



**AN EVALUATION OF ALTERNATIVE STRATEGIES FOR
THE REVITALISATION OF THE HORTICULTURAL
INDUSTRY IN THE PLOVDIV REGION OF BULGARIA**

ELENA GARNEVSKA

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ABSTRACT

The process of transition from a centrally planned economy established during the period of Socialism (1944-1989) to a free market economy, began in 1989 and since then a range of reforms (political, economic and agricultural) that have affected the agricultural/horticultural sector in the country have taken place. The agricultural reform began in 1991 with the liquidation of the state Agricultural Industrial Complexes (AICs) and the introduction of private farming that established two main organisational structures: private farms and private co-operatives. The situation in agricultural/horticultural sector in Bulgaria and in the Plovdiv region has been placed in a critical condition with decreased production outputs when compared to the pre-reform levels due to the loss of established markets, high production costs, limited governmental financial and marketing support, old plots of perennial crops (orchards and vineyards), obsolete machinery and technologies and a highly fragmented pattern of land holding.

The aim of this research is to evaluate a range of alternative strategies for the revitalisation and the future development of the horticultural industry in the Plovdiv region of Bulgaria. This was achieved by an investigation of the following:

- The national characteristics of Bulgarian agriculture/horticulture as well as the political/legal environment within which the farms have operated during the transition period.
- The local characteristics of the horticultural sector in the Plovdiv region, including an identification of the main advantages and problems.
- The business operational characteristics of the farms in the Plovdiv region, particularly with regard to current production and marketing structure.
- The evaluation by the farm managers of a range of alternative strategic options, based on Ansoff products/market matrix, for the revitalisation of the horticultural sector in the Plovdiv region.

The identification of the business characteristics and the evaluation of the proposed alternative strategic options were studied using face-to-face interviews, assisted by a questionnaire, with farmers managing different types of farms in the Plovdiv region.

The main findings indicated that the farms, irrespective of their size, land ownership patterns and type of crops, intended to continue with existing production patterns over the next 5 years, which they perceived as a 'safe' option for business survival and as a way of life. This it is argued is the result of the influence of the external (political/legal and economic) and internal environments acting upon the farm businesses. The external environment remains inconsistent and unstable characterised by poor agricultural policies and legislation, undeveloped markets and a lack of finance (subsidies or borrowed) for investment in modernisation and products/markets transformations, while the internal environment was characterised by the weak market position, and low competitive power of the small and highly fragmented farms, which were obliged to sell their produce locally and to accept the market price offered to them.

However, farm businesses in the Plovdiv region have considerable potential due to the favourable natural conditions, centuries old traditions of growing horticultural crops, the availability of a wholesale market in the region, combined with the significant knowledge and experience of the farm managers. Although the majority of farmers rejected new business approaches they were aware of the new opportunities that arose from the changing business environment. However, they were waiting for the political/legal and economic stability in the country and EU membership when the external environment would they believe be more stable and consistent.

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LIST OF ABBREVIATIONS

AIC:	Agricultural Industrial Complex.
BCG:	Boston Consulting Group.
BCP:	Bulgarian Communist Party.
BG:	Bulgaria.
CC:	Candidate Country.
CEE:	Central and Eastern Europe.
CEEC:	Central and Eastern European Countries.
CEFTA:	Central European Free Trade Agreement.
CMEA:	Council for Mutual Economic Assistance.
CAP:	Common Agricultural Policy
CIS:	Commonwealth of Independent States
EC:	European Commission.
EU:	European Union.
FAO:	Food and Agriculture Organisation.
FYROM:	Former Yugoslav Republic of Macedonia.
GAO:	Gross Agricultural Output.
GATT:	General Agreement on Tariffs and Trade.
GDP:	Gross Domestic Product.
LALOLU:	Law for Agricultural Land Ownership and Land Use.
LC:	Law on Co-operatives.
LLL:	Land Leasing Law.
LLOL:	Labour Land Ownership Law.
LPAP:	Law for the Protection of Agricultural Producers.
MAF:	Ministry of Agriculture and Forestry.
NAAS:	National Agricultural Advisory Service.
NARDP:	National Agriculture and Rural Development Plan.
NEDP:	National Economic Development Plan.
NGO:	Non-Governmental Organisation.

NSI:	National Statistical Institute.
NUTS:	Nomenclature des Unités Territoriales Statistiques.
OECD:	Organisation for Economic Co-operation and Development.
SAPARD:	Special Accession programme for Agriculture and Rural Development.
SFA:	State Fund for Agriculture.
WTO:	World Trade Organisation.
BGL:	Bulgarian Lev.
DM:	Deutsche Mark.

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BLAGODARJA!

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Historically agriculture/horticulture have been important sectors within the economy of Bulgaria. However, the industry has faced a variety of problems in the last 2-3 decades that have reduced both production outputs and farm incomes and consequently the livelihood of the farmers. Although Governments, particularly those in power in the transition period (1989 – present time), have attempted to solve these problems, no long-term positive results have been achieved and agricultural/horticultural sector remains in a critical situation. This research carefully investigated the views of a selected sample of farmers in the Plovdiv region, the real ‘actors’ in the industry, in order not only to review the current situation in terms of developing a profile of the farmers and their farms, but looking to the future to investigate their perceptions and likely behaviour in respect to a number of different development strategies. It was apparent from the outset of this study that the opinions, behaviour and perceptions of practising farmers were constantly neglected both during the period of Socialism and subsequently during the transition towards a free market economy.

This first chapter aims to provide a general background for this research by reviewing the agricultural/horticultural industry in Bulgaria and in the Plovdiv region. Having provided this introductory review, the research aim and objectives are defined and in the final section an outline of this thesis is provided. As a result this chapter has the following five main sections:

1.1 Introduction

1.2 Presents an overview of Bulgaria and the agricultural/horticultural sector in Bulgaria and in the Plovdiv region.

1.3 Summarises the main focus of the research which is the horticultural industry in the Plovdiv region of Bulgaria.

1.4 Explains the research aim, objectives and methodology.

1.5 Outlines the structure of the thesis.

1.2 BACKGROUND TO THE STUDY

1.2.1 Overview of Bulgaria

Prior to 1989 Bulgaria was a socialist country governed by one party – the Bulgarian Socialist Party (BSP) that introduced and maintained a centrally planned economy (OECD, 2000).

In 1989, the process of transition towards a ‘free market’ economy began in Bulgaria with a radical reform from a centrally planned economy into a ‘free’ market economy. The inherited inefficient industrial sector, poor development of agriculture and the end of the integration within the Communist Union led to great difficulties for the economic reform of the country. The first years were characterised by an unstable economic climate together with structural and organisational changes, privatisation and land restitution. In 1995 there were some positive and optimistic results but the negative economic processes were more powerful and resulted in the collapse of the banking system, currency depreciation and escalating inflation at the end of 1996 and the beginning of 1997. The GDP in 1997 dropped 30% in comparison to 1990 (NSI, 1998). Public protests against the worsening economic situation resulted in early parliamentary elections and the formation of a new coalition government in May 1997 (OECD, 2000; SENTER, 2000).

In 1997, the new Bulgarian Government introduced a ‘currency board’ that fixed the rate of Bulgarian Lev (BGL) against Deutsche Mark (DM) (now fixed against the EURO). This has had a significant positive effect on the inflation rate, the banking system and ensured positive growth of GDP (OECD, 2000; EC, 2002b). The major goals of the two democratic Governments elected after 1997 have been stabilisation of the macroeconomic situation in the country and preparation of the country for integration into the European Union (EU). The positive changes in Bulgaria were recognised by the European authorities and the country has been invited to join the EU in 2007 (EC, 2002b).

1.2.2 Overview of agriculture/horticulture in Bulgaria

Agriculture has traditionally been an important sector within the economy of Bulgaria. In the last century, the agricultural sector has faced several major structural changes. Prior to the World War II, agriculture was a leading sector in the Bulgarian economy with a well-established market position in Europe. During the period of Socialism

(1944-1989) agriculture was characterised by over-specialised large-scale production units, export oriented production geared to other Central and Eastern European Countries (CEECs) and poor standards of quality (OECD, 2000; SENTER, 2000).

Both the inherited inefficient agricultural sector and the difficult processes of economic reform in Bulgaria have adversely affected Bulgarian agriculture and thereby hit the source of livelihood of the population, especially in the rural areas. Gross agricultural output has fallen to about 60% of the pre-reform level 1989-1999 (NSI, 2000; OECD, 2000). The main reasons for these negative results (MAF, 1999; OECD, 2000) are:

- political, economic and social instability;
- structural changes in Bulgarian agriculture since 1991, characterised by the liquidation of the state controlled co-operatives and the slow process of land reform and privatisation of agri-food sector;
- inconsistent and unpredictable agricultural policies;
- changing conditions of access to foreign markets combined with the loss of the main export markets (former USSR and CEE countries).

Nevertheless, some positive achievements have been observed since the transition began such as the establishment of a National Agricultural Advisory Service (NAAS) in 1995, the completion of land restitution in 2000, privatisation of the agri-food processing units which was completed by 2000 and the establishment of a land market, although this is currently argued to be of limited effectiveness (OECD, 2000; SENTER, 2000).

The current framework of Bulgarian agriculture and agricultural policies over the period 2000-2006 is set out in the National Agriculture and Rural Development Plan (NARDP). This plan was prepared in line with the Special Accession Programme for Agriculture and Rural Development (SAPARD) which is one of the most important policy instruments for preparing the country for integration in to the EU. The key efforts in relation to the agricultural/horticultural industries (MAF, 2000a; OECD, 2000, SENTER, 2000) have been oriented towards:

- improving efficiency and increasing the competitiveness of the agricultural farms;
- achieving stability of market structures for agricultural/horticultural production;
- improving working and living conditions in rural areas.

1.3 OVERVIEW OF HORTICULTURE IN THE PLOVDIV REGION

This research focused on the future development of the horticultural industry in the Plovdiv region. In this research, the horticultural sector consists of fruit growing, vegetable growing and viticulture (grape growing).

The Plovdiv region is one of the 28 administrative regions of Bulgaria. It is situated in the central-south part of Bulgaria on the Thracian Plain and is bordered by the lowlands of the Rhodopi Mountains. The favourable climatic conditions, as well as the fertile soils, have underpinned the development of the agricultural/horticultural industry with cereals, apples, tomatoes, peppers, potatoes and grapes as the major crops.

The problems identified earlier for the agricultural/horticultural industry in Bulgaria are also valid for the horticultural sector in the Plovdiv region (MAF, 1999; SENTER, 2000) and they are:

- a complex land restitution process that has resulted in high fragmentation of the land area;
- a slow process of privatisation of the agri-food industry;
- an unexpected price liberalisation and increased input prices combined with low output prices;
- a rapid fall in consumer demand for fresh products;
- lack of efficient marketing structures for agricultural/horticultural products;
- trade difficulties of the agri-food companies in the region, which previously were the main buyers of horticultural produce.

The Plovdiv region was chosen for this research for the following reasons:

- Historically, the horticultural industry has been an important sector in the region.
- The region is one of the most important regions in Bulgaria for horticulture.

- The researcher is from the Plovdiv region and is aware of the specific features of the region as outlined above.

1.4 RESEARCH AIMS AND OBJECTIVES AND METHODOLOGY

There was limited data available concerning agriculture in Bulgaria and in the Plovdiv region. The data available focused on the main changes that the Bulgarian agricultural industry has experienced during the period of transition towards a 'free' market economy (for example land restitution and privatisation) as well as providing assessments of the agricultural policies and their impact upon the newly established private farm businesses (Bankova, 1999; Ivanova, 1999; Kanchev and Doichivova, 1999; Mishev *et al.*, 1999; FAO, 2000; SENTER, 2000; Kopeva and Noev, 2001; Mergos *et al.*, 2001; EU, 2002b). Only a few of these researchers used a 'bottom up' approach and asked the main 'actors' in agriculture/horticulture (farmers) about their business (Ivanova, 1999; Mishev *et al.*, 1999; Kopeva and Noev, 2001; Kostov and Lingard, 2002). Consequently, almost no attention has been paid to the farmers' attitudes, perceptions, expectations and the strategic development of the farms in terms of how the managers run their farm business, how they would improve their internal capacity, how they are influenced by the external environment and what is their vision for future development of their farm.

The overall aim of this research is to assess and evaluate a range of alternative strategic options for revitalising the horticultural industry in the Plovdiv region of Bulgaria at the level of farm businesses. Managers of farms of different sizes, land ownership patterns and types of crop were invited to evaluate the feasibility of the potential strategies and to determine the forces acting upon them.

This study has been innovative from the very beginning as it is a topic not previously investigated in the Plovdiv region or in Bulgaria and the respondents (farmers) lacked experience in participating in research surveys. Therefore, the formulation of the objectives was critical and are set below:

- To provide an overview of Bulgarian agriculture/horticulture together with the relevant policies and priorities.
- To analyse the characteristics of the horticultural industry in the Plovdiv region of Bulgaria.

- To investigate the operational characteristics of farm businesses in the Plovdiv region.
- To evaluate a range of alternative strategies for the revitalisation of the horticultural enterprises in the Plovdiv region.

The overall *methodology* of this research is quantitative and used a soft system type approach for organising the structure and content of the thesis (chapters and content). This involved dividing the subject (and each of the sub-divisions of the subject) into four components: process, content, output and outcome (Table 1.1). The ‘process’ - explain what is going on in the system; the ‘content’ - identifies and analyses each stage of the process; the ‘output’ comes at the end of the process and is described as a kind of physical result, and the ‘outcome’ is a stage that evaluates whether the objectives of the process were achieved successfully.

The research method employed in this investigation was a series of interview based surveys. The three surveys undertaken used structured face-to-face interviews because the respondents lacked experience in such kind of social researches and the interviewer needed to ensure clarity. The interviews used questionnaires that contained a mixture of ‘closed’ and ‘open ended’ questions. The ‘closed’ questions produced quantitative data and led the respondents in directions that are investigated and the ‘open-ended’ questions explained the reasons for their chosen ‘fixed-alternative’ option or expressed suggestions.

Little research has been undertaken into horticulture/agriculture in the Plovdiv region. Therefore this study consisted of a number of phases, as the results of the first phase were used for designing the second phase and the results from the second phase were used for organising the third phase. The pilot or ‘exploratory’ survey was undertaken to explore the research subject and to examine the farmers’ attitude towards investigation of their farm businesses. The second ‘farm profile’ survey, was carried out in order to collect more information about the operation of farm businesses and to analyse and explore the future expectations of the respondents. The last ‘strategic options’ survey evaluated a range of alternative strategies in terms of how the business environment affected the farm businesses in the Plovdiv region of Bulgaria.

1.5 OUTLINE OF THE THESIS

This thesis is divided into 8 chapters based upon the matrix presented in Table 1.1.

Chapter 1: Introduction

This chapter presents a general introduction to the thesis in terms of a background to the study relating to the challenges confronting the development of the agricultural/horticultural industries in Bulgaria and in the Plovdiv region. The research aims, objectives and methodological steps are also outlined.

Chapter 2: Review of agricultural/horticultural sector in Bulgaria and in the Plovdiv region

This chapter reviews the literature on the major periods of change (before and after 1989) in Bulgaria and the current status and problems of the agricultural/horticultural industry in Bulgaria. The main policies and governmental priorities in the area of agriculture and rural development are reviewed, as is the preparation of Bulgaria for EU accession, due to their impacts upon the farm businesses. This chapter also provides information about the current status of the horticultural sector in the Plovdiv region in terms of its main strengths, weaknesses, opportunities and threats.

Chapter 3: Strategy theory

This chapter discusses the concept of strategy, strategic planning, strategic decision making and strategic management. Different methods of strategic analysis (internal, external and competitive) are reviewed in terms of assessing a range of alternative strategies for revitalising the horticultural farms in the Plovdiv region. A variety of alternative strategies available for an enterprise are identified and discussed. People's perceptions and values also play an important role in strategy development and therefore require examination. This chapter also reviews the process of strategy evaluation and its alternative types of, and criteria for, evaluation of strategies.

Chapter 4: Strategic issues in agriculture

This chapter discusses the application of the processes of strategic planning, strategic decision making and strategic management in relation to farm businesses. The variety of strategic analysis and types of strategy used in agricultural research are summarised. The role of the people in the decision process relating to the farm business is analysed.

Chapter 5: Methodology

This chapter discusses the main methodological steps employed in this research. The theoretical context of the research process and research design is reviewed in order to provide the basis for the design of the primary data collection. The three surveys that employed face-to-face structured interviews are analysed comprehensively in terms of their design, organisation and delivery. The main quantitative analytical methods adopted are identified and discussed.

Chapter 6: Description of the sample of farms in the Plovdiv region

This chapter provides the background information about the sample of agricultural/horticultural farms in the Plovdiv region in terms of the independent variables identified in this study: farm size, land ownership patterns and types of crop. This chapter also outlines the main business characteristics of the different types of farm within the sample including the key personal characteristics of the respondents.

Chapter 7: Evaluation of a range of alternative strategic options

This chapter presents the response of the farmers in respect of the feasibility of a range of alternative strategies for the next 5 years. The proposed alternative strategic options are evaluated in terms of the main encouraging and discouraging factors (internal and external) affecting their decision about farm business development and the expected outcomes of these strategies. The most feasible strategic option is subsequently identified.

Chapter 8: Evaluation, discussions and concluding remarks

In this chapter, the whole research process is evaluated and the main limitations and achievements are identified. The discussion of the main findings is also provided and conclusions are drawn in terms of the most feasible future development of the horticultural farms in the Plovdiv region. Finally, the contribution of this research is outlined and the future areas of research arising from this study are suggested.

Table 1.1: Outline of approach and structure to the subject

FOCUS OF CONTENT	Introduction	Review of agriculture/horticulture in Bulgaria and in the Plovdiv region	Strategy theory	Strategic issues in agriculture	Methodology	Description of the sample of farms in the Plovdiv region	Evaluation analysis of the horticultural farms of the Plovdiv region	Evaluation, discussion and conclusion
Process	Main foci and components of research (2)	Major periods of change and EU accession process	Strategy and the strategy process	The strategy process in agriculture	Theoretical approaches to research	Nature of analysis	Nature of analysis	The nature of the self critique and the nature of conclusion
Content	The context of the research (1)	Objectives, policies and structures of government intervention	Methods of strategic analysis – business and people	Strategic analysis in agriculture – business and people	The approach adopted	Analysis of agricultural/horticultural context in the Plovdiv region – characteristics of the farms and farm managers	Analysis of Plovdiv horticultural context – future development	The theoretical approach – the lessons. Main findings.
Output	Research aims and objectives (3)	Current situation of agricultural and horticultural sectors – structure, production, etc.	Alternative strategies	Alternative strategies in agriculture	The actual research - secondary, primary etc	Types of farms derived	Types of farm business strategy derived from analysis	The horticultural analysis – the lessons. Meeting the research aim and objectives
Outcome	Outline of the thesis (4)	Current position in relation to accession	Evaluation process and evaluation methods	Evaluation process and methods in agriculture	Evaluation of research using normal criteria – e.g. validity, relevance, reliability etc	Differences between the different types of farms (size, land ownership patterns and types of crops)	Evaluation of strategic options – feasibility	Future research

Notes
Done in indicated order (1-4)

CHAPTER 2: REVIEW OF AGRICULTURE/HORTICULTURE IN BULGARIA AND IN THE PLOVDIV REGION

2.1. INTRODUCTION

This chapter reviews the literature relating to the agriculture/horticulture in Bulgaria as well as in the Plovdiv region together with the associated agricultural policies. The aim of this chapter is to provide an overview of Bulgaria and the agricultural/horticultural sector in order to better understand the dynamic processes that have and are taking place in the country, and to describe the business environment within which the farms have been operating. This review is intended to inform why and how the farm managers interviewed evaluated the proposed alternative strategies. This chapter is presented in seven main sections:

2.1 Introduction

2.2 Provides an overview of Bulgaria that includes the political, economic and agricultural reforms undertaken in the country since 1878 when Bulgaria gained independence from Turkish Empire. An overview of the agriculture in the other CEE countries is also summarised.

2.3 Reviews the agricultural policies of the pre-reform and reform period together with the preparation of Bulgaria for EU accession. This section also summarises the legal environment within which the farms were operating and the challenges that the farm businesses have been facing.

2.4 Discusses the dynamic changes of the horticultural sector in Bulgaria since 1878 in terms of land ownership, farming structures and performance of the horticultural sector (fruit-growing, viticulture and vegetable-growing).

2.5 Presents an overview of the horticultural sector (including fruits, grapes and vegetables) in the Plovdiv region and outlines the specific context of this research within which the horticultural farms in the region are operating.

2.6 Discusses the performance of agriculture/horticulture in Bulgaria and in the Plovdiv region based upon a range of available analysis made by various governmental and international organisations and associations.

2.7 Provides a summary of the key features of the agriculture/horticulture in Bulgaria and in the Plovdiv region.

2.2. OVERVIEW OF BULGARIA

2.2.1 General overview

Location

Bulgaria covers a total area of 110,994 km² of the north-eastern part of the Balkan Peninsula in south-eastern Europe. The country has common borders with Romania to the North, Serbia and Former Yugoslav Republic of Macedonia (FYROM) to the West, Greece and Turkey to the South and the Black Sea to the East (Figure 2.1). Bulgaria is the third biggest Candidate Country (CC) (out CC-12) after Poland and Romania and would be eleventh largest member state by area in the EU-27 (OECD, 2000; SENTER, 2000; EC, 2002b).

History

The country of Bulgaria was founded in 681 AD by the Bulgars (Asian nomads tribe). Christianity was introduced in the IXth century and during the early-middle ages the Bulgarian empire was economically developed and covered large parts of today's Albania, Serbia, Greece, FYROM, Turkey and Romania. However, the empire was destroyed in 1386 and Ottoman Turks occupied Bulgaria for five centuries. In 1878, Bulgaria regained independence under the Treaty of San Stefano after the Russian-Turkish War. The Treaty of Berlin (1878) dramatically reduced the territory of the country as large areas had been granted to the neighbouring countries, a process which continued during the two World Wars when Bulgaria was allied to Germany (OECD, 2000).

The Soviet army entered Bulgaria in 1944 and Bulgarian Communist Party (BCP) emerged as a leading political force. In 1947, Bulgaria was declared a Peoples' Republic and a one-party system was established for more than 40 years. In the end of 1989, the transition began from a centrally planned economy into a free market economy with a range of political, economic and social changes.

Relief and climate

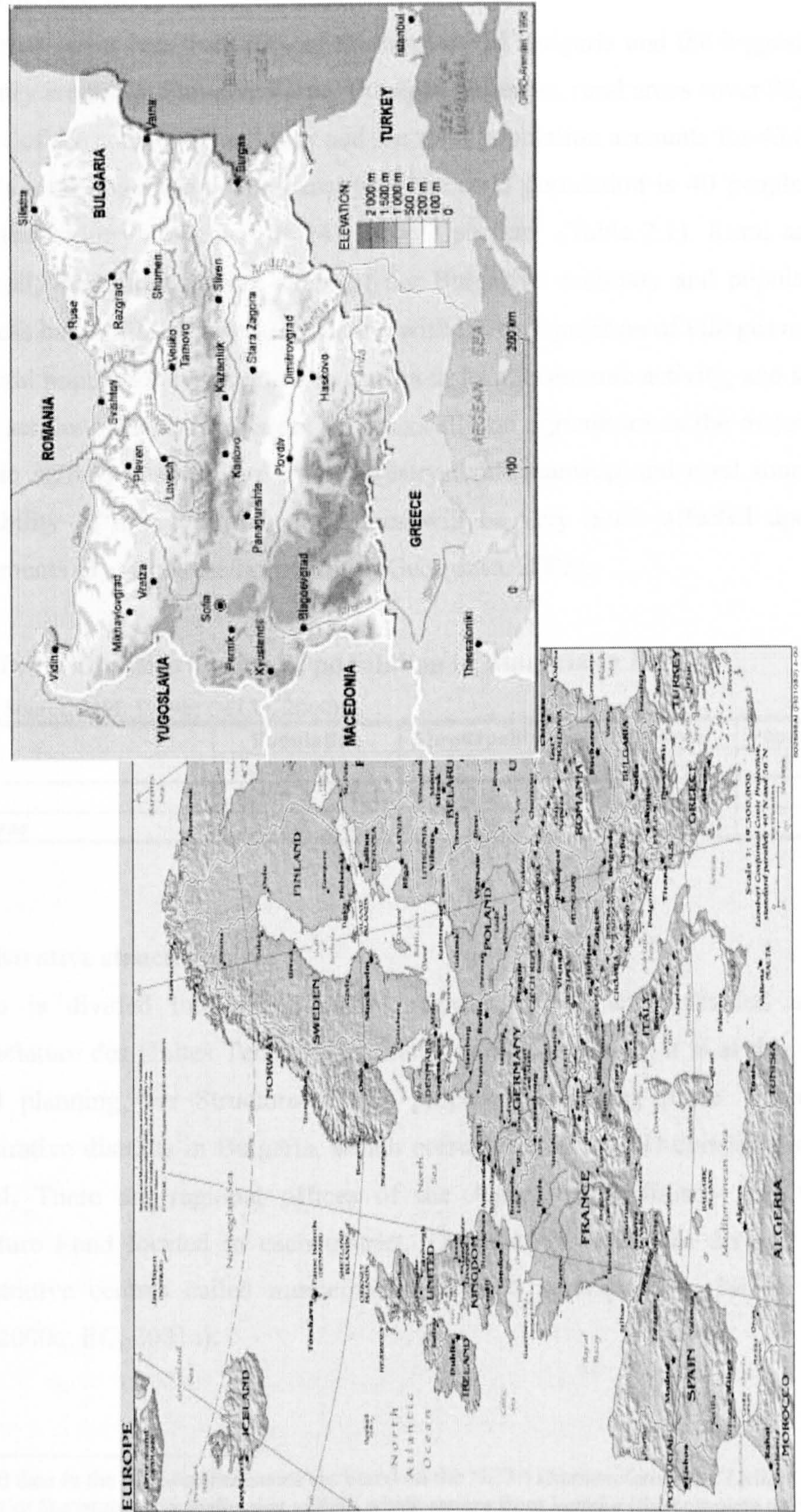
Bulgaria currently has a varied relief: mountainous and semi-mountainous regions covering about one third of the country (Figure 2.1). Geologically the country is divided into four areas: the Danube plains, the Stara Planina mountain area, the Transitional area, and the Rhodope and Pirin Mountains area. The climate, with four well-defined seasons, is moderate continental in the North and of a Mediterranean type

in the South, with the exception of the mountainous regions. Average annual temperature is 10.5°C. Snowfall for the much of the country occurs in the period from December to March and for the mountainous regions from December to June (OECD, 2000).

Population

Bulgaria has a population of 8.23 million people with an average density of 74.2 people per km² (Table 2.1), which is well below the EU average of 115.5 people per km² (EC, 2002b). The country is heavily urbanised compared to other countries in south-eastern Europe with over two thirds of the population living in towns and cities (OECD, 2000). Sofia is the capital city, with a population of over 1.2 million inhabitants (over 14% of the total). Other large cities include Plovdiv (0.4 million), Varna (0.3 million), Burgas (0.2 million) and Ruse (0.2 million) (NSI, 1999b)

Figure 2.1: *Geographical location and relief of Bulgaria*



Urban/Rural areas

Urban areas cover less than 20% of the territory of Bulgaria and the biggest cities in the country are Sofia, Plovdiv, Varna, Bourgas. Whereas, rural areas cover 90,371 km², or 81.4% of the country's total area and the rural population accounts for 43.6% of the country's total population. The density of the rural population is 40 people per km² against the country's average of 74.2 people per km² (Table 2.1). Rural areas have traditionally had an important share of the Bulgarian economy and population, but these areas have suffered a serious decline with the depopulation of villages and ageing of the rural population leading to a reduction in local economic activity, and social and cultural services. Since rural areas rely basically on agriculture as the major form of economic activity (as well as some forestry, craftsmanship and rural tourism), the sustainability of many rural communities will be very much affected upon future developments in agriculture/horticulture (Georgieva, 2003).

Table 2.1: Distribution of population in Bulgaria in 1998

(Source: NSI, 1999b; OECD, 2000)

	Population		Municipalities	Land area		Population density Persons/km ²
	Thousand	%		km ²	%	
Bulgaria	8,230.4	100	262	110,910	100	74.2
Rural areas	3,612.8	43.6	229	90,371	81.4	40.0

Administrative structure

Bulgaria is divided into six planning regions, which are classified as NUTS (Nomenclature des Unites Territoriales Statistiques) II regions¹. It is at this level that regional planning, for Structural Funds purposes, is taking place. There are 28 administrative districts in Bulgaria, which correspond to the EU-classification NUTS III level. There are regional offices of the Agricultural Ministry and the State Agriculture Fund located in each district. The country is further divided into 262 administrative centres called municipalities, which correspond to NUTS IV level (MAF, 2000a; EC, 2001a).

¹ Regional data in the EU Member States are based on the NUTS (*Nomenclature des Unités Territoriales Statistiques*) classification system which ranges from Level 0 (the complete territory of each Member States) to Level V (the level of local municipalities or communes). Levels II and III usually correspond to the areas administered by regional/district authorities.

2.2.2 Political overview

Post-Socialist political reform in Bulgaria started in the late 1989. The political monopoly of the governing BCP ended and the process of transition toward a 'free market' economy began in conditions of political instability and conflict between the two governing parties: ex-Socialist and Democratic parties. Since 1997, Bulgaria has had two reform oriented Governments. The first coalition Government was elected in 1997 and contributed substantially to the economic stabilisation of the country (OECD, 2000; SENTER, 2000; Kopeva and Noev, 2001). As a result, Bulgaria started the negotiation process for accession towards the EC and for membership in NATO. A new democratic Government was elected in 2001 that has maintained the positive changes of the previous Government and kept the same policy orientation towards the EU and NATO.

2.2.3 Economic overview

The current economic reform in Bulgaria began at the end of 1989. Poor economic planning, the legacy of an inefficient industrial sector, a systematically neglected agricultural sector and the end of the integration within the Communist Union led to great challenges for the economic reform of the country (EC, 1998c). The first few years started with unstable economic, structural and organisational changes such as high budget deficits, slow privatisation and the absence of foreign investment. In 1994 and 1995 there were some positive and optimistic results that were marked by a positive GDP growth. However, negative economic process were more powerful and resulted in the collapse of the banking system, currency depreciation and escalating inflation reaching 570% in 1997 (Table 2.2). Public protests against the worsening economic situation resulted in early parliamentary elections and the formation of a new democratic Government in May 1997 (FAO, 1999; OECD, 2000). In 1997, this new Government introduced a currency board. The rate of the Bulgarian Lev (BGL) was fixed against the Deutsch Mark (DM) (now fixed against the EURO) and the financial discipline became very strict as loss-making enterprises and banks were no longer subsidised. As a result the BGL stabilised, the inflation rate sharply decreased and the deficit on the budget was reduced. A positive GDP growth of 3.5% was registered in 1998 which declined to 1.9% in 1999 due to a decrease of industrial output together with the Kosovo crisis and went up again to 5.8% in 2000 (Table 2.2).

Table 2.2: Main economic indicators in Bulgaria

(Source: OECD, 2000; SENTER, 2000; EC, 2002a)

		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Real GDP growth	%	-8.4	-7.3	-1.3	1.8	2.9	-10.1	-6.9	3.5	2.4	5.8
Inflation	%	n/a	79.4	63.9	121.9	32.9	310.8	569.7	1.0	2.0	10.3
Budget deficit	%	n/a	5.2	10.9	5.7	5.7	10.9	3.2	2.0	2.8	n/a
Unemployment*	%	n/a	n/a	n/a	n/a	14.7	13.7	15	16	17	17.8

Note: * % of labour force

The economic transformation in Bulgaria has been characterised by declines in income and high levels of unemployment that have followed a trend of increasing since 1996 reaching 17.8% in 2000 (Table 2.2). The population particularly in rural and mountain areas have suffered in terms of source of livelihood (OECD, 2000; MAF, 2002a).

In 2000, Bulgaria had the lowest GDP per capita, of the accession countries, 5,400 EURO, followed by Romania with 6,000 EURO (OECD, 2000; SENTER, 2000; EC, 2002b). Due to economic and social reasons, Bulgaria will not join EU in 2004. However, the EC has confirmed that Bulgaria should be able to join the EU in 2007, which may be interpreted as an evidence for positive economic changes occurred leading towards economic stability.

2.2.4 Overview of agriculture in the CEE countries and in Bulgaria

2.2.4.1 Overview of the agricultural situation in the CEE countries

At the end of 1989, 23 former socialist countries in the Central and Eastern Europe and the Commonwealth of Independent States (CIS) started the transition from a common institutional and organisational heritage, represented by the Soviet agricultural model (Lerman, 2001). Despite the common heritage, there were some differences between the agriculture in the ex-Socialist countries at their starting point of the reforms and restructuring. Prior to 1989, the agricultural sector in many of these countries was dominated by production co-operatives and state farms, while Poland and the former Yugoslavia partially deviated from the common patterns as their agriculture has been largely based on small individual farms since the early 1950s (Burger, 2001; Lerman, 2001). Individual farming also existed in Hungary after 1968 (Finlayson, 1996; Burger, 2001) and in East Germany (Wilson and Klages, 2001) while in Bulgaria there was no effectively individual farming except the household gardens for self-consumption (OECD, 2000).

Finlayson (1996), Swain (1996) and Siebert (2001) state that the reform in agriculture in all ex-Socialist countries that began in 1989 has been difficult and complex. Swain (1996) and Swinnen (1999) suggest that after 1989, the Governments of most CEE countries have implemented a comprehensive package of economic and social reform policies, including more radical land reform and deeper individualisation and restructuring of agriculture. The OECD (1998) argue that the reform process in the CEE countries diverged and some countries were more successful in their economic restructuring (*e.g.* Hungary, Czech Republic) than others (*e.g.* Bulgaria, Romania). Lerman (2001) agrees and states that some differences emerged between them in their agricultural sectors.

The nature of the land policies had varied between the CEE countries. Some differences can be observed with regard to the nature of privatisation of the land of the former Socialist countries (Swain, 1996; Swinnen, 1999; Schultze and Tillack, 1999; Gorton, 2001). There were two fundamentally different procedures: restitutions to former owners and distribution to workers. The first procedure was adopted by the CIS countries and Albania, a mixed strategy was used by Hungary and Romania, while in all other CEE countries (including Bulgaria) the land was returned to the previous owners or their heirs (Swain, 1996; OECD, 2000; Burger, 2001; Lerman, 2001; Wilson and Klages, 2001). Most of the CEE countries retain a small proportion of land in state ownership, mainly for research and training purposes, while 20% of the agricultural land in the Czech Republic was own by the State in 1997 (OECD, 1998).

Despite the disparities described above, Swain (1996), OECD (1998), Burger (2001), Lerman (2001) argue in their studies that the general processes of restitution and transformation of land ownership were very similar in the different CEE countries. The land reform in these countries resulted in creation of a large number of individual farms and restructured or newly established co-operatives. The individual farms in most of the ex-Socialist countries are small-scale (except Hungary and Czech Republic) and they are not suitable for modern farming, and many of the new owners had never worked in agriculture. Kostov and Lingard (2002) and Schweizer (2002) stated that a very specific characteristic of the pre-accession countries is the large number of subsistence and semi-subsistence farms (*e.g.* Poland, Bulgaria), which play an important social role in transition economies. The pace of development of a commercial family farming is faster in some CEE countries such as Hungary, Czech

and Slovak Republics and Eastern Germany, than in Bulgaria where the farms are mainly small-scale (Finlayson, 1996, OECD, 2000; Burger, 2001; Wilson and Klages, 2001).

It was predicted that the large collective farms that existed in the CEE countries during the period of Socialism would disappear after the beginning of the transition towards a free market economy and that individually cultivated land would dominate after 1989 (Lernam, 2001; Davidova *et al.*, 2003). However, after more than 10 years, co-operatives still exist and continue to play an important role in agriculture and they cultivate about 40% of the agricultural land in most of the CEE countries. Only in Albania, Slovenia and Poland is all cultivated land in individual use and no collective farms remain (Slovenia and Poland never had a large collective farm sector) (Lerman, 2001; Siebert, 2001).

Gorton (2001) and Lerman (2001) demonstrate further that there were some farm' transformations in the CEE countries in terms of their size. The average size of the new collective farms is much smaller compared to the average size of the state collective farms before 1989. The individual farms are gradually differentiating into two groups: very small units cultivated by part-time farmers with less than 1 ha on average and large commercially oriented full-time individual farms cultivating on average 20-40 ha.

Finlayson (1996) and Burger (2001) discuss the situation in Hungary and argue that the agricultural situation there is not so bad. Some of the big farms have survived after they were restructured or changed their names and they cultivate 45% of the land. In the small-farm sector, a significant concentration was also apparent, and in 1998 60-70% of the land of individual farms was cultivated by farms larger than 50 ha. Farms under 10 ha were mostly part-time farms of retired or unemployed people and they mostly have a social significance. The situation in Eastern Germany investigated by Wilson and Klages (2001) is very similar. They state that family farms with an average size of almost 50 ha are the main 'winners' of the restructuring process. There are also part-time farms with an average size of 14 ha and co-operatives, who continue to have a significant role and cultivate about 30% of the agricultural land. Conditions for agricultural development in the Czech Republic are good as about 90% of the agricultural land is farmed by units over 100 ha (OECD, 1998). Polish agriculture is

characterised with highly fragmented land and small-scale farms (Mertines, 2001). The situation in Bulgaria is not as optimistic as it is in the Central European countries. Small-scale subsistence farms with an average size of 1.5 ha represent much of the agriculture in Bulgaria. The commercial farms of more than 10 ha exist but they are still not many. Private co-operatives with an average size of 700 ha also exist and cultivate about 40% of the agricultural land. NSI (1998), Bankova (1999), FAO (1999) and EC (2002b) argue that the existing agricultural enterprises in Bulgaria are transitional. The farm structure in Bulgaria is discussed in detail later in this chapter.

2.2.4.2 Overview of agriculture in the economy in Bulgaria

Pre-reform period /Period of Socialism (1944-89)

During the pre-reform period, the agricultural sector in Bulgaria was required to meet specific targets – the most important of which was self-sufficiency in food production. These goals were pursued through centrally determined prices, planned targets, quotas and collectivisation. The central Government managed the whole food chain, leaving little responsibility for decision-making to individual producers. The market situation was a ‘sellers market’ where demand was typically greater than supply and market forces did not play an important role. Consumers also had a little choice – either with the food products available or their quality (Bloomen and Petrov, 1994; EC, 1998c).

At first, socialist agriculture in Bulgaria was successful in meeting its targets. During the period 1956-1983, agricultural production more than doubled with an average annual growth rate in excess of 2.6%. However, in the mid-1980s the growth rate of gross agricultural output dropped substantially, and by 1987 it was decreasing. At the end of the period of Socialism (1989), the agriculture remained an important sector within the Bulgarian economy and provided 10-12% of the total GDP and employed about 18% of the active workforce (OECD, 2000).

According to the OECD (2000), some key features of the Bulgarian agro-food sector at the end of the socialist period were:

- after 40 years of collectivisation, agriculture was organised in large-scale units and used technologies that were suitable for these size levels;
- some sub-sectors of the agro-food industry (notably pig, poultry and fruit production) were particularly large-scale and over-specialised;

- agriculture and food processing were export-orientated with a large production capacity, however the quality of the products was low and mainly suited to other socialist countries. Some specialised higher quality products (e.g. wines) were produced and orientated towards the hard currency markets of western Europe and north America;
- many rural areas were in rapid decline as the younger population turned away from agriculture and moved to the cities. The older generations that remained were resistant to change, including the adoption of new technologies and more efficient farming methods.

The OECD (2000) argues that by the end of the 1980s it was obvious that the whole Bulgarian economy, including agriculture, required radical reform.

Reform period (1989-2001)

As a result of the political and economic reforms that started in 1989, agriculture in Bulgaria faced dramatic changes. The reform in agriculture began in 1991 and accelerated in 1992 due to the approval of a range of Land Laws that are discussed below. The main tasks of the reforms were: land restitution, liquidation of the state Agricultural Industrial Complexes (AIC) and other monopolistic structures, price and trade liberalisation, privatisation, establishing market structures for agricultural development and developing agricultural support policies directed to solve the problems that emerged during the transition towards a free market economy. The agricultural reform includes two major processes carried out in parallel: land reform and structural reform (Bentcheva and Georgiev, 1999).

During the period 1991 – 2000, the contribution of agriculture and forestry in GDP has fluctuated substantially, ranging from 15% in 1991 to almost 27% in 1997 and down again to 16% in 2000, which reflects large changes in the activities of other sectors of the economy over this period (Table 2.3). The peak of the share of agriculture in GDP in 1997 was a result of decline in industrial production together with a very good harvest (OECD, 2000).

Table 2.3: Importance of agriculture in the Bulgarian economy

(Source: National Statistical Institute (NSI), FAO, OECD, 2000)

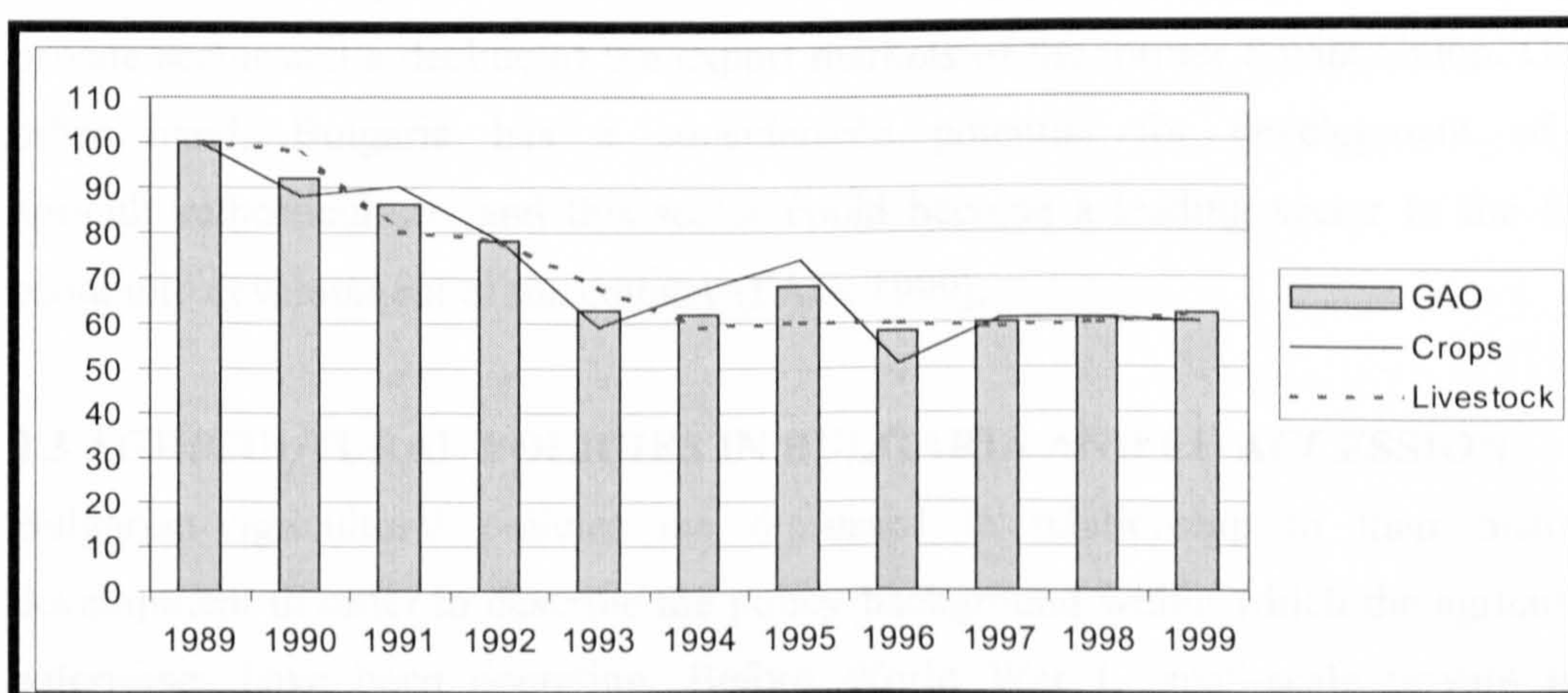
		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Share agric./GDP	%	15.4	12.0	10.6	12.4	14.1	15.4	26.6	21.1	17.3	16.0
Share agric./employment	%	19.4	20.7	21.7	22.8	23.4	24.2	24.3	24.7	25.9	26.2

Gross Agricultural Output (GAO) was very unstable over the period 1989-1999. Outputs have declined since 1989 with a small growth registered in 1995, 1997, 1998 and 1999 (Figure 2.2). The fluctuations in agricultural outputs were largely due to fluctuations in crop production, while livestock production declined up to 1994 but has remained relatively stable since 1995 (OECD, 2000; Mergos *et al.*, 2001). These large variations of the GAO resulted from a combination of the following factors outlined by OECD (2000):

- political, economic and social instability;
- structural changes in Bulgarian agriculture since 1991;
- inconsistent and unpredictable agricultural policies;
- changing conditions for access to foreign markets;
- changing weather conditions.

Figure 2.2: Gross Agricultural Outputs, crops and livestock

(Source: OECD, 2000)



Note: 1989 = 1000

The indexes are cultivated on the basis of constant 1989 prices. Product coverage is 70% for crop products and 90% for livestock products.

Ten years after the economic reform began, in 1999 the agricultural land accounted for about 55% of the total area of Bulgaria (6.2 million ha) of which 69% is arable (4.2 million ha), 27% is permanent pastures and meadows (1.7 million ha) and about 4% is vineyards and orchards (OECD, 1999; Mergos *et al.*, 2001). Currently about 15% of the agricultural land is abandoned due to the slow pace of land restitution process, reduced demand of for agricultural products, difficult access to credit and lack of working capital to buy the necessity inputs (FAO, 1999; OECD, 2000; SENTER, 2000).

The share of total employment in the agricultural sector has increased steadily from 19% in 1991 to 26% in 2000 (Table 2.3). This increase can be explained by two main factors: many older people or people who lost their jobs returned to cultivate their restituted land holdings. In 2000, about 795,000 people worked in the agricultural sector, which corresponds to 26.2% of total employment (MAF, 2000a; OECD, 2000; EC, 2002b).

According to the 1999 FAO report for Bulgarian agriculture:

“One of the major current developmental problems in Bulgaria seems to be that the country is caught in a low level development equilibrium trap”

This trap is made up of reduced domestic purchasing power, inadequate activity by the private sector and a decline of the export markets of the former Soviet Union. On the other hand, Bulgaria has a considerable potential for development of the agriculture/horticulture, and this sector could become a leading sector in the future economic development of the country (FAO, 1999).

2.3 AGRICULTURAL POLICIES IN BULGARIA AND EU ACCESSION

Bulgarian agricultural policies are discussed in relationship to their historical development in order to describe the policy background within which the agricultural enterprises have been operating. Before World War I, small-scale private farms represented the agricultural sector in Bulgaria. After 1944, when the process of nationalisation began, the communist government created large-scale collective production units that had technologies and machinery suitable for large-scale agricultural production not for small-scale farms. The rural areas were depopulated

because most of the former landowners moved to the cities, which offered better employment opportunities. There were high social expenditure and consumer price subsidies (Kostov and Lingard, 2002).

When the transition process towards a 'free market economy' began in 1989, the large state agro-industrial complexes (AIC) were liquidated after the approval of the Law for Agricultural Land Ownership and Land Use (LALOLU) in 1991. However, the agricultural sector was not prepared for this sudden change (FAO, 1999). During the first 7-8 years (1989-1997) the policies and regulations with regard to the agricultural sector and the nature of the agricultural markets were inconsistent. As a result gross agricultural outputs declined, and in 1999 were about 62% of the pre-reform period levels (OECD, 2000). The rural population lost their labour opportunities and incomes, and many problems faced agriculture/horticulture. These include the:

- emergence of many small scale farms producing mainly for home consumption out of which only 23% were market orientated;
- primitive nature of production using old technologies and machinery;
- lack of management skills for commercial farming; about 44% of the farms are run by pensioners (FAO, 1999; MAF, 2000a).

2.3.1 National policies for agriculture

Pre-reform period/Period of Socialism (1945-1989)

The main goals of agricultural policy in the pre-reform period (*i.e.* before 1989) were to ensure sufficient levels of food for the urban population, as well as the processing industry, and to meet Bulgaria's export obligations to CMEA (Council for Mutual Economic Assistance) countries (OECD, 2000). Before 1989, Bulgaria was one of the leading exporters of agro-food products from central and eastern Europe and government policy aimed to stimulate a vigorous agro-food sector that took full advantage of the country's favourable climatic and soil conditions. For a period of more than 40 years, Bulgarian agriculture specialised in the production of a range of products, including wine, tobacco, fruit and vegetables. Under the stable CMEA framework, export markets were guaranteed and this provided a strong incentive to expand, specialise and intensify production (FAO, 1999; OECD, 2000).

The main instrument for achieving these goals was the "central plan" which was based

upon an obligatory system of production quotas and the centralised determination of all agricultural and food prices throughout the agro-food chain (OECD, 2000).

Reform period (1989-2001)

Since the start of the economic reforms in 1989, the main goal of agricultural policies in Bulgaria has been to provide an adequate supply of basic food products at low prices to the domestic market (OECD, 2000; Mergos *et al.*, 2001). During the first few years the key measures that were introduced by the Government related to the development of the private sector based on market principles which included restitution and privatisation, price control and trade restrictions.

In 1991 a *Law for Agricultural Land Ownership and Land Use* (LALOLU) was approved that restored land ownership and the property rights to former owners and their heirs, and liquidated the large state Agricultural Industrial Complexes (AIC). This Land Law established the legal framework for private farming in Bulgaria. However, this Law was first amended in 1992 and provide practical guidelines for restoration of the land in 'real' (physically delineated) boundaries. In addition, another two Laws underpinned agricultural land restitution, which were the *Law on Co-operatives* (LC) and the *Land Leasing Law* (LLL). The LC was enacted in 1991 to provide the creation of the new private co-operatives, which was amended in 1999 to specify the procedures for establishing co-operative associations. LLL regulates the relationship between the owners and the users of the land, it was also amended in 1999 and any size or time restriction for leasing of farmland were removed. This change aimed to stimulate the Land market (OECD, 2000).

In 1995, the *Law for the Protection of Agricultural Producers* (LPAP) was adopted. This Law outlined a range of policy instruments for supporting agricultural production and the trade of agro-food products. It also established the *State Fund for Agriculture* (SFA) as a specific institution for financing agricultural development and administering mechanisms such as subsidised credits, advance payments on contracted production, price support and market intervention. In 1998, the LPAP (1995) was abolished and a new Law was introduced that broadened the scope for support to farmers with new policy instruments such as support through structural measures, scientific services and programmes to improve research, education and training. However, this Law excluded market price support and market interventions (OECD,

1999).

In the same year (1995), the *National Agricultural Advisory Service* (NAAS) was established that aimed to provide specialised extension service and advice to the rapidly increasing number of private farmers. However, due to limited finance the NAAS is not very efficient and only a small number of producers use their services (OECD, 2000).

Policies and policy instruments changed frequently during the early 1990s in response to the short-term objectives of successive governments (EC, 1998c). In general, these policies tended to be more reactive to immediate problems instead of following a clear and consistent strategy for development and revitalisation of the agricultural/horticultural industry. On several occasions, the policies implemented by the government were not in line with the stated priorities and objectives for developing Bulgarian agriculture. Consequently, reform of the agricultural sector has been delayed significantly, and there was a general decline in food production and processing during the first half of the 1990s.

Since 1997 (when the anticomunist coalition, *United Democratic Forces*, came to power), the priority of the Government has been the stabilisation of the Bulgarian economy as well as agricultural sector, and the resultant policies adopted have been more consistent with the stated long-term goals of:

- developing an efficient and competitive export-orientated agriculture;
- improving the income of those working in agriculture, and;
- preparing for EU accession (MAF, 2000a).

The current agricultural policies are contained in the Programme of the Government for 1997-2001 and the National Plan for the Development of the Agriculture and Rural Development 2000-2006. The current policies for the revitalisation of Bulgarian agriculture are based on the premise of private ownership of the land and production. The general vision is the development of a competitive, export orientated and environmentally friendly agriculture. The basic principles and objectives are:

- finishing the processes of land restitution (granting title deeds) and the privatisation of the food-processing firms;
- development of information and advisory services;
- attracting foreign investment;
- ensuring funds for agriculture by means of financial, credit, tax and price mechanisms;
- assistance to all types of farmers organisations;
- price liberalisation;
- adjust Bulgarian agriculture to the EU agriculture (FAO, 1999).

Both the FAO (1999) and the OECD (2000) extensively reviewed the wide range of policy instruments that have been used for the implementation of the agricultural policies in Bulgaria. They may be summarised as follows:

- Price regulation measures (price liberalisation);
- Market regulation measures;
- Trade measures;
- Credit and investment policies.

Agricultural *price liberalisation* began in 1990, with a decrease in the number of state fixed prices. It was inconsistent and resulted in negative profits for the agricultural producers due to high input prices (almost equal to the world levels) and low retail prices (EC, 1998c; Mihailova, 2000; OECD, 2000). There were four phases of price developments: 1989-91 – freeing the prices of certain products; 1991-95 – almost full liberalisation; 1995-97 – guarantee prices based on the Price Law and LPAP and 1997-99 – complete price liberalisation (FAO, 1999).

Bloomen and Petrov (1994) argued that the markets and consumers played an important role after the economic reform in 1989 and that the newly established private farms have had to strive for low costs in order to survive within a highly competitive environment. After 1989, new *market regulation measures* were implemented, monopoly marketing structures in agriculture were liquidated and a range of new private traders emerged subsequent to the privatisation of the wholesale and retail market channels. This resulted in the emergence of farmers' markets that are very

common and important for the small producers as regards fresh fruits and vegetables. Many of the large producers often contracted their production (OECD, 2000).

After the political and economic reforms of 1989 the state monopoly of foreign *trade* was abolished and the trade in agri-food products was regulated by various regulations that were inconsistent and short-term prior to 1997. Until 1989 more than half of the agricultural trade was with CMEA countries while after the transition there was a change of the trade patterns and trade with some Western and EU countries has developed. Since 1997, Bulgaria has been a GATT and WTO (World Trade Organisation) partner and has introduced new tariffs and applied a more liberalised and open trade regime for agricultural products. It has also become a CEFTA (Central European Free Trade Agreement) member on 17 July 1998. At present, Bulgarian trade policy for agricultural products is governed by a variety of bilateral and multilateral agreements (EC, 1998c; Mihailova, 2000; OECD, 2000; SENTER, 2000).

During the period 1989-1991, the Bulgarian Government had tried to improve the access to *credits* for farmers. Nevertheless, commercial banks consider loans to agriculture as being a high risk due to the low profitability and their uncertain economic situation. On the other hand, the banking system in Bulgaria was undeveloped and lacked credit resources. There were some short-term credits available to the agricultural producers, mainly for harvesting, provided by the State Fund for Agriculture (SFA). This, led to a major constraint for long-term investment and for agricultural development (MAF, 2000a; SENTER, 2000; MAF, 2002b).

Additionally, increasing support has been provided to develop more general agricultural services - notably research, education and training, and a national agricultural extension service. As mentioned above, the NAAS was not effective while the demand for such kind of services has been growing rapidly (OECD, 2000).

2.3.2 Preparing for EU Accession

2.3.2.1 Introduction

Bulgaria has been one of the twelve candidate countries in central and eastern Europe preparing to join the European Union (EU). The following agri-related areas were prioritised in respect of integration in the EU:

- animal health;
- crop protection;
- technical legislation;
- adoption of the market regime of the EU;
- adopting the mechanism of the EU structural policies;
- introduction of EUROSTAT methods in agro-statistics (EC, 2000b; MAF, 2000c; SENTER, 2000).

The current framework for the implementation of agricultural and rural development measures over the period 2000-2006 is set out in the National Agriculture and Rural Development Plan (NARDP), which has been prepared in line with the Special Accession programme for Agriculture and Rural Development (SAPARD) (EC, 2000b; OECD, 2000; Georgieva, 2003).

2.3.2.2 SAPARD

One of the most important policy instruments to emerge from the process of preparing for integration in the EU is the *Special Accession Programme for Agriculture and Rural Development* (SAPARD). This programme is designed to prepare for the enlargement of the EU and to solve the priority problems in agriculture and rural development before the candidate countries become members of the EU (EC, 2000b; Georgieva, 2003).

SAPARD is a seven-year programme starting in 2000. The European Commission (EC) allocates funds to the programme in the twelve candidate countries in accordance with the SAPARD Regulation (EU Council Regulation EC 1268/1999 of June 21, 1999) using the following criteria:

- the size of the farming population;
- the agricultural area;
- GDP per capita and the specific characteristics of the country/region.

The SAPARD allocation fund for Bulgaria is annually 53,026 million EURO (EC, 2000c; EC, 2002). A range of projects for developing agriculture and rural development are eligible for funding ranging from investment in farms to

improvements of the infrastructure (Georgieva, 2003).

This programme aims to achieve efficient agricultural production and sustainable rural development. However, the implementation of SAPARD was postponed due to administrative difficulties. The EC (2001) identified that Bulgaria was the first candidate country to have a SAPARD agency accredited by the EC and in May 2001 the EC conferred the Bulgarian authorities with SAPARD funds (EC, 2002; MAF, 2002b). The results and the evaluation of this programme are still under development.

The SAPARD Regulation requires each candidate country to prepare a plan for supporting agriculture and rural development – this must describe the existing rural problems, the proposed strategies/measures for overcoming them and the anticipated results of the measures funded by the EU. A broad range of actions are eligible for funding under SAPARD, including:

- investments in agricultural holdings;
- improving the processing and marketing of agricultural products;
- production methods designed to protect the environment;
- diversification of activities in rural areas;
- setting up of producer groups;
- village renewal and protection of rural heritage (SENER, 2000).

2.3.2.3 NARDP

The *National Agriculture and Rural Development Plan (2000 – 2006) for the Republic of Bulgaria* (NARDP) (MAF, 2000a) was prepared in accordance with the SAPARD Regulation and finalised in August 2000 for submission to the European Commission. The main objectives, key policy priorities and measures in the NARDP were already laid down by the National Economic Development Plan (NEDP) of Bulgaria.

The NARDP was prepared by an intra-governmental Working Group under the Ministry of Agriculture and Forestry, including representatives of the Ministry of Industry, the Ministry of Environment and Water Resources and the Ministry of Regional Development and Public Works, supported by members of farmer associations, producer organisations in the food industry as well as regional

development agencies and NGOs. Two rounds of public discussions on the plan's priorities and measures were also held in an attempt to achieve greater transparency of the drafting process.

The main objectives of the NARDP are as follows:

- improvement of agricultural production efficiency and promotion of a competitive food-processing sector by better market and technological infrastructure and strategic investment policies ultimately aimed at reaching EU standards.
- sustainable rural development consistent with the best environmental practices by introducing alternative employment, diversification of economic activity and establishment of the necessary infrastructure. This in turn will improve the living conditions and standards of rural communities, generate fairer income and open up employment opportunities (MAF, 2000a).

Investment supports to farmers that will help them bring production practices into line with EU requirements have been a key mechanism for the achievement of the plan's objectives. Support for improving the market structures will be of crucial importance for the development of the country's agricultural sector. The establishment of competitive structures and enterprises in the food processing industry, as well as in the area of marketing, will help reinforce and increase the sector's share in the market. At the same time, rural living and working conditions are closely related to rural heritage protection, recreation facilities and hence the quality of life in rural areas. An integrated rural development approach (*i.e.* the implementation of common economic, infra-structural, environmental and cultural policies in all rural areas) will therefore be adopted to ensure the achievement of the stated rural policy goals.

The two main objectives of the NARDP will be achieved during the 2000-2006 period on the basis of investment support in the five priority areas identified under the NARDP, they are:

- Improving the production, processing and marketing of agricultural and forestry products in compliance with EU standards;
- Integrated rural development aimed at protecting and strengthening rural economies and communities, and helping to reduce the process of depopulation;

- Developing a more environmentally-friendly agriculture, as well as improving environmental protection in agriculture and forestry;
- Investment in human resources, notably vocational training for agricultural producers and other persons working in the agricultural sector;
- Technical assistance for policy makers, programme administrators etc (MAF, 2000a; OECD, 2000).

2.4. CHANGES IN THE BULGARIAN AGRICULTURAL/HORTICULTURAL SECTOR SINCE 1878

For centuries, Bulgaria has had a vibrant agricultural sector. It is well endowed with natural resources and enjoys good natural conditions for agriculture and horticulture, while the fertile soils combined with a mild continental climate provide a diversity of agricultural production systems and gives a good comparative advantage to Bulgarian farmers. Moderate to good quality soils account for about two-thirds of all arable land, most of which lies between the Danube and the Balkan mountains, in the Maritsa valley and along the Black Sea coast. Poorer quality soils are mainly associated with livestock farming in the upland and mountain areas. The Maritsa Plain (within which much of the Plovdiv region is situated) in the central-southern area of Bulgaria is one of the most fertile and productive regions of the country.

2.4.1 Land ownership and farming structures in Bulgaria

Prior to 1944 (covers the period from 1878-1944)

Prior to 1944 the agricultural sector was highly fragmented. A Law for Agrarian Reform approved in 1880 introduced small-scale farming in Bulgaria with a permitted maximum size of the farms of 16 ha. In 1921, new structures were proclaimed by Law that limited farms to 30 ha (OECD, 2000; SENTER, 2000). In 1934, there were 885,000 private farms with an average size of 4.9 ha and only 11% of all farms were larger than 10 ha.

Pre-reform period/Period of Socialism (1944-1989)

In 1945, the Communist party approved the Labour Land Ownership Law (LLOL), which led to dramatic changes in land ownership patterns. The processes of nationalisation and collectivisation took place and the people were forced to bring into

the Labour Production Co-operatives (TKZS)* their land, livestock and other assets. In the 1960s, these co-operatives (TKZS)* were consolidated into state farms (DZS)* of which there were 795 with an average size of 4,500 ha. The large Agricultural Industrial Complexes (AIC) were developed in the 1970s and there were almost 300 with an average size of 12,600 ha with 2,200 workers. The concentration of production resulted in a range of economic, organisational and ecological problems. In the 1980s, the processes of de-consolidation of these large production units into a smaller one began (Kanchev and Doichinova, 1999; OECD, 2000).

During the Communist period, private farming was systematically restricted to the existence of household plots. Employees of the state farms were allowed to have up to 0.5 ha of land for self-sufficiency purposes (OECD, 2000; Kostov and Lingard, 2002).

Reform period (1989-2001)

Land restitution was a key element of the agricultural reform that began with the registration of claims by former owners or their heirs in 1991. As mentioned above, the principal tool of the land restitution process was the Law for Agricultural Land Ownership and Land Use (LALOLU) (FAO, 1999). The Law of Co-operatives (LC) and the Law for Leasing Land (LLL) were also an integral part of the process of land restitution.

The process of land restitution was very slow especially in the early 1990s due to:

- complex, restrictive and ambiguous laws and regulations;
- poor management skills for implementing the process;
- an inadequate operating budget (An Agricultural Strategy for Bulgaria, 1993) (OECD, 2000).

By the end of 1993, 13% of the land area was restituted and in 1997 this area had increased to 67%. By the end of 1999, the Ministry of Agriculture and Forestry (MAF) reported that 96% of the total land has been returned to former owners. The other 4% of the agricultural land is state-owned and belongs to the municipalities, churches and other state organisations and this land is not involved in the process of privatisation.

* Bulgarian abbreviation name

By 1999, only 25% of the new land owners had received their title deeds (property rights on their land), which is an obstacle for long term investments in land, land leasing contracts and development of an active Land market (Bentcheva and Georgiev, 1999; SENTER, 2000).

The big challenge that the agricultural sector faced as a result of the land restitution process and the underdeveloped Land market was the high fragmentation of the land (FAO, 2000; MAF, 2000b; Mishev and Kostov, 2000). This was acknowledged and the Government introduced policy measures for land consolidation through the development of a Land market (OECD, 2000). It has been argued that the main benefits of the land consolidation would be greater efficiency and productivity together with positive environmental effects (FAO, 2000).

Land Market

The legal framework for the functioning of the Land market was completed, however there was no significant active Land market for agricultural land in 1999. A number of obstacles have obstructed its development including low profitability in this sector and difficulties in finding credits for purchasing land. Since 1999 with the amendment of the LLL, the leased market has developed rapidly (OECD, 2000).

2.4.2 Farm structures

Once the process of land restitution started, the structure of land ownership changed radically and two main types of farming structures emerged: individual private farms and private co-operatives.

2.4.2.1 Individual private farms

Since 1991, one of the main ‘actors’ in the agricultural sector has been the individual private farms (most of them being household plots) with an average size 1.5 ha. In 1997, approximately 3,500 farms cultivated 66% of the cultivated land while 1.5 million small farms cultivated only 15% of the land (OECD, 2000). The majority of the individual private farms (86%) had an area of less than 1 ha and they were characterised as subsistence farms and used the majority of their production for self-consumption and animal feed. However, there are 3,506 farms with a size of more than 10ha (Table 2.4).

Table 2.4: Size distribution of the Private Individual Farms (1997)

(Source: MAF, 1998; FAO, 1999)

Land area ha	Number of the private farms	Share of the group in total %	Farmed land thous. ha	Average size ha	Share of the farmed land in the group %
< 0,2	915,217	51.5	83.1	0,09	3.1
0,2-0,5	363,564	20.4	118.4	0,33	4.4
0,5-1	256,442	14.4	180.5	0,70	6.7
1-2	156,473	8.8	214.6	1,37	8.0
2-5	68,474	3.9	205.1	3,00	7.7
5-10	13,446	0.8	90.3	6,72	3.4
>10	3,506	0.2	1783.2	508,6	66.7
Total	1.777.122	100%	2675.3	1,51	100%

The EC (1998c), MAF (2000a), Mishev and Kostov (2000) and OECD (2000) all suggested that four main groups of private farms may be identified and they are:

- Very small farms (less than 1 ha) that continue to cultivate personal plots, mainly involved in livestock and vegetable production, which in most cases is the only way of generating an income. They are more likely to be inefficient due to the lack of specialisation and management skills. They are transitional and do not respond to the market forces;
- Small-scale farms (between 1-2 ha) that are mostly producing labour intensive crops such as vegetables, fruits, grapes, tobacco and are selling them at the local markets. Most of them also have livestock products.
- Middle-sized farms (between 2-10 ha) that growing mainly labour extensive crops such as cereals and industrial crops. Very often, they create a partnership with 3 or 4 other farms.
- Large farms (more than 10 ha) that are highly specialised in cereals and industrial crops (e.g. sunflower, cotton). Most of them lease land, provide jobs and have the potential to increase their efficiency and business viability.

The majority of the existing agricultural enterprises are still transitional (due to their small size) in need of significant improvement and many of them are not registered (NSI, 1998). Bankova (1999) also suggests that many of these small-scale farms in Bulgaria will disappear in the medium term following the sample of the EU-6 countries (the first 6 countries that established the EU) which lost almost half of the farm of less than 5 ha over the last 30 years.

The EU (2002b) argued that the small size of the individual private farms is one of the weaknesses of the agricultural sector in Bulgaria. While in comparison the average farm size in the other countries of EU is between 20-50 ha except Greece, Portugal and Italy where the average size ranges from 5 to 10 ha. A study of Burger (2001) identified that the average size of farms in Hungary was between 20-30 ha.

The latest data available is from 2000 and states that there are 755,300 private farms operating in Bulgaria with an average size of 1 ha. However, only 5% of those agricultural holdings are over 5 ha (EC, 2002b). There is a significant difference between the number of the farms in 1997 and in 2000, which may be explained either by the inaccuracy of the data available due to different sampling procedures used or the fact that many of the farms are not registered (SENER, 2000). There has been no recent representative study with regard to the farm structure in Bulgaria (Bankova, 1999).

2.4.2.2 Co-operatives

Mishev *et al.* (1999) argue that the slow process of land restitution especially in the early 1990s has supported to a certain extent the newly established co-operatives. In 1997, there were 3224 newly registered co-operatives and they cultivated 41% of the cultivated land (2,430 thousand ha). FAO (1999) states that only 3% of the new co-operatives were not registered in 1997. Due to the fact that the Land market was not established by 1992, many of the new landowners had no other option other than to join co-operatives or liquidate their holdings. Therefore, many of the new landowners have allowed their land to be farmed by co-operatives. These people did not contribute their labour and have no idea about the rate of returns of their assets as they are employed outside agriculture, live in the cities and do not participate in the managerial decisions (NSI, 1998; FAO, 1999; OECD, 2000). Bankova (1999, p.64) argued that this contradicted the general co-operative approach applied in the Western economies which were defined as:

"... free and voluntary membership and having three characteristics associated with workers control: participation in farm decision-making, profit sharing and employee's ownership"

The new private co-operatives comprise two broad groups: member-oriented and market-oriented co-operatives. Member-oriented production co-operatives are focused on the needs of their members (*e.g.* produce for household consumption, feed for animals, etc.). They are not specialised and sell only a small quantity of their production. Consequently, their capital for investments is limited and they are using old and technically obsolete machinery. Their main attraction is offering jobs for their members and very often, they are overstaffed, however their main weakness is that they are not competitive within a competitive environment. Market-oriented co-operatives adjust their management decision with the market. Generating incomes allow them to invest in technology and expansion and often they diversify into marketing and processing, however, their number is still very low (FAO, 1999; Mishev and Kostov, 2000; OECD, 2000).

The majority of the existing private co-operatives in Bulgaria are of the first type (member-oriented) and their average size is about 700 ha (EC, 1998c; 2002b). Some of them are providing services (*e.g.* machinery, harvesting, etc.) to other holdings that do not have the necessary assets. Bankova (1999) argues that the co-operatives need to decrease the number of workers or they will lose their competitiveness.

The status of the co-operatives is continually debated and they are subject to a rapid evolution. The FAO (1999) suggests that the number and importance of market-oriented co-operatives will increase. The latest data available about the co-operatives from 2000 demonstrated that the number of the private co-operatives slightly declined from 3224 in 1998 to 3125 in 2000. However, their average size remained same, about 700 ha (EC, 2002b).

2.4.3 Changes in the performance of the horticultural sector

During the period of Socialism, Bulgaria specialised in a range of products, most notably wine, vegetables, fruits, arable crops, tobacco and became one of the leading exporters of agro-food products from Central and Eastern Europe (CEE). At that time markets were guaranteed and this greatly assisted in expanding production and achieving the economies of scale of the large state farms (OECD, 2000).

Since the reform of the economy began in Bulgaria in 1989, there have been dynamic changes in the agricultural and especially horticultural sector in terms of area and

production. The general trends of the different sub-sectors of horticulture are discussed below.

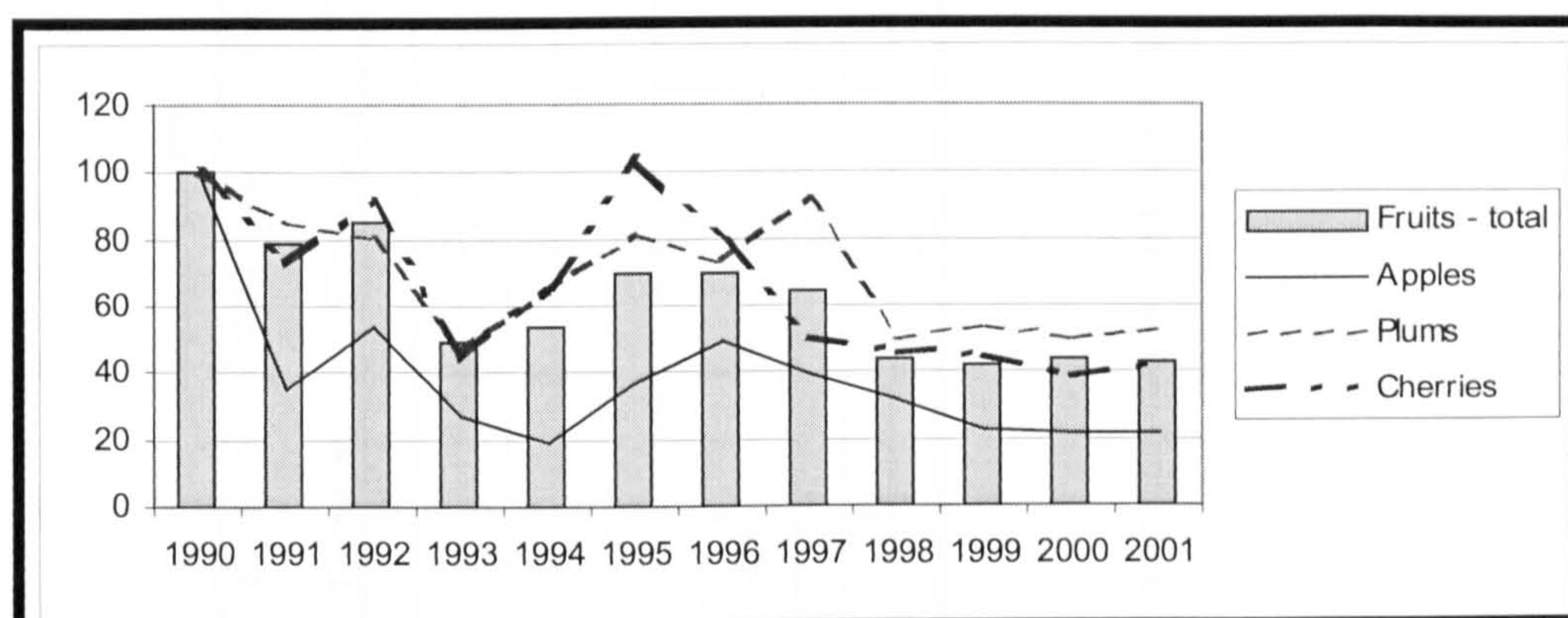
2.4.3.1 Fruit growing sector

Many kinds of fruits have traditionally been grown in Bulgaria because of the favourable climatic conditions. However, the main fruits are apples, plums, cherries and peaches (MAF, 2000b; OECD, 2000).

Over the period 1989-2001, the recorded areas of the fruit orchards fluctuated widely. A general decline in the area of fruits was reported from 219,000 ha in 1991 to 174,000 ha in 1997. Since 1998, these areas have increased and in 2001 the total recorded area under fruit-cultivation in Bulgaria was 205,000 ha (Table 2.5). This slow recovery can be explained in particular by an increased interest in developing orchards due to increased demand for fruits which have maintained relatively high prices (MAF, 2000a). Therefore, the demand for young plants has increased and new orchards were established, which provides some optimism for the future development of the fruit-growing sector (SENER, 2000).

The areas of the main fruit in Bulgaria, apple, decreased from 21,000 ha in 1991 to 14,000 ha in 1997. Plums were the only fruits that did not record a reduction in areas prior to 1997. The areas of cherry orchards were stable prior to 1995 and then decreased slightly over the period 1995-1998. However, since 1998 the areas of the three main fruit apples, plums and cherries has increased sharply (Table 2.5).

Over the period 1990-2001, total fruit production fluctuated widely due to big changes in the production quantities of the main fruits: apples, plums and cherries. By 2001, the outputs of fruits had declined by more than 55% compared to 1990. Apple production had fallen from 411,000 tons in 1990 to 90,000 tons in 2001. By 2001, plum production had also decreased by almost 50% and cherry production by more than 55% in comparison with 1990 (Figure 2.3). The total fruit production was 703,000 tons of which 90,000 tons were apples, 65,000 tons were plums and 30,000 tons were cherries in 2001 (Table 2.6).

Figure 2.3: Dynamic of fruit production

Note: 1990 = 100

The indexes are cultivated on the basis of 1990 production in tons.

The main reasons for the changes that have affected this sub-sector include:

- the fruit orchards have been abandoned for the first few years of land restitution and afterwards it was difficult to bring them back into production;
- small size of the farms after the land restitution;
- high production expenses;
- changing weather conditions;
- the ageing of the trees in the orchards;
- fragmentation of the orchards;
- the lack of capital for investment (FAO, 1999; FAO, 2000; MAF, 2000a; SENTER, 2000).

Table 2.5: Areas under main horticultural crops in Bulgaria, 1990 – 2001

(Source: NSI, 1997, 1998, 1999b, 2000, 2001b; FAOSTAT)

(Thousand hectares)

Years	Vegetables* total Thous ha	Tomatoes Thous ha	Pepper Thous ha	Potatoes Thous ha	All fruits** Thous ha ¹	Apples Thous ha	Plums Thous ha	Cherries Thous. ha	Table grapes Thous ha	Wine grapes Thous ha
1990	116	27	17	41	219	21	12	9	18	140
1991	119	24	20	43	219	21	12	9	18	138
1992	109	18	14	49	218	20	12	9	18	137
1993	96	17	14	39	195	19	12	9	13	117
1994	117	23	17	47	187	16	12	9	13	113
1995	156	30	20	56	180	15	12	8	15	112
1996	113	17	16	40	176	14	12	8	14	107
1997	122	19	17	44	174	14	12	8	14	107
1998	159	28	20	51	181	15	12	8	14	112
1999	166	29	20	52	197	15	20	15	14	112
2000	156	30	n/a	53	201	19	20	15	n/a	112
2001	160	30	n/a	53	205	19	20	15	n/a	115

Note: * including melons
** excluding melons

¹ The area of the main fruits do not even add to 50% of the total fruit area for reasons that are far from unclear, although they may in part be due to the inaccurate/poor data available data

Table 2.6: Production of the main horticultural crops in Bulgaria, 1990 - 2001

(Source: NSI 1997, 1998, 1999b, 2000, 2001b; FAOSTAT; FAOSTAT)

Years	Vegetables - Total*	Tomatoes	Pepper	Potatoes	Fruits ¹ - Total**	Apples	Plums	Cherries	Table grapes	Wine grapes
1990	1,850	846	227	453	1650	411	123	72	68	731
1991	1,716	646	236	498	1302	145	105	53	80	748
1992	1,463	444	204	566	1405	221	99	66	81	787
1993	1,087	348	153	357	808	110	57	32	47	482
1994	1,435	477	218	497	894	76	79	48	43	516
1995	1,836	530	252	649	1153	149	100	75	92	699
1996	1,217	324	207	320	1157	204	90	57	71	661
1997	1,266	242	175	463	1062	161	113	36	74	636
1998	1,747	490	233	478	728	129	62	33	43	396
1999	1,746	446	205	566	698	92	66	32	38	400
2000	1,478	410	n/a	398	727	89	62	28	n/a	416
2001	1,419	370	n/a	450	703	90	65	30	n/a	400

Note:

* including melons

** excluding melons

¹ The production of the main fruits do not even add to 50% of the total fruit area for reasons that are far from unclear, although they may in part be due to the inaccurate/poor data available data

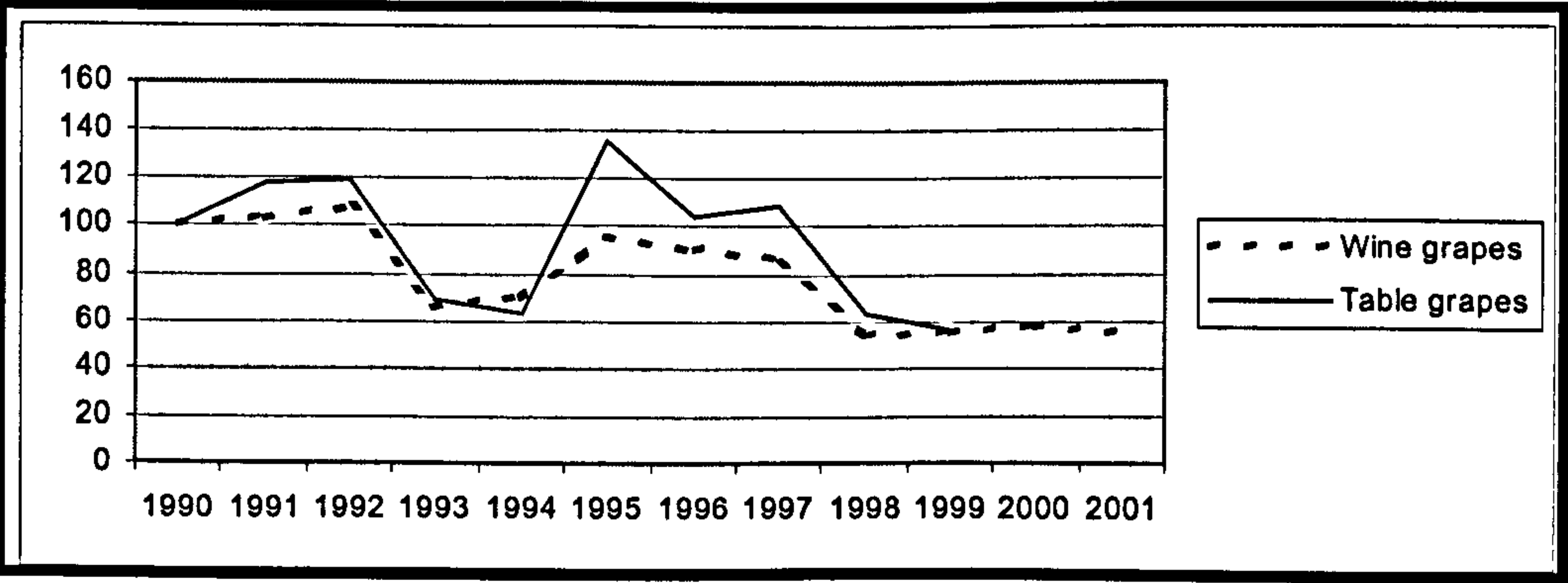
Mishev *et al.* (1999) argued that the possibility for increases in fruit production are limited in the medium term and, if the negative trend continues (*i.e.* the reduction in the number of fruit bearing trees) in the next 10 years, there will be little if any local fruit production. In the last few years, an increased interest of soft fruits have been observed due the increased demand and Bulgaria now produces 2,000 tons raspberries per year, most of them exported to EU countries (SENER, 2000).

2.4.3.2 Viticulture

In 1999, the total area of vineyards was recorded at about 126,000 ha, around 85% planted with wine grapes and 15% with table grapes (Table 2.5). The area of vineyards fluctuated over the period 1990-2001. A decrease in the area of vineyards was registered over the first 7 years of economic reform in Bulgaria, whereas since 1998 their area has increased and stabilised (Table 2.5) due to demand from the increased number of private wineries (SENER, 2000).

Over the period 1990-2001, the production of wine grapes fluctuated widely with the highest levels of 787,000 tons in 1992 and the lowest levels of 396,000 tons in 1998 (Figure 2.4 and Table 2.6). In 2001, grape production was almost half that of the pre-reform period. However, in the last few years production of wine grapes has increased slightly and remained stable mainly due to care being taken by the new owners of the restituted vineyards (MAF, 2000a; SENER, 2000).

Figure 2.4: Dynamic of grape production



Note: 1990 = 100
The indexes are cultivated on the basis of 1990 production in tones.

The dynamic changes in terms of area and production of grapes can be explained by the following factors:

- reduced yield due to the unfavourable age structure of the established fruit-bearing vineyards (when the land restitution began, approximately 35 % of the vineyards were more than 20 years old and only 2% are less than 5 years old);
- changing weather conditions;
- high production expenses;
- some technological difficulties such as high level of missing plants (in 1998 it was over 30%);
- little interest in long-term investment in this sector due to financial constraints (FAO, 1999; MAF, 2000a; SENTER, 2000).

The effect of reduced grape production resulted in a reduction in the quantity of wine produced. This negative trend dramatically affected the export-orientated wine sector (OECD, 2000; SENTER, 2000). The most common wine grape varieties in Bulgaria are Cabernet Sauvignon, Merlot, Chardonnay, Traminer and the traditional Bulgarian varieties Mavrud and Gamza (MAF, 2000a).

SENER (2000) states the viticulture would recover much quickly than the other sectors of agriculture due to substantial foreign interest, assistance and investments.

In 1999, the area of table grapes was reduced by 23% compared to 1990 (Table 2.6). However, in the same year the decline of their production was almost 40% of the pre-reform period (Figure 2.4) and this can be explained by the low yields of the old and not very productive vineyards (SENER, 2000).

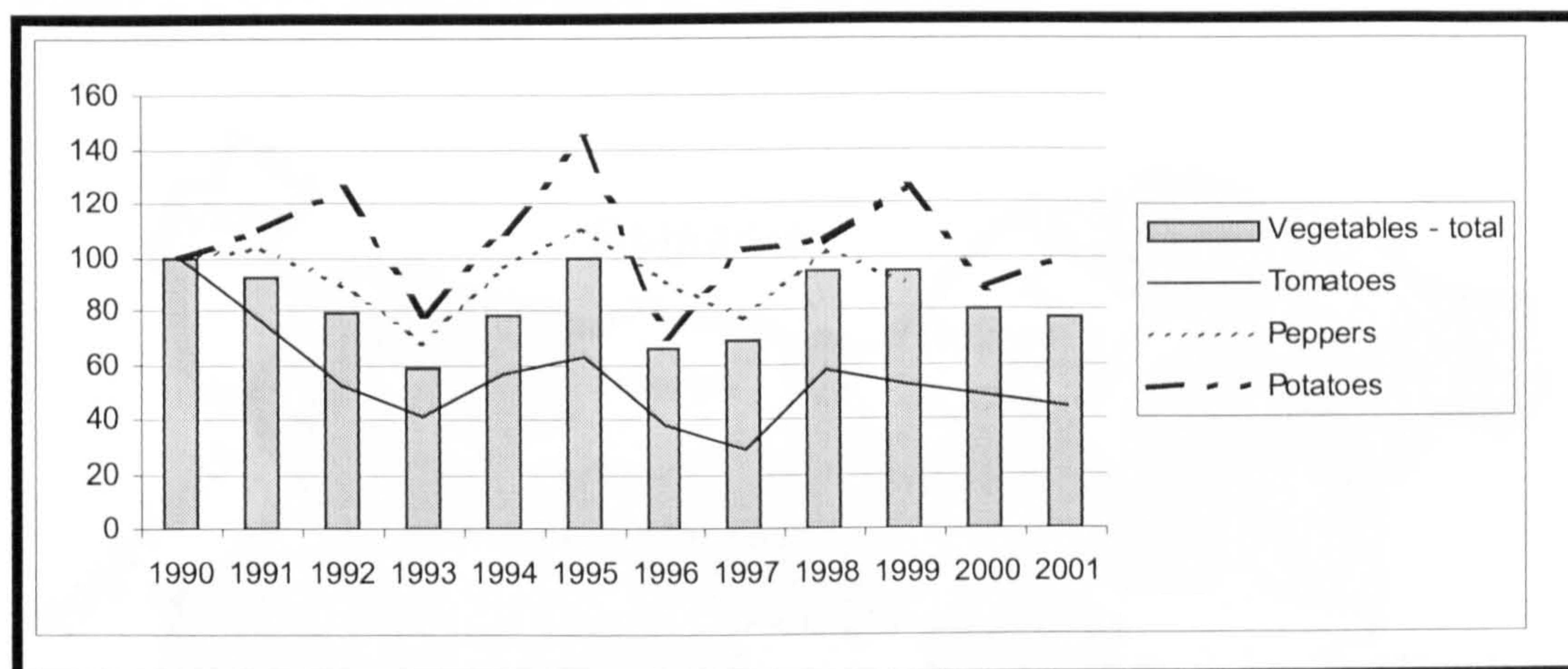
2.4.2.3 Vegetable growing sector

Vegetable growing has also been a traditional and very important sector for Bulgaria and the main vegetables are tomatoes, peppers, potatoes and cucumbers. Before World War II, Bulgaria was one of the main vegetable producers in Europe (SENER, 2000). Almost 15% of the value of total agricultural outputs in Bulgaria was vegetables in 1999 (EC, 2002b).

The areas under total vegetable cultivation fluctuated widely over the period 1990-2001 as well as the areas of the main vegetables: tomatoes, peppers and potatoes. Over the first few years of transition, the area of vegetables decreased from 116,000 ha in 1990 to 96,000 ha in 1993 this was followed by growths in 1994 and 1995, a decline in 1996 and an increase again since 1997. In 2001, the total area of vegetables was 18% greater compared to 1990 (Table 2.5). The reasons for the rise area can be linked to the 'new' farm structure (predominantly small-scale farms that are involved with intensive crops) and the stimulation of the products realising relatively high prices (MAF, 2000a; OECD, 2000). The year 1995 recorded the largest areas of tomatoes, peppers and potatoes, which was followed by a decline for the next 2 years and an increase again since 1998. In 2001, the area of tomatoes increased by 3,000 ha and the area of potatoes by 12,000 ha compared to 1990 (Table 2.5).

Over the period 1990-2001, the vegetable production fluctuated widely. This can be attributed mainly to the dynamic changes of the areas of vegetables. A growth in vegetable production was recorded in 1995, 1998 and 1999 and the levels of outputs at these years were close to the pre-reform levels (Figure 2.5). Overall, vegetable production decreased from 1,850 thousand tons in 1990 to 1,419 thousand tons in 2001 (Table 2.6).

Production of the main vegetables including tomatoes, peppers and potatoes also varied widely after the economy reform began in 1989 (Figure 2.5). Tomato output fell down from 846,000 tons in 1990 to 370,000 tons in 2001 which is only 43% of the production of the pre-reform period. Pepper production dropped significantly in 1993 and 1996. Potato output registered big changes over the period 1990-2001 including significant growth with more than 20% of the pre-reform period in 1992, 1995 and 1999 and significant drops in 1993 and 1996 (Table 2.6; Figure 2.5).

Figure 2.5: Dynamic of vegetable production

Note: 1990 = 100

The indexes are cultivated on the basis of 1990 production in tons.

The large changes in outputs of vegetables from year to year can be attributed to several factors including:

- high prices one year that lead to oversupply the following year and consequently price reduction;
- changing weather conditions;
- lack of co-ordinated management of the small size plots which are predominant in this sector;
- changing condition for access to foreign markets;
- lack of good quality seeds and other inputs (MAF, 2000a; OECD, 2000; SENTER, 2000).

2.5 OVERVIEW OF HORTICULTURE IN THE PLOVDIV REGION

2.5.1 General geographic and economic overview

Prior to 1999, Bulgaria was divided into nine large provinces that were governed by regional governmental bodies. Since 1999, the country has been divided again into 28 regions, a situation that existed prior to the onset of economic reform in 1989 (Figure 2.6). There are regional offices of the Agriculture Ministry and the State Agriculture Fund located in each district (MAF, 2000a).

Figure 2.6: Geographical location of the Plovdiv region

The Plovdiv province, one of the nine, that existed before 1999 includes Plovdiv, Pazardzhik and Smolian regions. This research, which began in 1999, used primarily the new administrative structure and focuses on the Plovdiv region. The discussion of farm structure has, however, been based upon data available for Plovdiv province, as there is no data available for the Plovdiv region (one of the 28 regions). The Plovdiv region is situated in central-south part of Bulgaria on the Thracian plain and is bordered to the south by the lowlands of the Rhodopi Mountains. There are two distinct production areas in this region. The lowland area (located on the Thracian plain) which has developed intensive agriculture/horticulture and the highland area (located at the foot of the mountains) with livestock, some horticulture and a timber industry.

The territory has an area of about 12,000 km² and includes more than 10% of the country's agricultural land (NSI, 1998; NSI, 1999a; NSI, 2001a; www.uni-

plovdiv.bg/eguide/plovdiv.htm). The favourable climatic conditions, as well as the good geographical location, have contributed to its economic development from the remote past until modern times. Consequently, the Plovdiv region is considered to be one of the most favoured regions in Bulgaria for developing agriculture/horticulture including cereals, apples, tomatoes, peppers, potatoes and grape production (MAF, 2000b; OECD, 2000; SENTER, 2000). The economic and political changes that began in 1989 have adversely affected the economic development of the region, and the agricultural/horticultural sector in particular, as its production of fruits, grapes and vegetables has decreased over the period of transition.

The population of this region is 1.2 million inhabitants (15.5% of the country population), which means it is the most densely populated region in the country (www.i-n.bg/cities). The highest percentage of employment in the Plovdiv region is in the agri-food processing industry (40%) which is a reflection of the importance of primary production in the region. However, registered unemployment level in the employment offices of the Plovdiv region is 15%, which is high compared to the other regions because of the dependence on primary sector (NSI, 1999a). The rural/urban residence ratio for Bulgaria is 47.7% and for the Plovdiv region - 54.4% (NSI, 1999a; NSI, 2001a). In the Plovdiv region about 6% of employees are under labour contracts in the agricultural sector (NSI, 1999a). In reality, this percentage is under estimate because most of the farmers are not registered. Therefore, the number of employees in agriculture in this region cannot be accurately determined.

The main administrative, business, research, communicative and cultural centre is the city of Plovdiv, the second biggest city in Bulgaria, which is located along the banks of Maritsa river. Plovdiv is one of the most ancient cities in Europe. It has a population of 350,000 people.

2.5.2 Land use and farming structure

The total cultivated land in the Plovdiv region decreased from 323,2000 ha in 1991 to 275,000 ha in 2000 of which 237,000 is used for arable crops, 27,000 for permanent crops and 11,000 for meadows (NSI, 2001a). The main 'players' in the agricultural/horticultural sector are small private units, leased enterprises and re-

organised private co-operatives (NSI, 2001a). However, the total number of the private production units in the region is not known for the reasons stated above that some private farms are not officially registered. Therefore, it is very difficult to determine exactly the farming population. However, it was estimated by NSI in 1994 that the number of farms that had horticultural crops was approximately 600 (NSI, 1995). The limitation of this data (list of registered agricultural/horticultural farms) was that this estimation was based on registered farms and this data was not accurate because some of the farms registered did not run horticultural business any longer and many of the newly established farms (after 1994) were not registered *i.e.* included in this list.

The data available with regard to the structure of the private farms (Table 2.7) and registered co-operatives (Table 2.8) in the different provinces of Bulgaria was based on research samples made by the Ministry of Agriculture and Forestry (MAF) in the nine provinces in 1997 discussed by FAO (FAO, 1999). Due to the lack of available data about the new 28 administrative regions, the following discussion is based on the old administrative division (9 provinces). The discussion below is aiming to provide a background about the farming structure in the region: private farms and private co-operatives.

Private farms

In the Plovdiv province the prevailing agricultural units (more than 50% of the MAF sample) are between 2-10 ha in size (Table 2.7). The FAO (1999) state that these farms are market orientated and some of them used leased land. There are also small farms (7%) with less than 2 ha that cultivate mainly highly intensive crops. This contrasts with the data available for the whole of the country where the majority of the individual private farms (co-operatives excluded) are of less than 2 ha. This may demonstrate that either the farms in the Plovdiv province are of bigger size or the MAF research sample was focused mainly on commercial farms and ignored the small farms of less than 1 ha. More than 40% of this MAF sample were of more than 10 ha and mostly produced both horticultural and agricultural products. Kostov and Lingard (2002) confirm that agriculture in Bulgaria and in the Plovdiv province and region is characterised by market-oriented commercial farms and by small-scale

farms (most often subsistence) due to the lack of active Land market. Due to the suitable natural conditions, vegetables and fruits are mainly grown in the lowland areas while tobacco and potatoes are planted in the highland locations. Most of the land of the large farms used is rented, which is one of the possible 'scenarios' for the future development of the horticultural industry in the Plovdiv province and region.

Table 2.7: Size structure of the private farms by provinces in 1997*

(Source: MAF, 1998, FAO, 1999)

	No	Sofia-town	Burgas	Varna	Lovech	Montana	Plovdiv	Ruse	Sofia	Haskovo
< 1 ha	50	-	5	17	-	5	10	2	-	11
1-2 ha	110	-	7	6	4	36	14	20	-	23
2-5 ha	678	3	89	61	22	198	80	100	-	125
5-10 ha	935	2	154	89	31	278	100	122	2	157
10-30 ha	975	7	206	161	45	169	76	148	10	153
30-100 ha	446	7	84	95	32	60	28	81	5	54
100-500 ha	275	7	42	65	28	27	33	27	7	39
500-1000 ha	42	1	1	14	5	4	9	2	-	6
> 1000 ha	15	-	1	5	1	3	2	2	-	1
Total	3526	27	589	513	168	780	352	504	24	569

* This data refers to the administrative structure available before 1999 (9 provinces)

Private co-operatives

The private co-operatives have a very complicated organisational structure in the Plovdiv province and throughout Bulgaria and their existence can be mainly explained with the slow process of land reform. This organisational structure is transitional and covers the gap emerging in the economic restructuring from a centrally planned to a free market economy (Bankova, 1999; Mishev *et al.*, 1999)

In 1997, the number of the co-operatives in all the nine regions ranged between 10% - 14% except for Sofia province. The highest concentration of co-operatives was in the north-eastern part of Bulgaria because there they specialise mainly in growing cereals and industrial crops. The number of co-operatives in the Plovdiv province was relatively low (10.2%) and their average size, 514 ha, was well below the average size for Bulgaria, which was 754 ha. The low average size of the co-operatives in the Plovdiv province may be explained partly by their horticultural orientation (*i.e.* intensive crops) (Table 2.8).

Table 2.8: Distribution of the registered co-operatives by provinces in 1997

(Source: MAF, 1998; FAO, 1999)

Regions	Number of co-operatives	Percentage %	Average land/ha	Number of rented contracts	Land for a contract in ha
Sofia-town	80	0.2	215.6	0	0
Burgas	436	13.5	994.6	518	0.4
Varna	457	14.2	860.8	690	134.0
Lovech	465	14.4	911.8	562	0.4
Montana	372	11.5	811.7	18	115.6
Plovdiv	328	10.2	514.3	437	0.7
Ruse	494	15.3	764.9	223	340.6
Sofia	255	8.0	278.8	560	1.1
Haskovo	409	12.7	630.4	211	5.8
Total	3,224	100	753.7	3,007	33.5

* This data refers to the administrative structure available before 1999 (9 provinces)

The newly registered private co-operatives in the Plovdiv region are of two main types member-oriented and market-oriented, which were described above. Member-oriented production co-operatives are characterised by the fact that their management is not based on the common co-operative approach because most of the members are not involved in their management. All the members have equal power but in practice they do not control the outputs because they are not interested in it (Kaneva, 1997). They are not specialised, have a limited capital for investments and use old and technically obsolete machinery inherited from the previous state organisational structure. The market-oriented co-operatives often considered diversifying into marketing and processing (FAO, 1999; OECD, 2000).

The member-oriented co-operatives are the most common type in the Plovdiv region (one of the 28 regions) while the market-oriented co-operatives started appearing in the last 5-6 years and began adjusting their management decision based on the market (FAO, 1999).

No official information was available about the farm structure in the Plovdiv region after 1999 because this region was not prioritised for investigation. However, based on various governmental and international reports (MAF, 1998c; FAO, 1999; MAF, 2000a; OECD, 2000; SENTER, 2000) it is reasonable to assume that in the Plovdiv region there are a large number of small-scale private farms (less than 2 ha) that are mainly involved with horticultural intensive crops. Family type farms of 2-10 ha and

farms of more than 10 ha which are using also some leased land and private co-operatives that are also existing in the Plovdiv region.

2.5.3 Performance of the horticultural sector in the Plovdiv region

2.5.3.1 Fruit growing sector

Prior to 1996, the area under fruit cultivation was relatively stable (about 21,000 ha) in the Plovdiv region. There was an increase over the next 3 years (1997-1999) followed by a decline in 2000 and 2001 (Table 2.9). In 2000, the Plovdiv region had the leading position in terms of the area of orchards in Bulgaria, with 16% of the total area compared with Gabrovo region with 10% and Stara Zagora region with 6% (MAF, 2001).

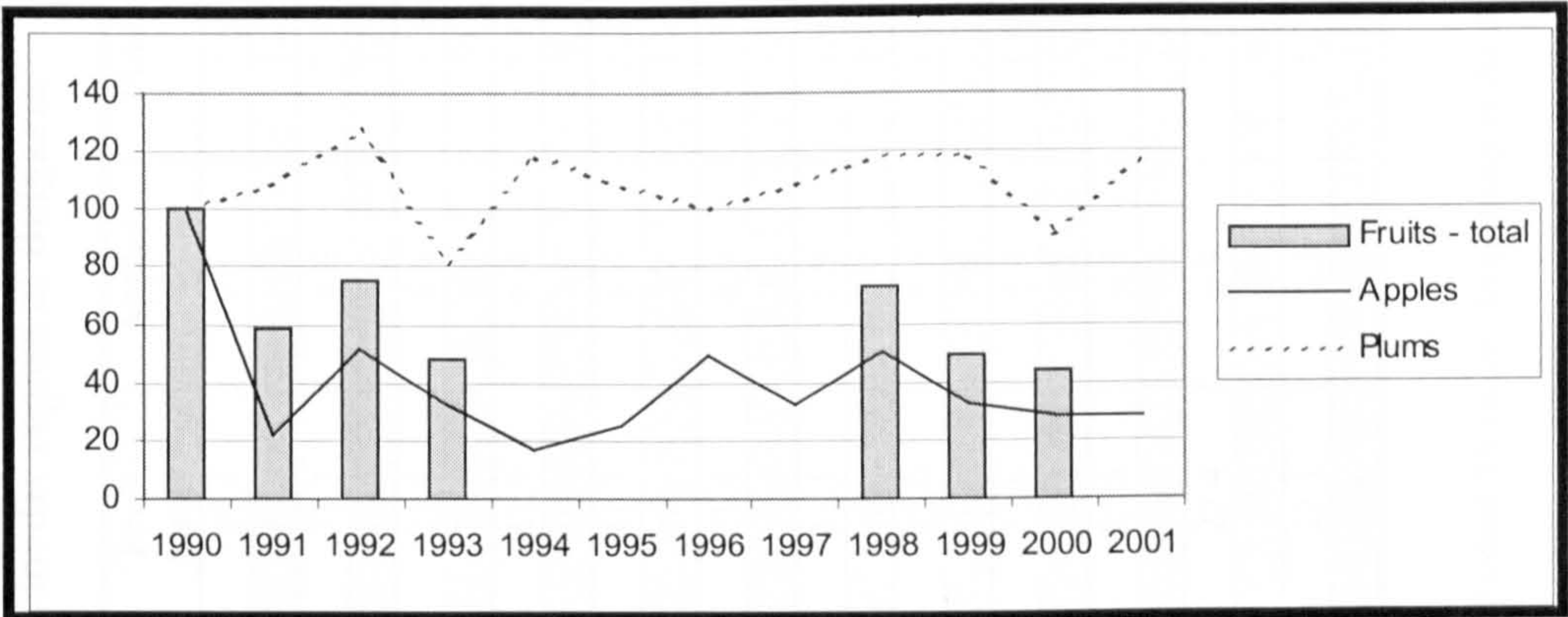
With regard to apple orchards, the Plovdiv region is the national leader, with more than 40% of the apple area of 6,935 ha in 2000 (MAF, 2001). The areas of the apple orchards were characterised by dynamic changes over the period 1990-2001. They decreased during the first 3 years of transition then stabilised over the period 1992-1995, declined again for two years and rose sharply after 1998 but again declined in 2001. Although the Plovdiv region is the second biggest region in terms of area of plums, its area declined by more than one third in comparison to 1990 with the sharpest decrease from 3,000 ha in 1992 to 1,600 ha in 1996 (Table 2.9). Cherries, apricots and peaches are also produced in the Plovdiv region but are not in leading positions or of great importance (NSI, 1999b; MAF, 2000b).

Data about the total fruit production was not available for the whole period (1990-2001). Nevertheless, it can be seen that the fruit production fluctuated in the 1990s. A general decline from 222,000 tons in 1990 to 97,700 tons in 2000 was recorded, a decrease of more than 55% (Table 2.9). Apple production in 2001 was hardly 33% compared to 1990. However, over the same period of time the apple outputs widely varied and a growth was recorded in 1992, 1996 and 1998 (Figure 2.7). Whereas plum production slightly increased in comparison to the pre-reform period from 11,000 tons in 1990 to 13,000 tons (Table 2.9).

The fruit output in the Plovdiv region fluctuated over the last 11 years (1990-2001)

and the factors that contributed to these changes are similar to those that were mentioned above for the whole country such as: unfavourable age structure of the trees, changeable weather conditions, using inefficient technologies, high production costs and lack of capital for investment (NSI, 1999a; MAF, 2000a; SENTER, 2000).

Figure 2.7: Fruit production in the Plovdiv region



Note: 1990 = 100
The indexes are cultivated on the basis of 1990 production in tones.

Table 2.9: Areas and production under horticultural crops in the Plovdiv region of Bulgaria¹
(Source: NSI, 1997; 1999; 2001)

Year		Vegetables – total*	Tomatoes	Pepper	Potatoes	Fruit - total**	Apples	Plums	Cherries	Table grapes	Wine grapes
1990	Area - thousand ha	12.3	3.4	2.3	2.8	21.4	7.1	2.6	1.0	2.0	11.3
	Production-thous. t.	223	132	39	31	222	119	11	5	7	44
1991	Area - thousand ha	12.0	2.3	2.9	3.2	21.3	6.6	2.9	1.1	2.0	10.9
	Production-thous. t.	176	89	37	35	131	26	12	4	16	47
1992	Area - thousand ha	12.0	1.6	2.6	3.6	21.4	6.4	3.0	0.7	2.0	11.2
	Production-thous. t.	130	58	36	68	167	61	14	4	5.3	12
1993	Area - thousand ha	10.0	2.1	2.1	2.1	21.9	6.4	2.3	0.6	1.4	9.5
	Production-thous. t.	118	58	33	28	108	38	9	3	3	33
1994	Area - thousand ha	11.5	2.5	2.9	2.7	21.7	6.4	2.3	0.4	1.4	9.4
	Production-thous. t.	166	74	65	46	n/a	20	13	3	3	34
1995	Area - thousand ha	14.9	2.5	3.2	3.0	21.4	6.4	2.2	0.6	1.4	9.4
	Production-thous. t.	185	68	69	72	n/a	30	12	6	10	52
1996	Area - thousand ha	13.8	1.3	2.8	3.2	21.1	5.9	1.6	0.6	1.4	9.2
	Production-thous. t.	119	33	58	33	n/a	59	11	n/a	13	63
1997	Area - thousand ha	14.8	1.8	3.3	3.1	23.0	5.9	1.6	0.6	1.4	9.2
	Production-thous. t.	222	50	71	35	n/a	38	12	n/a	11	61
1998	Area - thousand ha	n/a	2.8	3.3	2.8	23.8	6.9	1.6	0.6	1.4	10.1
	Production-thous. t.	n/a	69	68	30	162	60	13	4	7	52
1999	Area - thousand ha	n/a	4.9	3.7	4.2	23.8	6.9	1.6	0.6	1.4	10.2
	Production-thous. t.	n/a	86	43.5	40	108	39	13	3	3	29
2000	Area - thousand ha	n/a	5.6	4.3	4.6	22.4	6.9	1.6	0.6	1.4	10.2
	Production-thous. t.	n/a	58	45	44	98	33	10	3	3	29
2001	Area - thousand ha	n/a	4.4	4.3	n/a	22.1	6.5	1.7	n/a	1.4	10.1
	Production-thous. t.	n/a	61	53	n/a	n/a	33	13	n/a	3	22

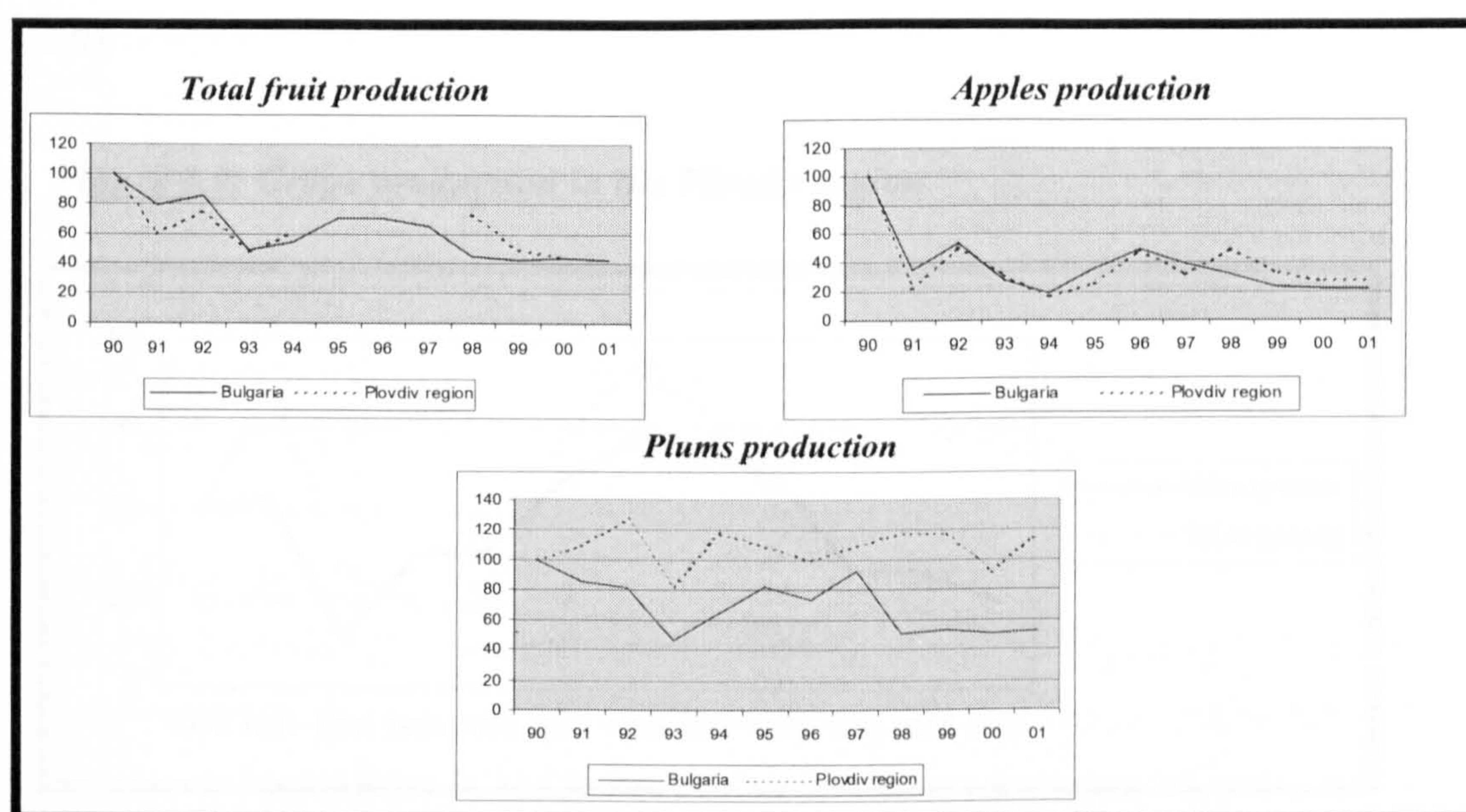
Note:* Vegetables, potatoes, melons and watermelons

** Fruits, grapes and strawberries

¹ The data in this table was collected from various statistical sources most of which are not published. Therefore, the accuracy of the data cannot be guaranteed

The total fruit outputs in Bulgaria and in the Plovdiv region, including apple production did not demonstrate significantly different patterns of change except in 1991 and 1998. However, the patterns of plum production in Bulgaria and in the Plovdiv region differed significantly (Figure 2.8). The inaccuracy and unreliability of the data or some other unknown reasons may explain this difference.

Figure 2.8: Fruit production in Bulgaria and in the Plovdiv region



Note: 1990 = 100

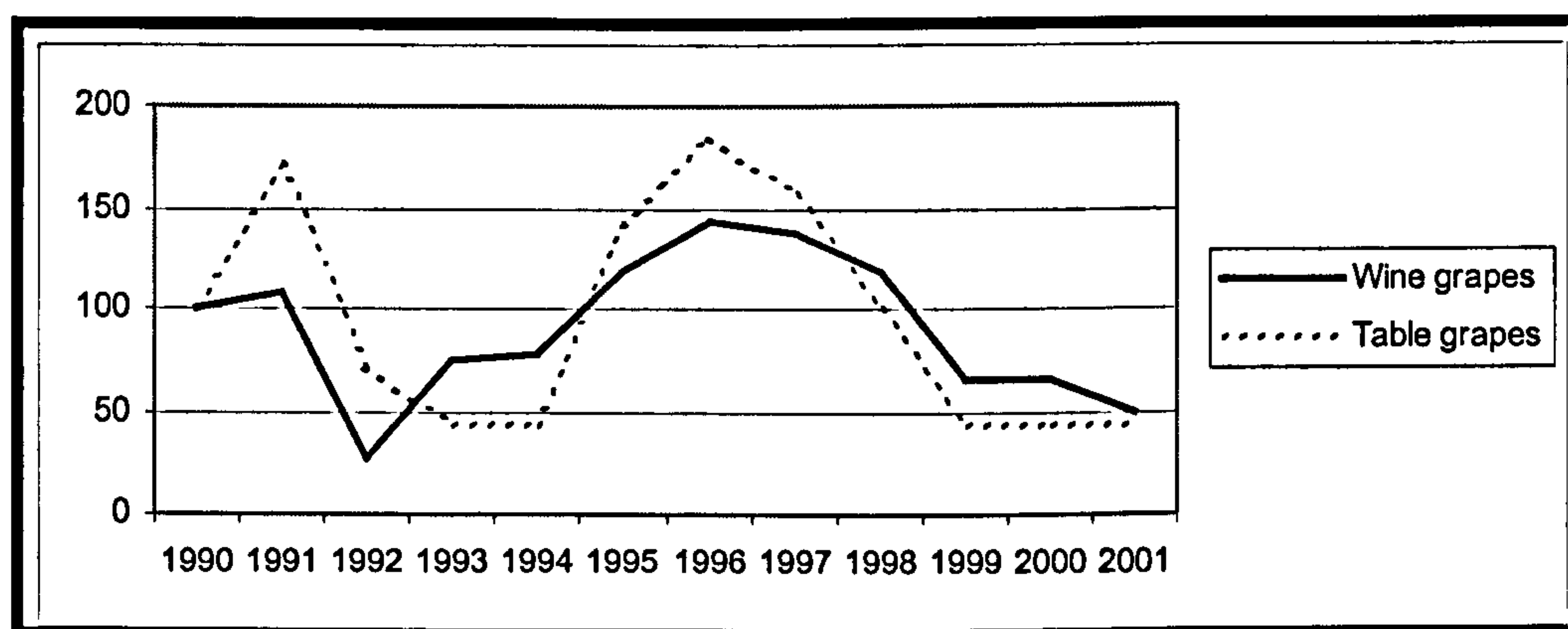
The indexes are cultivated on the basis of 1990 production in tons

2.5.3.2 Viticulture

In 1999, the Plovdiv region was in a second place in Bulgaria in terms of the areas of vineyards with 11,600 ha in comparison with the Bourgas region with 15,800 ha (SENER, 2000). The area of wine grapes declined significantly over the first 7 years of transition (1990-1997) except for a small growth registered in 1992. Since 1998 the areas of wine grapes has increased slightly and stabilised at about 10,000 ha. The areas of table grapes decreased from 2,000 ha in 1990 to 1,400 ha in 1993 and since then have stabilised at this level (Table 2.9).

Nevertheless, the production of wine grapes in the Plovdiv region widely fluctuated over the period of 1990-2001 with highest production of 63,000 tons in 1996 due to the good weather condition and lowest levels of outputs of 12,000 tons in 1992 when the yields were very low due to unfavourable weather conditions just before harvest (NSI, 1998). However, since 1996 wine grape production declined and in 2001 was 21,700 tons, which was about 40% of the pre-reform levels (Figure 2.9; Table 2.9). The production of table grapes also varied over the period 1990-2001 and in 2001 accounted 3,700 tons which was almost half of the level in 1990 (Figure 2.9; Table 2.9).

Figure 2.9: Grape production in the Plovdiv region

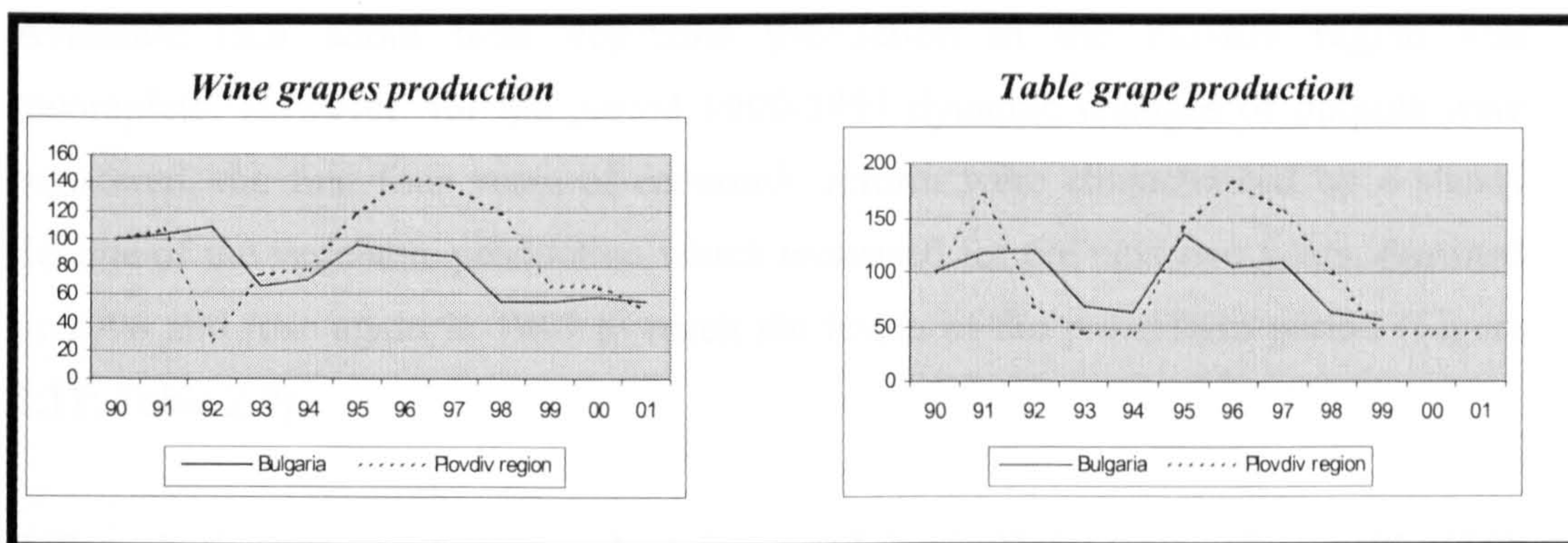


Note: 1990 = 100

The indexes are cultivated on the basis of 1990 production in tons

The wide fluctuation of the grape output in the Plovdiv region can be attributed to many of the same factors that were mentioned above for Bulgaria such as changeable weather conditions, old plants, lack of proper care of the plants, high production costs and lack of capital for investments (NSI, 1998; EC, 1998c; OECD, 2000).

In general, grapes production (wine and table) differed in Bulgaria and in the Plovdiv region except 1991, 1993, 1994, 1999, 2000 and 2001 for wine grapes in 1996 and 1999 for table grapes (Figure 2.10). The reasons are unclear and might be attributed to unreliability of the data available for the Plovdiv region.

Figure 2.10: Grape production in Bulgaria and in the Plovdiv region

Note: 1990 = 100

The indexes are cultivated on the basis of 1990 production in tons

The Plovdiv region has a very good potential for developing a sustainable wine grape sector because one of the very traditional Bulgarian varieties “Mavrud” has been only grown in the Plovdiv region (NSI, 1998; SENTER, 2000).

2.5.3.3 Vegetable growing sector

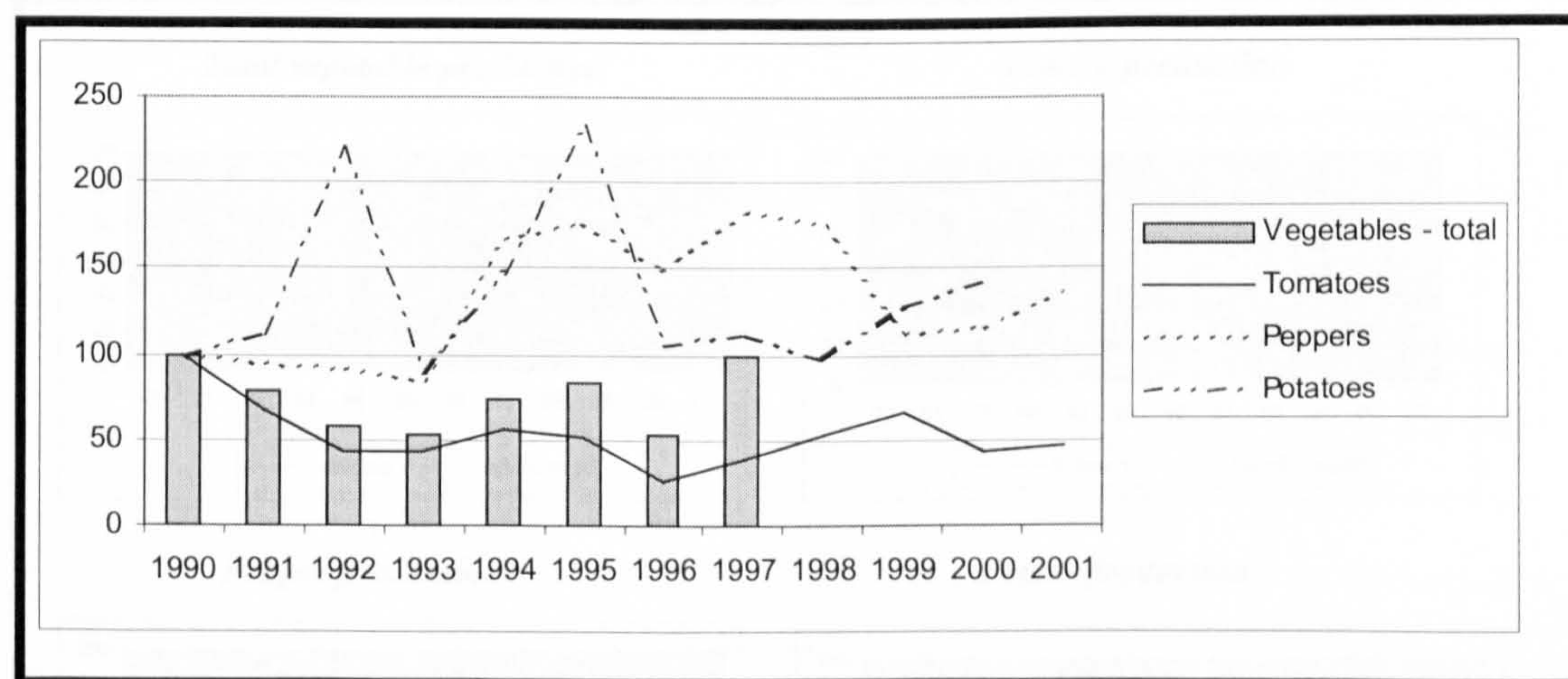
The Plovdiv region is also a leader in terms of the area under vegetable cultivation in Bulgaria with 20% of the total area in comparison with the Bourgas region with 12% of it in 2000 (MAF, 2001). The data for the whole period 1990-2001 was not available. However, it can be seen that area of the vegetable plots fluctuated over the period 1990-1997 with a growth recorded in 1995 and 1997. The main vegetables in the Plovdiv region are tomatoes, peppers and potatoes. Some other vegetables are also grown there such as cucumbers, beans and carrots.

In 2000, about one fifth of the areas of tomatoes and peppers in Bulgaria were cultivated in the Plovdiv region, which placed the region in a leading position nationally. Significant changes in the areas of tomatoes, peppers and potatoes were observed over the period 1990-2001 with the highest levels for these three crops of 5,600 ha (for tomatoes), 4,300 ha (for peppers) and 4,600 ha (for potatoes) in 2000 and lowest level of 1,300 ha in 1996 for tomatoes and 2,100 ha for peppers and potatoes in 1993. Potatoes were grown in the Plovdiv region on more than 4.6 thousand ha in 2000, which was almost 30% more compared to 1990 (Table 2.9).

Available data about total vegetable production in the Plovdiv region was incomplete. However, for the period 1990-1997 dynamic changes of outputs were registered, the first four years of economic reform were characterised by a steady decline of the vegetable production which increased for the next two years, declined in 1996 and rose again in 1997 to reach the levels of the pre-reform period (Figure 2.11; Table 2.9).

Although the area of tomatoes had increased in 2001 in comparison with 1990 tomato production in 2001 declined by almost 50% compared to 1990 (Table 2.9). The production of peppers and potatoes varied widely over the period 1990-2001 with a growth of production outputs in 1995 and 1997 for peppers and in 1992 and 1995 for potatoes (Figure 2.11). The Plovdiv region supplied 25% of tomatoes 25% of the peppers and 11% of the potatoes produced in 2000 for domestic and foreign markets (NSI, 2001).

Figure 2.11: Vegetable production in the Plovdiv region



Note: 1990 = 100

The indexes are calculated on the basis of 1990 production in tons

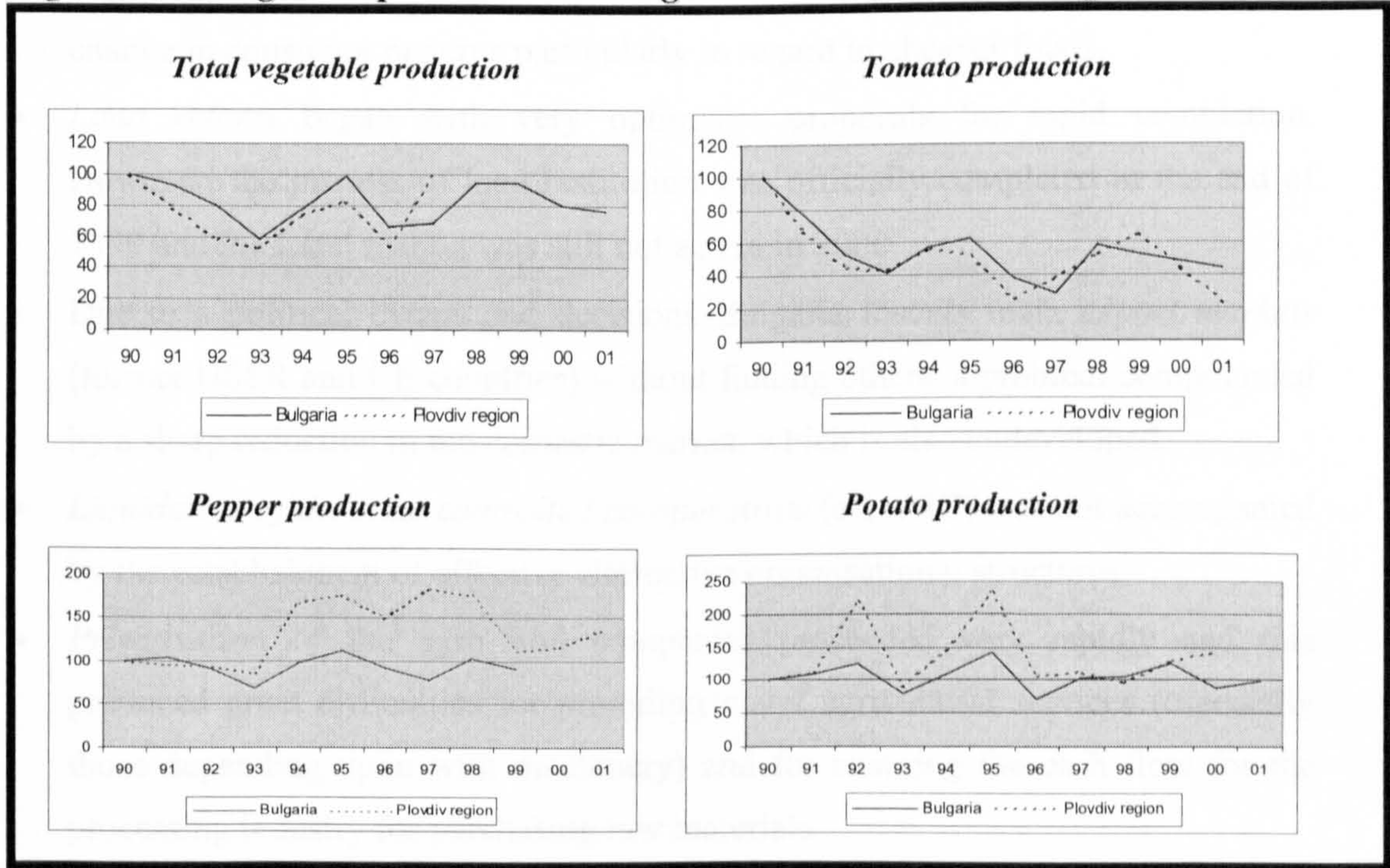
The main factors that attributed to these changes of the areas and the production of vegetable were their suitability for small-scale farming, where it is relatively easy to switch from one crop to another, unstable market demand, use of inefficient technologies, low quality seeds and changeable weather conditions (NSI, 1998;

OECD, 2000). These apparent trends may also be a result of inaccurate and inconsistent data.

However, it has to be mentioned that the yields of the tomatoes, peppers and potatoes were above the national average in the last few years (1999-2001) which suggested the potential advantage of developing a strong vegetable-growing sector in the region (NSI, 2001).

The patterns of total vegetable production in Bulgaria and in the Plovdiv region were relatively similar except a big difference in 1997. The tomato outputs in the country and in the Plovdiv region were almost parallel except in 2001. However, comparison between pepper and potato production at national and regional levels demonstrated differences apart from 1991, 1992 and 1993 for pepper output and 1991, 1993, 1997, 1998 and 1999 for potato outputs (Figure 2.12). Again the reasons are unclear and may be attributed to an inaccuracy of the data.

Figure 2.12: Vegetable production in Bulgaria and in the Plovdiv region



Note: 1990 = 100
The indexes are cultivated on the basis of 1990 production in tons

2.6 ANALYSIS OF THE PERFORMANCE OF THE HORTICULTURAL SECTOR

2.6.1 In Bulgaria

Since transition towards a free market economy began in 1989, the economic recession of the agricultural sector had led to a lack of confidence in this industry and an increase in the area of registered abandoned land. Gross agricultural output in 1999 declined by more than 30% compared to 1989 (OECD, 2000). This was mainly a result of poor organisational decisions taken by the government with regard to agriculture, especially over the first 7 years of transition (Mihailov, 1997; EC, 1998c). They have failed to find the right time and the right approach to restructuring the agricultural sector in Bulgaria.

The major factors are:

- *Price liberalisation* started without farmers being ready for the increased prices of inputs, low sale prices and was combined with a fall in consumer demand and change in consumer patterns particularly in regard to cheaper foods.
- *Land reform* began with very optimistic proposals for rapid completion. However, the process of land restitution was officially completed in the end of 1999 and the Land market was still not active in 2000.
- Due to a political events and decisions Bulgaria lost its main *export markets* (former USSR and CE countries) without finding others, a problem compounded by a sharp reduction in the domestic market, which is also undeveloped.
- *Liquidation of the state controlled co-operatives* (e.g. AIC) was not accompanied by the establishment of effective alternative organisational structures.
- *Privatisation* of the agro-food companies proceeded very rapidly and this produced great difficulties for providing many agricultural services (especially those depending upon with machinery) and for ensuring the cash flow for the processing industry for purchasing raw materials.
- The *quality* of some products is not good due to ineffective production systems and technologies, therefore they cannot compete in the European and World

markets (Ivanova, 1999; Naydenov and Liubenov, 1999; MAF, 2000a; SENTER, 2000).

As a result of these sudden changes a range of problems arose that include:

- agricultural and horticultural outputs decreased compared to the pre-reform levels;
- primitive nature of production using old technologies and obsolete machinery;
- emergence of a large number of small-scale farms, producing mainly for home consumption or selling a small surplus;
- increased levels of unemployment especially in the rural areas;
- lack of management skills for running commercial farming (FAO, 1999; OECD, 2000; SENTER, 2000).

However, some encouraging results were observed by 2000 such as completion of the processes of land restitution and privatisation, establishment of the Land market and the introduction of governmental support and market information service (OECD, 2000, SENTER, 2000).

2.6.2 In the Plovdiv region

Historically horticulture has been an important sector for the economy of the Plovdiv region. The long and rapid process of economic transition that began in 1989 negatively affected the economic development of the Plovdiv region and had a mainly negative impact upon the development of the agricultural/horticultural industry.

The horticultural industry in the Plovdiv region has been disadvantaged by a range of problems that have resulted from the political, economic and agricultural reforms in Bulgaria that are applicable also in the Plovdiv region. These problems created some *disadvantages* (SENER, 2000), these include:

- Complex land restitution process that resulted in high fragmentation of the land in the region;
- Price liberalisation that in general reduced the buying power of farmers,
- Lack of efficient marketing structures and a developed wholesale market system for agricultural/horticultural products;
- Huge trade difficulties of the agri-food companies in the region due to the loss of their market export positions (former socialist countries).
- Lack of credit facilities available for them to make purchase such as seeds, fertilisers and farm machinery.
- Underdeveloped farm diversification (alternative agricultural and non-agricultural economic activities) that could ensure additional incomes that would introduce fair standards for living for the agricultural and rural communities (MAF, 2000a; SENTER, 2000).

There are a few structural *advantages* in the Plovdiv region that may be able to operate as a 'framework for the revitalisation of the horticultural industry and they are:

- A wholesale market exists in the Plovdiv region (15 km away from Plovdiv only). Although it is not very well organised and efficient, it has played an important role during the transition period as it has provided small-scale farms with a place that they can sell their produce. The OECD (2000) identified that the wholesale markets (one in Sofia, Plovdiv and Varna) in Bulgaria differ from the wholesale markets in the Western countries because they are imperfect due to the fact that they inherited the old monopolistic and oligopolistic structures from the period of Socialism. The FAO (1999) also suggested that the three wholesale markets (including the one in the Plovdiv region) have been not efficient because of the lack of financial resources for new infrastructure investments and limited managerial and marketing skills of the current managers. These markets are improved versions of the 'farmers market' where the growers were selling their produce by themselves. Governmental reports have discussed the limitations of the existing three wholesale markets in Sofia, Plovdiv and Varna and a project

for establishing newly organised wholesale markets started in 2000 (FAO, 1999; MAF, 2000a; OECD, 2000).

- The only existing institute for fruit research is located in Plovdiv, which has provided help for the local producers, even with regard to their administrative and financial difficulties.
- The biggest Agricultural University in Bulgaria solely specialised in agriculture is also located in Plovdiv.

2.6.2.1 Strengths and weaknesses of the horticultural industry in the Plovdiv region

MAF (2000a) identified the strengths and the weaknesses of Bulgarian agriculture, which were applied in this study with regard to agriculture/horticulture in the Plovdiv region. The main strengths that were identified for Bulgaria and were applicable in the Plovdiv region were:

- Good natural conditions for the development of the horticultural industry in the region. The *soils* are fertile throughout most of its territory. *Underground water* is also available which is a prerequisite for good yields. The region enjoys a *Mediterranean climate*, which is especially good for fruits, vegetables and arable crops. This gives an advantage for producing high quality horticultural crops in the Plovdiv region.
- Considerable *experience* in producing horticultural crops.
- Fruits and vegetables have been *traditionally grown* from previous generations.
- The unique position of producing the distinctive wine grape variety 'Mavrud' (SENER, 2000).

The weaknesses regarding the development of the horticultural industry Bulgaria that are applicable for the in the Plovdiv region were as follows:

- The *economy* of the region has been poor since the transition towards a free market economy began in 1989. Family incomes have decreased resulting in

reduced buying capacity on the one hand from the consumers on the other hand from the farmers (MAF, 2000a).

- The *increased number of small agricultural/horticultural farms* (between 1-2 ha) that are not efficient, competitive and cannot afford to buy modern machinery and need to implement new production systems. They are still using machinery, technologies and equipment that were inherited from the old organisational structures (*i.e.* AIC).
- *High fragmentation of the land* that was consequence of the land reform (FAO, 2000).
- Most of the *permanent plots (fruit trees and vineyards)* are old, which has resulted in decreased outputs. Also the young plots are not taken proper care of.
- *Lack of experience* in handling and quality packaging and marketing.
- *Lack of management experience* in commercial farming (MAF, 2000a; SENTER, 2000; OECD, 2000).

2.6.2.2 Opportunities and threats of the horticultural industry in the Plovdiv region

The dynamic of the external business environment has had a strong impact upon farm businesses in Bulgaria and in the Plovdiv region. The political, economic and social changes in Bulgaria discussed above have presented some opportunities and threats for the farmers in the Plovdiv region. The main opportunities can be summarised as follows:

- *Exploring new markets* that could substantially influence the revitalisation of the horticultural sector in the region (MAF, 2000a).
- *Adopting organic farming* (SENER, 2000; Fischler, 2003).

The external environment also had negative impacts upon the farm businesses. Therefore, the main threats that have to be avoided are summarised as follows:

- The *weather* (insufficient levels of rainfall) and unexpected hailstorms could destroy or damage the harvest.

- The *unstable political situation* in the country (OECD, 2000).
- *Poor legislation* with regard to the agricultural sector especially regarding the Land Law, which resulted in inactive Land market.
- *Lack of strategic planning* in agriculture (especially long-term) in the region.
- *Poor market structures* that further disadvantage the low market position of the small horticultural farms (FAO, 1999).
- *Poor quality* of the agricultural/horticultural production which is a barrier exploring new markets (SENER, 2000).

2.7 SUMMARY

This chapter has presented a review of agriculture/horticulture in Bulgaria and in the Plovdiv region. This sector has traditionally been an important part of the economy of Bulgaria and in the Plovdiv region mainly due to the favourable climate and fertile soils. Despite the good natural conditions, in the last two decades, agriculture/horticulture has been in a critical situation due to political, economic, social and technological influences such as political conflicts between the governing parties, economic reform from a centrally planned economy to a free market economy, agricultural reform, inefficient governmental decisions, poor legislation, lack of capital for investments, de-population of rural areas.

Increasing the competitiveness of the agricultural/horticultural businesses, improving the incomes from agriculture and preparation for EU accession have become the main aims for the Bulgarian government since 1997. The SAPARD programme has been introduced in Bulgaria and its main instrument NARDP established the key policy objectives and measures with regard to agriculture/horticulture and rural areas.

Since the economic transition began in 1989, the large AICs existing during the period of Socialism were liquidated and two new organisational structures emerged: private individual farms and private co-operatives. The large number of private farms and private co-operatives that appeared were facing a range of challenges such as price liberalisation, land reform, privatisation and loss of main export markets.

The fruit-growing sector, viticulture and vegetable-growing sectors were badly hit by the political, economic and agricultural reforms in Bulgaria and in the Plovdiv region in particular. Overall, the production of the main horticultural crops decreased over the last 11 years due to the changeable weather conditions, unstable economic and political situation, inconsistent agricultural policies, unfavourable age structure of the trees and vineyards and usage of old technologies and machinery (OECD, 2000).

Describing the situation of agriculture/horticulture in Bulgaria and in the Plovdiv region provides background information for a better understanding of the future business development of the farms, which relates to the strategies that they intend to implement. Therefore, this research also reviews literature about strategic theory, which provided the analytical tool of this study. The next chapter defines the strategy and discusses different strategy development processes and analytical approaches that were adopted for the planning of the primary research.

CHAPTER 3: STRATEGY THEORY

3.1 INTRODUCTION

This chapter reviews a range of theories that have developed and evolved over the last fifty years in relation to strategy. A fundamental aim of this thesis is to propose alternative strategies for the revitalisation of the horticultural industry in the Plovdiv region of Bulgaria. These strategies relate particularly to the future of the horticultural business and therefore there is a particular focus upon strategies for business. However, these horticultural enterprises operate in a context that is affected by strategies and policies implemented by regional, national and international agencies consequently this review of strategic theory endeavours to provide a comprehensive review and is not simply restricted to strategic theory related to individual businesses. The strategies proposed to the farm managers in the Plovdiv region of Bulgaria emerged from a thorough review of the literature were subsequently analysed and evaluated by the farmers using the conceptual frameworks discussed in this chapter. The chapter is divided into eight parts, in general a historical, developmental perspective has been adopted in this review of the various dimensions of strategic theory.

3.1 Introduction.

3.2 Discusses strategy development in terms of underlying theories, definitions and levels.

3.3 Reviews some key strategic issues such as the process and practice of strategic planning, strategic decision making and strategic management.

3.4 Summarises a range of approaches to strategic analyses, in terms of how internal and external analysis as well as industry competitive analyses and business competitive analyses affect strategy development in a company.

3.5 Reviews the different alternative strategies that can be employed by a company.

3.6 Discusses the role of the people in the process of strategy development particularly in relation to the spread and uptake of ideas, diffusion and adoption and suggests how these processes can influence the choice of strategies.

3.7 Discusses the concept and process of evaluation of strategies.

3.8 Provides a summary and a bridge to Chapter four, which reviews strategies in relation to agriculture and horticulture.

3.2 STRATEGY DEVELOPMENT

The term strategy has a Greek origin: '*Strategia – the art of war*' which means projecting and directing military movements (Jennings and Wattam, 1998; Quinn, 1999; Oliver, 2001). The earliest ideas of a strategy were influenced by military experience. It was considered that there were similarities between running a business and some aspects of military experience such as developing tactics, concentrating on ones own forces and power and using the weaknesses of the enemies (Webb, 1989; Whittington, 2001).

The application of strategic thoughts to business was developed in the early 1960s at the Harvard Business School and continues to evolve. The stimulus for this arose from the realisation that businesses were operating in an environment that was changing rapidly, therefore there was a need to match the new business opportunities with organisational resources. As a result different management approaches were required for different aspects and divisions of the business (Rumelt *et al.*, 1991; Quinn, 1999).

3.2.1 Theories

The theory of strategy has evolved and different authors have focused on different issues of strategy (Ansoff, 1968; Andrews, 1971; Porter, 1985; Feurer and Chaharbaghi, 1997; Rumelt *et al.*, 1991; Spanos and Lioukas, 2001; Farjoun, 2002; Oliver, 2002). In the 1960s, the traditional mainstream strategy literature as exemplified by Ansoff (1968) and Andrews (1971) laid the foundations for strategic planning by matching business opportunities with organisational resources and illustrating the usefulness of strategic plans (Feurer and Chaharbaghi, 1997; Oliver, 2002). Some authors, (Spanos and Lioukas, 2001) argued that this stage of strategy development process is also known as 'resource-based' theory and is based on the careful evaluation of available resources (strengths and weaknesses).

In the 1980s, the focus shifted from strategic planning towards strategic management and increased attention was given to the issue of strategy implementation. Porter (1985) developed the concepts of competitive strategy and building and sustaining competitive advantage that adopts an 'outside-in' perspective by anticipating and exploiting business opportunities. Within this framework, a firm develops a set of strategic activities aiming to adapt to the industry environment by seeking an attractive

market position. This position is significantly dependent on the influences of competitive forces encountered by a company (Feurer and Chaharbaghi, 1997).

Peteraf (1993) and Spanos and Lioukas (2001) argued that these two main viewpoints of 'resource-based' and 'competitive strategy' perspectives complement each other in explaining a firm's performance and both industry and firm's assets have a significant contribution to firm success. The resource-based approach, by emphasising firm-specific efforts in developing and combining resources to achieve competitive advantage provides the strengths and weaknesses (part of the overall SWOT framework) while industry analysis supplies the opportunities and threats part.

3.2.2 The concept of strategy

The literature on strategy has grown considerably in the last 30 years and different authors have different understandings of the term. Therefore, there is no simple and universal definition of 'strategy' (Ansoff, 1968; Porter, 1985; McGee and Thomas, 1986; Webb, 1989; Montgomery and Porter, 1991; Feuerer and Chaharbaghi, 1997; Jennings, 1998; Johnson and Scholes, 1999; Mintzberg, 2000; Hutchinson, 2001; Markides, 2001; Farjoun, 2002).

Chandler's (1962) definition of strategy was regarded as one of the oldest and most classical (Besanko *et al.*, 2000, p.1):

"...The determination of the basic long-term goals and the objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals"

One of the early strategic scholars of the Harvard Business school, Andrews (1971), proposed another concept of strategy, which focussed on the businesses area the firm is in or intended to be. In other words, how an organisation would compete (Rumelt *et al.*, 1991). He stated the following:

"... the pattern of decisions in a company that determines and reveals its objectives, purposes, or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organisation it is or intends to be" (Andrews, 1987, p.13)

The concept of strategy, developed more recently at the Harvard Business School, has analysed and determined the unique capabilities of the company that could distinguish an organisation from its rivals (Porter, 1985; Montgomery and Porter, 1991). Porter (1996, p.55) stated:

“... strategy is the creation of a unique and valuable position, involving different sets of activities”

He explained also that strategic positioning was: *“choosing activities that are different from rivals”* (Porter, 1996, p.55).

Most of the authors in the late 1980s pointed to the correlation between strategies and long-term future business development as a result of the rapid uncertainty of the business environment (Dittrich, 1988; Webb, 1989; David, 1997; Miles *et al.*, 1999). According to Webb (1989, p.2) strategy was defined as:

“... the process of deciding a future course for a business and so organising and steering that business as to attempt to bring about that future course”

Dittrich (1988) distinguished strategies from tactics. According to him strategies refer to designing a long-term plan of actions that have to achieve long-term objectives or carry out long-term mission, whereas, tactics refer to short-term activities and actions. David (1997) and Miles *et al.* (1999) proposed a similar statement, with strategies being seen, as all the means required for achieving long-term objectives. However, they specified that long-term objectives are those which an organisation seeks to achieve for more than one year. In relation to this distinction, Bennett (1999) argues that a business with sound and effective strategies has a good chance for long-term success even if it makes tactical errors however the converse is not true.

In a seminal book, Johnson and Scholes (1999, p.10) proposed a more comprehensive definition of strategy:

“Strategy is the direction and scope of an organisation over the long term: which achieves advantage for the organisation through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholder expectations”

Mintzberg (1999) explained the concept of strategy in a broader way as he defined strategy as a plan, ploy, pattern, position and perspective (five P's). Strategy as a *plan* was explained as designing an integrated and comprehensive plan for achieving the main aims and objectives of the enterprise. This description deals with the establishment of the fundamental directions and issues within the organisation: ‘... *a path to get from here to there*’ (Mintzberg, 1999, p.13). Strategy could be a *ploy* that is “... *a specific manoeuvre intended to outwit an opponent or competitor*” (Mintzberg, 1999, p.14). In other words, a manoeuvre for overcoming the threats and gaining some business advantages. Strategy as a *pattern* focuses on actions that take into account the consistency of an organisation's behaviour, whether or not intended. Strategy as a *position* can be seen as “... *as a means of locating an organisation in ...an ‘environment’*” (Mintzberg, 1999, p.17), which means that strategy deals with organisations in their competitive environment, where they are located and how they keep their position in that environment. Strategy as a *perspective* meant: “... *the content consisting not just of a chosen position, but of an ingrained way of perceiving the world*” (Mintzberg, 1999, p.18). In other words, strategy takes into account the intention and behaviour in a collective context. He argued that there is a relationship between the five definitions of strategy and focuses on the idea that they complement each other. This observation helps to achieve a better understanding of the essential elements of the strategy in an organisation.

An important difference between strategy as a plan and strategy as a pattern is that the first definition can be seen as an ‘intended’ strategy and the second can be seen as a ‘realised’ strategy. In order to differentiate between intended and realised strategy, a ‘deliberate’ strategy can be distinguished by intentions that existed previously and were realised. On the other hand, ‘emergent’ strategy is characterised by patterns that are developed in the absence of intentions, or despite them. Finally, Feurer and Chaharbaghi (1997), Mintzberg *et al.* (1998) and Hutchinson (2001) argue that intended strategies might not always be realised and that the realised strategies might not be intended because there is no perfect forecast, realisation or totally consistent

environment.

The difference between the intended strategy and realised strategy is very important because, what managers say will be the company's action and what really happens are not always the same things. In this context, as stated by Johnson and Scholes (1999) and Teare *et al.* (1998), realised strategy is much more important than the intended strategy. In fact, the strategy realised by the company is the one that affects the whole behaviour of the organisation and not the planned strategy.

3.2.3 Levels of strategy

Strategies can exist at many different levels in an organisation, no matter what the size of the company is. For example in governments, there are strategies in different areas such as trade, economic, military, banking, regional development and agriculture. Similarly, businesses have strategies at different levels such as corporate, department (divisions) levels (Mintzberg *et al.*, 1999).

Many authors, Ansoff (1968), Andrews (1971), Hofer and Schendel (1978), Aaker (1984), Hax and Majluf (1996), David (1997), Johnson and Scholes (1999) have proposed that there are three different levels of organisational strategy: corporate, business and operational strategy. **Corporate or company strategies** focus on the overall aim and 'scope' of the organisation that has to fulfil the expectation of the main stakeholders. Clarification of the corporate strategy is very important for the 'top down' approach of strategic activities. The second level is **business or competitive strategies** and these refer to how the company should compete successfully in a market. The basic idea is to attain competitive advantage, to identify new opportunities, to develop links between markets and products and to satisfy the customers in a way that achieves the organisational targets. The third level is **operational strategies**, which focus on how different functional parts of the organisation (resources, processes, people, and skills) contribute to other levels of strategy.

The differentiation between these three levels of strategies in an organisation helps to define the orientation of the company, its relation with the shareholders, the markets where it is competing in and how it is competing in these markets. The information inputs will also be defined according to the aims of each level and the data gathered

and monitored according to its final use, the development of corporate, business or functional strategies (Costa, 1997).

Ansoff (1988) also identified a strategy he calls “administrative strategy” in an organisation. In his study, he described it as internal relationships and processes within an organisation.

Corporate strategy

Ansoff's (1968) concept of corporate strategy is explained as a “yardstick” for measuring present and future performance of an organisation. The quality of these yardsticks is named objectives and the desired quantities goals. Andrews (1971) proposed a more comprehensive definition of corporate strategy as. According to him the corporate strategy is:

“...the pattern of decisions in a company that determines and reveals its objectives, purposes or goals, produces the principal policies and plans for achieving those goals, and defines the range of business the company is to pursue, the kind of economic and human organisation it is or intends to be and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers and communities” (Andrews, 1987, p.13)

Corporate strategy focuses on producing general long-term guidelines that provide information for the preparation of short-term plans, which are realistic, and action oriented as well as understandable for the top and middle levels of the organisation. Corporate strategic planning provides the forecast of environmental variables (social, political, economic, technological) that have a significant influence upon the company's success or failure, and an assessment of the company's strengths and weaknesses that distinguish it from others and build its competitiveness (Yavitz and Newman, 1982).

Yavitz and Newman (1982) also suggested that corporate strategies have two main steps:

- analysing the present situation of the business unit within a certain environment;
- dealing with the future change of the business within the changing environment.

Aaker (1984) saw corporate strategy in a slightly different way as an enterprise strategy that reflected the interaction between a firm's policies and actions, and national policies and priorities. Luffman *et al.* (1988) argued that corporate strategies emerge at the highest level of strategic decision-making. Nowadays, due to the complexity of national and international businesses and the importance of government, corporate strategies appear to be very important for the future (David, 1997).

According to Mintzberg *et al.* (1999) the main difference between corporate and business strategy is that firms have both a corporate strategy (what businesses shall we be in?) and a business strategy (how shall we compete in each business?).

Business strategy

The development of a business strategy is the core of successful management. According to Ansoff (1968), business strategy focuses on the products - markets in which the businesses should compete. In other words, what product is to be developed, where and to whom to sell it, and what would be the advantage. Yavitz and Newman (1982) stated that the business strategy sets out the business mission and points out the main means to be used for fulfilling that mission.

Aaker (1984) argues that every company needs vision and direction for surviving and growing in a fast changing environment. Therefore, he proposed a more comprehensive theory of business strategy by dividing it into eight elements, which can be combined into two main parts:

- The product-market integration and decisions of the business strategy, including the level of investment and allocation of the resource;
- The development of sustainable competitive advantage to compete in particular markets. This concept encompasses unique assets, clear objectives and functional area policies.

Porter (1985) views business strategy as competitive strategy and stated that:

"... competitive strategy is about being different ... deliberately choosing a different set of activities to deliver a unique mix of value" (Porter, 1996, p.45)

Recently, Markides (2001) argued that business strategy is all about finding answers to three questions: *Who* will be targeted? *What* product and services should be offered? and *How* should these product and services be offered to the customers?

Operational strategy

Ansoff (1968) stated that for a company's day-to day business there are some rules that have to be followed and they are the operational strategies. According to Andrews (1971) these are the guidelines for the operation of each function in an organisation and its related activities (in marketing, research and development and finance).

Hofer and Schendel (1978) had a different view and argue that the focus of corporate strategy is on maximisation of the resource productivity. Luffman *et al.* (1988) suggested that the decisions at operational level are often tactical. However, they have to be guided and constrained by the overall strategic consideration.

Hax and Majluf (1996) provided a wider outlook and argued that functional strategies not only combine the functional requirements demanded by the corporate and business strategies but also constitute the depositories of the ultimate capability needed to develop the unique competence of the company.

3.3 KEY ISSUES OF STRATEGY THEORY

3.3.1 Strategic planning

As mentioned earlier, in the 1960s the Harvard Business School developed the theoretical basis of strategic planning. The essence of this approach was finding a match between organisational capabilities and opportunities within the external environment and employed SWOT analysis for this purpose (discussed further).

By the end of 1960s, Steiner (1969) was able to define strategic planning as:

“the process of determining the major objectives of an organisation and the policies and strategies that will govern acquisition, use and disposition of resources to achieve these objectives” (Steiner, 1969, p.34)

Ansoff (1968) suggested that strategic planning helps organisations to find their own way forward. Higgins (1980) argued that planning is taking decisions ahead of taking actions and in the 1980s, other authors defined strategic planning in similar way. Wheelen and Hunger (1989) suggested that strategic planning refers to the development of long range plans for managing the external opportunities and threats taking into consideration the corporate strengths and weaknesses. Simmons (1988, p.18) proposed a more concise definition:

“...an attempt to look ahead to where you want to be, coupled with programme to get you there” (Costa, 1997, p.24)

The importance of strategic planning has grown in the last two decades as it provides a framework of activities within the organisation that leads to improved managerial and organisational performance. On the other hand, strategic planning enables managers to deal with the rapidly changing external environment (Stoner and Freeman, 1992).

Woods (1994) stated that strategic planning is the first step of strategic management and the decisions made during this stage allow organisation to choose which products, services or markets to pursue, how to allocate resources, how to design the organisation to carry out a chosen strategy and how to compete.

Mintzberg (2000) summarises that strategic planning can be viewed as future thinking, controlling the future, decision making, integrated decision making and formalised procedure to produce results.

The strategic planning process can be seen as a cycle in which the activities occur simultaneously or in varying order. These activities are: environmental scanning, developing mission statement, defining aims and objectives, developing implementation plans, monitoring the progress and evaluation of this plan (Costa, 1997; Mintzberg *et al.*, 1998).

In order to understand the relation and distinction between the strategic planning and strategic decision making better, the next sub-section will discuss the process of strategic decision making.

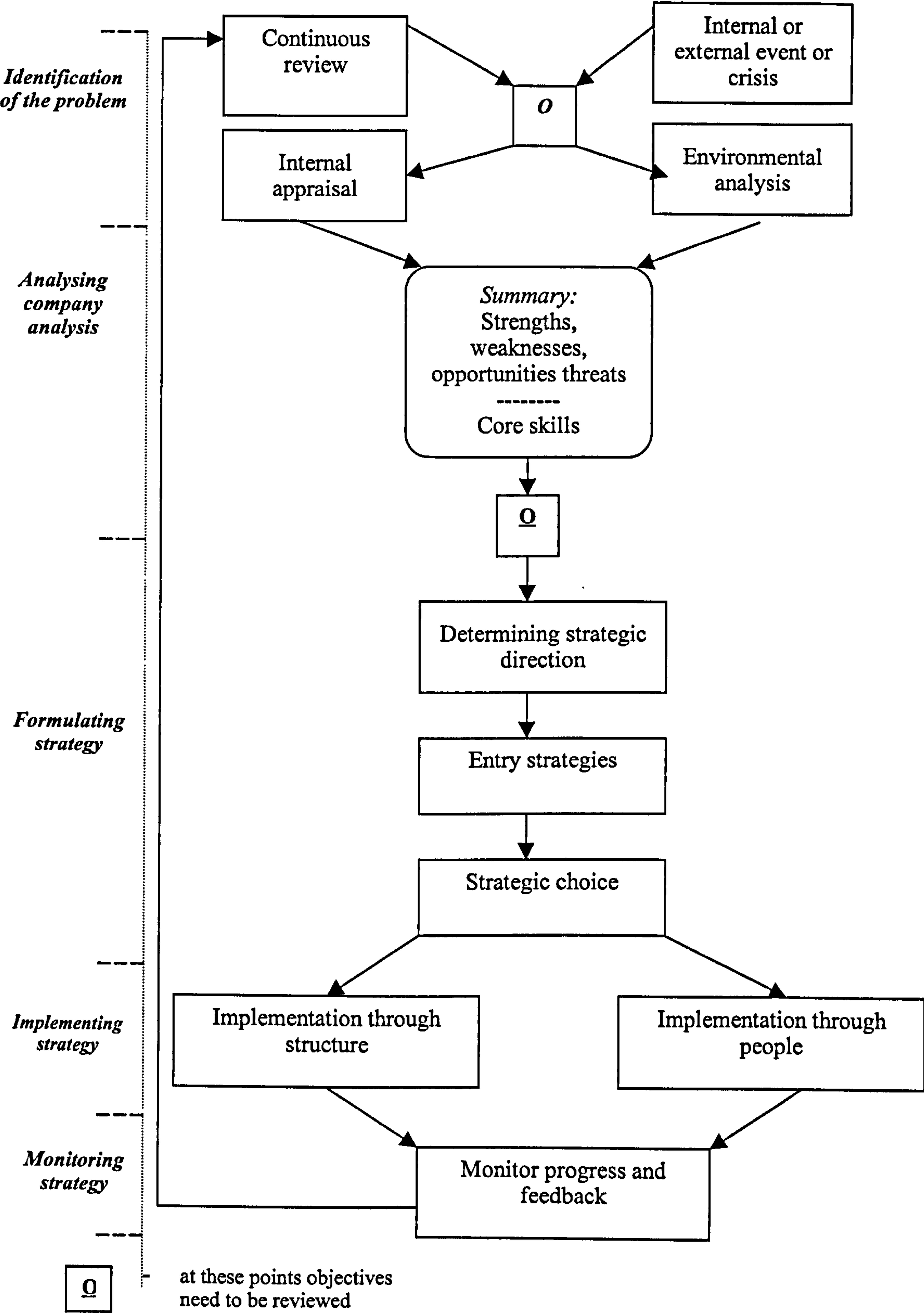
3.3.2 Strategic decision-making process

At the end of the 1950s, Konetz (Mintzberg, 2000, p.9) stated “... *first is planning, then deciding*”. Later, Hofel and Schendel (1978) stated that the purpose of strategic decision making at the corporate level is the formulation and selection of strategies that meet the objective of an organisation in the best way. Luffman *et al.* (1988) proposed a more comprehensive understanding of the nature of the process in a company that includes five main steps (Figure 3.1). These are:

- Identification of the strategic problem – in terms of whether the existing products and markets in which the firm operates are sufficient to satisfy future objectives. There are two ways in which the strategic problems can be identified. The first way is in the event of crisis and the second way is via continuous reviews of the business environment and performance.
- Analysing strategy - At this stage, it is necessary to collect data about potentially important aspects of the problem that would help to identify the strategic position and in the presentation of the overview of the problem. The analysis includes two parts: internal appraisal and environmental (external) analysis (Luffman *et al.*, 1988; Teare *et al.*, 1998).
- Formulating strategy – this step comprises three phases: 1) determining alternative future directions in terms of product-market portfolio of the firm. In other words, to decide which product and market can achieve long-term company objectives in the best way; 2) developing some future product-market changes and 3) choosing suitable alternatives.
- Implementing strategy - the successful implementation of a strategy depends on: the people (behaviour and leadership style) who are involved, and the system and structure (organisational, planning, control) operating within the company.
- Monitoring strategy – this step begins with deciding on the standards, which will effectively monitor the desired performance of the company followed by setting a specific measures for each standards and determining the corrective actions that need to be taken.

Figure 3.1: Strategic decision-making process

(Source: Luffman *et al.*, 1988)



Dyson (1990) summarises that the strategic decision making process in the following way. An organisation identifies whether there is a gap between the future set of objectives and the current performance of the firm. If a gap exists, a range of strategic options is formulated, a feasible one selected and then implemented.

Johnson and Scholes (1999) proposed a different view and, according to them, the strategic decision making process includes four different stages:

- Issue awareness – the awareness of strategic issues that may occur based on peoples' (may not be managers) previous experience and wisdom. It is not necessary to be based on analytical procedures;
- Issue formulation – involves processes such as gathering information which may be on verbal and informal basis, examination of the circumstances and creating and organisational view of the problem tackled;
- Solution development – generation of possible solutions;
- Selection of solutions – reaching a decision about what is to be done.

Hutchinson (2001) argued that the strategy decision-making process has to answer the following questions: Where are we going?, How do we get there?, What actions do we take?, How do we know we are on the right track?. Whereas, Farjoun, (2002) explains briefly that the strategic decision-making process refers to how the plan and decisions are reached.

Strategic planning and strategic decision making are two issues that are of significant importance to the future business development of a company. In this study, they refer to the horticultural farms in the Plovdiv region of Bulgaria. However, a review of strategy theory would not be complete without a discussion of strategic management. This is presented in the next sub-section.

3.3.3 Strategic management

As mentioned earlier, the theory of strategy development has shifted from strategic planning in 1960s to strategic management 1980s (Ansoff, 1968; Andrews, 1971; Hofer and Schendel, 1978; Feurer and Chaharbaghi, 1997; Mintzberg *et al.*, 1998). Andrews (1971) gave one of the early definitions of strategic management:

“the administration of operations dominated by purpose and by consideration of future opportunities, with explicit attention given to the need to clarify or change the strategy as results suggest and to enter the future on predetermined course” (Andrews, 1987, p.xii)

According to Gluick (1980) and Luffman *et al.*, (1988), strategic management is a set of decisions and actions that lead to the development of an effective strategy that helps to achieve corporate objectives. Ansoff and McDonnell (1990) proposed a systematic approach for clarifying strategic management, which relates to how strategic change can be managed. According to them, first comes the process of positioning the firm; second, the time-schedule of the strategic response of the firm, and third, the management of resistance during the implementation phases.

David (1997, p.4) defined strategic management as:

“the art and science of formulating, implementing and evaluating cross-functional decisions that enable an organisation to achieve its objectives”

He also explained that the strategic management process is *“an objective, logical, systematic approach”* for making the organisation’s key decisions. Hastings (1996) and David (1997) suggested that there are three major stages included in strategic management that are discussed later:

- strategy formulation – involves both the development of the organisation’s long-term mission, aims and objectives together with internal and external audit;
- strategy implementation – the establishment of the short-terms objectives and resource allocation,
- strategy evaluation – the assessment of the performance (Figure 3.2) (discussed further).

(Source: David, 1997)

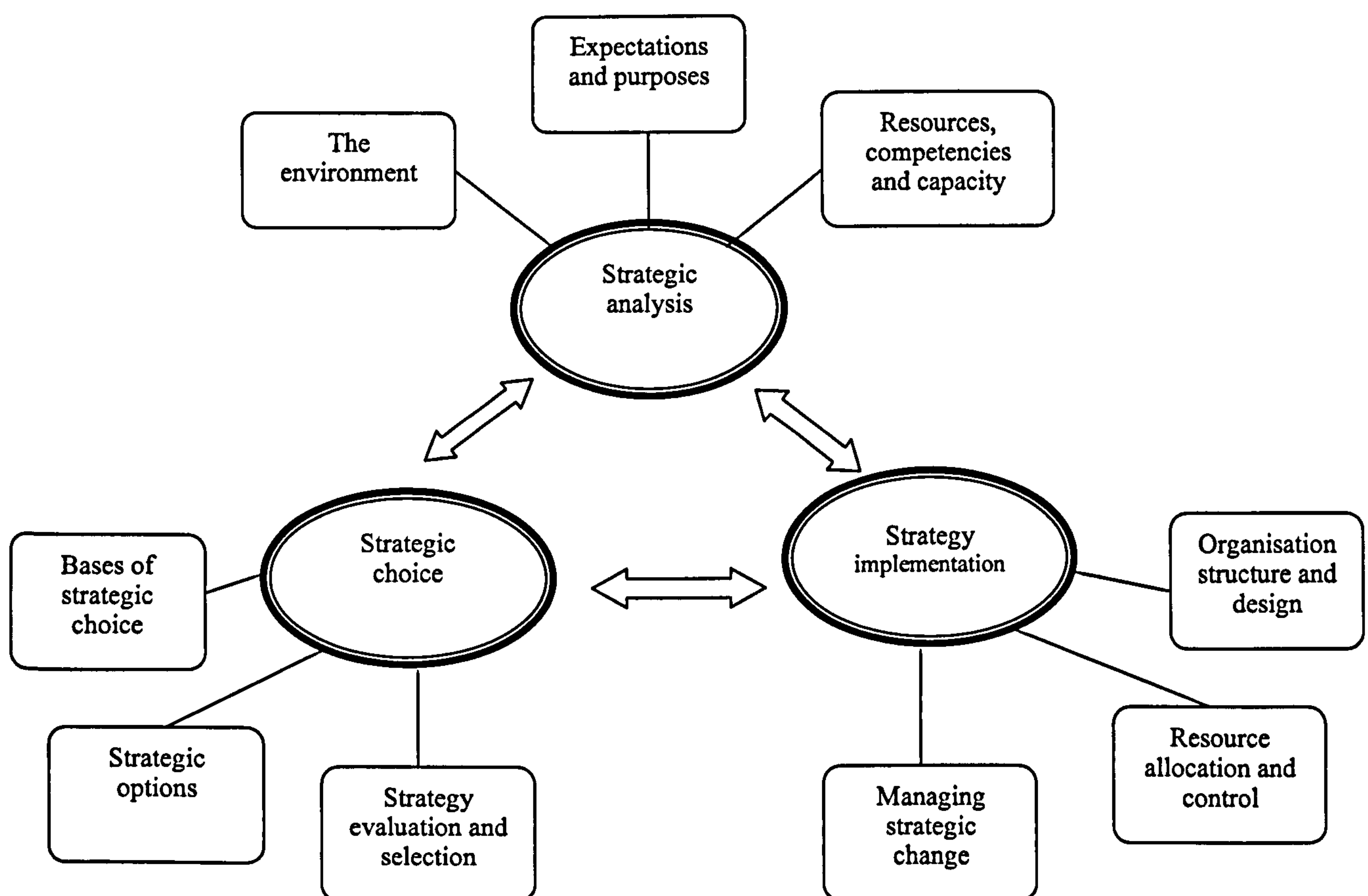


In a widely quoted book, Johnson and Scholes (1999) expressed a different vision and argue that the three main parts of strategic management are:

- strategic analysis – understanding the organisation’s strategic position;
- strategic choice - formulation of possible courses of action, their evaluation and choice between them;
- strategy implementation – planning how the choices of strategy can be put into practice and managing the changes emerged” (Figure 3.3).

Figure 3.3: A summary model of the elements of strategic management

(Source: Johnson and Scholes, 1999)



Farjoun (2002) simplified the strategic management process and suggested that this process consists of only two main sub-processes:

- strategy formulation - analysis of external and internal environment, choice and evaluation of strategies;
- strategy implementation – realisation of series of primary activities and design of organisational structure and processes.

Strategy formulation

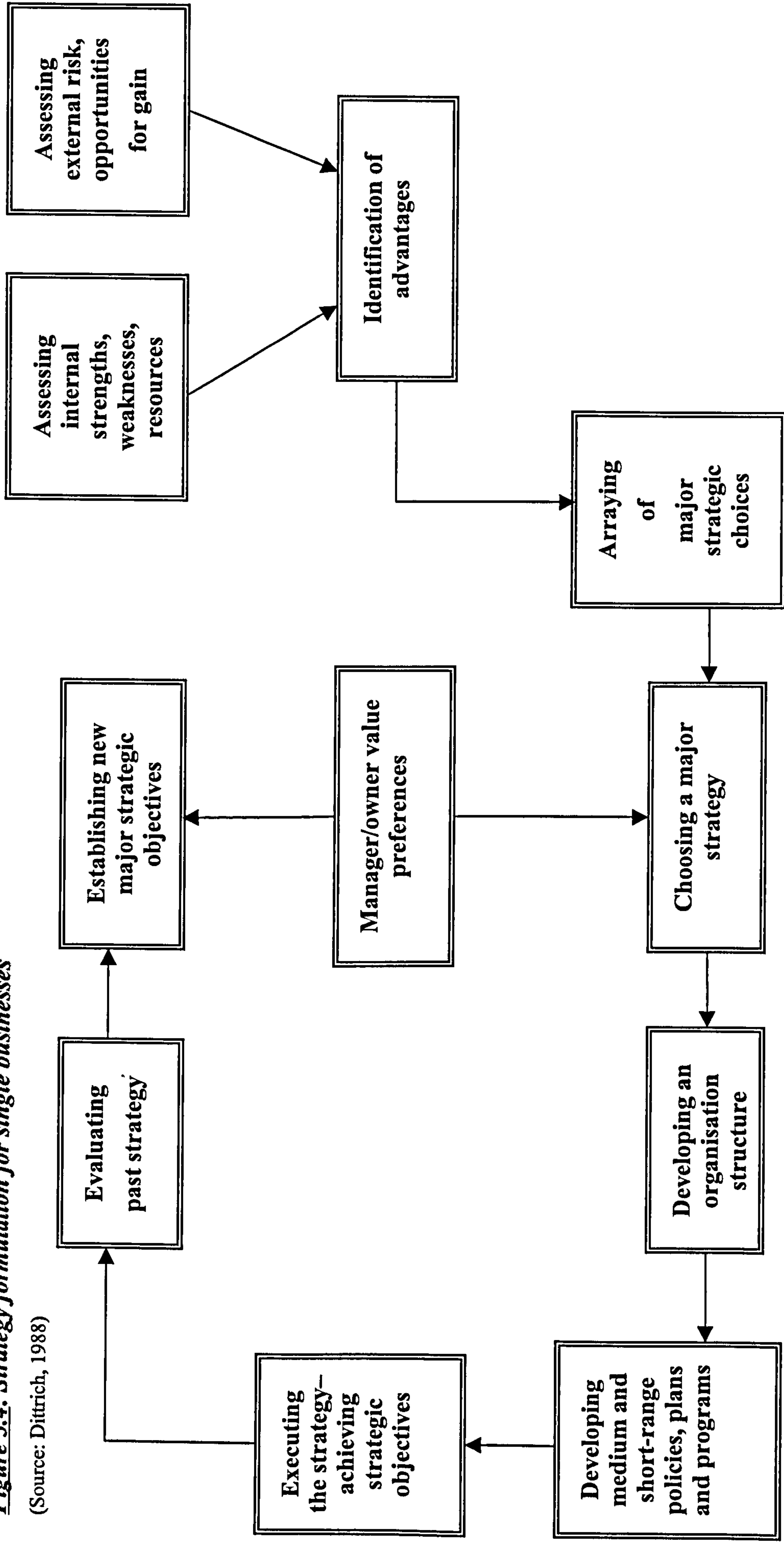
Strategies have to be formulated by an organisation in order to achieve a more favourable position. Over the years, a large number of concepts and techniques have been proposed on how an organisation can develop a suitable strategy. Some of these concepts focus on matching the organisation's resources with the opportunities created by the external environment, while others focus upon the organisation's resources and capability as drivers for competitive advantage (Andrews, 1971, Porter, 1985; Feurer and Chaharbaghi, 1995a; Feurer and Chaharbaghi, 1995b; Mintzberg *et al.*, 2003). Porter (1985) summarised the core concept of strategy formulation as "*coping with competition*". He focused on the structure of, and the competition in, an industry as providing a suitable approach for developing a company's strategy. During strategy formulation the strategist has to develop a plan of action such as:

- positioning the company – the identification of the company's strengths and weaknesses according to the specificity of the industry;
- improving company position if needed;
- exploiting industry change due to the rapid speed of changes (Porter, 1985).

At a later stage, Dittrich (1988) proposed a model for strategy formulation for individual businesses and he stated that this is a process of developing a set of long-term achievable objectives and a plan for their accomplishment. There are a few general steps in this model: information assembly, preparation of alternatives, choosing the alternative solution and the execution of the choices (Figure 3.4).

Figure 3.4: Strategy formulation for single businesses

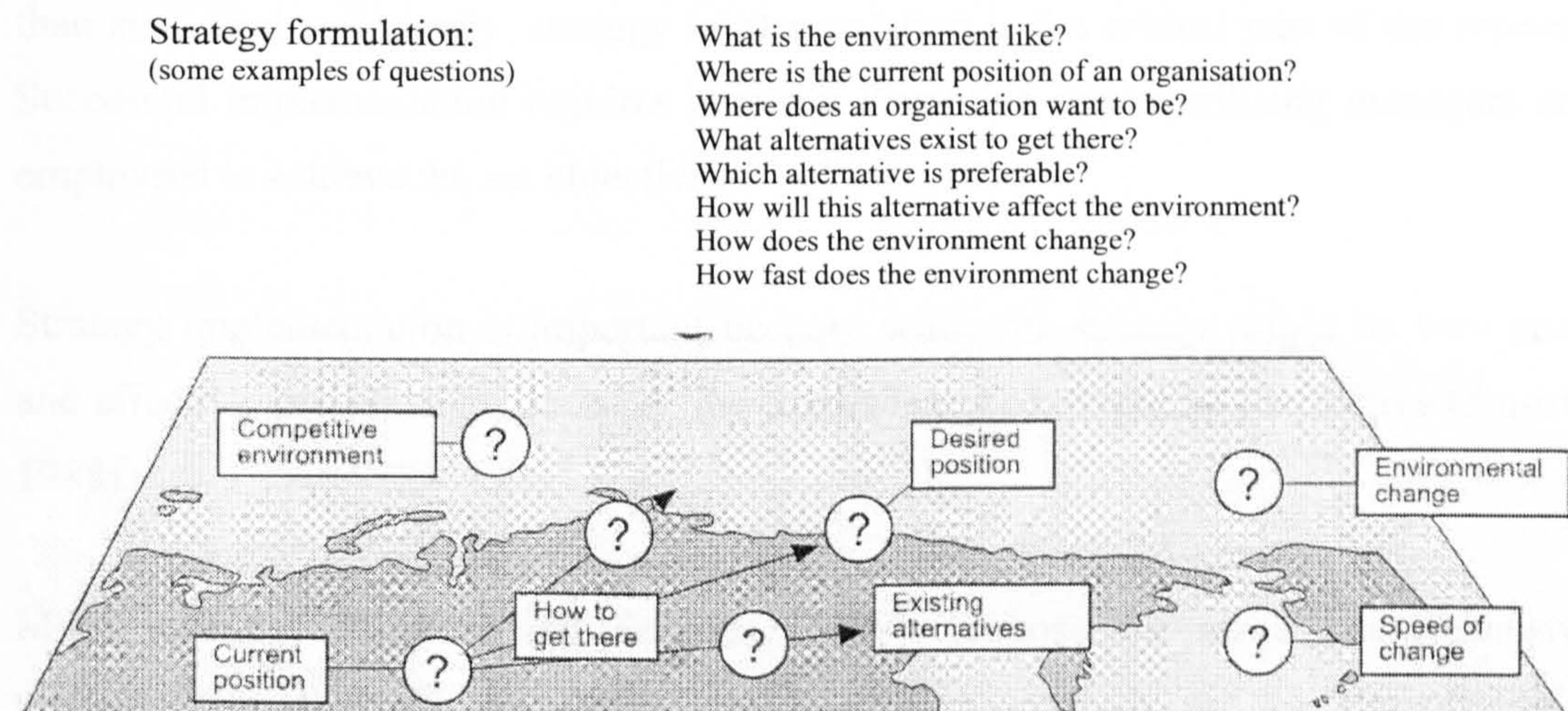
(Source: Dittrich, 1988)



Feurer and Chaharbaghi (1995a) introduced an innovative approach into the theory of strategy formulation and proposed a map for strategy formulation that portrays the external environment of an organisation with the path representing the potential courses of actions (Figure 3.5). The map concept comprises continuous change with respect to both the environment itself and the current position of the organisation within this environment, as well as selecting new alternative paths for development for replacing the existing old alternatives. The selection of path that defines the strategy depends on addressing a number of interrelated questions, outlined in Figure 3.5.

Figure 3.5: Map metaphor for strategy formulation:

(Feurer and Chaharbaghi, 1995a)



More recently, David (1997) viewed the strategy formulation process as a sequence of steps such as developing a business mission, identifying an organisation's external opportunities and threats, determining internal strengths and weaknesses, establishing long-term objectives, generating alternative strategies and choosing a particular strategy to pursue (Figure 3.2). While Thompson (1998a) argued that strategy formulation involves three main strands: planning, vision and emergent strategies.

Quinn (1999) and Mintzberg *et al.* (2003) proposed some common criteria for formulating an effective strategy, although each strategic situation is unique. These criteria are:

- Clear, decisive objectives – all the efforts have to be directed to achieve the overall goals;
- Maintaining the initiative – strategy has to enhance commitment rather than freedom of action;
- Concentration;
- Surprise and flexibility;
- Co-ordinated and committed leadership;
- Security.

Strategy implementation

Strategy implementation is the action stage when the formulated strategies have to be executed. The nature of the action stage of strategy is primarily administrative rather than analytical and clearly, strategy implementation is the critical part of the process. Successful implementation requires personal discipline and mobilising managers and employees to achieve the set objectives (Andrews, 1971).

Strategy implementation is important because while the strategy might be very good and effective as a strategic decision, the implementation might be ineffective (Ansoff, 1988).

More recently, Johnson and Scholes (1999) proposed a more comprehensive understanding that the successful implementation depends on the organisational structure and the people involved, and stated the following:

“... strategic implementation is concerned with the translation of strategy into organisational action through organisational structure and design, resource planning and the management of strategic choice” (Johnson and Scholes, 1999, p.22)

Strategy evaluation and monitoring

Strategy evaluation is the final and very important stage of a strategic management process (David, 1997). During this phase, information will be obtained about how well the strategies are working and if modification and change are needed.

Richardson and Thompson (1995) and Johnson and Scholes (1999) argue that strategy evaluation is part of the strategic choice, which includes the assessment of the

suitability, acceptability and feasibility of the strategy. Based on the results obtained, strategies could be selected, hence it has to be applied before the implementation phase. Hastings (1996) also argued that strategy has to be evaluated early in the strategic process in order to be able to replace the strategy if it is not beneficial for the organisation. The details of strategy evaluation will be explained later in this chapter.

After identifying the differences between the processes of strategic planning, strategic decision making and strategic management the next section discusses a range of analytical tools that support them and help for identifying the strategic position of a firm.

3.4. STRATEGIC ANALYSIS

As indicated above, the early concepts of strategy were developed at the Harvard Business School and focused upon analysing the unique capabilities that could distinguish a company from its rivals (Andrews, 1971; Montgomery and Porter, 1991; Porter, 1996). Yavitz and Newman (1982) argued that one of the important parts of the strategy process is analysing the present situation of the business within its competitive environment. Therefore, a forecast of the business environment that changes rapidly has a major influence upon the company's success or failure.

Strategic analysis includes two major parts: internal appraisal and environmental analysis (Luffman *et al.*, 1988; Feurer and Chaharbaghi, 1997; Markides, 2001). The internal analysis focuses on the company whereas the environmental analysis focuses on the industry.

Jennings (1998) stated that strategic analysis is "*a way of perceiving and structuring the problem*".

Analysing the environment (internal and external) is of great importance, however analysing competitiveness within the industry is also vital for the business survival (Porter, 1996; David, 1997; Minzberg *et al.*, 1999).

3.4.1 SWOT analysis

The SWOT analysis is a systematic and most widely used strategy tool that was developed first at the Harvard Business School in the 1960s (Brocklesby and

Cummings, 2003). This approach involves an internal appraisal of the strengths and weaknesses of the organisation and an external appraisal of identifying opportunities and threats in the environment.

Andrews (1987) argued that SWOT analysis informs the process of strategic decision making and includes four elements: what a company *might do* in terms of external environment, what a company *can do* in terms of ability and capacity, what the company *wants to do* in terms of personal aspiration and choice, and what the company *should do* in terms of the attractiveness of the alternatives

The main aim of the SWOT analysis is to find the best match between environmental factors and internal capacity (Rowe *et al.*, 1985; Feurer and Chaharbaghi, 1997; Johnson and Scholes, 1999; Weihrich, 1999; Sarkis and Sandarraaj, 2000; Oliver, 2000).

Investigating the internal environment of an organisation is vital for a company because any organisation needs to reinforce their strengths and correct the existing weaknesses. The *strengths* and *weaknesses* may vary greatly for different companies, however they can be characterised into management and organisation, operations, finance, marketing and other factors specific for a particular company (Dyson, 1990; Weihrich, 1990; Hax and Majluf, 1996; Johnson and Scholes, 1999; Brocklesby and Cummings, 2003)

The main purpose of analysing the external environment is to detect, monitor and present current events and threats that can create opportunities or pose threats for an organisation. The external *opportunities* and *threats* refer to economic, social, cultural demographic, environmental, legal and technological development and events that could benefit or harm an organisation in the future (Weihrich, 1999). Therefore, the main aim of formulating a strategy is to exploit external opportunities and avoid or reduce the impact of external threats (Luffman *et al.*, 1988; Weihrich, 1990; David, 1997; Teare *et al.*, 1998; Miles *et al.*, 1999).

3.4.2 Internal analysis

An analysis of internal *strengths and weaknesses* relates to the available resources and competencies of a company (Aaker, 1984; Rowe *et al.*, 1985; Jacobs *et al.*, 1998).

Luffman *et al.* (1988) suggested that an organisation should prepare strategies that make the most of the internal strengths and improve the internal weaknesses. While, Tampoe (1988) complemented the above and stated that a company that understands its strengths should compete better than its rivals. Some authors, such as Grant (1991) and David (1997) argued that the internal audit is more important than the external audit due to fact that the firm's own resources and capability may provide a more stable basis for formulating long term strategies.

Luffman *et al.* (1988) suggested that internal analysis (appraisal) includes the assessment of nine functions such as: objectives, strategy, structure, finance, marketing, production, R & D, personnel, system and procedures. Most organisations are not strong in all parts of their business. Therefore, for a company it is very important to assess the whole range of operational aspects that might affect business performance positively or negatively (McDonald and Payne, 1996; David, 1997).

David (1997) argues that an internal audit requires gathering and assessing the information about the main functional areas of a company that are explained below. These areas are:

- Management;
- Marketing;
- Finance/accounting;
- Production/operations;
- Research and development (R & D);
- Computer operation system.

He also stated that there is a relationship among these functional areas of business and the effective co-ordination between them is a key step for the success of a company.

Other authors, such as Mintzberg (1998), Johnson and Scholes (1999), Dyson and O'Brien (2000), Sarkis and Sandarraaj (2000), had a similar view and according to them internal audit refers to the appraisal of the resources, capability and core competence (managerial, financial, functional and organisational) of an organisation. Analysing strategic capability is essential for an organisation in order to know whether the

resources and the firm competences *fit* the external environment.

Management

The functions of management consist of five main activities: planning, organising, motivating, staffing and controlling (David, 1997). Identification of the internal strengths and weaknesses of these main functions of the management is included in the internal audit. The planning consists of all the managerial activities relating to preparing for the future. David (1997) stated that planning is very important in an organisation because it is:

“... the essential bridge between the present and the future that increases the likelihood of achieving desired results” (David, 1997, p.146)

The functions of organising refer to managerial activities *“... that result in structure of task and authority relationship”* (David, 1997, p.146). The function of motivating includes actions that influence people to complete some specific tasks. Staffing activities focus on personnel management and human resource management. In other words, activities of recruiting, interviewing, selecting, training, rewarding, promoting and disciplining employees are included in the staffing function of management. The controlling function of management includes those activities that assure that actual results are consistent with the intended results (David, 1997). Mintzberg *et al.* (1999) argued that the effective co-ordination between managers and the employee and their commitment to a company is the other managerial aspect that was not specified in David's study but has to be assessed.

Marketing

Marketing relates to the process of defining, anticipating and fulfilling customers' needs for products and services. The following analyses can help to identify and evaluate marketing strengths and weaknesses:

- customer analysis – assessment and evaluation of the consumers' needs and wants;
- buying supplies – evaluating and selecting the best suppliers;
- selling products/service - the ability of a company to sell some product or service, which include advertising, promotions, publicity and customer relations;

- product and service planning – the activities relating to test marketing, product and brand positioning, packaging, product features and product quality. This will help a company to avoid losses by revealing weak products;
- pricing –depends upon the decisions of consumers, competitors, distributors, suppliers and government;
- distribution – includes distribution systems, storage places, sales territories, wholesaling and retailing. An organisation needs to identify and evaluate alternative ways to reach their market;
- marketing research – through systematic collection and analysis of data relating to the marketing of products and services, a firm can uncover critical strengths and weaknesses;
- opportunity analysis – involves assessing the costs, benefits and the risks of marketing decisions;
- social responsibilities – refers to the issue of how safe and reasonably priced the firm products and services are (David, 1997).

Finance/accounting

Financial factors, such as working capital, liquidity, cash flow and asset utilisation, are essential factors for the formulation and the implementation of a strategy as well as being key drivers for strategic change (Mintzberg *et al.*, 1999). Financial/accounting analyses focuses on investment (allocation of capital and resources to project or products), financing (finding the best firm capital structure) and dividend (percentage and stability of dividends) issues (Luffman *et al.*, 1988; David, 1997).

Production/operations

The process of actions, which convert inputs into products and services, refers to the production/operations aspect of a business (Luffman *et al.*, 1988). There are five functions within production/operations, which have to be analysed and they are:

- Process - relates to the design of the production system (technology, facility location and process control);
- Capacity – includes decisions relating to forecasting, facilities and capacity planning and scheduling;

- Inventory – refers to specific decision for managing the flow, amount, and time of delivering of the raw materials;
- Workforce – concerns the process of managing the employees;
- Quality – assuring high quality products and services (David, 1997).

Research and development

Research and development includes activities relating to fundamental research or product improvement. It is a very important factor because successful R & D may lead to company survival (Luffman *et al.*, 1988). The overall mission of research and development is to support existing businesses, to help launch new businesses, to develop new products and to improve quality of the products. Therefore, organisations that make investments in this area could gain competitive advantage *e.g.* development of a new product before the competitors. Thus, it will help to position a company better (David, 1997).

Computer information system

An information system is a critical aspect in an organisation because it provides the basic data for all managerial decisions. The purpose of computer information system is better firm performance and improving the quality of the managerial decisions (David, 1997).

3.4.3 The environment - External analyses

It is difficult to understand the business environment due to its rapid change, complexity and diversity. Luffman *et al.* (1988) argue that it is important to screen the environment surrounding the company, the changes operating within it, and consequential opportunities and threats posed to the company. However, Johnson and Scholes (1999) proposed an inclusive framework for understanding the external environment:

- Assessing the nature of the environment in terms of uncertainty;
- Assessing the stakeholders' expectations - Stakeholders analysis;
- Environmental auditing, which identifies which macroeconomic influences (political, economic, social and technological) are important to the organisation (PEST analysis)

- Scenario planning, which means building different possible futures for an organisation, based on analysing the key environmental influences and drivers of change.

3.4.3.1 Environment uncertainty

Environmental changes have a major influence upon a company's business performance. Therefore analysing the environment is a vital stage for building a competitive position. Many authors (Feurer and Chaharbaghi, 1997; Jennings, 1998; Thompson, 1998b; Johnson and Scholes, 1999) emphasise that the environmental conditions could be static or dynamic and simple or complex. The environment is often complex because it consists of a large number of forces that influence an organisation. The environment is also dynamic due to changes of the trends or the emergence of new factors. Therefore, consideration of environmental conditions is a significant step for coping with the uncertainty. Very often, the main aspects of the business environment are difficult to predict.

3.4.3.2 Stakeholder analysis

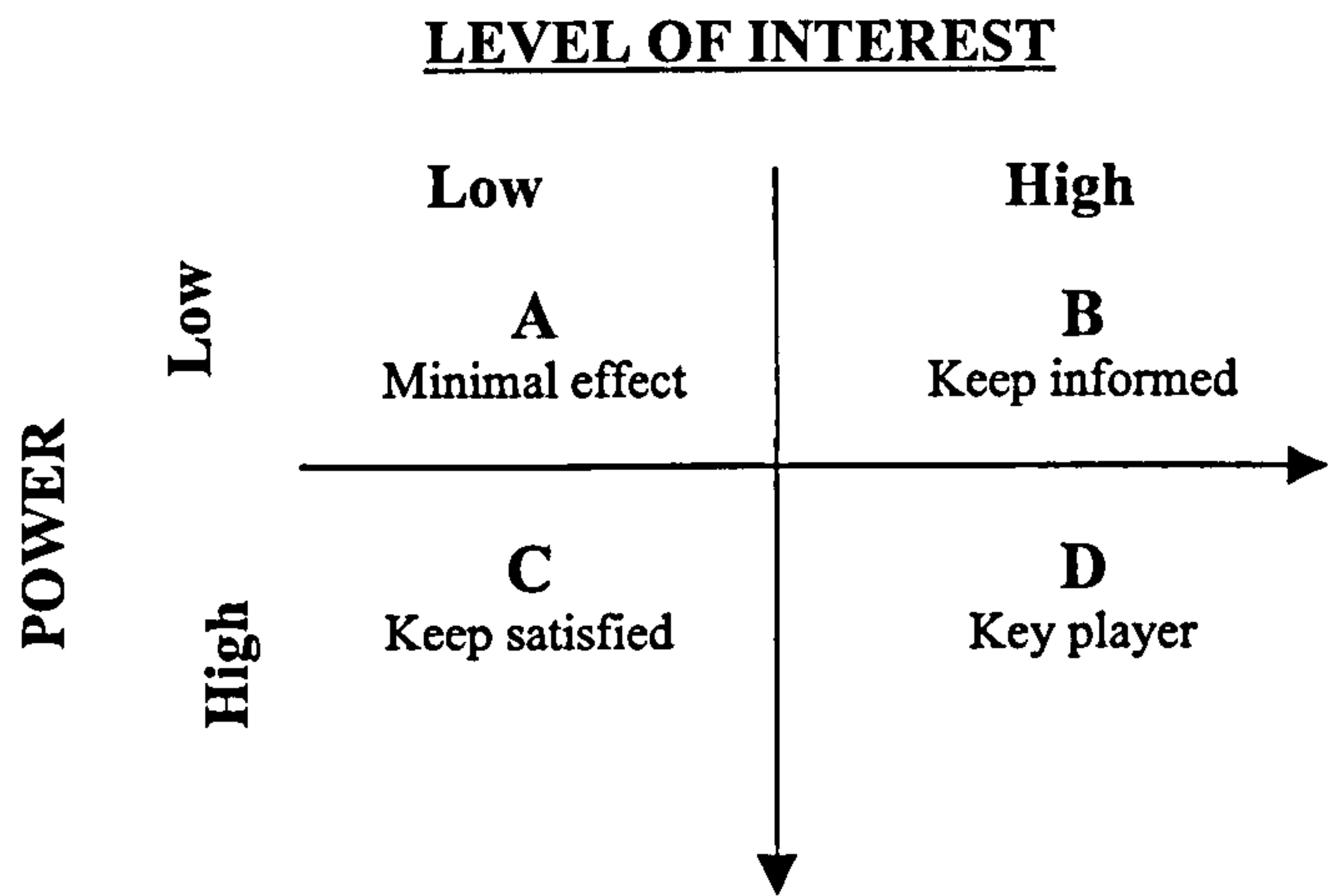
Webb (1989) stated that the stakeholders in an organisation are any group or individual, who can affect, or are affected by, the achievement of the firm's mission and objectives. In the business world, there are many of them such as owners, customers, suppliers, rivals, employees, managers and governmental institution. Therefore, analysing them is an important part of formulating company strategy. Different stakeholders have different expectations due to their different priorities, power and levels of interest (Rowe *et al.*, 1985; Feuerer and Chaharbaghi, 1995b; Jennings, 1998; Scholes, 1998; Miles *et al.*, 1999; Haberberg and Rieple, 2001).

Johnson and Scholes (1998) presented, the relationship between the power and interest of the different stakeholder groups with regard to the organisation's choice of strategies, in a matrix (Figure 3.6). Clearly, acceptability of strategies by the 'key player' (in quadrant D) has to be a main consideration during the formulation of a new strategy. An organisation has to be very careful with the stakeholders placed in quadrant (C) 'keep satisfied' because, although they are relatively passive, they are powerful and can easily raise the level of interest and become 'key players'. The stakeholders with high level of interest and less power, placed in quadrant B could be important in terms of their ability to influence the attitude of more powerful

stakeholders. This matrix is a useful analytical tool for creating the type of relationship an organisation needs to establish with each stakeholder group.

Figure 3.6: Stakeholder analysis

(Source: Scholes, 1998)

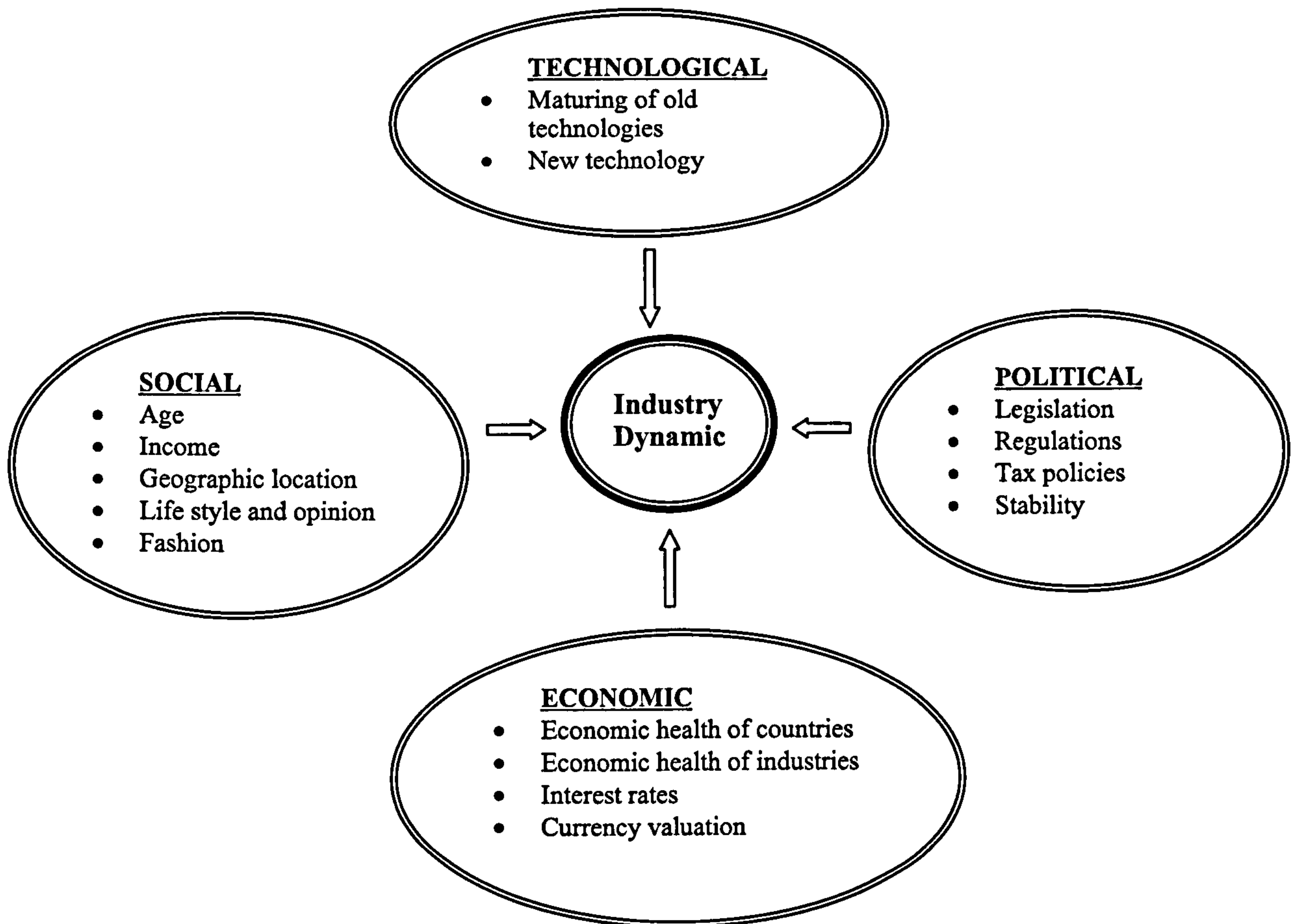


3.4.3.3 PEST analysis

According to Andrews (1987), Pearson (1987), Farnham (1990); Teare *et al.* (1998) and Mintzberg *et al.* (2003) there are many external trends/factors affecting the business performance of an organisation such as social change, economic trends, technological developments, political factors, legislation, consumerism and pressure groups. Therefore, the developments of these trends have to be considered and examined carefully. Johnson and Scholes (1999) described these concepts as PEST analysis (political, economic, social and technological influences), which is demonstrated in Figure 3.7.

Figure 3.7: PEST analysis

(Source: Johnson and Scholes, 1999)



The political environment can affect the business performance of a company through legislation, policies and specific programmes. These might create opportunities or threats at a strategic level. Understanding and analysing the *economic influences* are essential for a firm, as these forces affect every part of its activities due to the close relationship between the company and the key economic indicators, such as the inflation rate, taxation, trade policy and exchange rate. The pace of change in the *social/cultural environment* includes factors such as population size and structure. Social values and fashion can also influence any kind of products, services, markets and customers. Therefore, the challenging opportunities and threats that can arise from changes in cultural, social and demographic variables have to be assessed. Finally, but equally important, there are *technological changes*. Due to the rapid level of innovation and technology development over the last decades, this factor has become much more significant and has to be considered carefully (Luffman et. al, 1988;

Johnson and Scholes, 1999; Haberberg and Rieple, 2001).

Analysing all these macroeconomic factors is increasingly useful for constructing possible future (scenarios) of an organisation as “... *a way for considering environmental influences*” (Johnson and Scholes, 1999, p.111).

3.4.3.4 Scenario planning

Porter (1985, p. 447) defined scenario planning as a tool which provides “*an internally consistent view of what the future might turn out to be*”. Aaker (1984) suggested that there are three main approaches to scenario development. The first is developing three future options: optimistic, pessimistic and most likely. The second approach is based on the key variables that have a strong impact upon the industry activities. For example, in agriculture that could be the weather and yields. The third proposed approach is identifying several variables and generating a large set of scenarios and after that choosing the ones that are the most reasonable and feasible.

Luffman *et al.* (1988) and Webb (1989) discussed scenarios in a different way as a useful tool for answering the question “what if”. In the other words, postulating the future environment and its impact upon the company and then creating strategic decisions that have to deal within the specific situation. Robinson and Chiang (2002) used scenarios in terms of product development.

More recently, Johnson and Scholes (1999) stated that scenario planning is setting up different potential alternatives (long-term) for an organisation, based on major environmental factors and drivers with high level of uncertainty. The main steps for building scenarios are:

- Assessing the business environment in terms of high impact and high uncertainty. The quality of the analysis at this stage has to be as high as possible because it is a basis for building the scenarios;
- Identifying different possible futures, either as an optimistic or pessimistic outlook and if the key factors were limited, different configuration of these factors;
- Building the scenarios that might be vital and used in the future (Mercer, 1998).

Goodwin and Wright (2001) agree that the scenario planning attempt to deal with the uncertainties that are seen to be inherent in the future. In their study, they linked scenarios with the evaluation and argued that the issue of evaluating alternative scenarios is still underdeveloped.

3.4.4 Industry competitive analysis/Porter's Five Forces

Porter (1985) argued that the key concept during strategy formulation was “*coping with competition*”. The structure of the industry and the nature of the competition within it have to be analysed in order to provide a suitable approach for developing a company's strategy. Porter (1985) stated that strategic choice and decision making depends upon the industry's attractiveness in terms of long-term profitability and the factors that determine it.

Porter (1985) argues that there are five competitive forces, which affect the level of competition of a given industry. These forces are the power of suppliers and buyers, the threats of new entrants and substitutes, and competitive rivalry, which is known as Porter's Five Forces Analysis (Porter, 1985; Feurer and Chaharbaghi, 1997; Thompson, 1998a; Johnson and Scholes, 1999; Weihrich, 1999). The aim of Porter's Five Forces Analysis is identification of the factors in the environment that might affect the capability of an organisation to achieve effective competition (Figure 3.8). Luffman *et al.* (1988, p.39) stated that:

“... forces of competition drive an industry towards a profit level which is sufficient to keep firms in the industry”

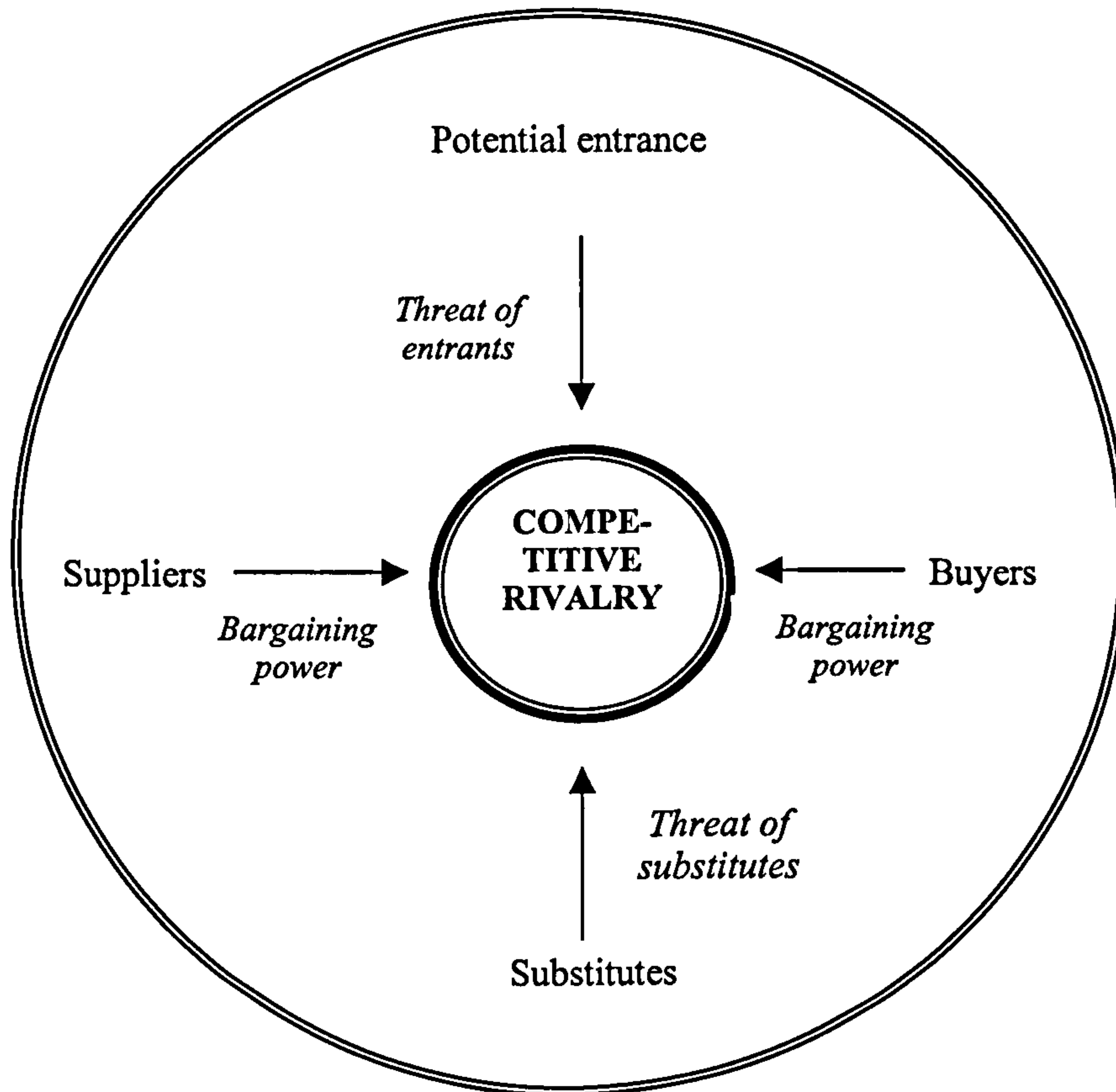
The power of buyers and suppliers

These two forces (power of buyer and suppliers) are linked in an organisation because both of them affect the intensity of competition in an industry. The bargaining power of the buyer is higher when there is a concentration of buyers, when there are alternative sources of supply, when the cost of switching to another supplier are low and when the supplying industry includes a large number of small operators. The power of the supplier refers to the ability of a business to negotiate the price. The bargaining power of supplier is higher if there is a concentration of suppliers; the costs of switching to another supplier are high; the brand power of the supplier and low bargaining power of the customers (Aaker, 1984; Webb 1989; David, 1997; Johnson

and Scholes, 1999; Besanko *et al.*, 2000).

Figure 3.8: Porter's Five Forces analysis

(Source: Johnson and Scholes, 1999)



The threat of entrants

The threat of entrants asks if there are barriers to entry to an industry. Besanko *et al.* (2000) defined barriers of entry, as factors that allowed some firms to have economic profit, while new companies, which want to enter the industry could be unprofitable. The barriers might be capital requirements, economies of scale, access to distribution channels, size independence, expected retaliation, legislation and differentiation. If the entry is easy the competition would be strong and the profit would be reduced (Rowe *et al.*, 1985; Luffman *et al.*, 1988; Johnson and Scholes, 1999).

The threat of substitutes

The threat of substitutes may have different forms such as:

- product-for-product substitution;
- a need for substitution by new products or services that supplement the existing product or service;
- generic substitution – situations where products or services compete. For example whether a family will buy a TV, a cooker or refrigerator, a car, or a holiday;
- “*doing without*” can also be considered as a substitute. For example, the tobacco industry (Johnson and Scholes, 1999).

The core of this force is assessing the risk of substitution in terms of a firm’s product and service, changes in buyer behaviour and meeting the buyer’s new needs (Porter, 1985; Rowe *et al.*, 1985).

Competitive rivalry

Competitive rivalry is placed in the centre (Figure 3.8) because it may be affected by each of the other forces (Besanko *et al.*, 2000). Competitive rivalry is the most powerful force among the five forces. The intensity of rivalry increases if:

- the numbers of competitors grow;
- the competitors are roughly equal in size and capacity;
- industry growth is slow which will lead to a ‘fight’ for market share;
- the products and services offered by firms are similar;
- exit barriers are high and the entire industry suffers from overcapacity;
- competitive firms are diverse in their strategies (David, 1997; Jennings, 1998; Mintzberg *et al.*, 2003).

There are other forces, which are also relevant, such as market growth rate, globalisation, differentiation and balance between the competitors (Webb, 1989; Johnson and Scholes, 1999).

3.4.5 Business competitive analysis

The focus of strategy development in 1980s shifted to improve the competitive position of an organisation and identifying the sources of competitive advantage such as organisational resources, innovation and creativity, excellence in strategy implementation, time and quality. Competitive advantage is a factor or a combination

of factors that could make a company more successful than other organisations in a competitive environment (Feurer and Chaharbaghi, 1997; Teare *et al.*, 1998). Business competitive analysis includes tools, as for example, Porter value chain, benchmarking, Boston Consulting group (BCG) and competitive position analysis (strategic group analysis, market segmentation, market attractiveness and strategic position and action evaluation matrix).

Porter's value chain

Oliver (2002) suggests that Porter's value chain analysis provides an alternative analytical approach to a business strategy. Porter (1985) stated that the value chain is a systematic way to separate a company into value activities (primary and supportive) making them easier both to understand and to control the cost and the sources of differentiation. He argued that value chain analysis requires two major steps: identifying the separate activities (business unit) and assessing the effectiveness. He stated that company resources have to be put into action in order to produce value products for consumers.

Thompson (1998a), Haberberg and Rieple (2001) agreed with the concept given by Michael Porter in the 1980s and went on to argue that the value chain analysis provides a way of observing where in the chain of activities an organisation is successfully adding value. They also reviewed and explained the two types of activities identified by Porter in the following way:

- *primary activities* in a value chain are directly involved in delivering products or services to users (e.g. manufacturing operations, sales and marketing);
- *support activities* contributes indirectly to the addition of value throughout by supporting one or more primary activities (e.g. process development, human resource management, planning and financial control).

Studies by Shepherd (1998), Johnson and Scholes (1999), Webb and Gile (2001) suggested that the value chain analysis was able to identify the relationships between the core competences of an organisation and its competitive performance because value chain analysis requires obtaining and structuring knowledge, resulting in an explicit understanding of the business.

Benchmarking

According to Johnson and Scholes (1999), benchmarking is defined as an assessment and comparison of the company's competence with the '*best in class*'. This analysis can potentially help to identify the critical factors and potentials within an organisation in the industry. Benchmarking can be performed at different levels depending on resources, competence in separate activities and managerial relations between the actions. Tomlinson (1998, p. 62) stated that benchmarking is "*a powerful tool to focus and drive change*" and to assist the process of change by giving clear goals and showing the best practice. However, before applying benchmarking analysis the necessity for change and improvements have to be recognised within the company.

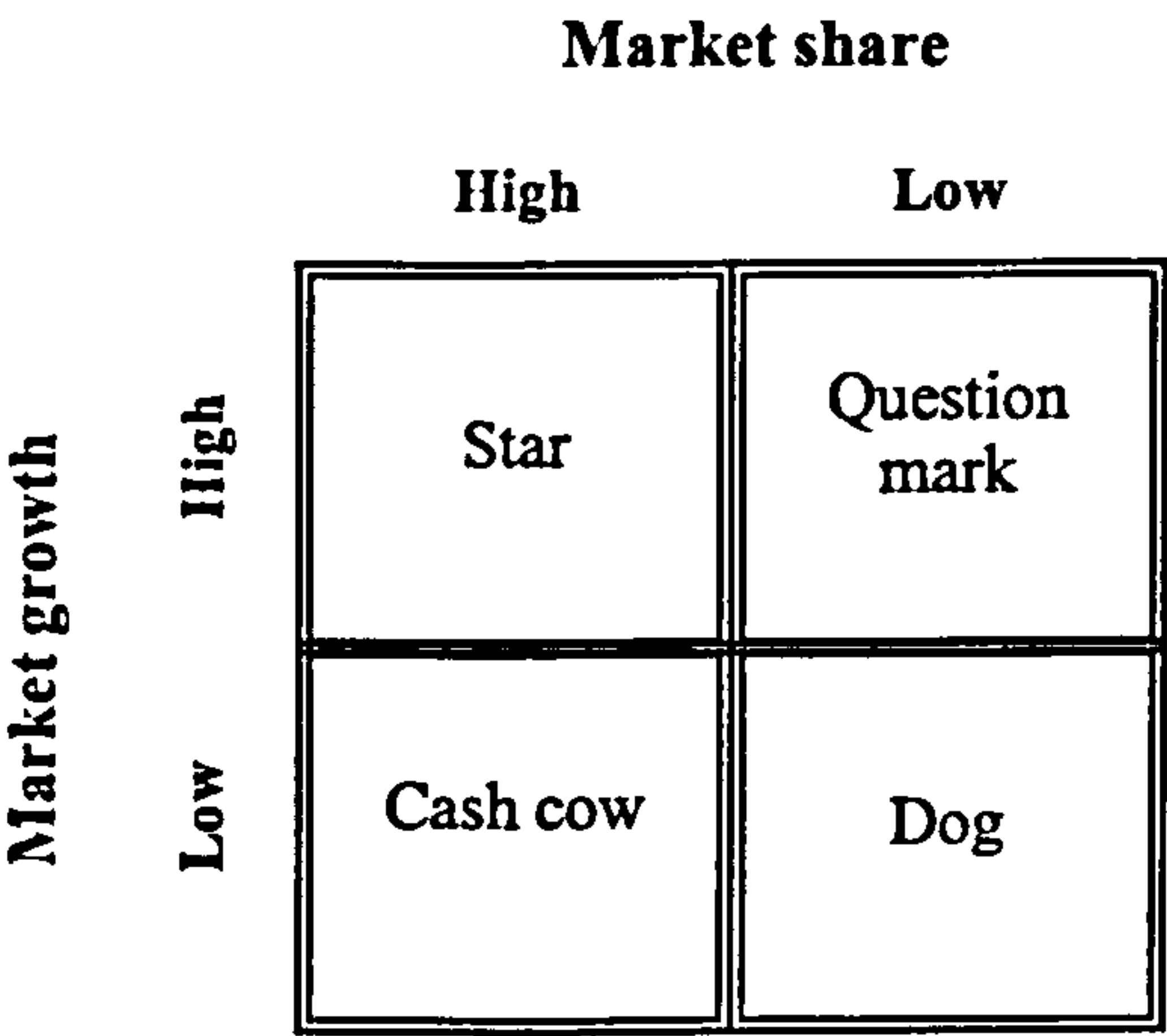
Boston Consulting Group (BCG)

The Boston matrix, created by the Boston Consulting Group proposed one of the first ways of classifying a business unit in relation to market growth and relative firm market share. This analysis became a very frequently used analytical tool in the business world because it is simple, well marketed and represents important strategic variables (Whittington, 2001). With the help of the BCG matrix, firms can distinguish their product lines in two dimensions: growth of the market in which their product is positioned and the product's market share relative to the share of its next largest competitors (Ansoff and McDonnell, 1990; Feurer and Chaharbaghi, 1997; Besanko *et al.*, 2000, p. 94) (Figure 3.9).

A *star* is a business unit with a high market share and substantial market growth, therefore, cash will be needed to keep the business unit in this position. The *question mark* is positioned in a growing market but does not have a high market share, therefore, innovative development needs to be applied. The *cash cow* is a situation with high market share but low market growth, which means that an organisation has to keep the cost below those of the competitors or control the investments. A *dog* is a position with low market share and low growth, and therefore, some changes should be implemented in order to improve the strategic position and competitiveness of the business unit or these businesses often are liquidated. The Boston matrix has some weaknesses because it is difficult to ascertain when 'high' and 'low' positions occur. Nevertheless, this analysis is particularly applicable for fast-moving goods rather than for industry products (Aaker 1984; Rowe *et al.*, 1985; Webb, 1989; Ansoff and McDonnell, 1990; David, 1997; Faulkner, 1998).

Figure 3.9: Boston Consulting Group (BCG) Matrix

(Source: Ansoff and McDonnell, 1990)



Competitive position

Analysing the competitive position of a company is an important step for the company’s business performance. Analyses, such as strategic group analysis and market segmentation as well as attractiveness analysis and action evaluation matrix, can establish how an organisation could strengthen its market and compete for customers or resources (David, 1997; Johnson and Scholes, 1999).

Strategic group analysis aims to identify the main potential and actual competitors within the industry with similar characteristics and strategies. This analysis is useful in terms of exploiting the unique characteristics of a company analysing possibilities for moving to a different strategic group, identifying opportunities, or initiating strategic problems (Aaker, 1984).

Market segmentation analysis identifies similarities and differences between groups of customers or users (Johnson and Scholes, 1999). According to Aaker (1984) there are three main steps for identifying the segments: 1) who are the buyers of the product, 2) who are the biggest buyers, and 3) who are the potential customers. There are some essential elements within this analysis, as for example, identifying the most important market segments, assessing their attractiveness for gaining competitive advantage, and estimating the relative market share within the market segments (Pearson, 1987).

Market attractiveness, known as the ‘directional policy matrix’, presents the position of business units in terms of competitive strengths and the market attractiveness and is a useful way of choosing the appropriate strategies for different business units and directing the attention of the managers into key forces of the environment (Johnson and Scholes, 1999).

The *strategic position and action evaluation matrix* (SPACE) is another important tool analysing the overall strategic position of a company. Four dimensions represent the SPACE: financial strengths, competitive advantage, environmental stability and industry strength. The four quadrant framework indicated whether aggressive, conservative, defensive or competitive strategies are most appropriate for an organisation (David, 1997).

3.4.6 Financial analysis

There is a very close relationship between business strategy and financial analysis. According to Pearson (1987), the main reason for running a financial analysis is to compare the main financial indicators with those of competitors and to find the reasons for the significant differences, if there are any.

Assessing the financial performance of an organisation is a significant action for shareholders, bankers, suppliers and employees. All of them have different expectations of financial information. For example, shareholders are concerned about their dividends, bankers about the level of risk of the interest-bearing loans, suppliers and employees about the liquidity of the firm. Therefore, investment decisions are fundamental for strategy choice (Luffman *et al.*, 1988). Financial analysis includes financial ratios (loss, turnover or sales margin), assessment of the cash flow and profit per unit that are essential for the future performance of a company. Due to the rapid changes over time it is necessary to carefully monitor the core financial measures (Grundy, 1998; Johnson and Scholes, 1999).

Profitability demonstrates the ‘financial health’ of the company and provides significant data concerning business performance. Profit is the generated capital needed to pursue growth strategies, to replace old plants and equipment, and to absorb market risk (Aaker, 1984; Thompson, 1998a). The profit ratio demonstrates the cost of the production and the marketability of the products (Rowe *et al.*, 1985). *Cash flow* is

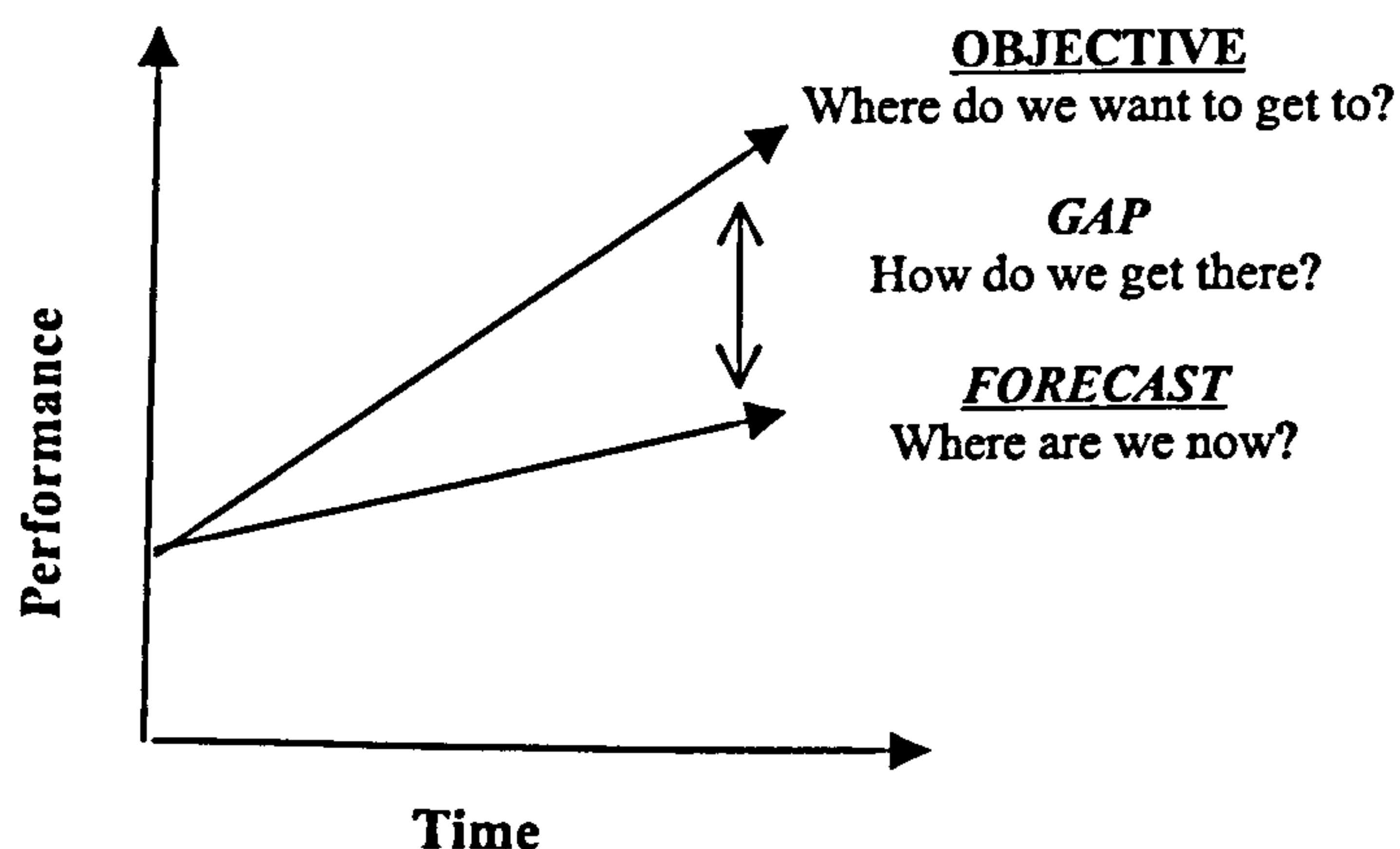
as important as the profit. It represents the ‘*life blood*’ of the company keeping it in business (Luffman *et al.*, 1988). Cash flow analysis is needed to plan the cash that will be generated from operations and the cash that will be needed for investments (Aaker, 1984).

3.4.7 Strategic direction or GAP analysis

Luffman *et al.* (1988) and Vesper (1990) argued that a major problem in the area of strategic environmental forecasting is “*how far ahead should one look*”. Thus, how the company would respond strategically, depends on the reaction time to changes in the environment. The relationship between an organisation and its external environment is commonly known as Gap analysis (Figure 3.10) and is used for understanding the dynamics of the competitive environment (Harrison, 1996; Billsberry, 1998). The major question is what strategic decisions have to be taken in order to fill the gap between the desired parameter (objectives) and what would happen without any change in strategy (forecast) (Ansoff, 1987). Aaker (1984) presented Gap analysis as “*the heart of long-range planning*”. The change of a strategy depends upon the gap between the projection and the desired performance.

Figure 3.10: GAP analysis

(Source: Billsberry, 1998)



Billsberry (1998) proposed that if a ‘gap’ occurred, three alternatives could be implemented: 1) change the objectives; 2) do nothing, and 3) change the strategy.

The next section discusses that in the majority of cases there are many alternative

strategies available to a company. However, Aaker (1984) argued that:

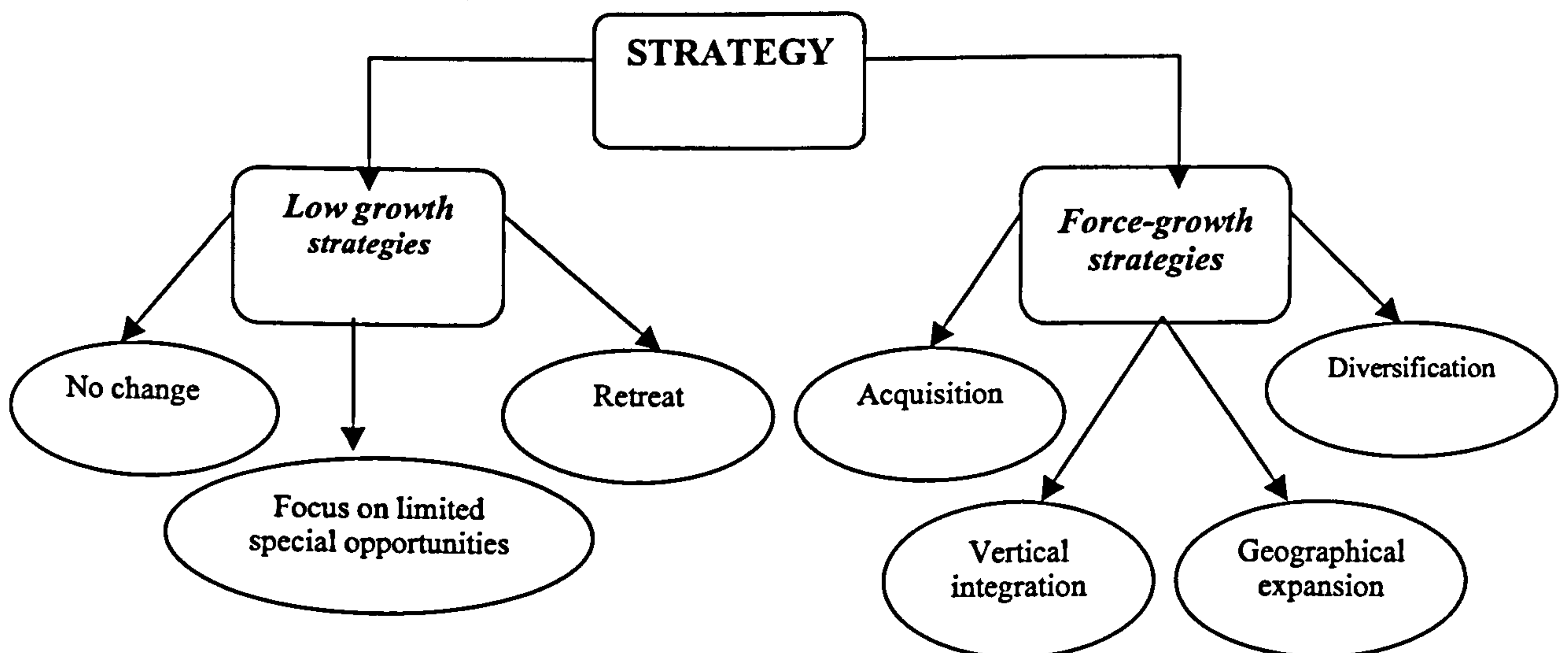
“a good decision among inferior alternatives is much less desirable than a poor decision among superior alternatives” (Aaker, 1984, p.250)

3.5. ALTERNATIVE STRATEGIES

At an early stage in the development of strategy theory, Andrews (1971) discussed the generation of alternatives in terms of their uniqueness. A range of possible strategies is available for a company but the decision, as to which strategic option will be viable, depends on the specific characteristics of an organisation (firm competence, financial and technical resources and history). Therefore, he suggested that there are two main kinds of strategies, based on business growth possibilities. These include low growth strategies and forced-growth strategies. These alternatives are presented diagrammatically in Figure 3.11.

Figure 3.11: Kinds of strategies

(Adapted: Andrews, 1988)



Later in the 1980s, Porter (1985) put forward a different view and suggested that an organisation could compete successfully employing three generic strategies: cost leadership, differentiation and focus strategy. Whereas, Luffman *et al.* (1988) partly adopted partly Andrews' theory and argued that a company can explore five basic directions:

- no change – using the same product to the same customers;
- backward vertical integration – to supply a product, currently bought from another company;
- forward vertical integration – to supply a product, currently produced by a customer;
- product expansion – offering a new product;
- market expansion – developing a new market.

In the 1990s, David (1997) proposed a more comprehensive understanding of the alternative strategies that a company can pursue and he categorised them as follows:

- forward integration;
- backward integration;
- horizontal integration;
- market penetration;
- market development;
- product development;
- concentric diversification;
- conglomerate diversification;
- horizontal diversification;
- retrenchment;
- divestiture;
- liquidation;
- a combination strategy.

Each of these alternatives could have different variations, therefore each of the strategic alternatives requires exploration (David, 1997). The first nine types of alternative strategies, mentioned above, are based on the Ansoff product/market matrix, which is discussed below. David (1997), on the other hand, defined the last four strategies of the above list as ‘defensive’ strategies.

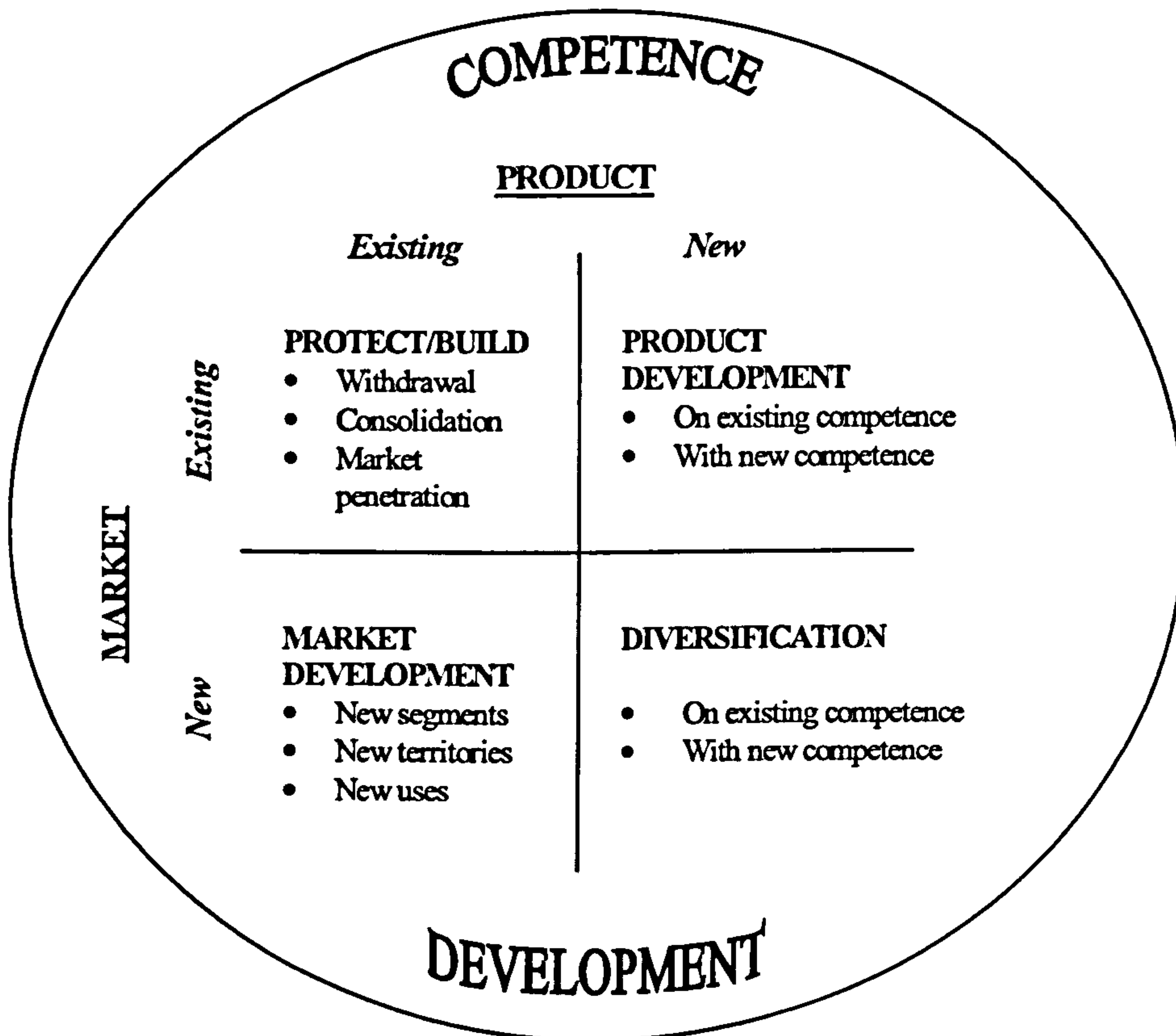
Luffman *et al.* (1988), Thompson (1998a) and Johnson and Scholes (1999) had a different view and argued that businesses could develop externally. Consequently, they suggested that there are also merger strategies, such as joint venture and acquisition.

3.5.1 Ansoff framework of alternative strategies

Ansoff (1987) proposed a matrix illustrating the development of alternative strategic directions in terms of market/product choice within an organisation (Figure 3.12).

Figure 3.12: Ansoff matrix: Directions for strategic development

(Source: Johnson and Scholes, 1999)



Protect and build on current position

This strategic direction is developed on the basis of the existing position of the current product and market. There are several options within the above-mentioned direction:

- Withdrawal – when “... the scope of an organisation activities might change” due to different reasons, as for example, resource limitations, competence level of the leaders, modification of company priorities and stakeholders expectation (Johnson and Scholes, 1999, p.310).
- Consolidation - protecting and strengthening the organisation’s position in its current markets through its existing products (Johnson and Scholes, 1999). Due to

the changes of the business environment (e.g. new entrants and better performance of competitors) the company has to protect the existing position by improving the quality in implementing innovative thinking and processes.

- Market penetration – expanding the market share with the present products and markets through increasing the marketing efforts (Aaker, 1984; Ansoff, 1987; David, 1997; Mintzberg *et al.*, 2003).

Product development

Ansoff (1987) stated that in product development new products replaced old ones. The aim of product development is to increase the sales of a company (David, 1997). There might be different reasons for product development such as changes in consumers needs, short product life cycle, well-developed research and development (R &D). Product development can be developed on existing competence of a company. However, in the long term, it is unlikely to be sustainable without the development of new competence. This could be perceived as an attractive strategic option but there are some barriers that have to be considered, as for example, the need for investment, the potential risk and new labour knowledge (Johnson and Scholes, 1999).

Market development

Market development introduces the existing products to new geographical areas or market segments (Aaker, 1984; David, 1997). Coverage of the company's product market is usually limited. Therefore, the ways for market penetration are:

- extension into market segments, which are not currently gained;
- developing new users of the existing company's products;
- exploring new markets in geographical terms (new domestic, national or international markets) (Johnson and Scholes, 1999).

Diversification

In a seminal book, Johnson and Scholes (1999) defined that:

“Diversification involves directions of development which take the organisation away from the present markets and its present products at the same time” (Johnson and Scholes, 1999, p.323).

Aaker, 1984; Ansoff, 1988; Besanko *et al.*, 2000; Mintzberg *et al.* (2003) argued that there are two main types of diversification:

- Related diversification – development of new products and markets within the industry in which the firm work (based on existing competence). There are different types of related diversification such as: 1) backward integration – development of activities related to the company's inputs; 2) forward integration - development of activities related to the company's outputs, and 3) horizontal integration - development of activities which complement the company's current activities.
- Unrelated diversification – when the company moves out of its current industry in order to create a new 'core competence', or create a 'genuinely' new market (Johnson and Scholes, 1999).

3.5.2 Porter's generic strategies

According to Porter (1985) a company could increase its competitive advantage through three generic strategies:

- Cost leadership
- Differentiation
- Focus strategy – divided into two alternatives (Figure 3.13).

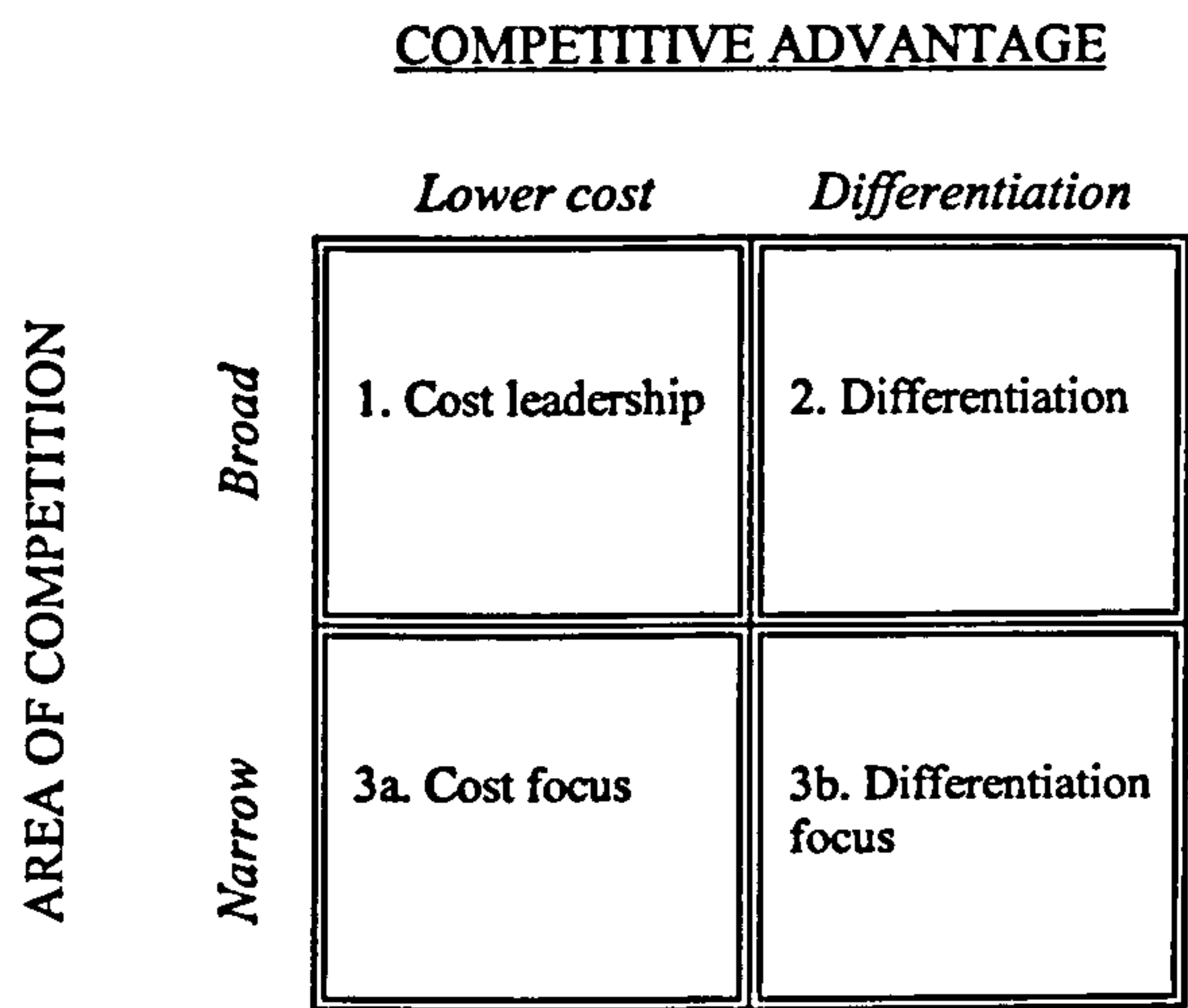
Cost leadership is a strategy, which focuses on the idea of producing something at a very low cost per unit for price – sensitive customers. In other words, the company has to keep its costs lower than the competitors. This strategy can be pursued by a company for rising market share and sales based on low price. Therefore, a firm has to exploit all sources of cost advantage (Porter, 1985; Feurer and Chaharbaghi, 1997). Hence, some competitors might be put out of the industry (David, 1997).

Differentiation is a strategy that seeks to produce 'unique' products, in an industry with price insensitive customers, that can be easily differentiated from those produced by rivals (Aaker, 1984; Porter, 1985; Feurer and Chaharbaghi, 1997). Implementation of this strategy is not a guarantee for achieving competitive advantage but its success could allow a company to increase the price of the product and to gain customer

loyalty (David, 1997).

Figure 3.13: Three generic strategies

(Source: Porter, 1985)



Focus strategy involves either differentiation or low costs but its direction is focused on a certain geographic market, consumers segment or product (Aaker, 1984). Cost focus is a strategy for achieving a cost advantage within the target market. Differentiation focus is a strategy seeking differentiation within the target segments (Porter, 1985). The focus approach is applicable for small size companies. Large firms could also pursue a focus strategy in a combination with some other alternatives. Focus strategy is successful when consumers have special preferences and requirements (David, 1997).

Brester and Penn (1999), Spanos and Lioukas (2001) argued, on the basis of their studies, that successful companies employ one of the three generic strategies because they can build a strategic (competitive) advantage over the rival firms. Each of these strategies can provide direction for a firms’ decision-making and develop entry barriers to protect the developed competitive position.

3.5.3 Defensive strategies

Retrenchment (reorganisation strategy) appears in a situation of low sales and profits in an organisation. In some cases selling the assets, closing ineffective factories,

reducing the numbers of employees, and bankruptcy can be the essential actions that have to be taken (David, 1997).

Divestiture is a strategy for selling divisions or parts of an organisation for raising the capital. This alternative is popular for companies that want to exploit their own strengths and get rid of their unprofitable departments (David, 1997).

Liquidation is a strategy of selling all the company's assets, which may be the only one possibility for loss-making firms, or an organisation that has gained a negative business position (Aaker, 1984; David, 1997).

A *combination strategy* is where a decision is made to mix two or more strategies at the same time. The resources and the priorities have to be assessed carefully prior to formulating a strategy. The type of industry, size of company, and nature of competition could affect the choice of a strategy (David, 1997; Thompson, 1998a).

3.5.4 External strategies for business development

The alternative strategies that relate to developing the businesses externally are joint ventures and acquisition (Luffman *et al.*, 1988).

Joint venture is an action when two or more companies establish a partnership or consortium for achieving some common targets or projects. The aim of this strategy is minimising risk, improving communications and globalising the operations. This alternative could appear as co-operative agreements in the area of research and development, cross-distribution, cross-licensing, cross-manufacturing agreements or sharing the responsibility in the new entry (Pearson, 1987; David, 1997; Johnson and Scholes, 1999; Thompson, 1998a).

Acquisition is a strategy where an organisation develops its resources and competence by taking over another company. Slightly different is *merged development* when companies of about equal size unite voluntarily to form one organisation. The main aims of these two options are: to get stronger or to develop new markets; to reduce managerial staff; to have access to new suppliers, customers, distributors, products and technologies (Aaker, 1984; Pearson, 1987; Luffman *et al.*, 1988; David, 1997; Thompson, 1998a; Johnson and Scholes, 1999).

3.6 PEOPLE CONTEXT

3.6.1 Decision making

People inside organisations invariably have different views and perspectives and the processes of strategic planning, strategic decision making and strategic management are affected by human factors, *e.g.* top management role as strategic leader is significant in identifying the internal and external contexts (Thompson, 1998b; Carneiro, 2001; Farjoun, 2002; Macbeth, 2002)

Managers are not neutral when they take managerial decisions as they have values, skills, experience and mental models (*e.g.* how a secretary has to perceive the behaviour of the director). The leader has to be the designer of the company because he/she has to set the directions, control these directions, involve and communicate with the people. The leaders have also to be ‘system thinkers’, in other words they have to see interrelationships, distinguish detail complexity from dynamic complexity, avoiding symptomatic solutions (Lufman *et al.*, 1996; Thompson, 1998b, Whittington, 2001; Keelin and Arnold, 2002; Mintzberg *et al.*, 2003).

Richardson and Thompson (1995) argued that strategic leaders have different styles of management and they suggested that these styles are:

- Classical administrator – they are concerned to achieve progress through careful planning;
- Design planner – they wish to improve organisational competence in developing long-term, market trend views through formal business plans;
- Political leader – they want to improve the organisational capability by political negotiations and building a social network of support;
- Competitive positioner – they aim to improve competitive competence and use effective industry analysis, choice of winning competitive strategies;
- Turnaround strategist – they aim to reorganise and turnaround the performance of an organisation.

Harrison (1996) and Song *et al.* (2002) also re-recognised that strategic decisions are highly complex and involve lots of dynamic variables (*e.g.* cultural features) which are

critical in strategy development because they are critically important to the long-term success of an organisation.

Decision making consists of three phases: finding occasions for making a decision, finding possible courses of actions and choosing among the possible actions. Decision making is part of the overall strategic change processes, which has to determine a compromise between the conflicting goals of individuals who have some interest in the existence of the organisation. Decisions involve evaluating alternatives for meeting objectives and choosing a course of action that most likely will achieve the objectives. A decision has no goals but reflects the wants, needs or desires of individuals together with their priority (Feurer and Chaharbaghi, 1995b; Harrison, 1996). Markides (2001) argued that strategic decisions could bring success or failure to an organisation and they might be connected to the process learning about adopting new technologies, ideas, products and business approaches.

3.6.2 The process of diffusion and adoption

Diffusion is a complex process because getting a new idea adopted can often be a difficult and long process. The changes of the external environment and especially technological change have been rapid in the last few decades and can affect productivity increase or the rate of economic growth. Frambach (1993) argued that new technologies, new products or new business ideas can significantly contribute to the success of a firm and might be a source of competitive advantage. Many innovations require a long time, often of some years, from the time when they become available to the time when they are widely adopted. Therefore, the common problem is how to speed up the rate of diffusion of innovation.

Although the framework of diffusion was originally based on the study of agricultural innovation (Rogers, 1983), it has been a starting point for research within the fields of: marketing (Robertson and Gatignon, 1986; Frambach, 1993), consumer behaviour (Martinez *et al.*, 1998), software and information technology (Kautz and Larsen, 2000) that each are important in the future performance of a company.

Before defining the process of diffusion and adoption of innovation, the content of innovation is elucidated. Frambach (1993), Rogers (1995) and Martinez *et al.* (1998) stated that an innovation could be an idea, practice, product, service, object and

process perceived as new by an individual.

The theory of diffusion of innovation has been used in agriculture by Rogers (1983) and he provided the basic definition of diffusion which was the:

“... process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 1995, p.5)

Brown (1981), Thirtle and Ruttan (1987) suggested that diffusion begins at the point when someone already adopts the innovation. While adoption was defined by Rogers (1983) as:

“a decision to make full use of an innovation as the best course of actions available”
(Rogers, 1995, p.21)

He explained the adoption process as an individual phenomenon relating to the sequence of stages, through which an individual passes from first hearing about an innovation to finally adopting it. Thirtle and Ruttan (1987) pointed out that adoption studies have to consider the reasons for adoption at a certain point in time.

In order to gain better understanding of the process of adoption and diffusion, the innovation decision process has to be emphasised. This process includes the following stages:

- knowledge - when an individual (potential adopters) knows about the innovation and how it functions;
- persuasion – when an individual forms a favourable or unfavourable attitude towards the innovation;
- decision – when an individual is undertaking activities that lead to a choice to adopt or reject the innovation;
- implementation – when an individual puts the innovation into use;
- confirmation – when an individual seeks reinforcement for an adoption decision that has already been taken (Rogers, 1983; Kautz and Larsen, 2000).

A range of factors can affect the process of diffusion of innovation, such as the value

of the innovation to society/individual or company, cost of the innovation, uncertainty of the innovation and social relevance (Robertson and Gatignon, 1986). Therefore, diffusion has a social and economic aspect because when new ideas are invented whether they are adopted or rejected could lead to a certain social and economic changes. Brown (1981) argued that the individuals in one social system have different levels of resistance and the higher level of resistance requires more information for adoption to occur.

In order to explain the rate of adoption of an innovation, several authors have attempted to determine the extent and speed of the diffusion. Rogers (1995) and Kautz and Larsen (2000) suggested five determinants of acceptance or rejections of innovation. These determinants are:

- relative advantage - the degree to which the innovation is perceived as being better than the idea that is superseded.
- compatibility - the degree to which the innovation is perceived as being consistent with existing values, beliefs and needs of potential adopters.
- complexity - the degree to which the innovation is perceived as being difficult to understand and use.
- trialability - the degree to which the innovation may be experimented on a limited basis.
- observability - the degree to which the results of an innovation are visible to others.

There are five categories of individuals in a social system that can be classified, based on the fact whether they adopted new ideas earlier than the other members (innovativeness). The usefulness of this classification lies on the possibility for defining different diffusion strategies for them (Kautz and Larsen, 2000). These categories were identified by Rogers (1995) and used by Thirtle and Ruttan (1987) in economics, Martinez *et al.* (1998) in consumer behaviour and Kautz and Larsen (2000) in the area of IT and software process improvements. These five categories are:

- Innovators;
- Early adopters;
- Early majority;

- Late majority;
- Laggards (Rogers, 1983).

The ‘innovators’ are information seekers with a diverse range of sources of knowledge who can cope with a high level of uncertainty and their decision does not solely depend on a subjective evaluation of the innovation. The ‘early adopters’ have the greatest degree of opinion leadership because they are those who decrease the level of uncertainty rather than evaluate innovation subjectively. The ‘early majority’ adopts the new ideas just before the average member of a social system. Their innovation decision period is relatively long and they seldom lead. The ‘late majority’ adopt the new ideas just after the average member of a social system because there might be economic necessity or increased network pressure and their decision is formed when almost all the uncertainty about the new idea is removed. The ‘laggards’ are the last to adopt an innovation and very often their decision is formed based on another new idea that has emerged and has been adopted at first by the innovators. The ‘laggards’ are behind in their awareness of the new idea and they are with low degree of opinion leadership (Rogers, 1983; Thirtle and Ruttan, 1987; Chaudhuri, 1994; Martinez *et al.*, 1998; Kautz and Larsen, 2000).

Several generalisations were made by in terms of socio-economic status, personality and communication behaviour, such as:

- Early adopters are not different from later adopters in age;
- Earlier adopters have better education than later adopters;
- Earlier adopters have higher social status than the later adopters;
- Earlier adopters have larger-sized units (companies, farms, etc) than later adopters;
- Earlier adopters have more favourable attitude towards borrowing money than the later adopters;
- Earlier adopter have more specialised operations than later adopter.

These generalisations demonstrate that the earlier adopters usually have a higher socio-economic status. They have greater intelligence, rationality, achievement motivation, better education and occupations, and the ability to manage with abstraction and uncertainty. They also are more cosmopolitan, information seekers that used different

sources of information and have higher degree of leadership (Rogers, 1983).

After reviewing the strategic theory and the role of the managers in strategy development, the next section discusses evaluation theory and strategy evaluation in particular. This provides the theoretical framework of the process of evaluation of strategies in order to understand how and why the farm managers of the sample in the Plovdiv region of Bulgaria evaluated the alternative strategies proposed.

3.7 EVALUATION THEORY AND STRATEGY EVALUATION

The root of the term '*evaluation*' is Latin in origin and relates to the word 'value'. In practical terms, 'evaluation' has been used in many different ways (Horton *et al.*, 1993). In the business world, many people have been involved directly or indirectly with activities relating to the development and planning of business policies and strategies. Therefore, these people have the responsibility to plan and to judge critically the reasons for the selected sets of action and according to Owen and Rogers (1999) this is the essence of the evaluation.

There is no simple evaluation framework, criteria or tools that can provide an exact answer to which strategy would be best for an organisation. Nevertheless, there are some essential principles that have to be considered (Thompson, 1998a).

Strategy evaluation frameworks involve three main activities and they are: 1) assessing the basis of the company strategies, 2) comparisons between planned and expected results, and 3) taking actions for change if necessary. Evaluation can be performed for all kinds and sizes of organisations in the business world because it assesses whether the planned objectives have been achieved (David, 1997).

3.7.1 Defining evaluation

It is difficult to have a simple definition of evaluation because there are different aims, approaches, objects, problems and models of evaluation.

Patton (1982, p.35) discussed the basic concept of evaluation and stated that:

“The practice of evaluation involves the systematic collection of information about the activities, characteristics, and outcomes of programmes, personnel, and products for use by specific people to reduce uncertainties, improve effectiveness, and to make decisions with regard to what those programmes, personnel or products are doing and affecting. This definition of evaluation emphasises (1) the systematic collection of information about (2) a broad range of topics (3) for use by specific people (4) for a variety of purposes.”

According to Breakwell and Millward (1995) an evaluation should be performed mainly in order to assess the need for change or to determine the viability of a particular form of change. Horton *et al.* (1993, p. 1) stated that evaluation is:

“... judging, appraising, or determining the worth, value, or quality of proposed, on-going, or completed research, generally in terms of relevance, effectiveness, efficiency, and impact”

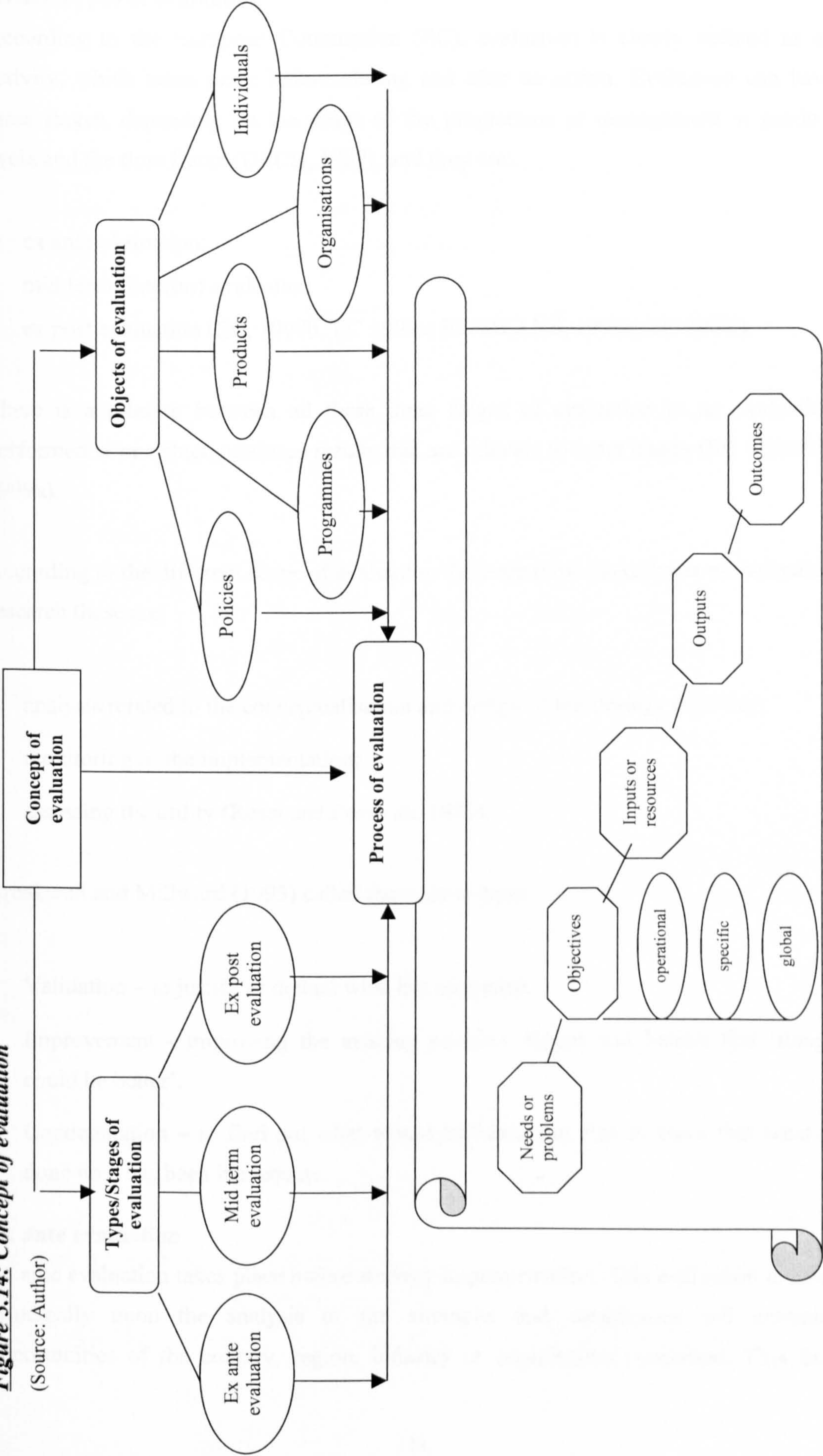
David (1997) and Carneiro (2001) discussed evaluation from a strategic point of view and stated that strategy evaluation is vital to an organisation because the management could be alerted to problems or potential problems before the situation becomes critical with no chance to change.

3.7.2 Concept of evaluation

The concept of evaluation adopted in this study is presented in Figure 3.14. The terms and approaches are discussed below.

Figure 3.14: Concept of evaluation

(Source: Author)



3.7.2.1 Types of evaluation

According to the European Commission (EC), evaluation is clearly defined as an activity, which takes place before, during and after an action. Evaluation can have three stages, depending on the phase of the programme or management or product cycle and the time frame (OECD, 1987), and they are:

- ex ante evaluation;
- mid term (interim) evaluation
- ex post evaluation (EC, 1999b; EC 1999a; EC MEANS, 1999a; EC 2000;).

There is a relation between all these three stages of evaluation as an evaluation performed at one stage produces results that are relevant to other stages (EC MEANS, 1999a).

According to the different scope of evaluation there are three major types of evaluation research these are:

- analysis related to the conceptualisation and design of the strategy or policy;
- monitoring of the implementation;
- assessing the utility (Rossi and Freeman, 1982).

Breakwell and Millward (1995) called these three types:

- Validation – to justify or defend what has happened;
- Improvement - improving the existing position. Hopes and beliefs that ‘things could be better’.
- Condemnation – to find out what would be better but also to show that what is done now has been inadequate.

Ex ante evaluation

Ex ante evaluation takes place before strategy implementation. This evaluation focuses principally upon the analysis of the strengths and weaknesses and potential opportunities of the country, region, industry or organisation concerned. This first

phase provides information and judgement of:

- whether development issues have been ‘diagnosed’ correctly;
- whether the strategy and the objectives were relevant;
- whether there was a relation with the overall policies and priorities;
- whether expected impacts were realistic (Morden, 1993; David, 1997; EC MEANS, 1999b; Johnson and Scholes, 1999).

According to the OECD (1987) ex ante evaluation is closely associated with the formulation of a policy or strategy. The first stage of evaluation should provide necessary data and basis for monitoring and future evaluation and could specify its selection criteria and measures.

Mid-term evaluation

Mid-term (intermediate) evaluation is performed during the second stage of the implementation of a programme or strategy. This evaluation critically analyses the first outputs and results. Financial management and the quality of monitoring are also assessed (OECD, 1987, Morden, 1993, Johnson and Scholes, 1999). Mid-term evaluation identifies whether some changes need to be undertaken and why they are needed.

Intermediate evaluation is based upon the information from ex ante evaluation. It is an exercise focusing primarily on the results achieved up to the moment, without in-depth analysis of the impacts. Mid-term evaluation has a ‘formative’ nature, that may produce direct feedback that could help for better management and decision making (Horton *et al.*, 1993; EC MEANS, 1999a).

Ex post evaluation

Ex post evaluation judges the entire programme, business project or strategy and particularly its impacts. Its aim is to report on the effectiveness and the efficiency of the programme, project or strategy and the extent to which expected effects are achieved. In other words, ex post evaluation comprises an assessment of the results obtained and an analysis of the way in which the resources and competence were used as compared with the objectives (OECD, 1987; Morden, 1993; David, 1999). The last

stage of evaluation focuses on the factors of success or failure and the sustainability of results and impacts. The conclusions have to be expressed in such a way that they may be generalized and applied to future performance.

3.7.2.2 Objects of evaluation

To the question ‘what could be evaluated?’ Breakwell and Millward (1995) categorised the types of things that could be evaluated as:

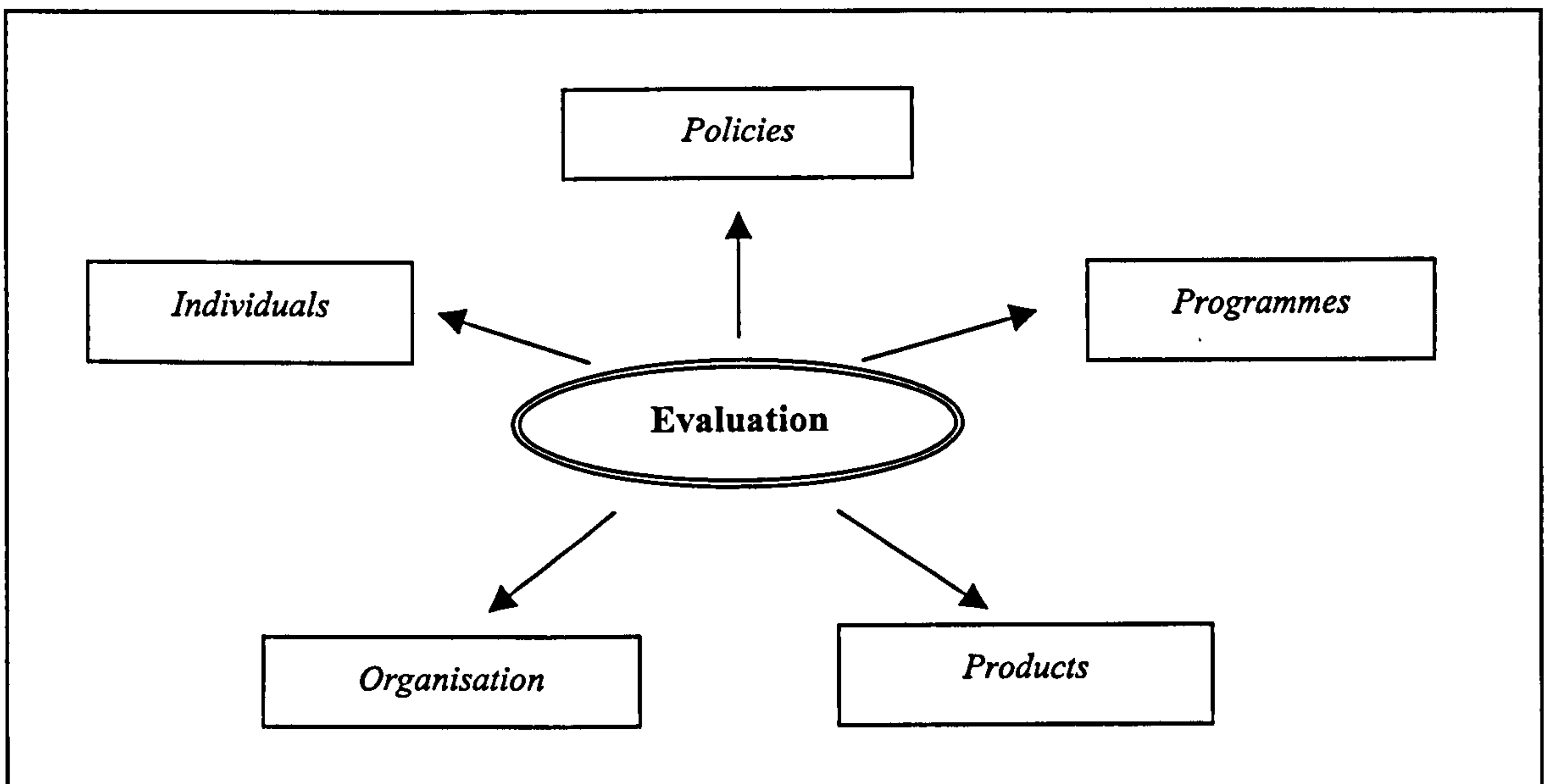
- Activity – the impact of single act or entire activity produced by individuals or several different people;
- Personnel – the ability or skills of the people involved in the task;
- Provision of resources – the availability of physical arrangements, equipment, staff and money necessary for the task;
- Organisational structure – the viability in the context of the task of the existing management structure, team formation and dynamics, communication channels and training;
- Objectives – assessed the appropriateness of the established goals.

When the evaluation includes all or most of the above mentioned targets this is frequently referred to as ‘programme evaluation’.

Owen and Rogers (1999) argue that the ‘objects’ for an evaluation could be classified into the following categories: programmes, policies, organisations, products, and individuals (Figure 3.15).

Figure 3.15: Objects of evaluation

(Source: Adapted by Owen and Rogers, 1999)



In strategic management theory strategy evaluation takes a core place. Nowadays, strategy evaluation has become a very important action due to the rapidly changing business environment. However, the quick and dramatic changes of external and internal forces have made evaluation more difficult (Johnson and Scholes, 1999).

3.7.3 The evaluation process

3.7.3.1. Focus of evaluation

Evaluation has to be focused and the key issues have to be understood. The first step of narrowing the evaluation is to answer the questions 'what will be evaluated', followed by 'what are the reasons' and 'to whom it will be done' (Horton *et al.*, 1993).

3.7.3.3. Evaluation questions

The most difficult and important phase of evaluation design is the formulation of the evaluation questions that are the key issues of the evaluation exercise. Possible questions according to EC MEANS (1999b) include:

- descriptive questions that intended to observe and measure changes (what has happened?);

- causal questions that assess the relationship and effects (how and to what extent was that which has occurred attributable to the evaluated issue?)
- normative questions that apply the evaluation criteria (were the results and impacts satisfactory?).

In the ideal situation the evaluation questions have to involve each of these three dimensions:

“An evaluation question must correspond to a real need for information, understanding and/or identification of new solution, otherwise it will merely be an ‘alibi question’, aimed, for example, at endorsing a decision already taken” (EC MEANS, 1999a, p. 70)

Horton *et al.* (1993) argued that the reasons for evaluation are to assess the progress, productivity, results or resource operation in order to plan future performance. According to these authors, there are two main uses of the data produced, which are:

- accountability – routine reports and the assessment of the impacts;
- decision making – improving planning and implementation and periodic reviews.

3.7.3.4. Evaluation criteria

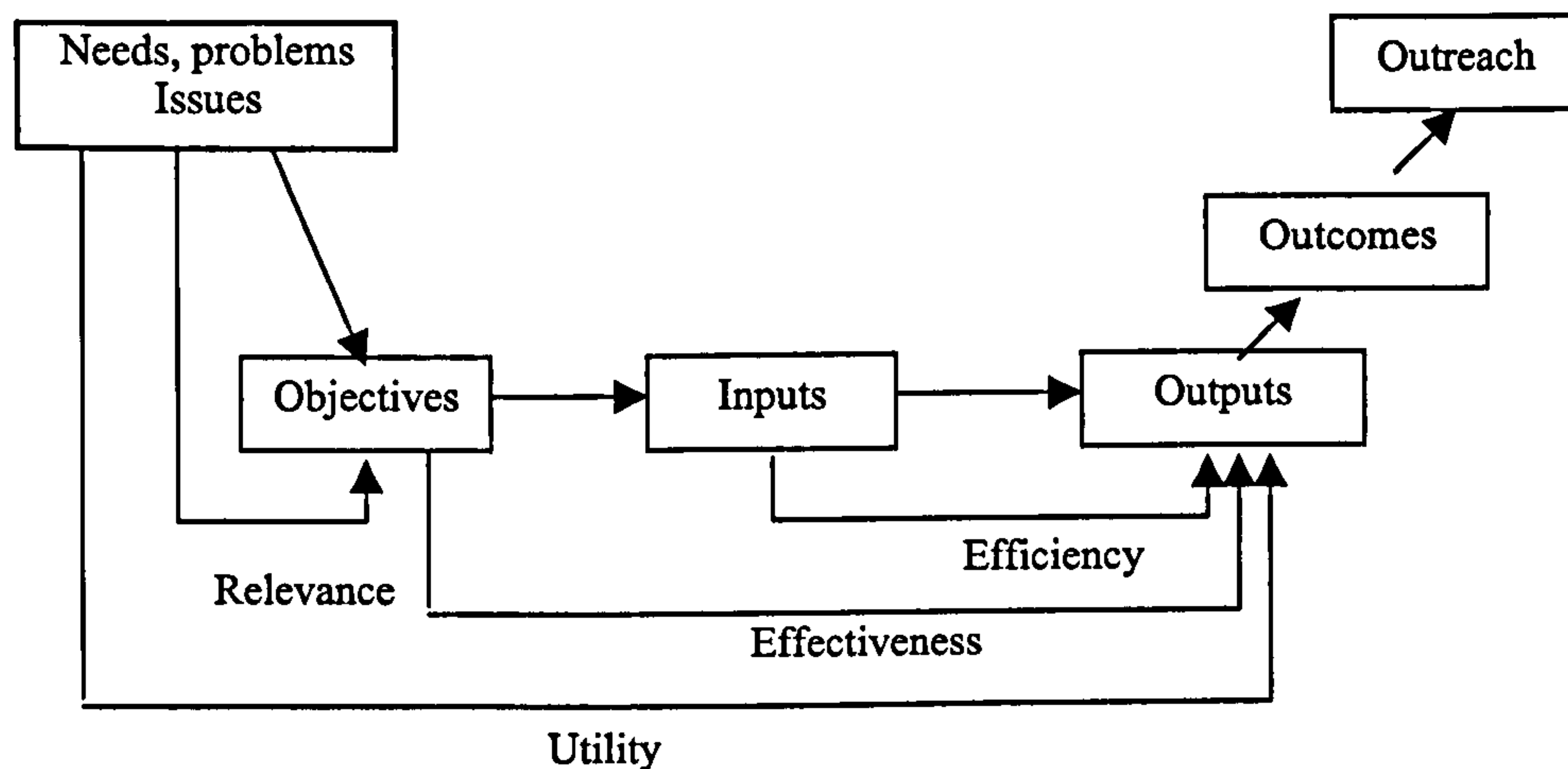
For a particular evaluation question, the criteria should help to formulate a judgement as to the success by linking the indicator to the expected results or impacts (OECD, 1987; EC, 1999b; EC, 2000d; Saad, 2001). When the evaluation question includes a judgmental criterion, they fall mainly into one of the main following four categories:

- **relevance** – appropriateness of the explicit objectives in relation to the occurred problems or needs;
- **effectiveness** – whether the formulated objectives have being achieved;
- **efficiency** – comparing the obtained results, or produced impacts with the resources. In other words *“the effect obtained equal to the inputs”* (EC MEANS, 1999a, p.71) or cost-effectiveness of activities;
- **utility** – to judge the obtained impacts in relation to the needs and economic issues (Lichfield *et al.*, 1975; EC MEANS, 1999a; EC, 2000d) (Figure 3.16).

Studies by Patton (1987), Owen and Rogers (1999) and Robson (2000) argue that the standards of excellence for evaluation have four primary characteristics: *utility*; *feasibility*; *propriety*; *accuracy* and they are an essential part of the professional practice of the evaluation.

Figure 3.16 – Main evaluation criteria

(Source: EC MEANS, 1999a)



In the business world, Andrews (1987) argues that the criteria for effective strategy evaluation are that:

- strategy has to be identifiable and explicit;
- strategy has to be unique;
- strategy has to exploit all the environmental opportunities;
- strategy has to be consistent in terms of competence and resources;
- strategy and all its parts and vision has to be consistent as well;
- level of risk has to be feasible from an economic and personal point of view;
- strategy has to be appropriate to the personal values of the company;
- strategy has to be appropriate to the society;
- strategy has to constitute stimuli to company's efforts;
- strategy was advisable to have some early response indicators.

Morden (1993) developed the above mentioned concept of evaluation criteria and specified that there are six major judgmental criteria for evaluating strategies, these

are:

- ***Desirability*** – the desirability of the objectives, strategies and operations to the internal staff, stakeholders and the external forces (mainly customers and financial institution);
- ***Feasibility*** – refers to the enterprise competence and how well the objectives, strategies, policies and plans were formulated, analysed and implemented, as well as how realistic and effective were they and were they achievable within the set time-scale;
- ***Appropriateness/suitability*** – judging the appropriateness of the strategy in terms of achieving the objectives, fitting in the specific situation (taking advantages of internal strengths and opportunities and avoiding the threats), correctly positioned, appropriate and addressed to regional, national and international level;
- ***Consistency*** – the level of consistency of objectives and strategies in terms of priorities, time, logic, competence, finance, operational assets and people;
- ***Facilitating change or innovation*** – the level of flexibility and innovation of the chosen objectives and strategies towards the internal and external changes and how well they fit into time-scale;
- ***Risk management*** – making strategic choice, implementing strategies and the allocation of resources was a risk process. Therefore, the degree of risk has to be assessed in terms of value loss (as results of internal and external events); time-scale, and resource availability.

Thompson (1998a), Johnson and Scholes (1999) argue that there are three key types of evaluation criteria that are essential and they are suitability, feasibility and acceptability. The first two criteria were mentioned above while the authors explained acceptability as being whether expected outcomes were achieved from the point of view of stakeholders, returns and risk.

3.7.3.5. Characteristics of an effective evaluation

Strategy evaluation is needed because success today is no guarantee for success tomorrow (David, 1997). An effective strategy evaluation has to meet several requirements such as:

- economic characteristics – there is no need for too much data or control due to its high costs, therefore cost effectiveness has to be considered;
- meaningful characteristics – which need to be precise and relevant to the company's objectives;
- time characteristics – the time limitation has to be considered, therefore, the necessary data has to be available at any time;
- true characteristics - needed to be provided whatever the results and financial ratios are;
- fair characteristics – the evaluation process has to present the situation fairly with no bias;
- simplicity – the more complicated data and actions will create difficulties for people and restrict the data produced (David, 1997).

Finally, effective strategy evaluation should help an organisation to take advantage of all internal strengths, exploit the opportunities, improve the weaknesses and defend against threats. Generally speaking, strategy evaluation should allow an organisation to inform its future and consistency against fast changing external forces (David, 1997).

3.8 SUMMARY

Strategy is how individuals or firms intend to manage their business in a rational way given the specific environmental limitations. Strategy may contribute significantly to the success or a failure of an organisation and becomes extremely important within conditions of increased competition. Strategies can exist at three different levels in an organisation: corporate, business and operational level. Therefore, the corporate strategies refer to the overall aim of a company. The business strategies focuses on how a company should compete successfully and the operational strategies focus on how the functional parts in an organisation contribute to the other two levels of strategies.

The processes of strategic planning, strategic decision making and strategic management are interrelated, however, there are some differences between them. Strategic planning refers to development of long range plan for managing the external opportunities and threats taking into consideration the organisational capabilities in terms of the company strengths and weaknesses. Whereas, strategic decision making

process is formulation and selection of strategies that meet the company's objectives in the best way (Hofel and Schendel, 1978). The strategic management process refers to how the strategies are working and the need to change the strategies if necessary.

The internal audit within an organisation regarding the available resources and capability is a very important aspect for strategy development in terms of the identification of the strengths and the weaknesses of the main functional areas of a company: management, marketing, finance, production, research and development (David, 1997). Andrews (1987) suggested that the essence of formulated strategies was to find a match between the organisations' capability and opportunities within the competitive environment.

The examination of the external environment is a critical step during strategy formulation and especially ex-ante evaluation in terms of the identification and monitoring of the opportunities and threats that could benefit or harm an organisation in the futures. The main external factors that could influence a company are political, economic, social and technological.

Porter (1985) argued that understanding the structure of the industry as well as the improvement of the competitive position and identification of a competitive advantage could provide essential information for developing the company's strategy.

A range of possible strategies is available for a company. Porter (1985) identified that three generic strategies could increase the competitive advantage of a company and they are cost leadership, differentiation and focus strategy. Other alternative strategies can refer to the product/market choice (product, development, market development, diversification, etc.) or to defend a business position (retrenchment, divestiture, and liquidation) or developing the business externally (joint ventures and acquisition).

The strategy process is highly influenced by people's (managers, other staff) perceptions and different values, skills and mental models. Therefore, the strategic leader was perceived by some authors as a designer of a company that have different managerial styles and have a vital role within the process of diffusion and adoption of new technology, product, idea, practice and business approach (Rogers, 1995; Thompson, 1998; Mintzberg *et al.*, 2003).

Strategy evaluation is a vital in an organisation because it can alert the management of potential problems before the situation become critical, or the strategy fails, and there is still chance for change (David, 1997). The three types of evaluation have different scopes. Ex ante evaluation relates to analysing conceptualisation and design of a strategy. The mid-term evaluation interacts with the process of monitoring of the implementation and the ex post evaluation refers to assessing the utility (Rossi and Freeman, 1982).

The most common evaluation criteria that are perceived as a standard for excellence are appropriateness/relevance, feasibility and acceptability (Thompson, 1998; Johnson and Scholes, 1999). However, other criteria such as desirability and consistency have been identified (Morden, 1993).

Developing strategy is a critical step in a business because it can strongly influence its present and future performance and has been discussed above the industry plays a vital role upon an organisation capability and competitive position. Therefore, the next chapter discusses the implication of strategic theory in agriculture with particular reference to the strategic options available to individual farmers operating in Bulgarian horticultural industry.

CHAPTER 4: STRATEGIC ISSUES IN AGRICULTURE

4.1. INTRODUCTION

This chapter presents how strategic theory has been applied to agriculture and more specifically farm business. Brassley (1997) argues that the specific characteristics of strategic theory used in agriculture have to be identified and examined due to the specific features of agricultural industry. The main aim of this chapter is to provide a review of the application of strategic aspects to the agricultural/horticultural industry and more specifically to discuss strategy theory as it relates to individual farmers and their farm business. The chapter is structured as follows:

4.1 Introduction;

4.2 In order to establish the context within which horticultural businesses operate this section provides background information about the rural economy and the development of horticulture and agriculture so that the specific framework of these industries could be defined;

4.3 Discusses the specificity of strategic issues such as strategic planning, decision making and strategic management processes in agriculture and how they have been applied in this sector. Farm management and the principles of farm business viability are explored, as these are essential for the understanding of the research subject;

4.4 Reviews the impacts upon the farmer's decision making of the overall business environment within which farms operate. An analysis of both the internal capacity (production, marketing, finance and staffing) and the external environment is provided in order to demonstrate how it affects the enterprises;

4.5 Presents a range of alternative strategies that farms can employ to survive and possibly expand. Attention is paid to farm diversification due to its perceived potential for sustaining the viability of the farm business in addressing the uncertainty of the external environment;

4.6 Outlines the role of people in the strategy process in agriculture/horticulture and demonstrates how their personality affects their business decisions and choice of strategies;

4.7 Discusses the concept of evaluation as it has been applied to agriculture and more specifically the application of evaluation to agricultural strategies;

4.8 Provides a summary of the chapter.

4.2 BACKGROUND

4.2.1 Agriculture

Agriculture has been a vital sector of economic life for more than 10,000 years and a major source of employment for the world's population. However, the importance of this industry has decreased since the beginning of the industrialisation of the Western economies (Grigg, 1982). Industrialisation of agriculture relates to the 'food supply chain', which begins with agricultural inputs being transferred to agricultural production, followed by processing, food distribution and consumption (Gilg, 1996; Ahmed, 2003).

Over the last two to three decades significant agricultural change has taken place globally in response to rapidly changing business environments, population growth and adoption of environmentally friendly principles (Hill and Ray, 1987). Over the next twenty years agriculture will continue to face tremendous changes due to drivers such as advanced technology, biotechnology, trade liberalisation, market globalisation, environmental concerns and consumer demands for safe and nutritious food. Agricultural enterprises will have to restructure their goals and strategic management principles in order to survive within this dynamic environment (Oosten, 1998; Brester and Penn, 1999; Poole, 2000; Shalhevet *et al.*, 2000; Parker, 2000; Kimhi and Nachlieli, 2001; Daskalopoulou and Petrou, 2002; Georgieva, 2003).

Farm incomes have been a critical issue in the past and have been put under increased pressure over the last few decades, as they have decreased in countries with developed economies. The three main reasons for the pressure of the farm incomes can be summarised as: firstly, an increased ability to supply agricultural products due to the development of science and the implementation of new technologies and machinery, which has increased productivity of agricultural products. Secondly, a relatively stable demand for agricultural products as the trend of birth rate is no greater than before. And thirdly, the proportion of spending for food has declined and the pattern of spending of disposable income has changed (Slee, 1989; Dyck, 1994, RDC, 1994; Brassley, 1997; Morris and Winter, 1999; Ahmed, 2003).

Agriculture should not be discussed in isolation. Farming is a ‘cornerstone’ of the rural economy, the main user of the land, a significant employer and produces the major part of food-supply (DE, 1992; Brassley, 1997; MAFF, 1999; Thomson, 2001; Georgieva, 2003). Therefore, agriculture has a vital role in the countryside, accounts for an important part of the rural economy, and could be a positive agent and basis for the future transformation of rural areas (Hill and Ray, 1987; DE, 1992; Howe, 1992; RDC, 1994).

4.2.2. Rural areas and their economy

Understanding the meaning of rural areas, their economy and development, will contribute to a better understanding of the context of this study as agriculture/horticulture largely takes place in rural areas. Defining rural areas appears to be an almost impossible task but there is a range of concepts for understanding the meaning of the ‘rurality’ (EU, 1997). For example, Gilg (1996, p. 20) defined countryside or rural areas as “... *a location where extensive land uses take place*”. The land use is mainly agriculture and forestry but it can also be conservation or other alternative economic activities. Gilg (1996) investigated further the concept of ‘rurality’ and stated that the rural areas should be based on the relationship between production and consumption. He proposed that various social and economic processes divide rural areas into four types:

- Preserved areas – with attractive landscape and anti-development culture;
- Contested areas – with traditional agricultural development;
- Paternalistic areas – with developed and large-scale farming;
- Clientilist areas – zones with direct agricultural income support (disadvantaged upland).

The EC (1997, p.6) provided a very simplistic definition as the rural areas “... *evoke a physical, social and cultural concept which is the counterpart of ‘urban’*”. However, the European Community (EC) also argued that there are different types of rural areas, and uses socio-economic criteria (e.g. agricultural patterns, density of inhabitants per square kilometre or population decline) to define these. However, their most frequently used criteria for defining the urban-rural continuum is population density.

The rural economy is complex both internally and in terms of its external links; it is generally characterised by the lack of large-scale industry and the fact that some local people do not have a local occupation or too many pensioners live there (Hill and Ray, 1987). According to Jackson (1992) the rural economy is not just about farming, it is also about food processing, and a wide range of alternative industries which may also be land using. Very often the rural residents depend not only on internal sources of income but also on external sources of income (pensions) and external links such as tourism and other leisure services that operate in the rural areas, but rely upon external sources of incomes (Thomson, 2001). Rural development implies structural and institutional changes in all its components such as production, consumption, marketing and trade. The production component includes farming and similar land based activities (Thomson, 2001).

Ritson (1997) stated that the future of the rural economy, rural society and the rural landscape depends upon a viable farming community, which has to be aware of the increased level of ecological and social concerns. The following sections therefore, discuss some of the theories for possible developments of agriculture.

4.2.3 Theories for the development of agriculture

Macrae *et al.* (1993, p. 22) suggested that the development paths of agriculture have to respond to the ecological and social values that arose in the last two decades in Canada. They argued further that there are three strategic frameworks for modifying agribusiness practices, which are described below:

- Efficiency framework – using traditional farming systems combined with reduced environmental impact;
- Redesign – avoiding the problems by designing new management approaches that are more appropriate in terms of the physical and socio-economic context;
- Substitution – replacing some disruptive products with more environmentally benign.

Dyck (1994) also stressed on environmental concerns and proposed three different paradigms for the sustainable development of the agricultural industry:

- ‘Environmental protection’ – which corresponds to conventional agriculture and the appearance of a need to protect the environment from ‘harmful economic activities’. This can be described in words such as ‘business-as-usual’, plus ‘treatment plans’ approach. For example, reducing the use of pesticides used by the farm enterprises.
- ‘Resource management’ – this concept was developed by Seikatsu in Japan and the general idea is that external environmental problems become internal ‘resource’ problems. It is based on traditional agriculture but there are major differences such as market control, specialisation and ecologically sound products and conscientious living. The underlying value was saving money then maximising the profit.
- ‘Eco-development’ – emphasises the balance between economic and ecological concerns, and the best illustration is organic agriculture combined with diversified crops. It is entirely different from the conventional agriculture, small-scale farming, stress on diversification and not profit-maximisation oriented.

In the UK, MAFF suggested that actions for environmental protection have to be undertaken in relation to crop and livestock extensification, organic farming, protecting water resources and the management of the land (Howe, 1992; Battershill and Gilg, 1997). Some other activities that have taken place in MAFF programmes over the last 20 years, have been farm diversification and in particular rural tourism, small-scale manufacturing and crafts (Butt, 1992; Newby, 1992). Farmers have been encouraged to exploit the new market opportunities and product/services for the economic development of the rural areas. On the other hand, farm diversification can also provide new job opportunities for the people living in these areas. The number of new jobs may not be significant but will be a contribution towards solving one of the biggest problems in the rural areas, unemployment (Butt, 1992; Howe, 1992).

The assessment of horticultural businesses and the future development of agriculture/horticulture is the core of this study therefore the next discussion relates to the application of general theory of strategic planning, decision making and management to agriculture.

4.3 STRATEGIC ISSUES IN AGRICULTURE

Schroder and Mavondo (1994) and Miles *et al.* (1999) stated that strategies might be a significant contributor to the success of the farm both socially and economically. Therefore, strategy and strategic thinking has become increasingly important because agribusiness has been facing an environment characterised by drastically limited resources and competitors who have similar skills, goals and objectives.

4.3.1 Strategic planning in agriculture

Giles and Stansfield (1990) argue that the strategic planning of an agricultural enterprise as in any other company draws upon a long-term strategic plan for achieving overall goals and objectives considering the internal and external constraints. They suggest that farm managers plan to do something before it happens in order to have some influence over the events when these happen. They also point out that planning is important for any farm regardless of their size.

An increasingly complex and rapidly evolving environment calls for innovative thinking and plans that can help farmers to deal with uncertainty (Horton *et al.*, 1993; Aubert *et al.*, 1999).

Horton *et al.* (1993) suggested more inclusive framework of strategic planning in agriculture and argues that it consists the following steps:

- Assessment of the external environment;
- Assessment of the farms' current status;
- Determination of the desired future state of the farm;
- Identification of the gap between the current status and the future desired status of the farm;
- Determination of the strategy to go from the current to the desired future state;
- Formulation of the implementation plan;
- Implementation of the plan;
- Monitoring, adjustment and evaluation of the plan.

Some other authors (Hemidy, 1996; Brester and Penn, 1999) point out the link

between strategic planning and price factors and the need to produce low cost products. Miles *et al.* (1999) explored this idea and argued that adoption of appropriate strategic planning techniques by agribusiness should result in a more effective agribusiness system characterised by lower production/marketing costs and more effective distribution.

4.3.2 Strategic decision making in agriculture

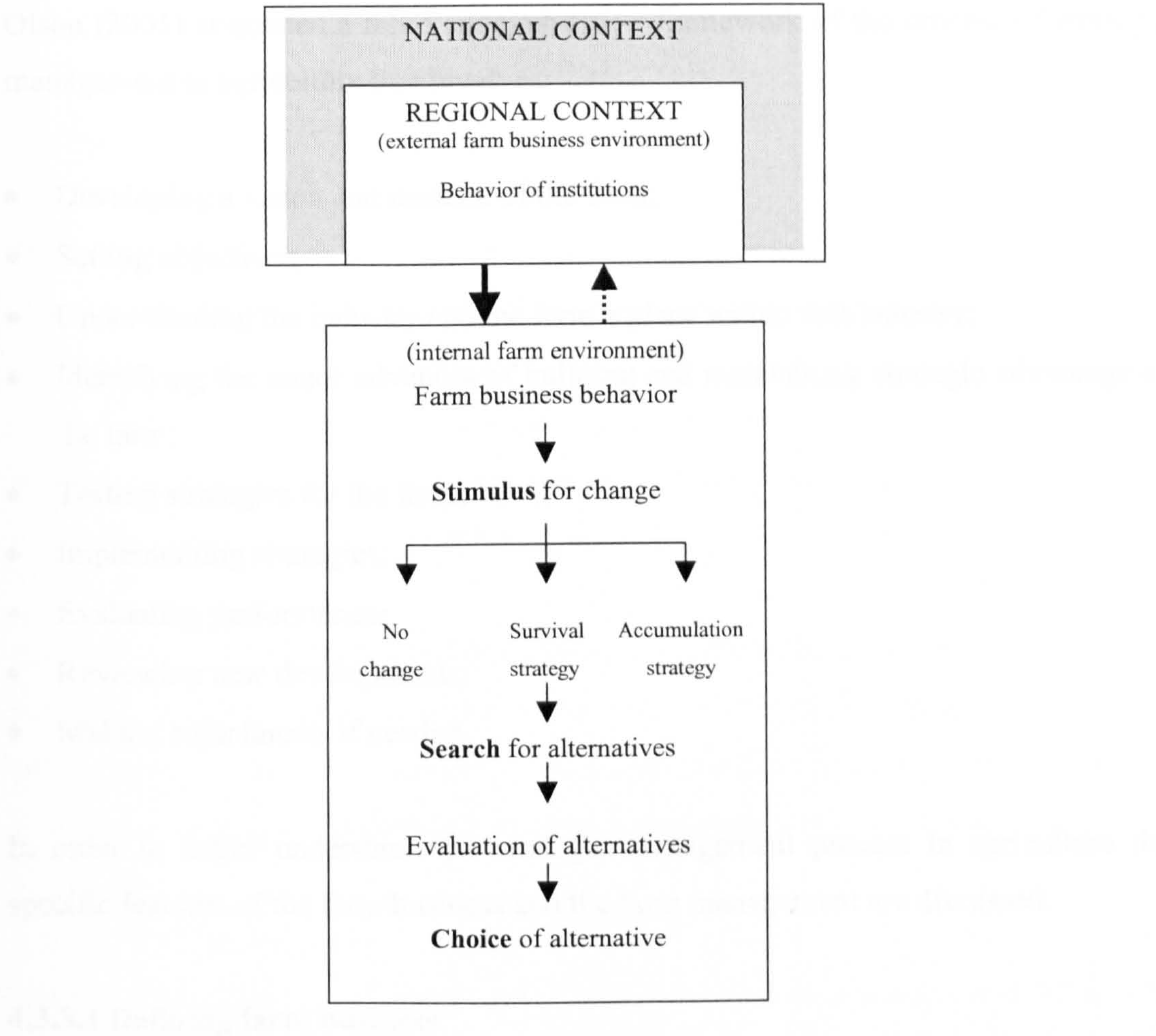
Giles and Stansfield (1990) suggested that strategic decision making refers to decisions that are taken now, based on information from the past, about events that will happen in the future. According to them, and Turner and Taylor (1998), decision making in agriculture consists of the following steps:

- observation – identification of the problem. For example, quota restrictions, weather limitation, etc.;
- analysing – assessing the business situation and environment within which farm is operating;
- developing alternative solutions – considering all the alternatives;
- finding the best solution – which alternative will produce best results;
- making decisions effective – undertaking effective actions;
- monitoring and control.

Ilbery *et al.* (1998) proposed an inclusive way of demonstrating the link between the external and internal environment (discussed later) and decision making process (Figure 4.1). They argue that strategic decision making process in agriculture includes only three stages: firstly, stimuli for change arising from the internal or external environment; secondly, search for suitable alternatives for farm business development; and thirdly, the choice of alternatives. These authors also identified that the behaviour and the attitudes of the farmers is an integral part of the decision making process. Farmers' decision making processes and consequences have been under investigation by many agricultural economists in order to predict farmers' behaviour in a variety of specific situations such as crop selection, adoption of technology and environmental practices (Willock *et al.*, 1999).

Figure 4.1: *Strategic decision making process and the external and internal environment*

(Source: Adapted by Ilbery *et al.*, 1998)



Gasson and Errington (1993), Hemidy (1996) and Ilbery *et al.* (1998) argue that the information for decision making comes from two different sources, which are internal and external, and it is essential for both these sources to be examined. More recently, Hossain *et al.* (2002) summarised the factors affecting farmers’ decision making as being diseases, pest control, general economic conditions, price and income elasticity, public policies and the adoption of modern technology.

4.3.3 Strategic management in agriculture

Harling (1992) argued that farm managers who followed the principles of strategic management were more successful. Strategic farm management consists of three main functions relating to resource allocation within business planning, implementation and

monitoring. These functions are directed to four areas: production, marketing, finance and staffing (Gasson and Errington, 1993; Hemidy, 1996).

Olson (2001) suggested a more comprehensive framework of the process of strategic management in agriculture that involves:

- Developing a vision and mission of the farm;
- Setting objectives;
- Understanding the industry and the farm's place within that industry;
- Identifying the major advances of building and maintaining strategic advantage of the farm;
- Testing strategies for the farm;
- Implementing strategies;
- Evaluating performance;
- Reviewing new developments;
- Making adjustments if needed.

In order to better understand the strategic management process in agriculture the specific features of the farm business and the farm management are discussed.

4.3.3.1 Defining farm business

Carter (1990, p.55) proposed a short definition of farming, which was '*...biological manipulation of plants and animals*'. Whereas, Gasson and Errington (1993, p.25) provided a more comprehensive definition as:

"... human intervention in 'natural' biological processes in order to tailor them to the satisfaction of human needs"

They argue that the farm business is an economic unit that includes farming activities within the frame of the available resources (capital, land, labour). However, they also stated that farm businesses have some specific features that distinguish them from other businesses and a farm can be discussed in many different ways such as describing it as the structure of units, capital, etc, or describing it as a system of inputs that is transformed into outputs.

Access to, or ownership of land is vital for the development of successful agribusiness. In addition the land has environmental and social functions for rural areas (Hill and Ray, 1987, Batt, 2000). Possibly, the major driver in the evolution of farm business in Bulgaria over the last decade has been the process of land restitution, a topic discussed in considerable details within Chapter 2, section 2.4.1).

Farming systems have become more 'open' and have an impact upon the economy due to activities such as buying inputs and selling outputs. Therefore, farm businesses, as any other business, have the task of allocating the available resources and using them in the best way for achieving the farm targets. In other words, the allocation of the resources as well as the acceptance or rejection of new forms of resources or new uses of the existing resources (Jones, 1990).

Gilg (1996), Stanton (2000) and Hossain *et al.* (2002) examined farm businesses as managing the relationship between the external relations (market, credit or technology) and internal factors (land and capital ownership or labour and managerial processes). These issues are an integral part of the farm management, which is discussed next.

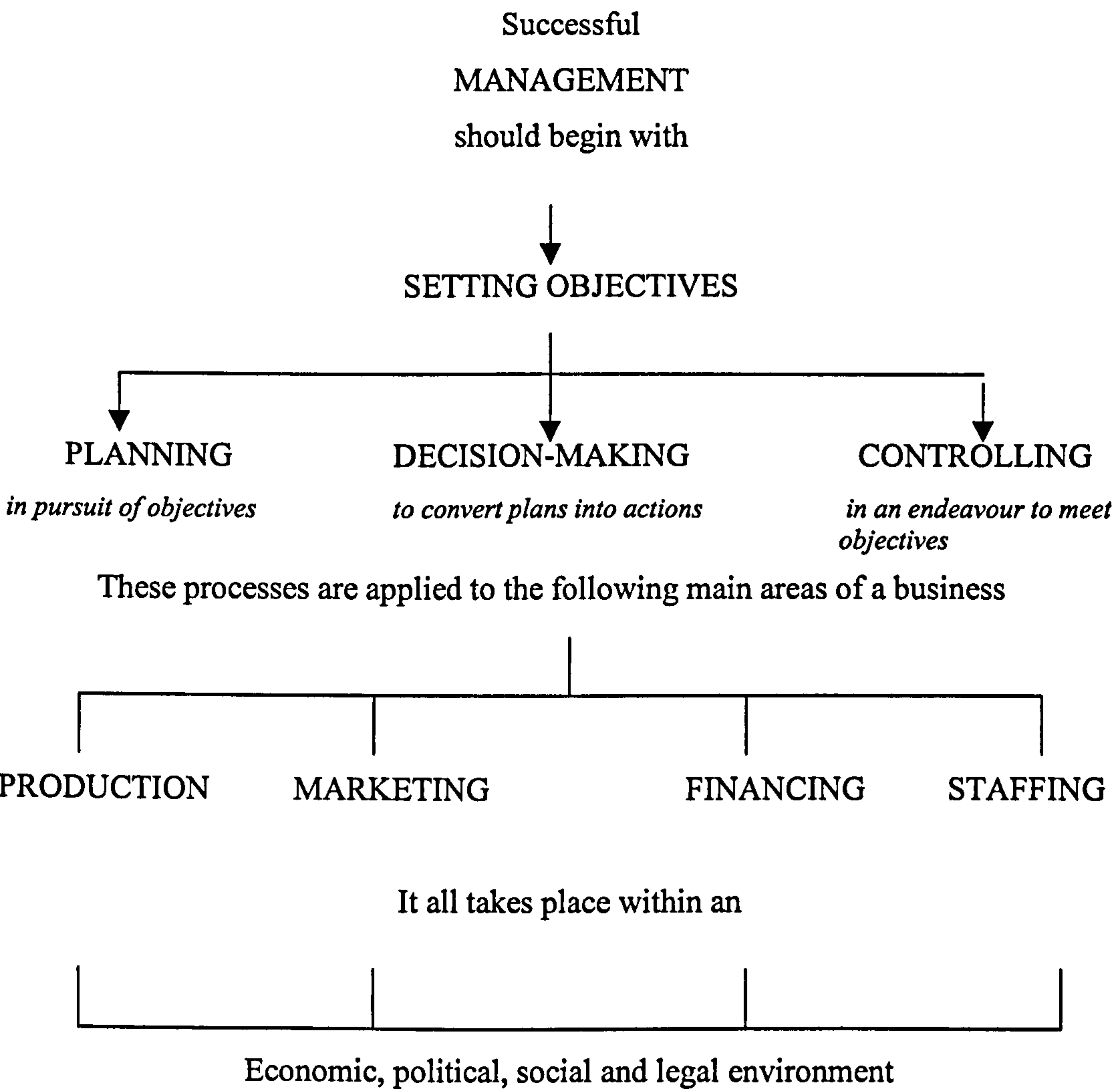
4.3.3.2 Farm management

Giles and Stansfield (1990) proposed a comprehensive diagram for successful farm management (Figure 4.2) that is discussed later. They defined farm management as:

"...an activity, involving the combination and co-ordination of human, physical and financial resources" (Giles and Stansfield, 1980, p. 8)

Figure 4.2: The successful farm management

(Source: Giles and Stansfield, 1990)

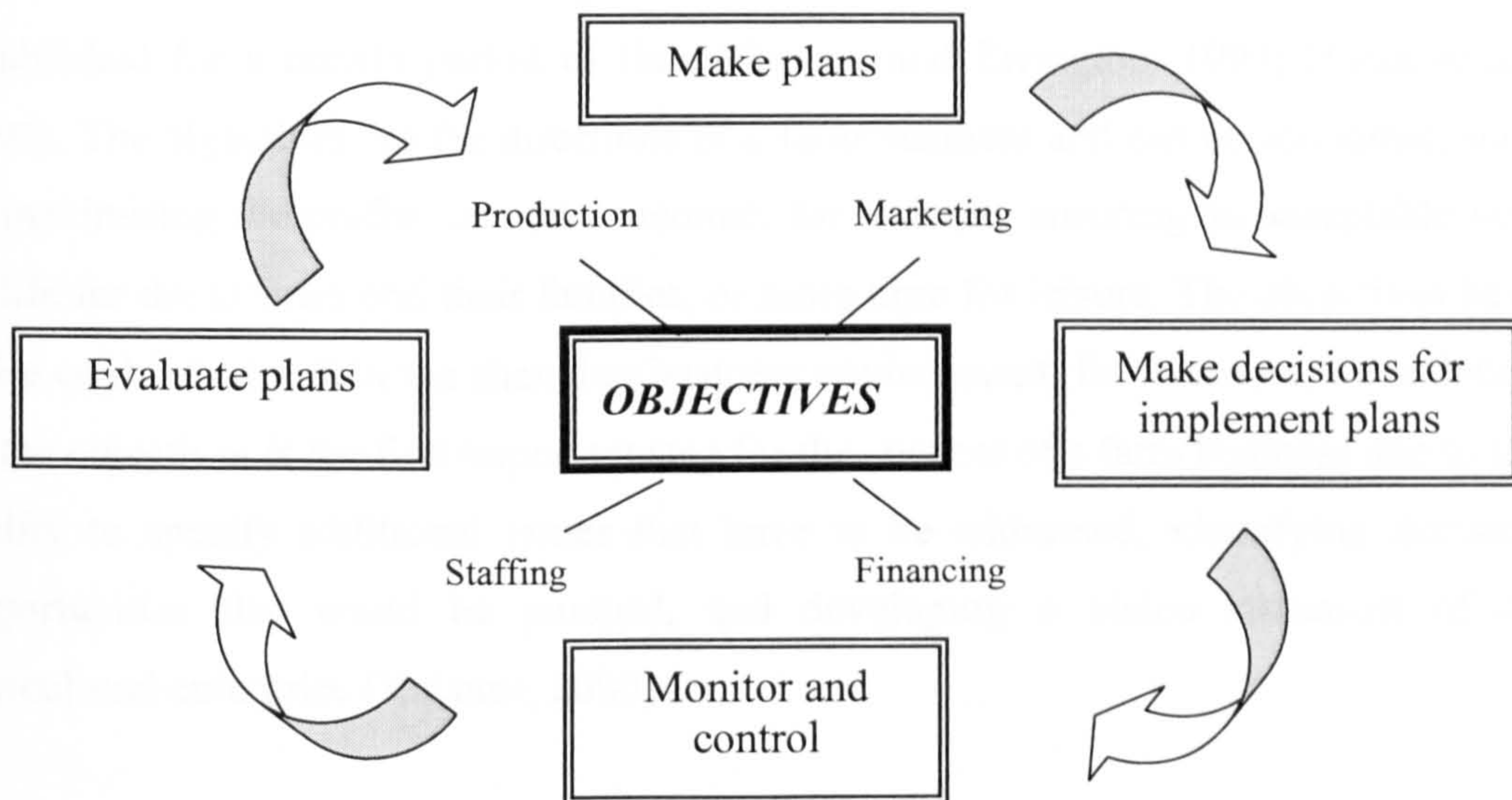


According to Gasson and Errington (1993) and Turner and Taylor (1998) the term ‘farm management’ was defined as organising the best possible usage of the available ‘scarce’ resources (land, labour and capital) for achieving the objective set.

Turner and Taylor (1998) linked farm management to planning, and according to them farm business success depends upon plans that have to be made, implemented, evaluated and if necessary changed (Figure 4.3).

Figure 4.3: The basic farm management functions

(Source: Adapted by Turner and Taylor, 1998)



Parker (2000) stated that the role of competence in business management is an important factor for long term business viability within the highly competitive business environment. The author outlined seven principles for improving farm management, these are:

- Developing an inspirational dream – establishing the overall vision and aim;
- Use foresight to imagine the future strategy – scenario planning might be a technique for imagining the future;
- Analysing and understanding the impact of the changes of external environment;
- Achieving excellence in core activities – benchmarking might be an useful analytical tool;
- Measuring performance through the right indicators for farm operational efficiency that will provide the essential information for decision making;
- Learn faster than the rivals;
- Manage yourself.

Objectives

The first step of the effective farm management is setting the objectives (Giles and Stansfield, 1990). The set of objectives has to achieve the needs that have been established for a certain period of time (Gasson and Errington, 1993; Harsh *et al.*, 1996). The objectives are the directions of a farm business and can be economic, such as maximising the profits, or non-economic, for example ensuring an acceptable way of life for the farmers and their families, or more time for leisure. The objectives have to be established within the changing business environment. Furthermore, formulation of the objectives is the first important step for the success of a farm business due to the ability to specify additional issues that have to be addressed, identifying decision opportunities that could be pursued, and developing a vision statement of an agricultural enterprise (Kajanus, 2000).

Gasson and Errington (1993) argued that objectives could be classified into four groups:

- Instrumental – referring to income and profit issues;
- Intrinsic – independence, enjoyment and healthy outdoor life;
- Social – community and family issues;
- Personal – gaining and exercising special abilities and aptitudes and self-respect.

Five types of objectives, similar to those mentioned above, have been identified by Willock *et al.* (1999) and they related to success in farming, conservation, quality of life, status (pride to be a farmer) and off-farm work (diversified activities).

Trip *et al.* (1996) and Kajanus (2000) stated that in order to reach a competitive advantage farmers have to consider two types of goals (objectives): firstly, general (strategic, fundamental and high level) and secondly, translating the general goals into specific (operational, detailed and lower level) ones.

Farm management functions

Planning is closely related to the objectives set and is a very important function for

effective farm management because plans could optimise the usage of farm resources (labour, machinery and capital), which could reduce the cost and increase farm profits. Plans in agriculture are very important especially during the 'peak' periods when the demand of labour and machinery is increased (e.g. picking the fruits, grapes, vegetables, etc.) (Giles and Stansfield, 1990; Turner and Taylor, 1998).

Decision making could act as a farm management function when plans are converted into actions (Giles and Stansfield, 1990). Gasson and Errington (1993) also stated in a simple way that implementation is a set of chosen actions that are put into practice.

Control is the third farm management function and emphasises the monitoring of the outcomes and whether they are achieving the intended objectives and, if not, the adjustments that have to be made (Giles and Stansfield, 1990; Gasson and Errington, 1993).

Main functional areas of the farm management

The main functional areas of farm management such as production, marketing, financing and staffing are discussed further.

The management of any business takes place within a rapidly changing environment (political, economic, social and technological). Identifying and responding to these changes and assessing the internal resources are essential aspects for farm business survival and success (Damianos and Skuras, 1996; Daskalopoulou and Petrou, 2002).

In order to understand the importance of the business environment of the farms, the concept of business viability is also outlined.

Farm business viability

Gasson and Errington (1993, p. 251) argued that farm businesses can survive if they respond to "...the challenges of the wider economy and reproduce itself". Turner and Taylor (1998) were more specific and stated that business viability relates to farm business survival in the changing political, social and economic environment. They emphasised that there are three indicators that describe the viability of the business:

- profitability – which means that income must go above the expenditure;
- feasibility (cash flow) – which is more important in the short term;
- worthwhileness (return on capital) – if the business is not making return on capital the business development will be restricted or impossible (Turner and Taylor, 1998).

Giles and Stansfield (1980) argued that profitability is the most important measure of business viability. In agriculture profit is the way of measuring the overall farm success as well as a guarantee for future expansion and development. Giles (1990) viewed profit in a more detailed way and suggested that the uses of profit are to measure the performance, provide rewards for investments, and also to supply renewable resources for facilitating change and development.

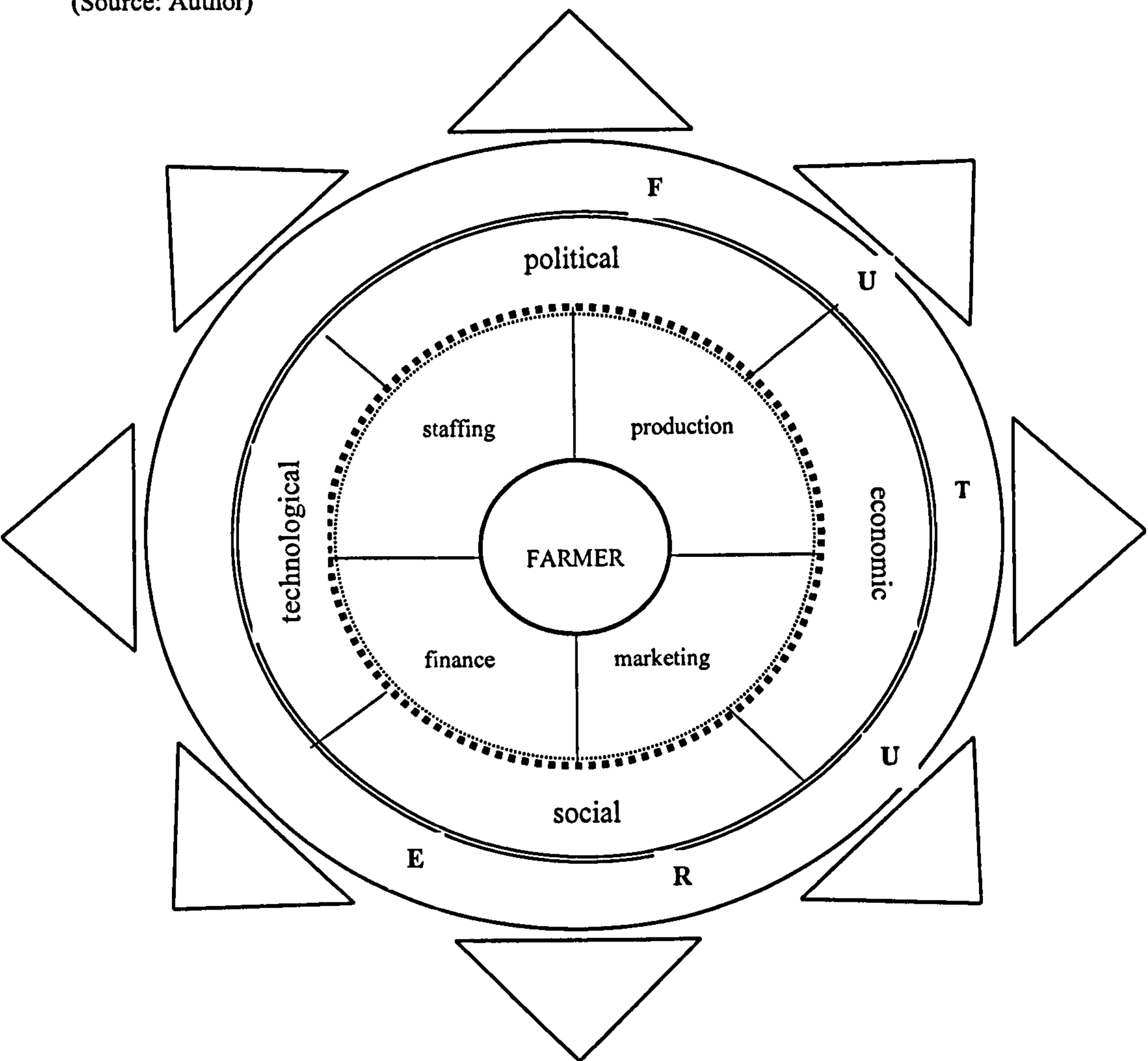
Farm business development depends strongly upon the farmer (individual perceptions and behaviour), the internal capacity of the farm (production, marketing, finance and staff) and external influences (political, economic, social and legal). All these aspects were addressed to the farm managers and horticultural farms within the sample in the Plovdiv region of Bulgaria.

4.4. ANALYSIS OF THE BUSINESS ENVIRONMENT

The interrelation between the internal and external environment together with the farmer is illustrated in Figure 4.4.

Figure 4.4: The farmer and the environment

(Source: Author)



4.4.1 Internal environment

Identification of the internal capacity (strengths and weaknesses) of the main functional areas of the farm management: production, marketing, finance and staffing, are an essential step for the future farm success.

Production

Production is a very important issue and has been defined as a:

"... process which brings together capital and labour in its various forms – raw materials, processed goods and equipment of all kind, plants, technology, the workforce and management – in order to create the commodity or, increasingly in agriculture, as it looks for new markets and opportunities..." (Giles and Stansfield, 1990, p.75).

These authors suggest that in farming, production cannot always be seen and sometimes it cannot be measured at least until the end of the production cycle. However, the farming business depends upon the ability of the manager to organise an effective production system. They also argued that the process of 'transforming inputs into outputs' consists of three major elements that have to be analysed and these are:

- Developing a production plan in terms of fixed resources (land, labour, capital and managerial ability), technologies and facilities;
- Acquiring the whole range of other essential resources (seeds, fertilisers, fuel and spare parts);
- Operating the plan as stated '*getting the job done*' refers to assuring high quality products.

Marketing

Marketing is finding answers to the questions what, where, when and how to sell (Giles and Stansfield, 1990). Analysing the strengths and the weaknesses of marketing in agriculture involves the following:

- Careful assessments of the customers' needs for agricultural products - the consumers world-wide are changing their preferences and nowadays are orientated towards more healthy and natural products, therefore farmers have to be market orientated not just product orientated in order to have a profitable farm business (Napton, 1992; Damianos and Skuras, 1996, Oosten, 1998);
- Evaluation when buying inputs or selling outputs (Daskalopoulou and Petrou, 2002);
- Competition - is a more flexible factor and producers have to find or protect their market segments in Europe or overseas;
- Pricing - the marketing position of farmers is that of price taker due to their small output compared to the size of the market. Consequently, agricultural producers are subject to unstable and unpredictable fluctuations in price because the buyers and suppliers are more often large companies with almost monopolistic positions.

Therefore contractual arrangements between farmers and processors or distributors could benefit the farm business; however some restrictions might accrue also (Hill and Ray, 1987);

- Distribution channels – discussed further.

Mallen (1996) argues that the structure of distribution channels is a reflection of an economy's level of development of the country. Whereas, Hobbs *et al.* (1997) specify that distribution channels have evolved in the modern economy and brought changes to the structure of the agricultural industry. The main distribution channels that are used by farmers are the following:

- Farmer's market – when farmers bring their production to a market place and sell it directly to the final customer;
- Live or electronic auction – farmers deliver their production to the auction. Buyers do not know the sale price, they are developing their price opinion based on visual assessment or written description of the products;
- Sales through dealers – when farmers are selling their produce to a dealer who resells it to a processor or other customers;
- Sales directly to a processor without a contract;
- Sales directly to a processor with a contract;
- Vertical integration – when farm enterprise is vertically integrated into processing and distribution. Poole (2000) used this channel for the restructuring of the Spanish horticulture.

The horticultural farms in the Plovdiv region of Bulgaria used some of those distribution channels and these were discussed in Chapter 6, section 2.3.1.

The horticultural industry, as a specific part of the agricultural industry, has been facing these changes as well as changing from a production-driven to customer-driven industry while developing market oriented product chains (Dyck, 1994; Oosten, 1998).

The customer requirement towards healthy and natural food is very applicable for the horticultural industry and more specifically fruit and vegetable production as they are

mainly produced for fresh consumption. Ritson (1997) stated that farm marketing has been more successful for fruits and vegetables because there are fewer suppliers, the products are less processed and more varied.

Finance/accounting of the farm

Strategic alternatives have to be assessed bearing in mind the relationship between profit, cash and capital and their impact upon these three factors in order to find the best farm capital structure (Turner and Taylor, 1998). Gasson and Errington (1993) stated that agriculture is an unattractive industry for capital investment due to:

- its 'organic nature' and dependence upon seasons, vegetation periods, growth cycles, weather and risk of disease;
- the slow process of capital returns due to the long production cycle;
- having land as a major resource with its specificity such as fertility and topography.

Staffing

Labour is a resource that "*holds the key to productivity*" (Giles and Stansfield, 1990, p.155). Planning and controlling labour in agriculture are very important tasks due to the element of seasonal work with peak and off-peak periods. The effective use of this resource is a vital step for reducing the costs that can ensure farm success. The level of labour productivity depends upon the application of strategies for labour skill development and training, increased motivation and usage of incentives (Giles and Stansfield, 1990; Gasson and Errington, 1993; Turner and Taylor, 1998).

Identification of the internal capability together with the external environment is essential in order to identify the factors that are important for the future of the farms (Kajanus, 2000). Therefore, the next section analyses the external environment.

4.4.2 External environment

The external environment could indicate opportunities but could also identify constraints and threats for the farms (Marsden *et al.*, 1989; Seabrooke, 1990). This study includes PEST analysis, stakeholder analysis and scenarios.

PEST analysis

Agricultural farms, as with any other organisation, are operating in a constantly changing, uncontrollable and turbulent environment (political, economic, social and technological) (Marsden *et al.*, 1989; Slee, 1989; Giles, 1990; Spedding, 1990; Hemidy, 1996; Miles *et al.*, 1999; Webster, 1999; Kajanus, 2000; Prag, 2000; Thompson, 2001; Bontkes and Keulen, 2003).

Different *political/legal* factors affect the farm business in different aspects. For example, in the EU agricultural policies have changed over the last two decades and are increasingly oriented to environmental and ecological issues and to reduce the subsidised support for agricultural production. The new environmental regulations and policy instruments occurred worldwide due to changes of agricultural policies at national and international level. They have a significant impact upon the agribusiness therefore have to be taken into consideration (Gasson and Errington, 1993; Gary and Wilkinson, 1997; Ilbery *et al.*, 1998; Oosten, 1998; Morris and Winter, 1999; CEAS, 2000; Parker, 2000; Thomson, 2001; Bontkes and Keulen, 2003).

For instance, the Common Agricultural Policy (CAP) encourages agriculture but on the other hand EU farmers have to face the reform of policy and provide new opportunities for non-agricultural activities (Ilbery *et al.*, 1998).

The political transformation that has occurred in Central and Eastern European Countries (CEECs) including Bulgaria has strongly affected the agricultural sector due to the complexity and diversity of the business environment (CEAS, 2000). Therefore, the farm business strategies have to follow national policies and strategies, which are intimately related to issues of rural development. Agricultural and rural development policies and their instruments affect directly and indirectly the farm business and the available set of strategic options. Individual farms react differently due to cultural difficulties or resource limitations. Formulation of appropriate business strategies in a stable policy environment is easy. However, policy changes have to be assessed and considered by farmers in order to adjust their farm business and to take advantage of the new opportunities that arise (Slee, 1989; Ilbery *et al.*, 1998).

The agricultural sector is a major industry in Central and Eastern European Countries

(CEECs) and in Bulgaria. During the pre-accession process, the EU has provided the guidelines and established the requirements for agricultural restructuring in the CEECs and in Bulgaria in particular (EC, 2000). Hence, a Special Accession Programme for Agriculture and Rural Development (SAPARD) was introduced for preparing the applicant countries for integration to the EU and this may influence the farm businesses in those countries.

The agricultural industry has begun to experience the impact of some *economic* processes such as market and economic globalisation and trade liberalisation within the WTO and GATT, which have created new challenges for the farmers (Macrae *et al.*, 1993; Oosten, 1998; Parker, 2000; Shalhevet, 2000; Daskalopoulou and Petrou, 2002). Trade liberalisation affects the agricultural industry by its basic requirement of reducing the support for this sector. However, Brester and Penn (1999) argued that trade cannot be completely liberalised and they explained:

“...countries would specialise in production of those commodities for which they have a competitive advantage” (Brester and Penn, 1999, p.3)

The major outcomes of the above trends will intensify competition (local, national and international) under the pressure of the free market and will demand new products and production structures that will stimulate the innovation process (Oosten, 1998).

The *social* factors that can present a variety of opportunities and threats to the farms and can affect the farm businesses are people's age structure, change of lifestyles, increased requirements for food safety and health (Brester and Penn, 1999; Kajanus, 2000; Parker, 2000).

Technological improvements have strongly affected agriculture in terms of improving the productivity and efficiency per unit. The development of biotechnology provided a new opportunity for farmers by increasing their productive capacity. Dynamics in information and communication technology along with advanced transportation have changed the farm business practice. The new global network requires new types of farmers with innovative ideas and skills relating to the novel trends in production and marketing structures (Spedding, 1990; Gasson and Errington, 1993; Oosten, 1998;

Webster, 1999; Parker, 2000).

Brester and Penn (1999) specified that the external environment of a farm focused on the specific aspect of the environment such as analysing the consumer demand for food quality, safety, convenience and nutrition.

Hemidy (1996) and Bontkes and Keulen (2003) pointed out something very specific for the agricultural industry. They stated that in farm businesses there are also factors that cannot be controlled such as unpredictable weather conditions. Therefore there are no easy and standard business solutions.

Ilbery *et al.* (1998) argued that integral parts of the external environment are various institutions. They paid therefore attention also to the behaviour of these various institutions, which could influence the farm enterprises in terms of their functions (advisory, technical, financial, marketing). These can be a part of the stakeholders, an issue that is discussed next.

Stakeholders

Farms as any business organisation have to meet the demands of stakeholders such as:

- local, national and global communities;
- employees on the farm;
- trade and marketing association;
- suppliers and strategic partners;
- governmental and political groups;
- banks and other financial institutions (Miles *et al.*, 1999).

Agribusiness like any other business is driven by stakeholders who are working in that industry such as farm managers (managing the production unit), investors (having the courage to invest in agriculture), customers (with their specific needs and requirements) (Wensley, 1990). Schroder and Mavondo (1994) and Batt (2000) stated that the local and national institutions are also important stakeholders for farms due to their strong involvement in farm business, in regards to both production and

marketing.

Scenarios

CEAS (2000) stated that building different scenarios is important to the farm sector in order to demonstrate how different forces shape the future market environment for farm businesses. Scenario planning can provide a farm with a clear picture of market developments and assessment of the future, especially when the business environment is subject to sudden changes. In other words, scenario planning can help agricultural enterprises to understand and develop their investment and marketing strategies. Kajanus (2000) uses scenarios in his study of creating innovative strategies for farm development in Finland, while Zanolli *et al.* (2000) developed scenarios for the future of organic farming in Europe.

Analysis of the environment within which the farms are operating is not complete without an examination of the industry, and the competitive environment that is presented further.

4.4.3 Industry competitive environment

Porter (1985) developed the concepts of industry competitiveness. His framework of five forces that affect the industry competitiveness has been applied to certain agricultural situations. Neumann (1997) and Albisu *et al.* (2000) also partly used the Porter's concept of industry competitiveness in their study of agri-food industry in Europe. Neumann (1997) applied it in horticulture (fruits and vegetables) in the Eastern part of Germany while Albisu *et al.* (2000) used it in regards to agri-food industry in Spain. Besanko *et al.* (2000) comprehensively discussed the application of Porter's Five Forces within the tobacco industry.

Neumann (1997) discussed the issue of increased competition in the Central and Eastern European countries (CEECs) within the process of transition towards a free market economy, due to the transformation from a monopoly system combined with central planning into a market system with competition. During the process of privatisation, the big monopoly 'suppliers' and 'buyers' have been broken up and have been replaced by a number of new companies, which began to compete with each other. Any of these firms who have a cost advantage will use the price mechanism for

taking strategic actions for discouraging new entrants (Hobbs *et al.*, 1997).

Agriculture as any other industry buys input from suppliers and produces output for buyers. Farming is one part of the whole food chain, at one end there are the buyers and at the other there are the sellers (Giles, 1990). Besanko *et al.* (2000) stated that *supplier power* of tobacco producers is non-existent or low due to the fact that they are unorganised and sell below the competitive prices. They also argue that the *power of buyer* is also low because the distributors and retailers of tobacco are highly fragmented. This is very applicable for Bulgaria due to the small-scale farming and production.

Hill and Ray (1987) and Gasson and Errington (1993) argued that new *entry* into farming is not an easy option especially for young people in the context of over-production. For people who are coming from other industries it is also not easy because they do not know the specifics of the farming business. For new family members who established a farm business it is much easier as they usually receive family support and help. In general, it can be summarised that new entry in agricultural industry and in tobacco sector in particular is high (Besanko *et al.*, 2000).

The agricultural industry is operating in a very competitive environment and the main mechanisms are price, supply and demand (Brester and Penn, 1999). The next subsection reviews therefore the competitive business environment in agriculture.

4.4.4 Business competitive environment

Porter (1985) established the foundation of business competitiveness. His theoretical framework of analysing the competitive position of an organisation has been used by different researchers in different countries such as dairy industry in South Africa (Blignaut, 1999), flower industry in Australia (Batt, 2000), meat industry in Hungary (Attila, 2001), agri-food industry in Czech Republic (Lucey, 2001).

Another approach for analysing the competitive position of a company, strategic group analysis, was partly used by Martinez *et al.* (2002) in studying horticulture in Spain.

Wensley (1990) argued that a successful farm business could be run if the farmers are

aware of, and beware of the specificity of the business, know the strengths and weaknesses of their rivals and judge their own strengths in order to gain competitive position. In other words, farmers have to be aware that there are hundreds of suppliers and customers that will pay them to do what they want rather than what they have done for hundreds of years. Those who are flexible to the dynamic changes will survive offering new products and services while others will disappear due to their low level of competitiveness.

The analysis of the internal, external and competitive environment presents a range of strategies available for a farm and summary of a range of alternative strategies suggested by different authors is presented below.

4.5 ALTERNATIVE FARM STRATEGIES

The review of the literature suggested that a range of strategies is available to farms. These strategies could be based on product/market relationship, could be the three generic strategies proposed by Porter or could develop externally the farm business.

4.5.1 Product/market strategies

Damianos and Skuras (1996) and Ilbery *et al.* (1998) identified six adjustment strategies for farm business development in their study, and these are:

- Conventional development paths - maintaining traditional farm production;
- Alternative (agricultural diversification) - developing new agricultural products;
- Off-farm pluriactivity (non-agricultural diversification) - re-deployment of farm resources into off-farm activities;
- Industrial - expansion of farm business based on traditional products;
- Hobby - enjoy the outdoor life;
- Retired - not market oriented production.

Many authors focused on diversification strategy in agriculture as a way for economic growth of rural areas, and on the other hand for sustaining the income of farm business (RDC, 1994; Damianos and Skuras, 1996; Ilbery *et al.*, 1998; McNally, 2001; Sofer, 2001; Georgieva, 2003).

Over the last 2 –3 decades, the pressure on the farmers has increased significantly due to the following aspects:

- over-supply and increased competition;
- higher investment risks;
- higher operational costs;
- increased consumer awareness of the food products;
- concentration of the buyers (Giles and Stansfield, 1990; Ritson, 1997; Turner and Taylor, 1998).

Therefore, farmers have to be flexible and have to respond to the changing business environment in order to survive. According to Ellis (2000) and Sofer (2001), agricultural incomes have been declining over the last two decades and other sources of incomes have had to be developed. In general, a successful step for business survival is based on an assessment of the farm assets, identification of the potential opportunity, and if feasible, implementation of new income generating activities – agricultural or non-agricultural. Recently, farm business viability has principally depended upon the ability of the enterprise to develop new alternative sources of income and relocate its labour force (Haines and Davies, 1987, Marsden *et al.*, 1989; Hobbs *et al.*, 1997; Sofer, 2001). Diversifying the farm business is an alternative that has to be taken into consideration. Combining agriculture with other additional sources of revenue relating to agriculture can be one part of the farm diversification. The other part can be shifting away from the agriculture and developing non-agricultural activities (Damianos and Skuras, 1996; Ilbery *et al.*, 1998; Bowler, 1999; Ellis, 2000; Prag, 2000; Thomson, 2001; McNally, 2001; Daskalopoulou and Petrou, 2002).

Farm diversification has become rather widespread in the last two decades in Western economies (EU countries) due to the significant change of the CAP and GATT agreements (Marsden *et al.*, 1989; KCC, 1992; EU, 1997; Ilbery *et al.*, 1998; Bowler, 1999; Williams, 2000; McNally, 2001). The definition of MAFF (1994, p.4) was short and stated that farm diversification is: “...*adding a new enterprise to the existing farming unit*”. Damianos and Skuras (1996) defined farm diversification as a form of

alternative farming, which refers to the development of alternative economic activities by using the whole range of farms' resources (land, capital, labour and buildings). Sofer (2000) argued that the concept of farm diversification is an economic unit, which generates its incomes from agricultural and non-agricultural activities.

McNally (2001) classified diversification into five categories: services, contracting, processing and sales, speciality products and miscellaneous. However, diversification is not an easy option, there are a range of barriers that have to be evaluated and overcome such as lack of capital or financial support, difficult planning permissions, lack of experienced labour and difficulties with obtaining the right information or advice (KCC, 1992, MAFF, 1994).

A farm as a business organisation can diversify in two different ways:

- Related diversification;
- Unrelated diversification (Ilbery *et al.*, 1998; Bowler, 1999; Miles *et al.*, 1999; McNally, 2001) (see Chapter 3, p.105).

Reasons for agricultural diversification

The aims of developing a diversification strategy may also be to reduce the dependence of the farm on a single market, product or customer, a higher return of investments, to ensure future growth or to avoid strong competition (Hake, 1971). Napton (1992) stated that diversification has been a response to risk and uncertainty. Referring to the agricultural industry the reasons can be summarised as followed:

- Decline or supplementing inadequate farm incomes – this might be a result of bad weather, disease, or the existing farm cannot generate sufficient income after implementing the whole range of necessary improvements.
- Exploiting an opportunity or ability – when there is competitive advantage that can be developed within the farm due to the existence of opportunity rather than financial necessity.
- Planning future expansion – when the business is viable but there is a need for meeting changing circumstances.

- Facing changing circumstances – the availability of change that is linked or could be an opportunity for diversification. For example: change in a policy or new road diversion (Hake, 1971; Haines and Davies, 1987; RDC, 1994; EC MEANS, 1999c; Prag, 2000; Sofer, 2001).

McNally (2001) identified some other reasons, such as to create employment for family and non-family members and from an economic point of view for reducing the business risk.

Reasons for non-agricultural diversification

The rationale for the appearance of non-agricultural diversification is:

- increased efficiency of the agricultural sector that is resulting in better productivity and reduced employment;
- rising the costs of the inputs combined with a fall in the prices of outputs which reflect negatively upon agricultural incomes;
- changes in the demographic and occupational levels;
- development of new policies and priorities relating to agriculture and rural areas;
- improvement of the rural infrastructure (Prag, 2000).

Damianos and Skuras (1996), Ilbery *et al.* (1998), Bowler (1999), EC MEANS (1999c), McNally (2001) investigated farm diversification in their studies in England, Wales and Greece and their results revealed that diversification increased farm incomes and increased the demand for labour in the rural area. However, it was identified that in Greece large numbers of farms still maintain a strong agricultural character (Daskalopoulou and Petrou, 2002).

4.5.3 Generic strategies

Brester and Penn (1999, p.6) argue that the purpose of strategic business management “... is to build a strategic (or competitive) advantage over rivals firms”. According to them, successful firm can employ one of the three generic strategies strategy (low-cost strategy, differentiation strategy or focus strategy), identified at first by Porter (1985) (see Chapter 3, section 3.5.2). Brester and Penn (1999) applied Porter’s generic

strategies to agriculture and stated that farms could develop one of the two possible production structures:

- The first type of production structure refers to undifferentiated products and only low-cost producers will survive. It is mainly the larger farms that can implement the new technologies that can reduce the price of their production.
- The second group of producers will develop differentiated products for certain consumer demands. These farms are not necessarily large but the farmers' strategic decisions need to be focused on the contract relationship in order to reduce the risk.

Shalhevet *et al.* (2000) also applied Porter's generic strategies in their investigation and they stated that the essential strategic alternatives for responding to the dynamic business environment within the farms are operating are:

- focus strategy;
- low-cost strategy;
- product differentiation that relates to environmentally friendly agriculture;
- specialisation – identifying a product with competitive advantage and specialising in it.

4.5.3 External strategies for farm business development

The alternative strategies that emphasise the development of the farm businesses externally are discussed in the context of the Central and Eastern Europe (CEE) and the New Independent States (NISs). The most common options were joint ventures and acquisitions.

Joint venture is the most popular merger strategy in the CEE countries and is an action when two or more farms establish a partnership for achieving some common goals. Technical and marketing joint ventures have become more and more popular in agriculture (Hobbs *et al.*, 1997).

Acquisition of the agri-business firms in the CEE countries as a form of investment is less popular. A range of restrictions such as labour force, the skills and the motivation

of the managerial staff, poor quality of the goods and infrastructure owned by the firms, the process of privatisation, etc. are the motives of the low level of popularity (Hobbs *et al.*, 1997).

Analyses of the business environment within which the farms are operating and the choices of strategies are strongly influenced by the farmers with their individual perceptions, behaviour models and response values. Therefore the next section focuses on the farmer as an individual who takes the business decisions.

4.6 THE PEOPLE CONTEXT IN THE STRATEGY PROCESS IN AGRICULTURE

4.6.1 Introduction

Jones (1990) identified a close relationship between farmers and society and the necessity that any conflict between them has to be removed or avoided. As managers of the land, farmers in a modern society have to perform a range of roles that might not always benefit them but do benefit the society of which they are a part. Howe (1992) stated that the farmer has three roles, which are food producer, rural businessman and ‘custodian’ of the environment. Agricultural producers ensure the food supply and also provide the raw materials for the agri-food industry that provides them with economic returns. Secondly, farmers have an important function as an employer of the rural population. And thirdly, they have to protect and enhance the environment in terms of improving the fertility of the land and the quality of the landscape.

Willock *et al.* (1999) stated that the farmers’ behaviour and attitude are not easy to predict and depend on a range of factors such as personal and farm structural variables. They also classified farmers into two groups based on their aims: business-orientated (profit-maximisers) and environment oriented, and argued that farmers tend to be more business oriented rather than adopting environmental practices. On the other hand, Saugeres (2002) defined the ‘good’ farmers who are not profit oriented and do not destroy the landscape because they are ‘natural’ farmers who feel their connection to land and nature.

At a time of dynamic changes, the processes of adoption and diffusion of innovation (new activity, technology, idea, business approach and procedure) are very specific for

agriculture; the next section therefore discusses them.

4.6.2 Diffusion and adoption in agriculture

The rapid technological and economic changes (*e.g.* new varieties, breeds, machinery, fertiliser and trade agreement) in agriculture, over the last 30-40 years, were the most important factors for increasing the productivity, and the major drivers for agricultural restructuring. These changes, and the innovations that have been adopted by farmers, can be allied to the process of adoption and diffusion (Poole, 2000; Ahmed, 2003).

Rogers (1983) stated that diffusion research has been commonly used in agriculture and rural development and contributed significantly to establish the main principles of the diffusion process. The diffusion process may not only reflect to the lack of innovativeness but also to relate to problems of accessing resources such as information, capital, and education due to the fact that existing policies are targeting certain groups of farmers (Ilbery, 1992).

Rogers (1983) also stated that adoption studies of farmers were well appreciated by the agricultural extension services. Thirtle and Ruttan (1987) established a link between the adoption of new crop varieties and profitability, experience, education and credit availability.

There are some factors in the innovation itself that can influence the speed of adoption such as the level of promotion, the costs of the innovation, as well as the necessary knowledge and expertise of the labour. The personal, social and institutional characteristics are the other aspects that affect the process of innovation in agriculture (Ilbery, 1992; Gary and Wilkinson, 1997; Brassley, 1997). Ahmed (2003) agreed with the above-mentioned factors that might influence farmer's adoption and added one more, which was resource endowment (funding). Kajanus (2000) stated that innovations are one of the main sources of sustainable competitive advantage.

There is a time lag between the first adoption of an innovation by farmers and the moment when all farmers have adopted it due to their level of innovativeness (see Chapter 3, p.113). Consequently, four types of adopters can be identified:

- Early adopters;
- Early majority;
- Late majority;
- Laggards (Ilbery, 1992).

In general, it can be summarised that ‘early adopters’ (innovators) are creative and learned about the new method from different sources of information (Grigg, 1982). They are usually farmers having large farms, young (under 45 years), well educated and understand the need of transformation due to the changing environment. The ‘early adopters’ can benefit directly, as their production costs could be reduced due to improved technology. They also can deal with the eventual failure and can take the risk of an innovation. The ‘early majority’ adopts the innovation in order to build up competitive advantage and survive within the condition of increased competition (Ilbery, 1992; Gasson and Errington, 1993). The ‘late majority’ accepted the innovation from the neighbouring farm after seeing that the new approach is working well. The ‘laggards’ usually have small enterprises and are less educated. On the other hand, if they never adopt innovation they will continue having a high cost production and that will take them out of the business (Ahmed, 2003).

Willock *et al.* (1999) had a different view and in their study they identified three groups of adopters among the farmers such as:

- growers who are eager to make changes;
- profit oriented farmers;
- growers who perceive farming as a way of life.

4.6.3 Management styles

Gasson and Errington (1993) studied the farmers’ managerial style (goal orientation) and attitude. In Table 4.1 different managerial styles related to business profitability are evaluated. The first column presents the growers with advanced management knowledge, flexible and responsive to the rapid changes, good planners and open to the off-farm investments. The second column includes farmers who are cautious, avoid risk and have a self-sufficient orientation.

Table 4.1: Contrasting farm management styles
(Source: Gasson and Errington, 1993)

HIGH PROFIT ORIENTATION	LOWER PROFIT ORIENTATION
Entrepreneur	Cautious strategist
Accumulator	Sufficer
Entrepreneur	Yeoman
Financial manager	Individual worker
Productivity increaser	Lifestyler
Extensifier	Intensifier

In the study of New Zealand’s farmers, Fairweather and Keating (1990) identified three groups of farmers with distinctive business styles (goals and strategies) such as:

- dedicated producer – their aim is high quality production via careful planning and financial management;
- flexible strategist – tended to respond to changing environment, apply effective marketing and off-farming activities and trying to reduce work-load;
- lifestyler – working close to ‘nature’ and maintaining the family life style are the essential values to them.

4.7 EVALUATION IN AGRICULTURE

Evaluation of agricultural strategies has been undertaken by a number of researchers. For example, Edwards (1984) evaluated alternative purchase strategies in Chile, Jenson (1988) evaluated a range of cotton marketing strategies in the USA, Jen (1998) evaluated strategies for the wood industry in Taiwan, Smith *et al.* (1999) studied a range of strategies in performance across the objectives in the fish sector of Australia. Some authors that adopted the general evaluation concept in their studies have applied it to agriculture. For example, Haas (1989) focused on evaluation of farm structure in Netherlands and Polacheck *et al.* (1999) ran an initial evaluation of strategies for the tuna industry. However, none of them used and evaluated in their research the Ansoff product/market strategic options.

Developing good evaluation practice became a priority area for the European Commission (EC). The purposes of their evaluations in the agricultural sector are to

check the reasons for public intervention, to confirm both reproducible success stories and to ensure failures are not repeated, and to report back to citizens (EC, 1999a). More recently, EC ran an evaluation of the SAPARD programme in the CEE countries (EC, 1999b; EC, 2000d).

Horton *et al.* (1993) argued that designing and carrying out evaluation in agriculture and agricultural research involves five main steps:

- Focusing the evaluation – this step has to address the following: what will be evaluated (project, programme, business or research activities or resources), the reasons for evaluation (improve management, future planning, etc.), who will use the results (farmers, regional and national authorities, etc.) and what are the key issues that should be evaluated (objectives, business or research processes and outputs);
- Designing the evaluation – guide for carrying out the evaluation;
- Collecting and analysing information – selecting the methods and procedure for collecting and analysing the information which have to be valid, credible and feasible;
- Reporting results – this step contributes to drawing up suggestions for improvements of the project and management.
- Managing the evaluation process – supervising all the activities.

Zanoli *et al.* (2000) discussed in detail the criteria of scenario (strategy) evaluation and they identified the following criteria:

- Comprehensiveness – taking into account relevant events and trends;
- Clarity – depends on simplicity, realism and unbiasedness;
- Consistency – concerns the validity of the basic information and how it has been used;
- Coherence – do not violate the basic rules of the theory.

4.8 SUMMARY

Globally, agricultural industry has been facing significant changes over the last 3-4 decades as a result of technological advances, trade liberalisation, market globalisation, environmental concerns and changes in consumer demand. Therefore, in order to survive in this dynamic environment farms have to adjust their strategies to this environment.

Agriculture accounts for an important part of the rural economy and its future depends upon viable farm businesses that can adjust their strategies in response to a rapidly changing environment (Ritson, 1997).

The processes of strategic planning, strategic decision making and strategic management in agriculture are similar to these outlined in the general strategic theory. A farm business like any other business has the task to allocate the available resources and to use them in the most effective way for achieving the objective set (Jones, 1990). However it has to be mentioned that the resources in agriculture are limited, which is different compared to any other businesses because the main resource in agriculture is the land. On the other hand the competitors in agriculture have very similar skills, goals and objectives (Hill and Ray, 1987; Miles *et al.*, 1999). Farmers are taking their decisions based on information about their internal and external environment.

Assessment of the internal capacity (main functional areas) of the farms in terms of production, marketing, finance and labour is vital for the future success of the business. The combinations of economic, social and technological changes over the last decades have had a strong impact upon agriculture and rural areas and they have to be taken into consideration and examined carefully (Newby, 1992; Poole, 2000; Daskalopoulou and Petrou, 2002).

The agricultural/horticultural industry demands changes that have to be market oriented, therefore, they need a more diverse range of strategic options and enterprises (Slee, 1989, DE, 1992; Dyck, 1994; Daskalopoulou and Petrou, 2002). Agricultural incomes have been declining in the last 3-4 decades, so new sources of incomes have to be developed such as farm diversification (agricultural and non-agricultural economic activities). Market opportunities are not static - they are changing and

evolving.

A farmer is a policy-maker regarding his own business taking decisions based on the available resources land, labours and finance. At the same time the farmer is a policy conformer constrained by legal, social and economical factors (Jones, 1990). Furthermore, farmers have three roles: food suppliers, rural businessmen and ‘custodians’ of the environment.

Ilbery *et al.* (1998) argued that the future of agriculture and farm households is far from certain due to dynamic changes of the political and economic forces such as different WTO, GATT and CAP agreements.

To understand the process of evaluation of alternative strategies from the farmers’ point of view in the Plovdiv region of Bulgaria, this study employed three surveys that used face-to-face structured interviews supported by a questionnaire. The methodological choices and steps of this research are described and explained in the following chapter on methodology.

CHAPTER 5: METHODOLOGY

5.1. INTRODUCTION

This chapter discusses the research process and the main methodological steps of this research. The aim of this chapter is to describe the overall methodology and particular methods employed in this study as well as the main analytical techniques. Bailey (1987) and Kumar (1999) suggest that the choice of research topic is affected by practical, scientific and personal concerns. From a practical point of view, this investigation was one of the earliest studies into horticultural business in both Bulgaria and the Plovdiv region, following the collapse of the Socialist system in 1989. This, it is hoped, enhances the value of this research because the research findings will be able to offer support to different levels of authorities and policy-makers. This topic also had scientific value as it investigated the status and problems of farm businesses using a 'bottom up' approach in order to be able to develop actions for revitalising and increasing the competitiveness of the farms. From a personal point of view, the author lived and worked in the Plovdiv region and witnessed the problems in agriculture/horticulture, which led to an interest in investigating them and developing alternative strategies for overcoming these difficulties. Secondary and primary data are used to address the research aim, which is an ex ante evaluation of a range of alternative strategies for revitalising the horticultural industry in the Plovdiv region of Bulgaria.

This chapter is divided into five main sections:

5.1 Introduction.

5.2 Provides the theoretical context of the research concept, research process and research design. Some comments with regard to the primary research are also included.

5.3 Discusses the application of the theoretical context in practice. The main methodological steps of the three surveys ('exploratory' survey, 'farm profile' survey and 'strategic options' survey) are outlined.

5.4 Reviews the different analytical techniques that are used in order to answer the research questions (to achieve the research objectives), and the issues of validity

and reliability, including the selection of independent variables and the analysis of the non-respondents.

5.5 Provides a summary of the chapter.

The Plovdiv region was also selected for this research because it is one of the most important regions in Bulgaria for producing agricultural and horticultural crops in particular. It is argued that agriculture/horticulture could be positive agents of change for the local communities in the Plovdiv region because of their potential for job creation and income generation. Therefore, strategies for overcoming the problems facing the agricultural/horticultural industry and taking the industry forward are required.

5.2 THEORETICAL CONTEXT

5.2.1 The research concept

Research is defined in the Oxford and the Cassell concise dictionaries as an *act of searching or systematic study of specific things or phenomena by critical or careful investigation or inquiry*. These definitions are reasonable except for the weakness that they do not pay attention to the fact that research is a long process of preparation, searching, reviewing and making conclusions (Orma and Stevens, 1995).

According to Cooper (1984) and Teitelbaum (1998) research in general can be divided into two main categories: research/literature review and primary study. Within the literature review (called also library research) a '*comprehensive synthesis*' of the past research on the topic is obtained. In other words, it is based on the essential literature information that can help to identify the problem/s that have to be solved. On the other hand, the primary study is a different approach in which reviewing the literature is a major task but the most important aspect is the primary data collection in terms of choosing the research method, selecting the sample and drawing some conclusions.

Cooper (1984) argued also that primary research has received considerable attention in different social sciences' issues and books compared to a literature review research.

In this research a literature review of the current status of the agricultural/horticultural industry in Bulgaria and in the Plovdiv region, general strategic theory and strategic issues applied in agriculture are reviewed in order to build the conceptual framework

of the primary research, which was designed to answer the specific research aims and objectives of this study.

5.2.2 The systems approach

Levin (1994), Greenwood and Levin (1998) and Robson (2002) argue that system theory is relevant to research and especially evaluation research. The general concept of systems theory is that the world is composed of interactive systems organised differently due to various kinds and sequences of processes that take place within them (Hill and Ray, 1987). Kumar (1999) stated that as a result, research also has, in most cases, to be systematic. In other words, the procedures adopted have to follow a certain logical order in order to understand the systems and the context within which the processes occur has to be examined. Each system includes a range of elements or sub-systems that interact with each other and produce different outcomes.

Overall this study evaluated a range of alternative strategic options based on a soft systems-type approach, that involved dividing the subject (and each of the subdivisions of the subject) into four components: process, content, output and outcome.

The systems approach begins by identifying the stages of the *process* involved in order to achieve a desired outcome. The process is “... *linked to actions taken to provide a solution to the problem being examined*” (Greenwood and Levin, 1998, p. 76). Robson (2002) suggested that this identification stage concerns answering the questions ‘how?’ and ‘what is going on?’. In the context of this research, for example, the process may be the diversification of a horticultural enterprise into organic production.

Each of the stages in the process has a *content* and therefore the second component of the approach is based on identifying and analysing what happens at each stage in the process (Greenwood and Levin, 1998). In the case of a farm diversifying into organic production, the content may be identifying the opportunity, planning new activities, securing the market and so on.

At the end of the process there will be, in most cases, a physical result. This is defined as the *output* of the process. In the example of diversification into organic production the result may be the production of organic crops.

The final part of this approach determines the *outcomes* of the process. This stage reviewed whether the objectives of the process were achieved successfully. Examples of outcomes in terms of diversification into organic production are that the farm becomes more viable, the farmer gains more income.

Hill and Ray (1987) used a systems approach to explain the nature of the interaction between agriculture and its environment. Attonaty and Pasquier (1996) used it to analyse farm businesses in a region of France in terms of dividing the business into a set of elements that are viewed as being in dynamic interaction.

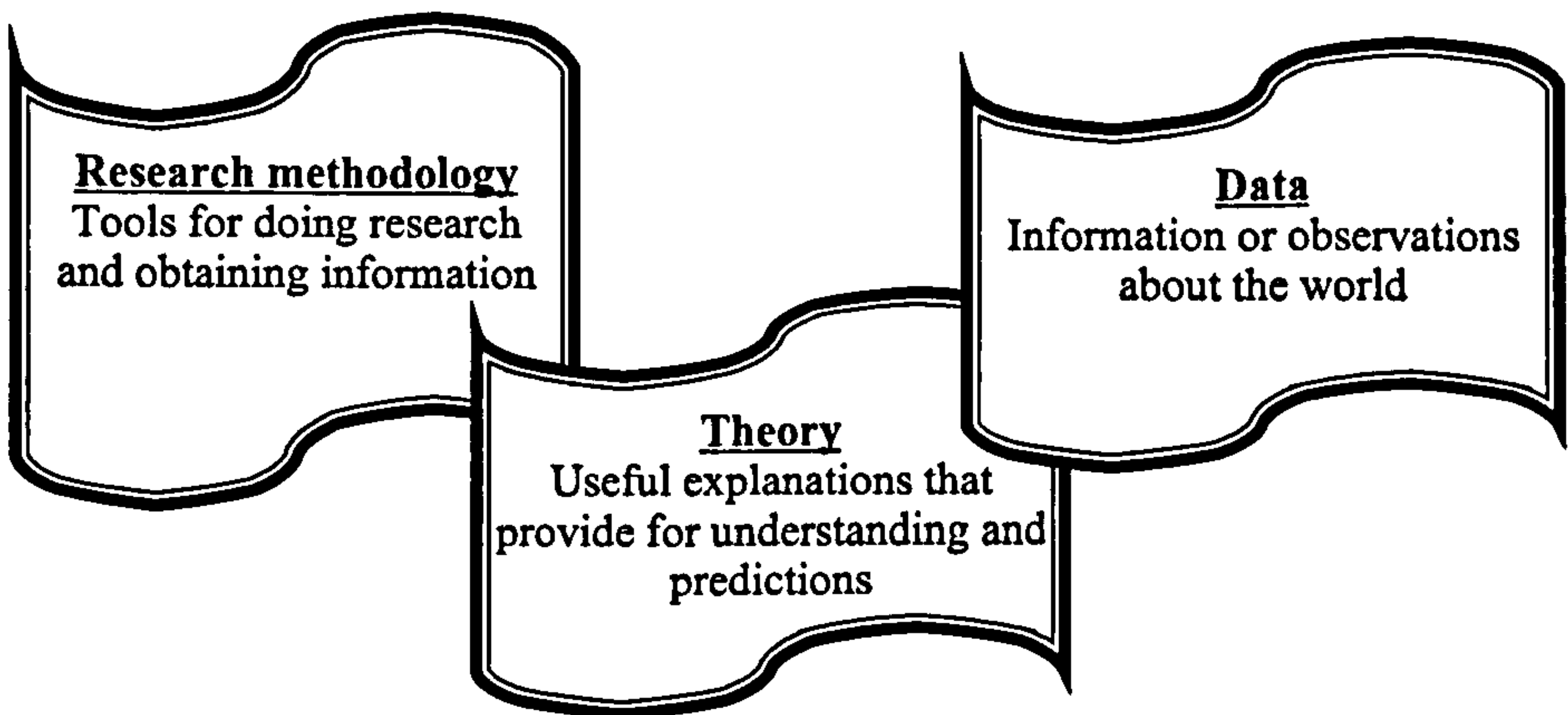
5.2.3 The research process

Adams and Schvaneveldt (1985) and Gilbert (1998) argue that good research comprises three major ingredients:

- Construction of a theory that gives a scientific explanation and the rationale of the events that are observed.
- Design of the methods for gathering the data, this means choosing the most suitable techniques for collecting meaningful information.
- Data collection that generates data (ideas, facts and knowledge) for explaining and understanding the events (Figure 5.1).

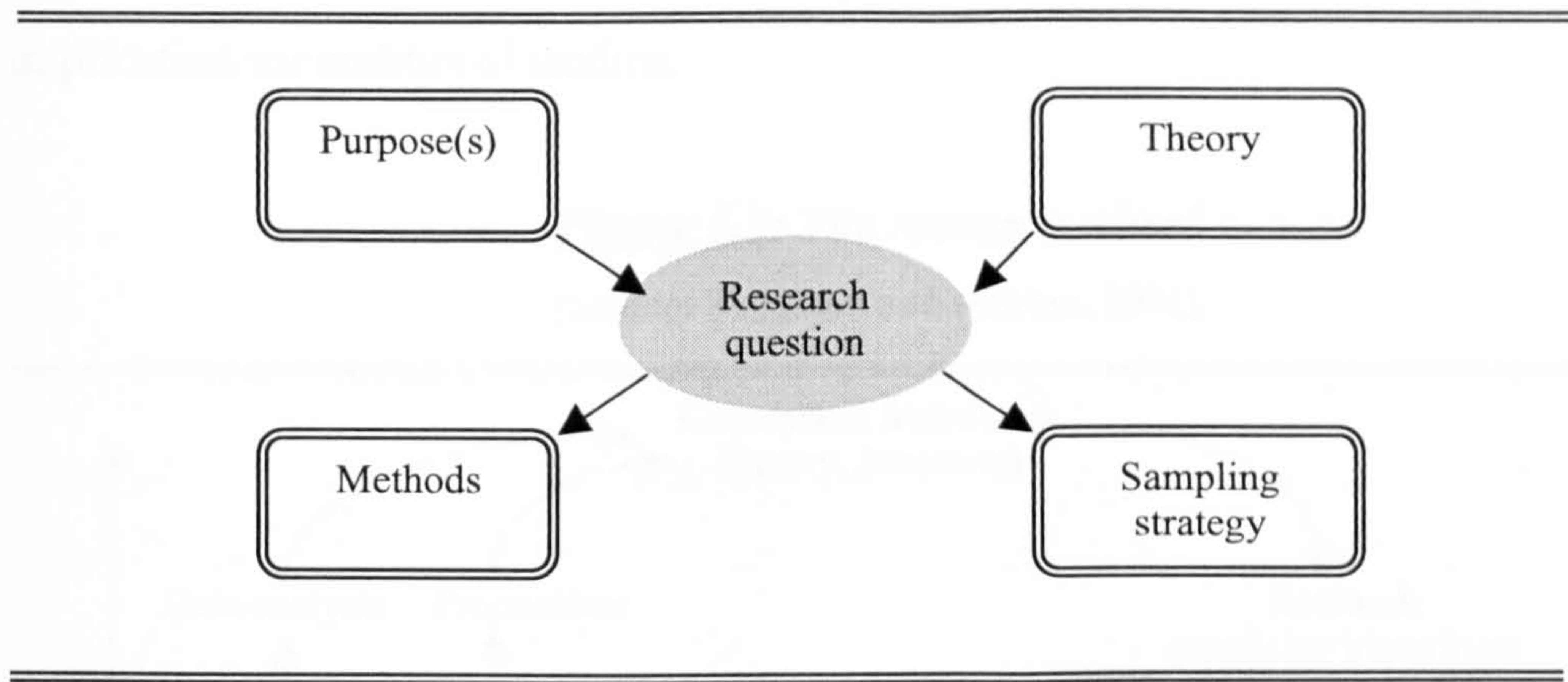
Figure 5.1: Interrelationship of methodology, data and theory

(Adapted: Adams and Schvaneveldt, 1985)



Robson (1997) has suggested that the main components of the research process are: purpose, research question, theory, methods and sampling strategy (Figure 5.2).

Figure 5.2: Framework for research design
(Source: Robson, 1997)



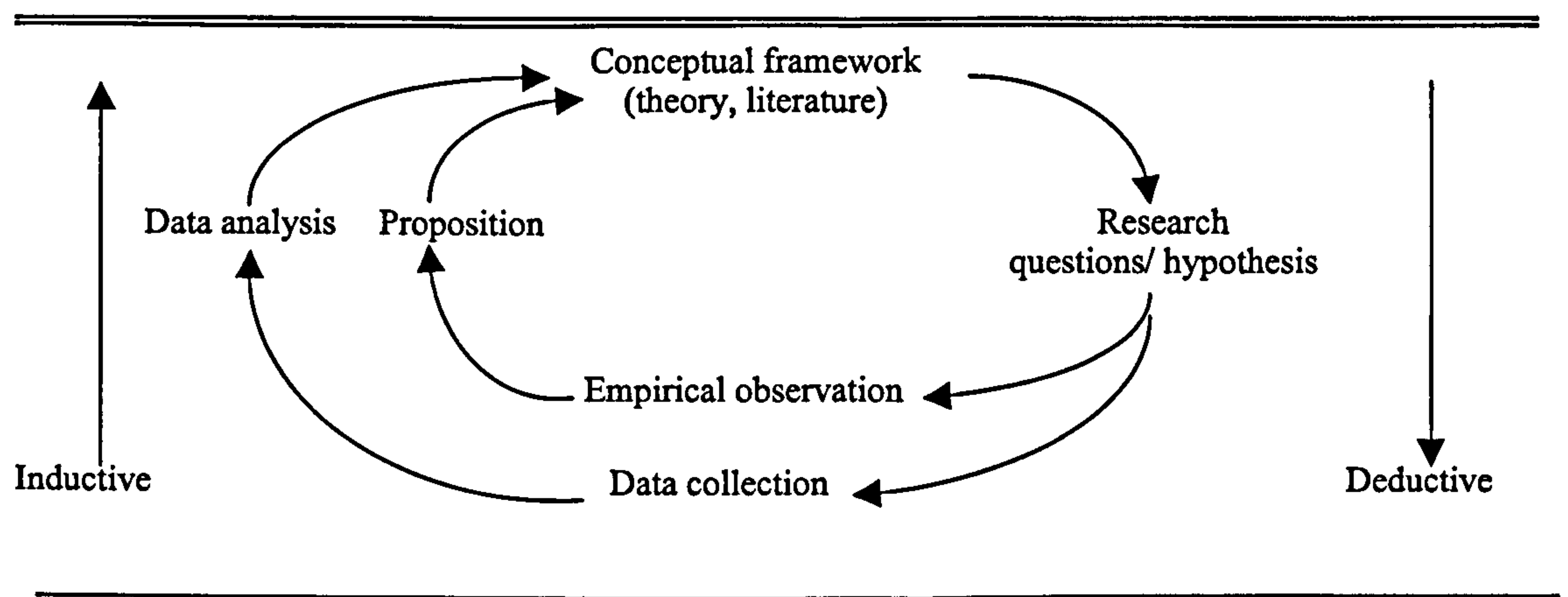
More recently, Rudestam and Newton (2001) state that there is no universally agreed format for research and they suggested that good research contains a review of the literature, a statement of the problem and a clear delineation of the proposed methods and plans for data analysis. Going into details, they argued that research is not linear but a ‘recursive cycle’ of phases that are repeated, which is called the ‘*research wheel*’ (Figure 5.3). The most common entry point of the research wheel is some form of empirical observation where the researcher selects a topic from a infinite array of possible topics. The inductive process serves to relate the specific topic to a broader context and begins with some intuitions of the researchers, which are typically guided by their values, assumptions and goals. The next step of the research process is to develop a proposition, which is expressed as a statement of an established relationship. These prepositions exist within a conceptual or theoretical framework. A conceptual framework being viewed as a less developed form of a theory. Conceptual frameworks and theories are developed to account for or describe abstract phenomena that occur under similar conditions. So the inductive logic relates to choosing specific topics within a broader context.

Moving around the ‘research wheel’, the researcher uses deductive reasoning to move from the larger context of theory to generate a specific research question/s that may be accompanied by one or more hypothesis. The second loop of the research wheel begins

with the data collection that serves to answer the research question. The data collection is essentially another part of empirical observation, which then initiates another round of the research wheel. Generalisations are made based on the particular data observed and analysed (inductive process). The generalisations are connected to a conceptual framework, which then leads to an elucidation of further research questions and implication for additional studies.

Figure 5.3: The research wheel

(Source: Rudestam and Newton, 2001)



This research has reviewed the value of the ‘research wheel’ and was conducted in the following sequence:

- Problem identification;
- Literature review;
- Determination of the research aim, objectives and questions;
- Data collection – secondary and primary;
- Research results (analysis)
- Discussions and conclusions (Figure 5.4).

These stages are demonstrated in Figure 5.4.

Identification of the problem

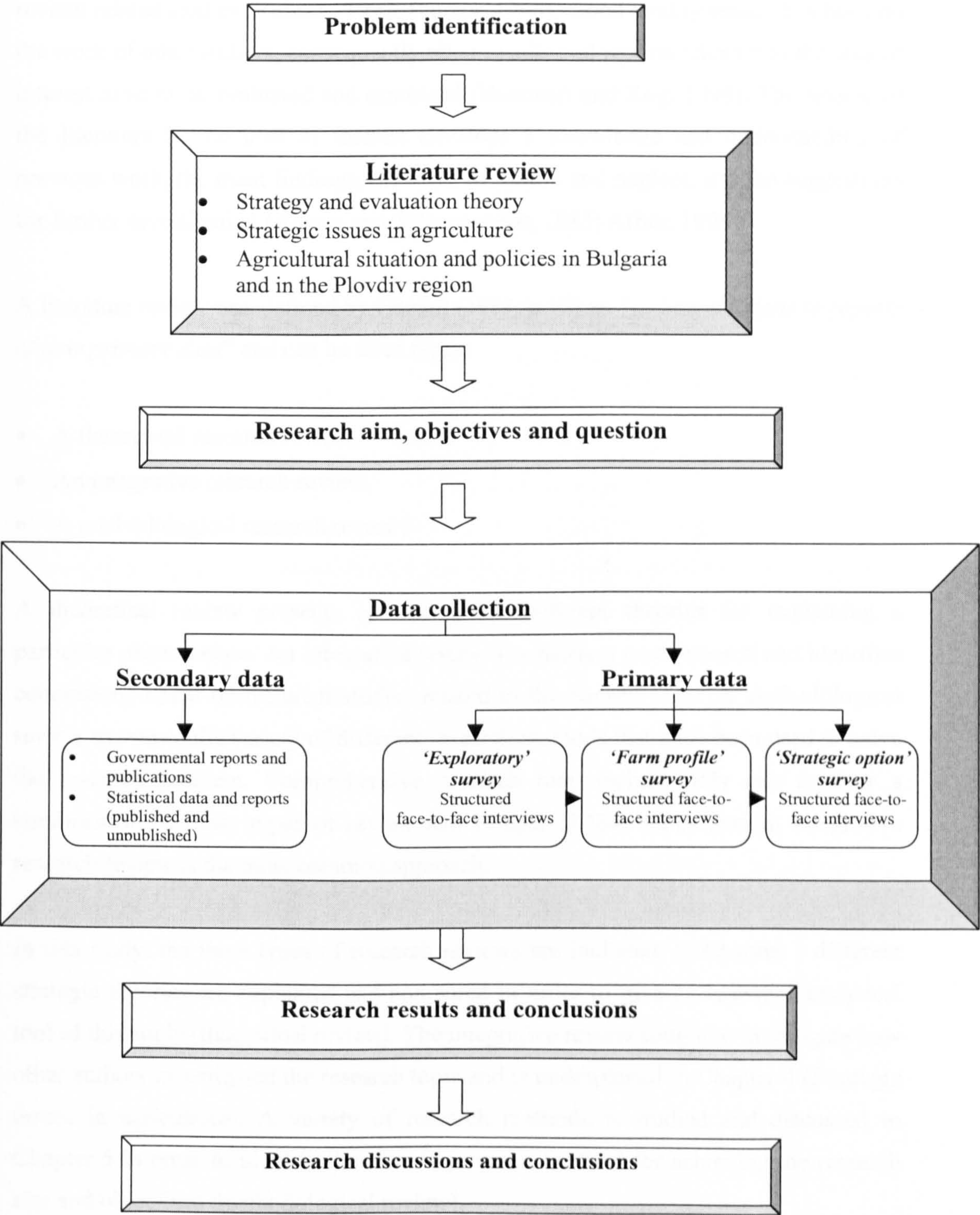
Identification of the problem is the first significant step in the research process that clearly defines the topic. Kumar (1999) and Miller and Salkind (2002) stated that the

research problem identifies what, why and how a researcher intends to research. He also argued that the research design, sampling strategy and frame of analysis are greatly influenced by the formulation of the research problem. Kumar (1999) also argued that to evaluate the research problem in terms of financial resources, time available and the researcher's knowledge and experience in the field of study is extremely important.

The agricultural/horticultural industry is a traditionally important sector in Bulgaria and in the Plovdiv region. Prior to 1989, this sector was in crisis and since the transition towards a 'free market' economy this crisis has become even deeper. However, very little has been done to counteract the negative effects of the economic, political and agricultural reform upon the farm businesses. On the other hand, employment in agriculture has increased in the last few years and it is essential to determine and examine the internal and external factors that affect the future development of the farm businesses and their viability. The development of agricultural/horticultural industry is also strongly influenced by government, therefore it is important to examine the inter-linkage between the changes in the national policies and the performance of the agricultural/horticultural enterprises.

Figure 5.4: The main methodological steps of this research

(Source: Author)



Review of the literature

Once the research problem has been identified and the topic chosen, the next step is to review related studies (Robson, 1997; Procter, 1998). Good quality research is built on the work of other authors, consequently other results and reports relevant to the area of interest have to be evaluated and examined (Bickman and Rog, 1998). The review of the literature in the area of interest develops a knowledge and understanding of previous work, the main findings, the areas of debate and neglect, and the suggestions for further investigation (Adams and Schvaneveldt, 1985; Arber, 1998).

A literature review was defined by Cooper (1984, p.10) as “... *introductions to reports of new primary data*” and can be three types:

- A theoretical research review.
- An integrative research review.
- A methodological research review.

A theoretical review presents and compares different theories for explaining a particular phenomenon. An integrative review summarises past research and identifies conclusions based on different studies related to the chosen topic. A methodological review examines the variety of different research methods that have been used to solve the research problem. Comprehensive research may include only one type or a combination of these types of review and Cooper (1984) states that an integrative research review is the most common approach.

In this study, the three types of research reviews are included. In Chapter 3 different strategic theories are explained and compared in order to give an essential analytical tool of this study (theoretical review). The integrative review sought to investigate how other authors investigated the research topic and is underpinned in Chapter 4 (Strategic issues in agriculture). A variety of research methods is studied and discussed in Chapter 5 in order to identify the most appropriate method for achieving the research aim and objectives (methodological review).

For this thesis, various sources were used to provide information on strategy evaluation and farm business development in Bulgaria and in the Plovdiv region. The

key materials used included:

- Relevant publications, *e.g.* books, conference papers and reports obtained from British and Bulgarian libraries of universities, research institutions and organisations;
- Various journals relating to agriculture, agricultural economics, strategic management and farm business.
- Key words (*e.g.* Bulgarian agriculture and horticulture, farm business, strategy evaluation) were searched in a variety of databases.

Some limitations during the stage of the literature review emerged. The information with regard to agriculture and horticulture in Bulgaria was not easily accessible due to the restricted number of publications and limited public access. The whole range of governmental reports were disseminated only at a Ministry level, which provided a challenge for the researcher to establish collaborative contacts with local and EU experts in Bulgaria. Those became interested in this research and provided very useful and helpful information. The literature relating to Bulgarian agriculture (especially in the Plovdiv region) and strategic issues in agriculture was also found to be limited because very little research about agriculture/horticulture has been undertaken in the Plovdiv region. On the other hand, agriculture has understandably been a popular topic for investigation at EU and world scale.

Research aims and objectives

A good theoretical foundation can give a sound base for identification of the research aims, objectives and related questions. Good research questions are clear, specific, answerable, interconnected and substantively relevant (Robson, 2002).

In this study, the overall aim relates to an *ex ante* evaluation of alternative strategies for revitalising the agricultural/horticultural industry in the Plovdiv region of Bulgaria. The evaluation of these strategies will depend upon a range of external and internal factors that affect the farm business.

In order to be able to answer the overall aim this research required exploration of the following objectives:

- the current situation of the Bulgarian agriculture/horticulture and national agricultural policies and strategies;
- the characteristics of the Plovdiv region and the current status of the horticultural industry in the region;
- the main business operating characteristics of the agricultural/horticultural farms in the region and the potential of a range of alternative strategies to revitalise the agriculture/horticulture of the region;
- the evaluation of a range of alternative strategies/scenarios for the revitalisation of the horticultural enterprises in the Plovdiv region.

In social science research as with strategic theory there is a diversity of available options and alternatives and making a decision as to which approach and methods to adopt is an important, if not the most important, step in the research process (Denscombe, 1998).

Data collection

According to Kumar (1999) there are two major approaches for gathering data about situations, people, problems, and phenomena. Sometimes the information required is already available (secondary sources) while some other times the information must be collected from a survey (primary source).

Secondary data

Arber (1998), Procter (1998) and Kumar (1999) identified the basic sources of information used for secondary data collection, these are:

- statistical data and reports;
- public analytical documents (governmental reports and publications, etc.);
- academic books and journals .

The key sources of secondary data that are used in this study were made available through Bournemouth University, UK; Agricultural University - Plovdiv, Bulgaria; The Bulgarian Ministry of Agriculture, The Bulgarian National Statistical Institute, and the EC and FAO databases. Some unpublished materials were also used.

There were some limitations that were encountered throughout the process of secondary data collection that had a major impact upon the design of the collection of primary data.

A major area of difficulty was obtaining statistical data for the horticultural industry and businesses in Bulgaria and in the Plovdiv region in particular. Since the transition began in 1990, horticulture has not been systematically investigated therefore the information was limited and in many cases inaccurate. However, it has to be mentioned that a few studies have been undertaken in the period 1996-2000. These were mainly supported by the EU and some other international associations and organisations. This available data was collected for different reasons and expectations and therefore required careful evaluation. In practice, the statistical information on agriculture and horticulture used in this study was built up from different governmental and statistical reports and publications and updated as more became available, or as revised statistics were published. For example, some data has become available as a result of the EU pre-accession process in Bulgaria. This has resulted in specific investigations by the Bulgarian Ministry of Agriculture in order to prepare the national plan for agriculture and rural development within the framework of the EU/SAPARD programme (see Chapter 2, section 2.3.2.2).

Banchev and Terziev (1999) agreed with the limitations explained above and suggested some further limitations with regard to farm data collection in Bulgaria these are:

- the comprehensiveness of the information – many important aspects of change in the farming system have not been included (the changed organisational structure of the farms have been unclear, lack of specific data for various type of farms, lack of data on a substantial number of the farms, etc.)
- the poor reliability of farm information – for political reasons only part of the collected data was made available to the public.

Primary data

Collecting primary data by means of a survey is frequently the most important and critical step of the research process. The research method that was employed in this research was *face-to-face interviews* assisted by a questionnaire. The three surveys

included in this research were undertaken in the Plovdiv region of Bulgaria. This was a time-consuming process with many challenges due to the farmers' lack of experience with research interviews. The other challenge was that only one person (the researcher), who was also initially inexperienced in this area, did all the fieldwork.

This study included three field studies:

- An 'exploratory' survey.
- A 'farm profile' survey.
- A 'strategic option' survey.

The '*exploratory*' survey was undertaken during the summer of 1999 (July – August) and the main targets were to examine the farmers' attitudes and behaviour towards this investigation and to gather some basic operational business data about the farms.

The '*farm profile*' research was carried out during the period February-April 2000. The main purpose of this survey was to collect information about the personal characteristics of the farm managers as well as the main business operational characteristics of the farms.

The '*strategic options*' survey was performed during the winter of 2001 (January – March). The main tasks were to examine the farm managers' view of the changing business environment within which their farms are operating, the feasibility and appropriateness of a variety of proposed strategic options and their desired outcomes.

Data analysis

The data collected during the 'exploratory' survey was analysed manually. Whereas, the data gathered from the 'farm profile' and 'strategic options' surveys was analysed by using the SPSS package (Statistical Package for Social Science). Appropriate information about the analytical procedures used in this research is provided later in this chapter. The actual analysis, main findings and conclusions are discussed in the subsequent chapters.

Research discussions and conclusions

This is the final stage of the research process and includes a summary of the research

findings. Based on these and the evaluation of the study suggestions for further research could be drawn (Kane, 1997).

The main steps of the research process involved in this study provided the framework of this investigation, however a further explanation of the concept of research design is necessary in order to understand better the choice of research, the sampling strategy and research method. This is discussed next.

5.2.4 Research design

Kumar (1999) and Robson (2002) state that there are three types of research design and these are:

- Exploratory;
- Descriptive;
- Explanatory.

The exploratory study is carried out to assess phenomena, to ask questions or to find out what is happening. A very appropriate research method for exploratory work is case studies because a range of explorative, more often qualitative data can be obtained. It is less structured and aims for new insights (Adams and Schvaneveldt, 1985; Kumar, 1999; Stebbins, 2001).

Descriptive research involves describing attitudes, behaviours or conditions, generally speaking providing profile of the variables (persons, events or situations) and the most suitable tool for achieving these is the survey method.

Explanatory investigation explains why certain attitudes, behaviour or conditions happen. In other words 'why' and 'how' there is a relationship between two aspects of a phenomenon. Experiments are a suitable strategy for explanatory studies (Kane, 1997; Kumar, 1999; Robson, 2002).

This research has a descriptive character and the survey approach has been chosen in order to describe the characteristics and future development of the different types of agricultural/horticultural farms in the Plovdiv region as well as the profile of the farmers that manages these farms.

The methodology that was employed during the investigation was relatively new and unknown in Bulgaria. Hence, uncertainty and misunderstanding from the farmers were anticipated and were examined at an early stage in this study (during the ‘exploratory’ survey).

5.2.4.1 Qualitative versus quantitative type research

Creswell (1998) and Goulding (2002) emphasised that qualitative and quantitative research are different i.e. they offer alternative ‘modus operandi’ for carrying out social research. Qualitative research stresses on processes and meanings that are not rigorously examined or measured in terms of quantity, amounts, intensity or frequency. In contrast, quantitative research emphasises the measurement and analysis of a relationship and patterns between variables. Qualitative research may get closer to the individuals’ perspectives and beliefs and rich description are valuable whereas the quantitative research produces more reliable results due to the use of mathematical models, statistical tables and graphs (Denzim and Lincoln, 1998).

On the other hand, Rudestam and Newton (2001, p.36) argued that the distinction between these two type of research could be misleading because qualitative research “... *does not possess a distinct set of methods that are all their own*” and can use interviews, survey approach, observation or inquiries which are commonly used in quantitative studies.

The criticism of qualitative research according to Denzim and Lincoln (1998) and Goulding (2002) includes aspects such as:

- it does not usually fit with any agenda for practical, applied or managerial research and the methods for primary data collection, as well as the samples, are not always identified in advance;
- its findings might be subjective, intuitive and value laden due to the fact that results are seldom reported in terms of complex statistical methods;
- is novelistic, entertaining and descriptive and often does not explain the logic and the reasons of the events occurred;
- some variables are not measurable.

Quantitative research also has its limitations such as:

- it does not focus on details or provide rich explanation of the phenomenon;
- it seldom captures a subject's perspective "*... it is abstract from this world and seldom studies it directly*" (Denzim and Lincoln 1998, p.10).

From the above debate, it is apparent that neither approach is ideal or superior and a combination of qualitative and quantitative methodologies might often be a very good choice (Rudestam and Newton, 2001). Creswell (1998) argues that quantitative research uses a large number of people while qualitative researchers work with few people and detailed data is collected.

Due to the limitation of the available literature and secondary data concerning the agricultural/horticultural industry in Bulgaria and in the Plovdiv region, quantitative research and more specifically survey approach was chosen in this study in order to examine a wide range of characteristics/cases of agricultural/horticultural businesses without going into great depth. The other reason for choosing quantitative methodology is the nature of the research aim to evaluate a range of alternative strategies for the future development of the agricultural/horticultural farms in the Plovdiv region of Bulgaria. Nevertheless, qualitative type questions are also used with the intention of exploring some aspects comprehensively and clarifying the rationale for the farmers' business decisions and choice. The Matrix approach (a very common approach of qualitative study) was also partially adapted for the visual presentation of groups of the factors that influence the evaluation of the alternative strategic options.

5.2.4.2 Sampling

A next critical aspect of social research design is sampling. The sample has to be carefully selected from the 'population' for building confidence that the main findings represent the category under investigation. There are two basic sampling techniques known as 'probability' and 'non probability', which comprise a variety of different approaches presented below:

1) Probability sampling: means that each element in the population must have an equal and independent chance of selection in the sample.

- *Random* – selection of people or events 'at random' from a list of the population;

- *Systematic* – introduction of some system for selecting the sample such as choosing ‘nth’ case from a list of the population;
- *Stratified* – dividing the population into a number of groups (strata) with common characteristic such as male or female, etc.;
- *Quota* – similar to stratified sample in using certain categories (strata). However the difference is that strict random selection is not used and researcher decides who will be chosen in the sample. This approach is extensively used in market research;
- *Cluster* - separating the population into a number of units (clusters) which include individuals having a range of common characteristic;
- *Multi-stage* – extension of cluster sampling and involves taking samples from samples.

2) Non-probability sampling: does not follow the theory of probability and is used when the number of elements in the population is unknown and cannot be individually identified:

- *Purposive* – building up a sample selected with a specific purpose and is considered to provide valuable information relevant to the topic of investigation;
- *Snowball* – the sample appears through the process of reference from one individual of the population of interest to another;
- *Convenience* – the sample includes the nearest and most convenient persons;
- *Theoretical* – the selection of sample follows a route of discovery based on the development of theory, which is ‘grounded’ in evidence. At each stage, the new evidence is used to change or confirm a theory and based on that the sample is chosen (Adams and Schvaneveldt, 1985; Kane, 1997; Arber, 1998; Denscombe, 1998; Henry, 1998; Kumar, 1999; Miller and Salkind, 2002; Robson, 2002).

In this research, a non-probability sampling procedure was used due to the limitations of secondary data mentioned earlier and the lack of an accurate and up-dated list of the ‘population’ (farms) in the Plovdiv region and especially those farms with a horticultural orientation. Hence, the most appropriate approach was purposive sampling as the farm managers were chosen due to their relevance to the research topic and their ability to produce the most valuable data. The main advantage of this technique is that the researcher can concentrate on instances that can provide critical, extensive and vital information for achieving the research targets. Kumar (1999, p.162)

argued that purposive sampling is very applicable on occasions “...to describe a phenomenon or develop something about which only a little is known”. The main weakness is the difficulty in justifying whether the sample is representative and the results can be generalised (Robson, 2002). However, purposive sampling was used in Spain for analysing the production and marketing strategies of Spanish citrus farms (Poole, 2000).

5.2.4.3 Research methods for collecting primary data

Dixon *et al.* (1991), Denscombe (1998), Kumar (1999), Kane and O'Reilly (2001) and Robson (2002) proposed three research methods for primary data collection that complement and support one another. These are:

- interviews;
- questionnaires;
- observation.

Interviews are “... a conversation with a purpose” (Robson, 1997, p.228). Kumar (1999), Kane and O'Reilly (2001), Goulding (2002) state that there are three major types of interviews: structured, semi-structured and unstructured. *Structured interviews* are very strict in terms of the format and the order of questions and answers. The best-standardised schedule that can be used is a questionnaire. *Semi-structured interviews* are more flexible but still have to cover a list of issues that have to be answered. The *unstructured interviews* are informal and follow a general area of interests and concern.

Denscombe (1998) and Oppenheim (1998) explored the subject and proposed that the interview approach might be performed on one-to-one and group basis as well as in focus groups. Goulding (2002) stated that the interview might be face-to-face or conducted over the telephone. Robson (2002) argues that structured interviews are a very appropriate tool for survey research.

Adams and Schvaneveldt (1985), Robson (1997), Oppenheim (1998), Denscombe (1998) and Newell (1998) identify some advantages and disadvantages of the interview approach. The main advantages are:

- depth of information;
- better understanding of interviewee opinions, ideas and point of view;
- flexibility;
- high response rate;
- better quality data;
- better accuracy and relevance of the collected data.

Whereas the key disadvantages are:

- time-consuming;
- higher cost;
- necessity for interviewer skills;
- interviewee can be affected by interviewer (motivations, skills, experience, etc.);
- more difficult to obtain co-operation.

Questionnaire, as another research method, is ‘... a written list of questions’ that has to be answered by respondents in order to discover things (Adams and Schvaneveldt, 1985; Denscombe, 1998; Kumar, 1999). Questionnaires can be face-to-face, self-administered (postal) or telephone (Robson, 1997). Face-to-face questionnaires involved interaction between the researcher and the respondent and are commonly used in social research. With self-administrated questionnaires, the respondents complete the questionnaire by themselves and there is no direct contact between the researcher and the respondent.

Some other limitations of questionnaire and the self-administered in particular are:

- there is no interviewer to explain the questions and the purpose of the survey as well as to motivate the respondent;
- low response rate;
- limitation for controlling the completion of the questions;
- low process of collecting the filled questionnaire;
- there is a risk of inaccurate answers (Robson, 1997; Denscombe, 1998; Kumar, 1999; Kane and O’Reilly, 2001).

Observation is another way to collect primary data, which is:

“...a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place” (Kumar, 1999, p.105)

Observation is used when the behaviour of individuals is investigated rather than perceptions. Kane and O'Reilly (2001) identified that the main barrier of observation is that it is a time-consuming process.

This research used face-to-face (one-to-one) structured interviews based upon predetermined set of questions (questionnaire) since there was a need for relevant comprehensive information, which it would not have been possible to be collect by using other methods. Due to the challenging nature of this study, this method was found to be the most appropriate. The same research method (face-to-face interview using questionnaire) was chosen in Greece for investigating the alternative farm enterprises and their strategies and in New Zealand for assessing the farmers' behaviour (Damianos and Skuras, 1996; Gary and Wilkinson, 1997).

The self-administrated questionnaire was not apposite for this research due its specific context despite the advantages outlined above that this is a cheap and easy way of surveying, with no interviewer bias and can cover a large geographical area and a large number of respondents. The telephone questionnaires were also not appropriate research method due to the fact that it was not possible to contact the farmers in the Plovdiv region by phone because many of them did not have a telephone line in their work places (farms). Observation was also not suitable in this research due to limitation of time and the specific context of the study.

Owning the fact that questionnaire approach was used in this investigation to structure the interviews with the farm managers in the Plovdiv region of Bulgaria the next subsection discusses the issue of questionnaire design.

5.2.4.4 Questionnaire design

The three stages of the primary data collection in this study used face-to-face interviews assisted by questionnaires, therefore the design of the questionnaires was a

critical step. A questionnaire can comprise a range of research tools such as checklists, attitude and rating scales and projective techniques (Oppenheim, 1998). The essential elements that have to be considered during this stage of formulating questions are:

- to ask the precise questions relevant to the research topic;
- to word the questions;
- to avoid 'leading', 'vague' and long questions;
- to avoid asking the same question twice in different words;
- to have sufficient options in the answer (Dixon *et al.* 1991, Denscombe, 1998; Kane and O'Reilly, 2001; Robson, 2002).

There are many ways of formulating the questions concerned with facts, behaviour, attitudes and beliefs. Hence, many types of questions can be developed. Newell (1998), Oppenheim (1998) and Kumar (1999) stated that in research practice two main types of questions are emphasised as follows:

- 1) '*open*' – respondents can express their answers in their own words and length, hence, these questions produce essentially qualitative data. They can also produce a quantitative data in terms of how the data collected will be analysed;
- 2) '*closed*' – usually the answers are structured and produce quantitative data. According to Robson (2002) 'closed' questions can either be 'fixed-alternative' or 'scale'. Adams and Schvaneveldt (1985) and Denscombe (1998) explored this idea and proposed the following forms:

- having two (yes/no) options;
- having several options from which the respondents can choose one or more of them;
- ranking the proposed options;
- scaling the degree of agreement (Likert scale);
- rating items (having scale of 1 to 7 or 1 to 10).

The questionnaires used in the interviews employed both types of questions. The 'closed' questions led the respondents in directions that were being investigated and the 'open-ended' questions explained the reasons for their chosen 'fixed-alternative'

option or expressed suggestions. The process of designing and running the interviews using questionnaires for the three investigations are outlined later in the chapter.

5.3 APPLICATION OF THE THEORETICAL CONTEXT IN TERMS OF THE THREE SURVEYS

5.3.1 ‘Exploratory’ Survey

This first stage of the fieldwork was carried out during the summer of 1999 (July – August) in Plovdiv, Bulgaria. Validating and exploring the data collected from the secondary sources of information was a vital aspect in planning the three surveys. Due to the limitation of the available secondary data (described above) relating to the horticultural industry in the Plovdiv region there was a need for some fundamental information in order to plan the later stages of the investigation. It was also essential at that stage to assess the farmers’ behaviour and their attitude towards participating in this investigation. It was anticipated that the unpredictability of the respondents was one of the main threats to this research due to their lack of experience in research interviews. Hence it became essential to examine this, and if possible, to attempt to minimise its impact.

5.3.1.1 The planning and organisation of the ‘exploratory’ survey

Objectives

Due to the limitations of the available literature and the challenge of running a ‘unique’ investigation in the rural area of Plovdiv region, the main objectives were:

- to examine the farmers’ attitudes towards participating in this research;
- to examine the farmers’ attitudes towards providing information about their farm businesses;
- to gather some basic operational business data about the farms;
- to test how the farmers assess their internal capacity and external environment;
- for the researcher to gain experience in conducting interviews.

Chosen research method

The chosen research method, as discussed above, was structured face-to-face interviews using a questionnaire. Understanding of the respondents’ behaviour and the topic were prioritised at that early stage rather than collecting factual information and

statistics (Arber, 1998). “*The job of the in-depth interviewer is thus not that of data collection but ideas collection*” (Oppenheim, 1998, p.67). The ‘exploratory’ interviews were designed to encourage respondents to express their own ideas in their own words. However, a questionnaire was used in order to structure the interview and to help in achieving consistent results.

Sample

This survey was small-scale (only 20 respondents) while designed to explain “*the way people understand the things*” and as “*pattern of behaviour*” (Denscombe, 1998, p. 25).

The sampling procedure that was employed during this preliminary survey was non-probability purposive sampling because:

- of the lack of an accurate list of horticultural farms in the Plovdiv region that would allow probability sampling;
- the funds for doing this research was limited;
- time limitations.

As the research focuses on the horticultural industry and the future development of the farm businesses in the Plovdiv region the main characteristics that were used for choosing the sample were:

- crop type - horticultural crops (fruit, grapes or vegetables,);
- land area of more than 2.5 ha with market orientated production;
- organisational structure - private farms/co-operatives;
- different farm locations: *upland* (located at the foot of the mountains) and *lowland* (in the Thracian plain).

Questionnaire design

The data collection instrument (questionnaire) assisting the interview was designed to assess the willingness of the farmers to participate in this investigation and to collect basic information about their farm business performance. The questionnaire was mainly a supportive tool and a form for making some written notes nonetheless its

importance was carefully considered.

The questionnaire involved 27 questions. The questions were formulated in order to collect information about the farmers' behaviour and the farms. The majority of the questions (20) used in the 'exploratory' survey were 'open-ended' since this was a better way for receiving wide and rich information relating to the research topic. Only seven questions were 'closed' and more definite 'fixed-alternative' (e.g. 'yes' or 'no') because either there was either no option or other related questions followed them explaining the reasons of the chosen fixed-alternative (see Appendix A).

5.3.1.2. Running the survey

The 'exploratory' survey involved 20 farmers. The respondents were the people managing the private farms/co-operatives and they were interviewed at their work place (villages) in the Plovdiv region. The majority of them (14) were private individual farms and 6 co-operatives were visited.

Villages with different locations were visited: lowland and upland. Fifteen of the farms were located in the Thracian plain (lowland) and 5 were located in the uplands.

5.3.1.3 Links between the data and strategic theory

At that early stage it was essential to test and examine some basic aspects relating to strategic analysis. A SWOT analysis was used to assess preliminarily how farmers understand and interpret their internal capacity and external potential opportunities and threats. The respondents identified their main strengths, weaknesses, opportunities and threats. Some other aspects were mentioned such as farm management functions: marketing, production and staffing but they were explored in detail during the second survey. The role of the stakeholders was examined so as to understand how they could influence the farm business. Benchmarking was also studied but due to the lack of 'market leader' any further investigation in this area was recognised as not being applicable.

5.3.1.4 The lessons learned

During and after the investigation the following conclusions emerged. The chosen research strategy face-to-face interview using a questionnaire was a very appropriate method of doing such kind of research in the specific conditions in Bulgaria and in the

Plovdiv region for achieving the objectives of this survey. The main weaknesses during the preliminary investigation related to:

1) Preparation and organisation of the survey:

- A very challenging aspect of the research was the translation of the questions into Bulgarian because in some cases there was no adequate word in the Bulgarian language. Therefore, the questions became much longer and potentially imprecise such as strengths, opportunities (questions 7, 9);
- A few questions were difficult for understanding by the farmers (q. 9)
- The other challenge was to word the questions to suit the social and educational status of the target group, *i.e.* farmers. Some of the questions were difficult for the Bulgarian farmers to understand due to their education level or their age. (Most of the farmers over 60 being heavily communist indoctrinated). These questions related to some issues of marketing, difficulties with associations, improving the business (questions) hence respondents needed more explanation (questions 16, 17, 21, 25 and 26);
- The nature of the sample was not very precise. One of the boundaries was a farm size of more than 2.5 ha. Farms with less than 2.5 ha but market-oriented should be included in a future sample because the agriculture/horticulture in Bulgaria and in the Plovdiv region in particular is represented by small scale holdings with less than 1 ha of land (NSI, 1998).
- Time of undertaking this survey was not very appropriate because that was the active period for the farmers when they were very busy with performing their agricultural/horticultural activities.

2) During the implementation

- Difficulties with the farmers' co-operation emerged during this investigation as some of growers were very helpful while others were suspicious about this research;
- The interviews were not recorded and some comments may have been missed;
- Farmers in Bulgaria are not used to research interviews. Therefore, a long introduction and explanation of the research aim and objectives was essential for making respondent relaxed and comfortable in the situation.

5.3.1.5 Lessons for later surveys

The following lessons had to be taken into account in the later investigations within this research:

- the size of the farm is an important dimension of farm business performance and farms with less than 2.5 ha land, but market oriented, have to be included in the future surveys;
- crop selection and patterns are also important factors that had to be further assessed in order to analyse whether farms with different crops would evaluate various strategies in different ways;
- the period for running the survey is recommended to be changed (non-active season);
- the time for presentation and clear introduction and explanation of the questions asked had to be built into the interviews;
- the research method of face-to-face interviews was suitable for this type of investigation and the type of respondents.

5.3.2 'Farm profile' survey

The second stage of the primary data collection was undertaken during the period February – April 2000 in the Plovdiv region of Bulgaria.

5.3.2.1 The planning and organisation of the 'farm profile' survey

Objectives

Based on the experience of the 'exploratory' research and considering the type of further data required, the objective during this survey were to gather information about:

- the operational characteristics of the agricultural/horticultural businesses in the Plovdiv region;
- the challenge of diversification;
- the farm managers profile (*e.g.* age, gender and education);
- the farmer's attitude and expectations;
- the future performance of the horticultural farm in the next 5 years.

Research method

The chosen research method for this 'farm profile' survey, as in the 'exploratory' survey was face-to-face interview. The interviews were structured, using a questionnaire because it was necessary to follow the same order of questions with all respondents.

Sample

The 'farm profile' survey included 108 farmers. The respondents were only the managers/owners of private farms/co-operatives and they, as in the first investigation, were interviewed in their work places (farms in the villages) in the Plovdiv region.

The sampling procedure that was employed during this second survey was again purposive because:

- of a lack of any kind of business operational data for the farms in the region;
- of a lack of accurate and up-to-date list of horticultural farms in the Plovdiv region;
- the specificity of the research required a response from the main 'actors' in agriculture/horticulture (farmers) who are critical to the topic of investigation;
- time and the money were limited.

The sample of farmers was again selected using non-probability sampling despite there being a list (from 1994) available by the National Statistical Institute. According to this list there were 587 horticultural farms. However, this list was not accurate and up-dated because some of the farms did not appear in the records or some that did appear were not operated any longer. This could be explained by the following:

- farmers were not obliged to register their farms;
- due to unstable economic environment and dynamic changes over the last 10 years, some farms listed faced great financial and trade difficulties and no longer practiced horticulture.

Therefore, the only one available record for the number of horticultural farms in the Plovdiv regions was not reliable but a source of information that was used with caution.

The sample was chosen based on the following main criteria that were similar to those used during the ‘exploratory’ survey such as:

- crop type - horticultural crops (fruits, grapes or vegetables). However, some of the farms were growing also agricultural products;
- market orientated production;
- farm land – from 0.5 ha 3,000 ha;
- organisational structure - private farms/co-operatives.

Questionnaire design

The data collection instrument (questionnaire) assisting the face-to-face interview was designed on the basis of the existing research literature (Fowler 1993; Kane 1997; Oppenheim 1998; Denscombe 1998; Newell, 1998; Kumar, 1999; Robson, 2002). The questionnaire was an important tool within these interviews. Therefore, it was designed very carefully in order to produce reliable and valid results. The questionnaire strictly controlled the logic and the order of the questions, which were formulated with the intention of providing accurate information for achieving the objectives of this study. There were more than 8 iterations during the evolution of this questionnaire due to the specificity of the topic and the circumstances in Bulgaria and in the Plovdiv region in particular. In some case the format of the questions was changed for gaining different type of data, in other cases some questions were formulated more specifically (*e.g.* a question became ‘fixed-alternative’ option, followed by another open-ended question).

The questionnaire had 37 questions, 14 of these questions used were ‘open-ended’ and allowed respondents to explain the reasons for the chosen option or to express their opinion about something. There were 23 ‘closed’ questions with ‘fixed-alternative’ or scale options. The data collected from the previous investigation provided the rationale for some ‘fixed-alternatives’ type questions. Four of the questions were ‘scale’ and they related to the farmers’ degree of agreement with various statements. The majority of the ‘closed’ questions included multiple choices, which was possible after the preliminary analysis of the ‘exploratory’ survey and the gained research experience and confidence (see Appendix B).

The questionnaire assessed the internal capacity of the farms, their external relationships and the personal characteristics of the farm managers/owners. The first part of the questionnaire included questions relating to the production structure. The second part involved data about the farm marketing, the third section investigated the issue of farm diversification. The fourth part consisted questions relating to some external business characteristics, the fifth part explored attitudes and the last section involved collecting some personal data about the farmers.

5.3.2.2 Running the survey

The 'farm profile' survey involved 108 farmers. The respondents were the farmers of the private farms/co-operatives who were interviewed at their working place (villages) in the Plovdiv region. The number of the private farms was 97 and the number of the private co-operatives was 11.

5.3.2.3 Links between the data and strategic theory

At this second stage of the research some basic characteristics relating to strategic analysis were examined. Based on the initial results from the first survey, a detailed SWOT analysis was performed, the three most important strengths, weaknesses, opportunities and threats were confirmed. The basic characteristics of the external environment were identified. Value chain analysis was also investigated partly during this fieldwork in terms of how farmers assess their competence and competitive performance and how this could be improved. The respondents were also asked to build their best future scenario. GAP analysis was included in order to identify their current position and where they would like to go. Farmers analysed their business performance and their future expectations. Diversification as a strategic decision was investigated in details to identify the main barriers and opportunities of its development.

5.3.2.4. The lessons learned

During and after the investigation the following weaknesses and conclusions emerged. The chosen research strategy, structured face-to-face interview, worked very well within the specific nature of the research. The main limitations that occurred during this investigation were:

1) Preparation and organisation of the survey:

- The translation of the questionnaire was again very challenging due to lack of Bulgarian word of the terms ‘strengths’, ‘weaknesses’ and due to the limited business terminology in Bulgarian language. Therefore, wording the questions in terms of pricing, strength and weaknesses (e.g. questions 15, 16, 17) was critical;
- Limitations of time and money that affected the sample size;
- The non-probability sampling (purposive) that was employed during this investigation could be criticised in terms of whether the sample is representative. However, this was the only way of collecting valid information relevant to the topic due to the lack of reliable data about the population of horticultural farms in the Plovdiv region.

2) During the implementation:

- There were problems with the farmers’ co-operation but the experience gained from the ‘exploratory’ survey was very helpful in some situations. For example, the word ‘interview’ was not used and replaced with a Bulgarian word for collecting data because some of the respondents did not make any differences between research interview and radio/TV interviews. Sharing some information obtained from various sources with regard to EU and SAPARD programme, which was with limited access to the farmers was also used in order to gain their co-operation;
- Farmers’ difficulties responding to some questions with regard to their ‘dreams’, strengths, pricing and their business expectation (q. 7; q. 15; q. 20);
- The concept of diversification was an unknown subject and the interviewees needed further explanation;
- Only a very few interviews were recorded because farmers generally refused to be recorded, as a result some comments may have been missed;
- Very often the farmers changed the time and the locations of the meetings, which inevitably led to delays.

The problem with farmers’ co-operation was anticipated (based on the experience from the ‘exploratory’ survey) and mainly overcome by the researcher. This was achieved by disseminating among growers some useful data about some activities and projects in the area of agriculture/horticulture such as: SAPARD (Special Accession

Programme for Agriculture and Rural Development), FAMAD (Fruit-cultivation and Mountain Agriculture Development), GTZ (Project for building agricultural wholesale markets), etc.

5.3.2.5 Lessons for the 'strategic options' survey

The following lessons arose that informed the final 'strategic option' survey:

- the accumulated data regarding the production and marketing structures were sufficient for designing the most critical part of the primary data collection, namely the 'strategic options' survey;
- the time period (not an active season for farming) was suitable for contacting the respondents and running the survey in the Plovdiv region;
- there were some problems with the farmers' co-operation, in terms of going second or third time (in some cases) to the same farm managers, that had to be recognised and taken into account in the final survey. Therefore the information about the EU and SAPARD programme in Bulgaria was required to be consistently reviewed in terms of changes and opportunities that these programmes could present to the farmers.

5.3.3 'Strategic options' survey

The 'strategic options' survey was undertaken during the winter of 2001 (January - March). This investigation sought to provide information on the farmers' evaluation of a range of alternative strategies for the future development of the horticultural private farms in the Plovdiv region of Bulgaria. These strategic options were based on the Ansoff product/market matrix and they are:

- doing what you currently do but better;
- developing new horticultural crops;
- developing new markets;
- developing new agricultural activities (animal-breeding, herb-growing, etc.);
- developing new non-agricultural activities (agri-tourism, small processing unit, etc.)

5.3.3.1. The planning and organisation of the ‘strategic option’ survey

Objectives

The research objectives for the last stage of this investigation were:

- to analyse the changing business environment within which the farms are operating;
- to examine perceptions of the feasibility and appropriateness of a variety of strategic options;
- to study the farmers’ perceptions and expectations of the outcomes of the different strategies;
- to identify the most feasible strategy for the next 5 years;
- to identify the farmers’ basic business knowledge.

Research method

The research method employed was again face-to-face interview using a questionnaire. The interviews were structured due to the specificity and the strict logic of the questions that needed to be followed.

Sample

The sampling procedure employed during the third phase of the investigation was based on the sample from the ‘farm profile’ survey. The overall concept was going back to the same farmers to collect very specific data – the identification and evaluation of a range of strategic options based on the Ansoff matrix. Some of the producers refused any further co-operation, while other farms no longer existed, which were the main reasons for the reduced sample size from 108 farmers to 76. Analyses of the non-respondents and whether they could affect the validity of the research findings is presented later in this chapter.

Questionnaire design

The questionnaire used during this survey was designed to collect some very specific and ‘unique’ information about the farm’s future business performance. The design process was critical and relatively long. The questionnaire was changed more than 15 times keeping in mind the specific aspects in Bulgaria and the previous experience gained. In the beginning, this questionnaire was long and repetitive in terms of

evaluating the set of alternative strategies *i.e.* the same approach and questions were used for each strategy. Therefore, finding a way of reducing the length of the questionnaire was necessary and its format was changed several times. On the other hand, the way of evaluating these strategic options evolved in terms of factors that encouraged/discouraged them to develop one or more strategies in the next 5 years.

The total number of the questions in the 'strategic options' questionnaire was 34. Only 10 questions in this survey were 'open-ended' and were designed to gain some comprehensive descriptions such as farmers' understanding of terms such as profitability, business viability and quality of life. Five of the questions combined 'closed-ended' questions with 'open-ended' sub-questions aimed an explanation of the reasons for the chosen alternatives. There were 19 'closed' questions, mainly 'fixed-alternative' options (see Appendix C).

This questionnaire included six parts. The questionnaire began with a few paraphrased questions from the 'farm profile' survey in order to make the farmer more comfortable and relaxed. From Part one to Part five, the questions related to an assessment of five alternative strategies and the final Part involved some complementary business information

5.3.3.2 Running the survey

The 'strategic options' survey included 76 interviews. The respondents were again the farm managers of private farms/co-operatives (in most cases they were also the owners) and they were interviewed in their work place (villages) in the Plovdiv region. Some of the interviews were very long because the farmers could not at first understand the questions and they needed explanation and clarification.

5.3.3.3 Links between the data and strategic theory

The last stage of the research aimed at identifying and evaluating alternative strategic options based on the Ansoff product/market matrix in terms of their feasibility, the factors that affected the farmers' strategic evaluation and the range of expected outcomes if the alternative strategy was perceived feasible. Due to the close relationship between the farm business and the changing external environment, PEST analysis was adopted. Farmers in the Plovdiv region identified the most important

external (political/legal, and economic) and internal factors that affected their farm business and that could be a positive or negative agent of change in their business decisions.

5.3.3.4 The lessons learned

The main weaknesses and conclusions that arose from the last survey are discussed below:

1) Preparation and organisation of the survey:

- Translation of this questionnaire was the most difficult compared to the previous two. There is no term in Bulgarian equal to 'business viability' (q. 29), therefore, it was difficult to explain;
- Wording the questions was a critical element because they needed to suit the social and educational status of the farmers, however the data collections was very specific and unique;
- Again, understanding the logic and the order of the questions was a big challenge for the farmers (keeping in mind their limited business knowledge);
- Limitations of time and money.

2) During the implementation:

- The co-operation of the farmers – incentives were not strong during this survey, therefore it was extremely difficult for the researcher to go for a second or third time (in some cases) to the same farmers;
- Some farmers misunderstood one question relating to the desired profit rates (q. 31) due to the nature of the farm business in Bulgaria and lack of accountancy (most of the farms did not have any accounts records);
- The interviews were not recorded because farmers were not comfortable with any kind of recording equipment;
- Careful control was a compulsory task during the interview because there was a danger of repetition of the answers.

5.4 DATA ANALYSIS

Once the quantitative data was collected, the next step was to analyse it.

5.4.1 Quantitative analysis

The data of the 'farm profile' and 'strategic options' surveys were analysed using the Statistical Package for Social Sciences (SPSS) Version 10. The data that was input into the SPSS was checked twice: before and after the process of entering the data. Some corrections were made in order to avoid mistakes at a later stage.

Prior to the actual beginning of the data analysis it is necessary to outline the different type of data, which directs the researcher to the type of analysis that can or cannot be performed. The higher level of measurement (interval/ratio) allows using more powerful and sophisticated statistical analysis while the lower levels scales (nominal) permits low level of analysis. There are certain statistical techniques that work with some kind of data and that will not work with others. Three types of data are commonly accepted (Goev, 1996; Bryman and Cramer, 1997; Denscombe, 1998; Kumar, 1999; Pallant, 2001) and outlined below:

- *Nominal or categorical* data (or nominal scale) classifies individuals, objects or responses based on common characteristics into categories. Such types of data are used in describing data (e.g. nationality, gender, etc.).
- *Ordinal* data (or scale) allows the categories to be ordered/ranked in certain order (e.g. 'more' or 'less' of the concept in question). In other words, it establishes an ordered relationship between the persons or objects being measured. The most obvious example is the five-point scales such as strongly agree, agree, neutral, disagree, strongly disagree.
- *Interval/ratio* data (or scale) possesses the characteristics of the ordinal scale and allows the categories to be ranked on a scale. However, the difference is that the distance between the categories is a known factor (equality of interval). The ranking of the categories is proportional and measure constant units of measurements (pounds, minutes, etc.).

Some authors such as Diamantopoulos and Schlegelmilch (1997) argue that interval and ratio scale should be separated and the difference is that the ratio scale has all the features of an interval scale plus an absolute zero point.

Once the type of data (level of measurement) is identified, choosing the correct statistical techniques becomes the next essential step. Some statistical analysis can include parametric and non-parametric tests according to specific requirements. Pallant (2001) stated that parametric statistics make assumptions about the population that the sample has been drawn from, whereas non-parametric tests do not make assumptions about the population and they are required when data is measured on nominal and ordinal scales.

In this research, all three measurement scales were used, however the majority of the variables were nominal. This, combined with the small sample size, restricted the use of parametric tests and non-parametric tests were mainly used, which are less powerful. Nevertheless the non-parametric tests are a useful tool when the assumptions for parametric techniques cannot be met (Bryman and Cramer, 1997).

In relation to the number of variables statistical techniques can be summarised into three categories: univariate, bivariate and multivariate (Bryman and Cramer, 1997; Diamantopoulos and Sclegelmilch, 1997).

Univariate techniques examine each variable separately. This is the first step in analysing the data and there is no real problem because there is only one level of measurement. *Frequency* analysis is the simplest form of descriptive analysis and produces counts and percentages of the variables or categories. It is used in order to bring out the key points of the data. In other words, to identify how the data is distributed across the categories. The *mean* is a method for measuring the average of a distribution and clearly does not make sense when dealing with nominal data. The *median* is the mid-point in a distribution of values and can be used with ordinal as well as interval data. The *mode* is defined as the most frequently occurring value and is rarely used in research reports. The *range* describes the spread of data and measures the difference between the highest and lowest values in a set of data. The *standard deviation* measures “...the spread of data relative to the arithmetic mean of the data” (Denscombe, 1998, p.197). In other words, it uses all the values (not only the highest and the lowest) in order to calculate how far the values tend to be spread out around the mean (Bryman and Cramer, 1997; Diamantopoulos and Sclegelmilch, 1997).

While the frequency tests revealed interesting patterns of response, they were not enough to explain how the farmers from the Plovdiv region assessed their farm business characteristics and evaluated the range of alternative strategies for the future development of their farms.

Bivariate techniques involve two variables and examine the relationship patterns between them (Goev, 1996; Denscombe, 1998). There are large numbers of bivariate tests (parametric and non-parametric) such as T-tests, ANOVA, Chi-square, Cramer's V, Mann-Whitney, etc. Due to the fact that most of the variables were categorical running T-test and ANOVA were not appropriate because these techniques compare the mean score on some continuous variables when there are two or more groups.

Cross-tabulations are the simplest and most frequently used way of demonstrating the presence or absence of a relationship in tables known as contingency tables (Robson, 2002). The rows in such kind of table present the categories of one variable and the columns the categories of the other.

The most flexible commonly used statistical test for comparing frequency distributions of two variables is the *chi-square* (χ^2) and works with the three type of data (nominal, ordinal and interval/ratio). Chi-square compares the observed and expected frequencies in each category and examines the null hypothesis (H_0) that states that there is no relationship between two variables assuming that they are independent of each other (Bryman and Cramer, 1997; Denscombe, 1998; Pallant, 2001). In order to find whether a relationship exists between two variables of the sample selected, the null hypothesis would need to be rejected. In cases when the null hypothesis is confirmed, the proposition that there is relationship must be rejected.

Hypothesis testing seeks to identify whether there is/is not a relationship between the an independent variable and a dependent variable: either in terms of means or in terms of proportions. In the context of this research, for example, such analysis based on proportions could test whether the size of the farm (the independent variable) is associated with the distribution of answers given by farmers on the influences on the future of their farm (the dependent variable). The null hypothesis is that there is no association. Whether or not the null hypothesis is accepted or not depends on the level of probability that what is being measured has happened by chance that the researcher

thinks is acceptable. In a Chi-Square analysis for example, the normal significance level chosen is 0.05. This means that the difference(s) in the distribution of the answers would only occur 5 times out 100 by chance and therefore the results are unlikely to have arisen by chance and the null hypothesis would be rejected. The main limitation on the use of chi-square test is sample size. In order for the result to be valid no more than 20 percent of cells should have expected frequencies of less than 5 and no cell have an expected value of 0 (zero). If the chi-square is used in relation to 2x2 tables then the 'Yates correction' for continuity' should be adopted to prevent an overestimate of the chi-square value (Pallant, 2001).

Cramer's V test was used to measure the strength of association between two nominal variables or one nominal and one ordinal variable. This test in large part derives from Chi-square and varies between 0 and +1 with the larger value signifying a higher degree of association. However, Cramer's V test does not specify how the variables are associated. The *Spearman's correlation coefficient rho (ρ)* assesses not only the strength of the relationship but also the direction between two ordinal variables. Nevertheless this test is not used in this study due to the nature of the data that was mainly nominal (Bryman and Cramer, 1997; Diamantopoulos and Schlegelmilch, 1997; Pallant, 2001).

The *Mann-Whitney U test* was used to test the difference between one nominal and one ordinal variable. This is the non-parametric alternative to the T-test of independent samples and instead of comparing the mean of the two groups the Mann-Whitney U test compares the number of times a score from one of the sample is ranked higher than a score from the other sample (Bryman and Cramer, 1997). The Z value gives the value for z-approximation test that includes a correction for ties in the data. Again, the significant value for rejecting the null hypothesis is .05 (Coakes and Steed, 1999; Kinnear and Gray, 2000; Pallant, 2001).

The *Kruskal-Wallis (KW) test* was also used for hypothesis testing between one ordinal and one nominal variable when the independent variable has more than two groups, non-parametric alternative to ANOVA (Siegel and Castellan, 1988). In other words, it is very similar to the Mann-Whitney test, however it can compare scores in more than two groups. If the significance level is less than .05 there is a significant difference between the mean ranking on the dependent variable for the three groups (Bryman and

Cramer, 1997).

Multivariate techniques explore differences between three or more variables simultaneously. These tests are perceived as more complex and the most popular are multiple regression, factor analysis and cluster analysis (Diamantopoulos and Schlegelmilch, 1997; Coakes and Steed, 1999; Pallant, 2001).

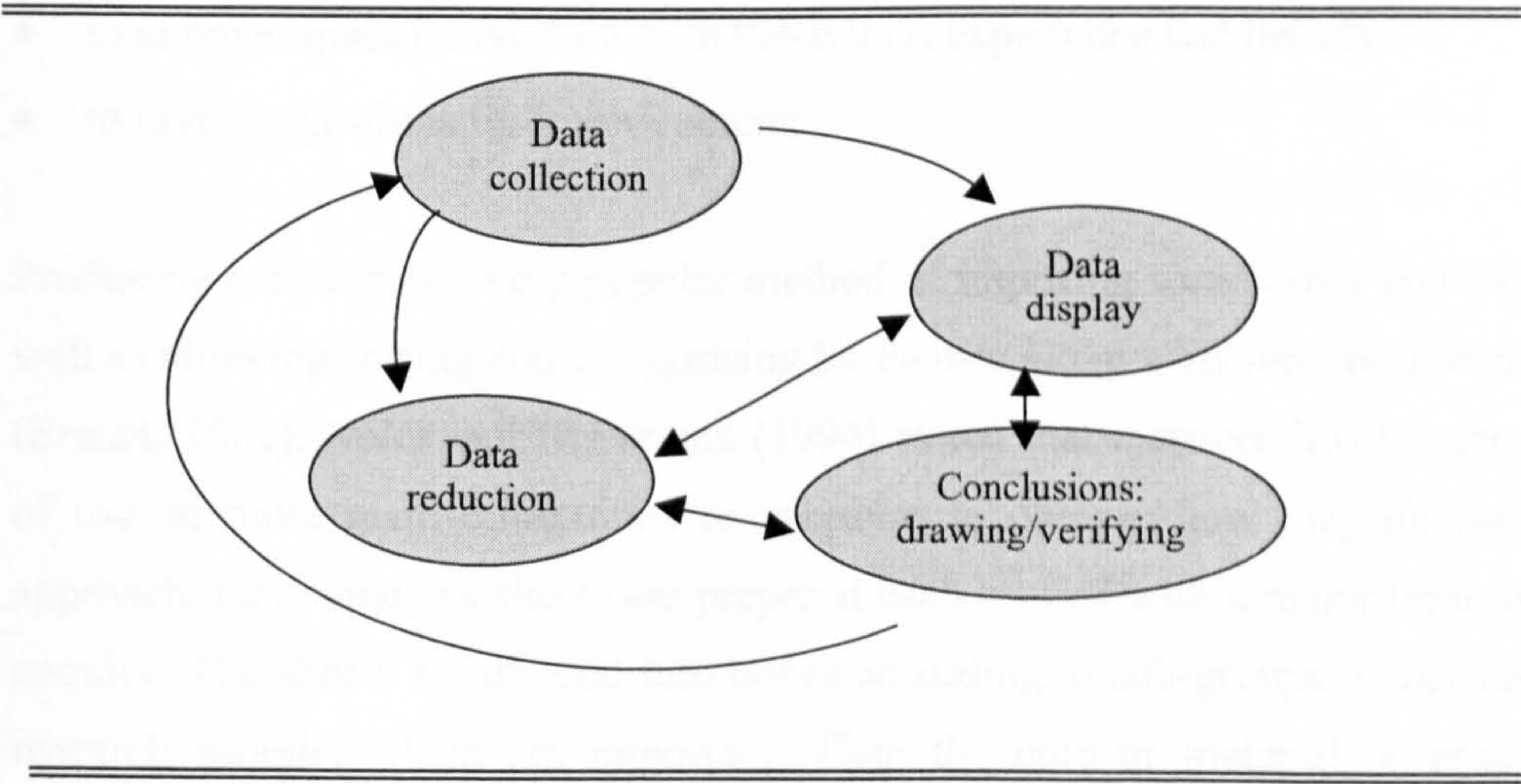
Multivariate techniques were not used because the majority of collected data was grouped into categories (nominal data) and the sample size was too small.

5.4.2 Analysis of qualitative type questions

Creswell (1998) stated that there are 28 approaches to qualitative analysis and the researchers choose the most suitable methodology based on their research interest and aims. Hakim (2000) and Kane and O'Reilly (2001) emphasise that qualitative approach could be used for interpreting the meaning of data collected through quantitative techniques.

Miles and Huberman (1994) stated that the analysis of qualitative data consists of three flows of activities: data reduction, data display and conclusion drawing/verification. The 'interactive' model proposed by them was adopted and used in this research for analysing the open ended questions as demonstrated in Figure 5.5.

Figure 5.5: Components of data analysis: Interactive model
(Source: Miles and Huberman, 1994)



Data reduction is the process of selecting, simplifying or transforming the written up field notes and appears continuously throughout the research. At a very early stage data is reduced through editing and summarising, at a later stage, through coding and at the last stage through conceptualising and explaining. In this study all the answers from the open-ended questions were presented in a form of lists. Due to the big variety of answers it was essential to group the responses into categories that were coded and input into SPSS.

Data display is the tool for analysis and assembling the information into an accessible, compact form that demonstrates what is happening and either drawing conclusions or moving to next step of analysis. This form is most commonly discussed as matrices, graphs, charts, tables, etc.

Conclusions drawing and verifying are the main reasons for running the first two stages of data reduction and data display. A range of tactics can be used for confirming meaning, avoiding bias and assuring the quality of conclusions such as comparisons, seeing plausibility, noting patterns, themes or relationships between the variables, subsuming particular into the general (Miles and Huberman, 1994).

Open-ended questions were used in this study in order:

- to reveal more fully the reasons of the decisions that were taken in the past or would be taken in the future;
- to uncover quantitative factors in behaviour, experience and beliefs;
- to give suggestions for improvements.

Producing a matrix is a very popular method of imposing some order and structure as well as allowing sorting and categorising by themes along with sub-group comparisons (Ereaut, 2002). Miles and Huberman (1994) stated that matrices involve the crossing of two or more main dimensions or variables to observe how they interact. In this approach, large analysis sheets are prepared each headed with a major topic or area of enquiry. The sheets are divided into boxes according to sub-groups represented in the research sample, which are important. Then the note or material or proportion is inserted in the relevant box. An important feature of the matrices is the production of a

visual pattern and if the researcher wishes to increase the level of visual comparison between the sub-groups colours can be used.

In this research, the matrix approach was partly adopted in order to produce a visual comparison of whether the farmers with different types of farms (independent variables) were encouraged/discouraged by different internal and external factors to introduce one or more of the proposed alternative strategic options. The matrix display used quantitative data and is developed using as headings the three groups of farms based on size, land ownership and type of cropping patterns (discussed below) and the factors that may influence their business decisions.

5.4.3 Limitations and issues of validity and reliability

For quantitative research, the issues of validity and reliability are very important in terms of ensuring that the measures developed are appropriate for this research.

Validity means the extent to which the collected data adequately reflects the phenomenon under consideration (Robson, 2002). Kumar (1999), Jennings (2001) and Pallant (2001) argued that there are three main ways for assessing validity and they are:

- *Face* (contracts) and *content* validity are known under the common name of subjective validity. Face validity refers to the establishment of a logical link between the questions and the objectives, which seems reasonable and easy to apply. In other words “...*the concept being measured is being done so apparently, that is, on the face of it*” (Jennings 2001, p.149). Nevertheless, face validity is not widely accepted because it is based on personal judgement rather than objective evidence. Whereas, *content validity* refers to the use of measures that incorporate all of the meaning associated with a certain concept.
- *Criterion validity* is establishing measures that would predict future outcomes with regard to specific criteria.
- *Construct validity* is more sophisticated approach based on statistical procedure and is associated with measuring several indicators that are theoretically sound.

Kane and O’Raily (2001) argue that there are two types of validity, *internal* and *external*. Problems of internal validity could be the choice of the independent variables

(discussed above) or vague questions, whereas the external validity reflects whether the research results can be true for the whole populations. In other words, whether the results can be generalised, which refers to the issue of the representativeness of the sample (Robson, 2002).

Ensuring validity in this study was a difficult task because the researcher dealt with people's attitudes and behaviour and the quality of the data depended on their individual responses. However, this threat was partly overcome by the chosen research method a face-to-face interview for the three surveys, which avoided misunderstanding of the question and ensured that the necessary data was collected. Subject validity was ensured through the review of the literature, which was undertaken in order to identify different aspects of the concept that were used during the three surveys. The theoretical construct based on the literature review that is satisfied from the adopted research instruments for this research was proved from the research findings. For example, the results from quantitative type analysis (e.g. cross-tabulations, chi-square tests) can ascertain construct validity, since by the use of these techniques many aspects of the theory (strategic planning, strategic management, strategy analysis) became apparent, such as the significance of the external factors upon the farm business and the farmers' decisions.

Reliability is whether the process of the study is consistent and reasonably stable over time. In other words, it concerns the replication of the study under similar circumstances (Miles and Huberman, 1994; Denscombe, 1998; Kumar, 1999; Jennings, 2001; Rudestam and Newton, 2001). Robson (2002) argued that reliability using a survey approach is easier to obtain due to the fact that respondents are asked questions that are carefully worded after piloting.

Some authors argue it is easy to obtain perfect reliability without validity, however perfect validity would ensure perfect reliability (Jennings, 2001; Robson, 2002). Veal (1997) stated that in the natural sciences reliability is easy to control while in social science it is more difficult because social sciences deal with human beings in ever changing social situations.

In this research there were some critical points with regard to the issues of reliability and validity of the research findings that require further exploration and clarification.

These points were:

- The process of the selection of independent variables, which is discussed later in the next section. Due to the small sample size the number of cases in some groups of the independent variables was very low and did not allow the undertaking of some statistical tests (*e.g.* the group of farms with perennial crops only; the group of co-operatives).
- Existence of non-respondents due to the fast changing economic environment in Bulgaria. During the ‘strategic option’ survey the number of respondents decreased from 108 (‘farm profile’ survey) to 76 and the question arose as to whether the non-respondents affected the process of evaluation of the five proposed alternative strategies, as discussed later.

5.4.4 Independent variables

A number of independent variables were selected in order to demonstrate whether different farm characteristics such as size, land ownership and cropping patterns will influence the process of evaluation of alternative strategic options.

Three independent variables were identified in this research as they may influence the process of evaluation of a range of alternative strategic options. They were derived from the literature about Bulgarian agriculture/horticulture. Authorities such as MAF, EU, OECD and FAO, as well as some Bulgarian researchers, have analysed and discussed different aspects of the agricultural/horticultural industry such as size, organisational structure, cropping patterns, land reform and trade regime. In this research, the independent variables that were identified that may have an impact upon the farmers’ strategy evaluation process were:

- 1) Farm size;
- 2) Land ownership;
- 3) Horticultural cropping type.

Farm size

The size of the farm is a very important factor that might influence the business performance of the farms as well as their economic development and future opportunities as was confirmed by various researchers (FAO, 1999, Kanchev and

Doichinova, 1999; Mishev *et al.*, 1999, OECD, 2000). Agriculture has undergone a significant structural transformation since 1989. The large Agricultural Industrial Complexes (AICs) were liquidated and transformed into private individual farms and private co-operatives.

Table 5.1 demonstrates the size distribution of the private farms according to a survey of the Bulgarian Ministry of Agriculture and Forestry that was supported by the EU/ACE programme. Their results revealed that the average size of private farms in Bulgaria is 1.5 ha. However, one of the weaknesses of these findings was that there is no evidence that the MAF sample is representative.

Table 5.1: Size distribution of the private individual farms (1997)
(Source: MAF, 1998; FAO, 1999)

Land area (ha)	Number of farms	Share of group in total, (%)	Farmed land (000 ha)	Average size (ha)	Share of the farmed land in total, (%)
< 0,2	915217	51.5	83.1	0.09	3.1
0,2-0,5	363564	20.4	118.4	0.33	4.4
0,5-1	256442	14.4	180.5	0.70	6.7
1-2	156473	8.8	214.6	1.37	8.0
2-5	68474	3.9	205.1	3.00	7.7
5-10	13446	0.8	90.3	6.72	3.4
>10	3506	0.2	1783.2	508.60	66.7
Total	177122	100.0	2675.3	1.51	100

Due to the lack of available data about the size distribution of the agricultural/horticultural farms in the Plovdiv region in particular, dividing the sample in term of size in this research was a critical issue. In the first stage of the analysis of the primary data the median (4.35 ha) was used as a cut off point and divided the sample into two main groups, which were:

- farms of less than 4.35 ha
- farms of more than 4.35 ha.

The advantage of using the median was that it divided the sample into two equal groups, which allowed usage of some statistical techniques due to the even group sample size. However, the main criticism relates to the issue of validity of the research conclusions because the small farms and some of the medium-sized farms were classified in one group and might evaluate the strategies in different way as mentioned

above. Acknowledging the limitation of the median as a cut off point led to identifying another way for dividing the sample, which is more valid. A comprehensive review of the existing literature characterised that different organisations defined the groups of farms in terms of farm size in different way with regard to their research aims.

The FAO (1999), Kanchev and Doichinova (1999) and Mishev *et al.* (1999) used the size distribution as revealed by the existing MAF data and they divided the private farms into the following groups, which were:

- farms of less than 1 ha;
- farms between 1.1 – 5 ha;
- farms between 5.1 –10 ha;
- farms of more than 10 ha.

Their results revealed that the farms of less than 1 ha were self-sufficient type farms with a very low level of commercialisation. Farms between 1.1-5 ha were small scale, farms between 5.1-10 ha were middle sized and farms of more than 10 ha large and these types of farms had a different business visions (FAO, 1999).

It has to be acknowledged that the EC, in their report about the situation of agriculture in Bulgaria in 1998, used the data gathered by the MAF about the size distribution and used 8 ha for dividing the private individual farms (EC, 1998c). OECD (2000) also used the data provided by MAF sample and they divided the private farms by using 10 ha as a cut off point.

As mentioned above, there is no a certain way for grouping the private farms in terms of size. However, MAF, EU, OECD and FAO agree that there are private farms that are of a self-sufficient ‘garden’ type or with a very low level of commercialisation and they were less than 1 or 2 ha respectively. There are also private medium-sized farms that are mainly family farms that market their production. There are also large farms with high level of commercialisation with a size of more than 5 ha or 10 ha.

This research did not focus on the farms that do not sell their produce. However due to the nature of the agriculture in Bulgaria, represented mainly by small scale farms, they were defined in this research as enterprises with less than 2 ha (‘small’ farms).

Defining the cut off point for the medium sized farms was arguable as it was not clear from the available literature whether farms with size between 2-5 ha or 2-10 ha would have demonstrated valid results. On the other hand, the focus of this investigation was horticultural industry, which is a specific sub-sector of agriculture. The specific issue that has to be taken under consideration was that horticultural crops (fruits, grapes and vegetables) are intensive crops (with high production costs), therefore they are suitable for smaller plots of land compared to cereals and other industrial crops. These crops are not suitable for machinery cultivation so they are labour intensive (EC, 1998c; FAO, 1999; OECD, 2000). Nevertheless, this research defined the 'medium size' farms as enterprises ranking in size from 2-10 ha because some of the farms were not strictly horticultural and they also cultivated some agricultural crops such as cereals, tobacco, etc. and the 'big' farms had size of more than 10 ha.

Land ownership patterns

Land ownership was another factor that it was considered might influence the process of evaluation of alternative strategic options and it was explored further. The FAO (1999), MAF (1999) and OECD (2000) investigated two groups of private enterprises: private farms and co-operatives. Studying the process of development of land reform in Bulgaria, it became obvious that a distinction may be recognised between farms that use only own land and those who may also lease land. Therefore this research identified three groups of farms based on the patterns of land ownership and they are:

- farms based on cultivating only their own restituted land, named 'own' farms;
- farms based on cultivating either a mixture of own and leased land or only leased land, named 'mixed/leased' farms;
- private co-operatives.

Cropping type

The EC (1998c), FAO (1999), MAF (2000a) and OECD (2000) discuss aspects of different agricultural/horticultural crops individually. However, in this research four key types of crops were selected and they are:

- fruit;
- vegetables;

- grapes;
- other crops (*i.e.* arable crops, tobacco, etc.).

Due to the small sample size it was appropriate to reduce the numbers of the groups of cropping types. There were several alternative ways for dividing the sample that were considered based on the existing literature or during the process of analysis of the primary data and they were:

- 1) farms with agricultural and horticultural orientation in terms of land size or output;
- 2) farms that are growing fruit and those who did not;
- 3) farms that are growing vegetables and those who did not;
- 4) farms that are growing grapes and those who did not
- 5) farms that are growing perennial crops (fruits and grapes), non-perennial crops (vegetables and 'other' crops) or mixed (perennial and non-perennial) crops.

In order to answer the research question and to produce valid results the sample was divided in terms of whether the farms cultivated perennial, non-perennial or 'mixed' crops (see above). The review of the literature identified that the perennial crops have been one of the most profitable crops during the first 10 years of economic reform in Bulgaria, which was confirmed by the interviewees in this research. Therefore, it was assumed that the possession of fruit and grapes might have a strong influence upon the decision making process of the farmers. Perennial crops included fruit and grapes. Non-perennial crops involved vegetables and other annual agricultural crops whereas the farms with 'mixed' crops had both perennial and non-perennial products.

5.4.5 Analysis of the difference between the respondents and the non-respondents

There were 32 farmers who did not respond to the 'strategic option' survey, which was undertaken one year after the 'farm profile' survey. Their personal characteristics, as well as the business operational characteristics of their farms, were investigated. It was necessary to test if the non-respondents differed in any way from those who responded to the last stage of this research and might influence the process of evaluation of alternative strategies.

There were two key reasons why the sample size from the 'farm profile' survey decreased by one third and they were:

- The farms no longer existed;
- Some farmers did not want to participate any further in this investigation because of poor financial results or other personal reasons.

The results revealed that there were no significant differences between the personal characteristics of the respondents and the non-respondents. More than half of the two groups of farmers were in their working age (less than 60 years), well educated males with substantial agricultural experience (Table 5.2).

Table 5.2: Personal characteristics of the respondents and non-respondents

		Respondents		Non-respondents	
		Frequencies Count	Percent % of cases	Frequencies Count	Percent % of cases
Age ($\chi^2 = .530$)*	Under 30 years	5	7	2	6
	31-40	13	17	3	10
	41-50	19	25	9	28
	51-60	23	30	7	22
	Over 60 years	16	21	11	34
	Total:	76	100	32	100
Gender ($\chi^2 = .1000$)	Male	61	80	26	81
	Female	15	20	6	19
	Total:	76	100	32	100
Educational Level ($\chi^2 = .952$)*	Primary education	8	10	4	13
	Secondary education	43	57	18	56
	Higher education	25	33	10	31
	Total:	76	100	32	100
Having agricul- tural education ($\chi^2 = .981$)	Yes	29	38	13	41
	No	47	62	19	59
	Total:	76	100	32	100
Having previous Experience ($\chi^2 = .899$)	Yes	52	68	23	72
	No	24	32	9	28
	Total:	76	100	32	100

* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5

The main farm operational characteristics of the respondents and the non-respondents were similar except the type of farms. More than half of them were established in 1992 and cultivated their own land with less than 10 employees. Almost two thirds of the two groups of farms had a size of less than 10 ha and the majority of them did not have contacts with international partners (Table 5.3).

Table 5.3: Farms' characteristics

		Respondents		Non-respondents	
		Frequencies Count	Percent % of cases	Frequencies Count	Percent % of cases
Establishment of the farms ($\chi^2 = .778$)	In 1992	46	61	21	66
	After 1992	30	39	11	34
	Total:	76	100	32	100
Farm size ($\chi^2 = .075$)	Less than 2 ha	14	18	11	34
	Between 2-10 ha	46	61	12	38
	More than 10 ha	16	21	9	28
	Total:	76	100	32	100
Type of the farms ($\chi^2 = .025$)*	Own farm	39	51	21	66
	Rented farm	6	8	2	6
	Mixed farm	26	34	3	9
	Co-operatives	5	7	6	19
	Total:	76	100	32	100
People employed ($\chi^2 = .136$)*	Less than 10	55	72	21	68
	11-50	14	18	3	10
	51-100	5	7	3	10
	More than 100	2	3	4	12
	Total:	76	100	32	100
Having foreign contacts ($\chi^2 = .192$)	Yes	6	8	6	19
	No	70	92	26	81
	Total:	76	100	32	100

* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5

As mentioned earlier, the only difference between those who responded and who did not respond, related to the type of farm. The main differences were:

- 34% of the respondents had mixed farms (own and leased land) compared to 9% of the non-respondents with mixed farms;
- the proportion of the co-operative who did not participate in 'strategic option' survey was 18% compared to 7% of the co-operatives who responded for second time;
- 65% of the non-respondents were cultivating only their own restituted land compared to 51% of the respondents with 'own' farms (Table 5.3).

Due to the dynamic business environment of the transition economy in Bulgaria and in the Plovdiv region, for a very short period of time between 2000 and 2001 the number of co-operatives dropped because some of them could not operate efficiently within the

newly established competitive environment. The management of these co-operatives did not change after 1990 being characterised by large number of employees and inefficient economies of scale (FAO, 1999; OECD, 2000). Conversely, the percentage of the mixed farm increased due to the development of the Law for Land Leasing (LLL) and the establishment of the land market.

No significant difference was found between the respondent and the non-respondents and their production structure. About half of the respondents and non-respondents grew fruits, grapes, vegetables and other crops. However, a small but not important (for the overall aim of this research) difference was found in their future product system. The non-respondents were less confident about their future crop patterns than the people who participated in the final ‘strategic option’ survey. In terms of the willingness for diversification, more than half of the two groups of farms wished to diversify their business (Table 5.4).

Table 5.4: Farm business characteristics

		Respondents		Non-respondents	
		Frequencies Count	Percent % of cases	Frequencies Count	Percent % of cases
Having fruits ($\chi^2=.496$)	Yes	38	50	19	59
	No	38	50	13	41
	Total:	76	100	32	100
Having vegetables ($\chi^2=.376$)	Yes	60	79	22	69
	No	16	21	10	31
	Total:	76	100	32	100
Having grapes ($\chi^2=.402$)	Yes	32	48	17	53
	No	44	52	15	47
	Total:	76	100	32	100
Having other crops ($\chi^2=.296$)	Yes	61	80	22	69
	No	15	20	10	31
	Total:	76	100	32	100
Remaining the same pattern of crops for the next 7 years ($\chi^2=.027$)*	Yes	42	55	20	63
	No	26	34	4	12
	Don't know	8	11	8	25
	Total:	76	100	32	100
Willingness for Diversification ($\chi^2=.943$ *)	Yes	45	59	18	56
	No	23	30	10	31
	Don't know	8	11	4	13
	Total:	76	100	32	100

* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5

The respondents and the non-respondents shared the same expectations in terms of product/market interrelation for the next 7 years assessed in terms of various product/market alternatives formulated on the Ansoff matrix (Table 5.5). No significant differences were found between the two groups of farmers and the five proposed strategic alternatives, which were:

- Same crops to same market (Mann-Whitney U = .130);
- Same crops to new market (Mann-Whitney U = .480);
- New crops to same market (Mann-Whitney U = .956);
- New crops to new market (Mann-Whitney U = .848);
- Withdrawal from farming (Mann-Whitney U = .085).

Table 5.5: Farm business expectation of the respondents and non-respondents

	The respondents					The non-respondents				
	Same crops to same market	Same crops to new market	New crops to same market	New crops to new market	Withdrawal from farming	Same crops to same market	Same crops to new market	New crops to same market	New crops to new market	Withdrawal from farming
	%	%	%	%	%	%	%	%	%	%
Strongly agree	3	18	3	37	0	0	19	3	31	0
Agree	21	67	4	28	9	9	75	6	34	0
Neutral	0	0	4	1	4	3	0	0	3	0
Disagree	75	15	88	34	26	84	6	91	31	25
Strongly disagree	1	0	1	0	61	3	0	0	0	75
Total	100	100	100	100	100	100	100	100	100	100

The majority of the farmers, despite whether they responded or not, disagreed with the opportunity of having the same or new crops and current markets, while they agreed with the possibility of having their current crops but exploring new markets. While the prospect of diversification (developing new crops and market) was more likely to be accepted, one third of the respondents and the non-respondents disagreed with this option (Table 5.5).

Therefore, it could be concluded that there were no major differences between the respondents and the non-respondents that could affect or change the process of evaluation of the alternative strategies in anyway. This analysis demonstrated that the decreased sample size of the 'strategic options' survey would not influence the research results outcomes of this study.

5.5 SUMMARY

This chapter has presented the theoretical context of research process and research design as well as the sequential methodological steps that were undertaken during this investigation. This research followed the general outline of the survey approach and each step has been discussed and analysed. In order to obtain accurate and valuable information three surveys were undertaken that used face-to-face interviews assisted by questionnaire as a research method. Since the research subject is new for Bulgaria and not investigated, data availability and collection are the most obvious limitations. Therefore, this research used the theory of strategy as an analytical tool. Moreover the main constraints of the fieldwork were time and budget limits that affected the duration of the study and the sample size. Another challenge was the fact that the research has been organised and finalised in the UK whereas the surveys were carried out in Bulgaria using Bulgarian language.

A range of quantitative approaches was used in order to produce valid results. The independent variables that might influence the process of evaluation of alternative strategic options were farm size, type of farms and type of crops.

The differences between the respondents and non-respondents were tested and it appeared that non-response bias is not a serious issue in this study and will not affect the evaluation process.

The research process demonstrates whether the research objectives are achieved and meaningful conclusions and suggestions for future farm development will be provided and will ensure optimal outcomes that can be taken into consideration by the policy makers. All these issues will be discussed in the next two chapters.

CHAPTER 6: DESCRIPTION OF THE SAMPLE OF FARMS IN THE PLOVDIV REGION

6.1 INTRODUCTION

In order to present a context for understanding the evaluation process of the alternative strategic options from the point of view of the farmers, this chapter provides comprehensive background information on the sample of agricultural/horticultural farms in the Plovdiv region of Bulgaria. The farmers' viewpoint is discussed in the following chapter. The objectives were to examine whether there are any patterns in the data on the characteristics of the farms and their managers, as well as to determine the existence or absence of relationships between the dependent and the independent variables. This chapter includes four main sections:

6.1 Introduction.

6.2 Provides a discussion of the independent variables: farm size, land ownership patterns and types of crops. The review of the literature suggested that farm size, land ownership and types of crops are potentially the key factors that may strongly influence the farmers' evaluation of strategic options for the revitalisation of the horticultural industry in the Plovdiv region of Bulgaria.

6.3 Summarises the key characteristic of the respondents of the sample and the key business characteristics of their farms that may affect their future development. The external background of these farms may also have an impact upon their farm business performance. Therefore, these issues needed to be examined in relation to the independent variables in order to be able to identify whether there are any common factors or differences between the different types of farm and how these differences would affect the decision making of the respondents.

6.4 Provides a summary of the chapter.

Based on *size*, the horticultural farms of the sample were divided into the following groups:

- 'small' farms – less than 2 ha (n = 25);
- 'medium size' farms – between 2-10 ha (n = 58);
- 'big' farms – more than 10 ha (n = 25).

Different *patterns of land ownership* separated the sample of horticultural farms in the Plovdiv region into:

- ‘own’ farms – cultivating only their owned restituted land (n = 60);
- ‘mixed/leased’ farms – cultivating either a mixture of their own and leased land or having only leased land (n = 37);
- co-operatives (n = 11).

The horticultural farms also had different *cropping patterns* and the sub-division of the crops was based on whether they have permanent (perennial) or non-permanent (non-perennial) crops. The three sub-groups were:

- farms with only perennial crops (fruits and grapes) (n = 7);
- farms with only non-perennial crops (vegetables and other agricultural crops such as arable, herbs, etc.) (n = 31);
- farms with ‘mixed’ crops – cultivating a mixture of perennial and non-perennial crops (n = 70).

The primary data was analysed using SPSS (Version 10). Frequency analysis was used for identifying the overall patterns and tendencies of responses. The arithmetic mean, median and mode were also used when applicable. Cross-tabulations were undertaken in order to demonstrate the relationships between two variables (one independent and one dependent). Chi-square (χ^2) tests were performed in order to test the null hypothesis (H_0) assuming that the variables are independent of each other (Bryman and Cramer, 1997). Cramer’s V tests were also used for identifying the strength of the relationship between two variables. Multiple response cross-tabulations were also used for analysing open-ended questions with more than 1 possible answer.

The validity of some of the chi-square test results was restricted because 20% of the cells had an expected count of less than five and one or more cells had an expected values of less than 1. The main reason is the small sample size and the fact that some of the groups of farms within the sample (e.g. co-operatives and farms with only perennials) were very small. A variety of approaches (e.g. reducing the number of possible answers, filtering out of the independent variable categories) were considered

and it was decided that these approaches would not significantly add to the overall understanding of the situation (see Chapter 8, section 8.2.3). Therefore, most of the results of the test of significance were used as a guide to the subjective interpretation of the data. Only the valid Chi square test results are presented in this chapter. However, all the results of the Chi-square and Cramer's V tests are presented in Appendix D.

6.2 INDEPENDENT VARIABLES

6.2.1 Size of the farms

The review of the literature suggested that size of the farms might influence the farm business performance hence it was examined. The size of the horticultural farms (including the co-operatives) under investigation varied between 0.5 ha and 3,000 ha and their average size was 132 ha (Mean = 131.79). The total area under cultivation by these farms was 14,233 ha of which about 86% was cultivated by private co-operatives. However, the area of the horticultural crops (fruits, grapes and vegetables) within the total area of co-operatives was only 1599 ha, which was only 13% of their total area.

Private individual farms

With the co-operatives excluded from the sample, the total area under cultivation by 97 individual private farms was 1,892 ha with an average area of 19.5 ha (Mean = 19.52). No data was available about the size of the private enterprises in the Plovdiv region. However, for comparison the average size of the private individual farms in Bulgaria was stated by MAF in 1997 to be 1.51 ha.

As mentioned above, the individual production units were divided into three main sub-groups:

- 'small' farms – size of less than 2 ha;
- 'medium size' farms – size between 2 – 10 ha;
- 'big' farms – size of more than 10 ha (see Chapter 5, section 5.4.4).

Table 6.1 demonstrates the size structure of the sample of private individual farms (without co-operatives) in the Plovdiv region where 60% of them had an area under cultivation between 2 – 10 ha. The proportion of the 'small' farms was 26%, while 'big' farms were only 14% of the sample of private production units.

Table 6.1: Farm size of the horticultural farms within the sample

<i>Farm size</i>	Count	%
Less than 2 ha	25	25.8
2 -10 ha	58	59.8
More then 10ha	14	14.4
Total:	97	100

For comparison, the only previous research made by MAF in 1997 investigating the size structure used the administrative structure that existed before 1999 when there were nine provinces in Bulgaria. Their results revealed that in the Plovdiv province more than half of the agricultural individual farms (51%) were between 2 -10 ha in size. There were some bigger farms (42%) with size from 10-30 ha (FAO, 1999). However, this research focuses on horticulture and purely agricultural farms (cultivating arable crops that are suitable for large plots of land) were excluded which might explain the low proportion of the farms of more than 10 ha in this sample.

A difference can be seen between the farms with different size and their pattern of land ownership. The results show that 92% of the ‘small’ and 62% of the ‘medium size’ farms cultivated only their own land, whereas 52% of the production units with an area of more than 10 ha had either a combination of their own or leased land or had only leased land and 44% of them were co-operatives (Table 6.2). The process of land restitution fragmented the agricultural land due to the fact that many owners inherited a plot of land (FAO, 1999; MAF, 1999; MAF, 2000a; OECD, 2000). Consequently, farm consolidation was only possible by leasing or buying neighbouring land. This study confirmed that the plots of land that were inherited by one owner were small as only one ‘big’ farm cultivated its own restituted land. Therefore, land consolidation may become a vital action for revitalisation of the horticultural industry.

Table 6.2: Size of different types of farm within the sample

	SIZE OF FARMS							
	Less than 2 ha		2 – 10 ha		More than 10 ha		Total	
	Count	%	Count	%	Count	%	Count	%
<i>Land ownership</i>								
Own farms	23	92	36	62	1	4	60	56
Mixed/leased farms	2	8	22	38	13	52	37	34
Co-operatives	0	0	0	0	11	44	11	10
Total	25	100	58	100	25	100	108	100
<i>Cropping type</i>								
Perennials	2	8	4	7	1	4	7	7
Non-perennials	9	36	17	29	5	20	31	29
Mixed crops	14	56	37	64	19	76	70	65
Total	25	100	58	100	25	100	108	100

Co-operatives

Eleven private co-operatives were involved in this investigation. The size of the private co-operatives observed in this research ranged from 400 ha to 3,000 ha and their average size was 1,122 ha (Mean = 1121.72). Consequently, 11 of them cultivated 12,339 ha. No secondary data was available for size structure of the private co-operatives in the Plovdiv region, however their average size in Bulgaria was stated by Kanchev and Doichinova (1999) to be 762.3 ha in 1998. Compared to the data before 1989 that recorded average area of the AICs of 12,600 ha (OECD, 2000), the new production co-operatives were a lot smaller in terms of size because some of the new owners of the land chose to keep and cultivate their land instead of joining the newly registered co-operatives (FAO, 1999).

The OECD (2000) suggested that more than 40% of the new land owners allowed their land to be farmed by co-operatives, they did not contribute their own labour and had only a slight idea about the rate of return on their assets as they were employed outside agriculture, lived in the cities and did not participate in the managerial decisions.

Types of crops

The farms included in the sample had similar types of crops despite their size, for example, more than half of the farms with different size had a mixture of perennials and non-perennials in their production structure (Table 6.2).

6.2.2 Land ownership patterns

More than half of the respondents cultivated their own restituted land (55%), 35% of them had a mixture of own and rented plots or leased land only and 10% of them were

co-operative (Table 6.3). The farms that used only leased land or a mixture of their own and leased land were combined in one group called 'mixed/leased' farms due to both the small sample size and the fact that only 7% of the total sample of farms only used leased land.

The farms under different ownership patterns were of different sizes. The results revealed that 60% of the 'own' and 'mixed/leased' farms were between 2-10 ha. About one third (38%) of those production units who cultivated only own restituted land were of a size of less than 2 ha whereas 35% of those who leased some land or had only leased land had a size of more than 10 ha (Table 6.3). Land legislation was poor and the Land market was not well developed in Bulgaria during the first 7-8 years of the economic reform in the country (FAO, 1999; OECD, 2000) and this may explain the low percentage of farms with leased land. A quotation of a respondent confirmed that leasing land was not a very popular practice at that time because the risk was very high due to the uncertain business environment.

"I do not want to rent land at the moment because the leased land legislation is not well developed and I may end up investing money in planting some crops and after three months find out that the owners want their land back with all the improvements made by me"

The farms in the sample had similar types of crops despite their land ownership patterns. More than half of the farms with different ownership patterns had mixed crops: perennials and non-perennials (Table 6.3).

Table 6.3: Land ownership patterns of different types of farm

	LAND OWNERSHIP PATTERNS							
	Own land		Mixed/leased land		Co-operatives		Total	
	Count	%	Count	%	Count	%	Count	%
<i>Size of the farms</i>								
Small	23	38	2	5	0	0	25	23
Medium size	36	60	22	60	0	0	58	54
Big (with co-operatives)	1	2	13	35	11	100	25	23
Total	60	100	37	100	11	100	108	100
<i>Cropping type</i>								
Perennials	5	8	2	5	0	0	7	7
Non-perennials	21	35	8	22	2	18	31	29
Mixed crops	34	57	27	73	9	82	70	64
Total	60	100	37	100	11	100	108	100

6.2.3 Types of crops

Dividing the farms in the sample based on whether or not they have perennial, non-perennial or mixed crops was an approach used in this research which derived from a review of the literature. It was assumed that separating the sample into these groups might present informative results in terms of how the respondents evaluated the alternative strategies/scenarios. Different agricultural/horticultural products that were included in these group of perennials (*e.g.* fruits and grapes) and non-perennials (*e.g.* vegetables and other crops) were also discussed separately later in order to understand better the production structure of these horticultural enterprises within the sample.

The results show that two thirds of the farms (65%) planted mixed crops, 29% of them only cultivated non-perennial crops and only 6% of them had perennial crops (Table 6.4).

Table 6.4: The crop patterns of different types of farm

	TYPES OF CROPS							
	Perennials		Non-perennials		Mixed crops		Total	
	Count	%	Count	%	Count	%	Count	%
<i>Size of the farms</i>								
Small	2	29	9	29	14	20	25	23
Medium size	4	57	17	55	37	53	58	54
Big (with co-operatives)	1	14	5	16	19	27	25	23
Total	7	100	31	100	70	100	108	100
<i>Land ownership</i>								
Own farms	5	71	21	68	34	49	60	56
Mixed/leased farms	2	29	8	26	27	39	37	34
Co-operatives	0	0	2	6	9	12	11	10
Total	7	100	31	100	70	100	108	100

The farms of the sample had a similar types of crops despite their size. Approximately 70% of the farms with perennials, non-perennials and ‘mixed’ crops were between 2-10 ha of size (Table 6.4).

Similarities can be seen between the farms with different land ownership patterns and different types of crops. Approximately 70% of the farms with perennials, non-perennials and almost half of those with ‘mixed’ crops cultivated their own restituted land (Table 6.4)

The farmers explain the rationale of having a mixture of perennial and non-perennial and they gave the following reasons:

- Spreading financial and labour resources equally during the year (65%). One of them explained:

“I start cultivating my land in March after that I harvest some vegetables and I am finishing the year with the grape harvest”

- Reducing the business risk of planting a range of agricultural and horticultural crops (44%);
- Using the farm’s own resources (machinery, labour) (7%) (Table 6.6).

The motives for having fruits, grapes, vegetables and other crops are explained further.

Perennials - Fruits

The farmers of the sample were asked whether they were producing fruit. More than half of the interviewees (53%) were cultivating fruit with an average area under fruit cultivation of 11 ha (Mean = 11.22) (Table 6.5). The most common fruits were apples (35%), plums (16%) and cherries (13%). The Plovdiv region is the biggest apple producer and second biggest producer of plums in Bulgaria (SENER, 2000).

Table 6.5: Fruit cultivation of different types of farm

Fruits	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	10	40	28	48	19	76	57	53
No	15	60	30	52	6	24	51	47
Total	25	100	58	100	25	100	108	100
Chi-square Sig.	(χ ² = .023)							
Fruits	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	27	45	21	57	9	82	57	53
No	33	55	16	43	2	18	51	47
Total	60	100	37	100	11	100	108	100

Two thirds of the respondents (65%) cultivated fruit because they inherited their orchard/s as part of the land restitution process. Almost half of those with fruit (46%) had fruit because these crops were perceived as a profitable. Only 11% of those

thought that they were interested in producing fruits because these products have been traditionally grown in the Plovdiv region (Table 6.6).

Table 6.6: Reasons for cultivating different crops

Reasons*	Mixed crops		Fruits		Grapes		Vegetables		Other crops	
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Spreading financial and labour resources	64	65	0	0	0	0	0	0	0	0
Reducing the business risk	43	44	0	0	0	0	0	0	0	0
Inherited orchards or vineyards	0	0	37	65	31	63	0	0	0	0
Profitability	0	0	26	46	23	47	25	31	23	28
Traditionally grown	0	0	6	11	5	10	53	65	2	2
Good natural conditions	0	0	2	2	0	0	10	12	0	0
Providing jobs for local people	0	0	0	0	0	0	6	7	0	0
Using own assets, resources	7	7	0	0	0	0	0	0	40	48
Feeding the own animals	0	0	0	0	0	0	0	0	22	27
Crop rotation	0	0	0	0	0	0	0	0	7	8
Total of percentages of cases	98	100	57	100	49	100	81	100	83	100

Note: * This table includes only the top three or four answers and exclude all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Less than half of the respondents (47%) did not have fruits in their production structure (Table 6.5). This might be explained by the fact identified in an OECD report that the establishment of a new plot of perennial crops was almost an impossible target for the farmers due to their limited capacity for obtaining financial support (OECD, 2000).

If the fruit orientation of the farms is cross-tabulated with farm size the results reveal that the farms of different sizes differ in their fruit orientation ($\chi^2 = .023$), however the relationship was weak (Cramer's $V = .264$). The majority of the farms who cultivated more than 10 ha (76%) had fruit, whereas 60% of the 'small' farms did not cultivate any fruits (Table 6.5). As a result, the respondents with 'big' farms who grew fruits have been able to expand the size of their orchards and thereby their farm expansion, which could increase the business viability of their farms. One of these producers stated:

"Without growing apples I would not be able to buy more land and to establish my new orchard"

The farms with different patterns of land ownership showed similarities in regards to

their fruit orientation. However, the majority of the private co-operatives (82%) grew some fruits (Table 6.5) but the size of their orchards was very small compared to their total size. For example, one of the co-operatives investigated with a size of 6,500 ha had only 100 ha orchards.

Perennials - Grapes

Another perennial crop is grapes (table and wine) and they were cultivated by 45% of the respondents (Table 6.7). The average area of the vineyards was almost 4 ha (Mean = 3.91). Viticulture is one of the strongest sub-sectors of agriculture in Bulgaria. Grape production was largely stable during the years of transition towards a ‘free’ market economy in the Plovdiv region, which is the second biggest in terms of area of vineyards after the Bourgas region (near the Black Sea) (SENER, 2000). One of the traditional varieties of wine grapes in Bulgaria ‘Mavrud’ is specific only for the Plovdiv region, therefore it was very popular crop for cultivation among the farmers. One of the respondents stated:

“I have ‘Mavrud’ and I am planning to establish a new plot of vineyards with this variety because the local private wineries are fighting for this grape”

Table 6.7: Grape cultivation of different types of farm

	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	13	52	25	43	11	44	49	45
No	12	48	33	57	14	56	59	55
Total	25	100	58	100	25	100	108	100
Chi-square Sig.	(χ ² = .747)							
	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	28	47	16	43	5	46	49	45
No	32	53	21	57	6	54	59	55
Total	60	100	37	100	11	100	108	100
Chi-square Sig.	(χ ² = .947)							

The rationale for cultivating grapes was very similar to those for the fruits, as both are perennial crops. Two thirds of the growers interviewed (63%) inherited their vineyards after the land restitution. One of the respondents expressed his happiness and stated:

“I was so lucky to have grapes on my land. Due to one of the directives of the Socialist Government in the 1980s, the size of the vineyards was halved, therefore at present there is a huge demand for grapes”

According to 47% of the interviewees the fact that grapes were profitable had prompted their interest to plant grapes because of the demand from the increased number of private wineries. Various reports (EC, 1998c; FAO, 1999; OECD, 2000; SENTER, 2000) stated that the wine industry was the only agri-food sector that was efficient and export oriented during the transition towards a ‘free market’ economy, therefore finding markets for wine grapes was not difficult. Only 10% of those who had vineyards identified that grapes were traditionally grown in the Plovdiv region (Table 6.6).

There was no significant difference between the grape orientation of the farms with different size ($\chi^2 = .747$) and land ownership patterns ($\chi^2 = .947$) (Table 6.7).

Non-perennials - Vegetables

Vegetables were another horticultural crop that was investigated. The majority of the respondents (76%) confirmed that vegetables were very important crops in their production system and the average area under vegetable production was 6 ha (Mean = 6.19) (Table 6.8). The most popular vegetables among these producers of the sample were:

- Tomatoes – (45%);
- Peppers - (33%);
- Potatoes - (29%).

During the last 11 years (1989-2001) of economic reform in Bulgaria, vegetable production did not decrease in terms of area or production because vegetables are annual crops that do not need big or long-term investments and have maintained relatively high prices (MAF, 1999; OECD, 2000).

Table 6.8: Vegetable cultivation of different types of farm

	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	20	80	44	76	18	72	82	76
No	5	20	14	24	7	28	26	24
Total	25	100	58	100	25	100	108	100
Chi-square Sig.	(χ ² = .803)							
	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	43	72	30	81	9	82	82	76
No	17	28	7	19	2	18	26	24
Total	60	100	37	100	11	100	108	100

Vegetables have traditionally been grown in the Plovdiv region and this was identified by 65% of the respondents as the main reason for cultivating them. According to 31% of them vegetables were profitable which helped to explain why they produced these crops over the period of economic transformation. The favourable natural conditions in the Plovdiv region, on the Thracian plain around the river Maritsa, has historically provided a sound basis for the development of the horticultural industry in the region and growing vegetables in particular was identified by 12% of the interviewees (Table 6.6).

Farm size did not present any significant difference with the vegetable orientation ($\chi^2 = .803$). More than 70% of the farms of different sizes cultivated vegetables (Table 6.8).

The land ownership patterns of those who cultivated vegetables were similar as more than 70% of the 'own', 'mixed/leased' farms and co-operatives had vegetables in their production structure (Table 6.8).

Non-perennials - Other crops

A range of the agricultural crops that were part of the production structure of some of the farms in the sample were collectively referred to 'other' crops and included herbs, tobacco and a range of arable crops. These were examined to determine if their cultivation affected the process of decision making of the respondents. The majority of the farm managers that participated in this study (77%) cultivated together with their horticultural crops (fruits, grapes and vegetables) some of these 'other' crops (Table 6.9). The results revealed that the average area of cultivation of 'other' crops was 108

ha (Mean = 108.44) which is much bigger than the average area of the horticultural crops that was 4 ha, 6 ha and 11 ha (grapes, vegetables and fruits respectively). This could be explained by the fact that the co-operatives within the sample had large plots with 'other' agricultural crops, which significantly increased their average size. Mishev *et al.* (1999) stated in their study that agricultural crops such as arable and tobacco are more suitable and efficient on bigger plots of land.

Table 6.9: Other agricultural crops cultivation of different types of farm

	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	15	60	46	79	22	88	83	77
No	10	40	12	21	3	12	25	23
Total	25	100	58	100	25	100	108	100
Chi-square Sig.	(χ ² = .803)							
	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	44	73	28	76	11	100	83	77
No	16	27	9	24	0	0	25	23
Total	60	100	37	100	11	100	108	100

The main reasons for combining horticultural products with 'other' crops (Table 6.6) were stated by the producers to be:

- Using resources available within the farm such as land, machinery and labour (48%). Horticulture is an intensive sector, therefore it is not suitable for large plots of land and the farmers took decisions to use the rest of their farm land for growing some other less intensive agricultural crops as was explained by a respondent:

"I have arable crops because I have to use my land otherwise it will become neglected, the production costs are much lower compared to the horticultural crops and I can ensure work for my full-time employees over the year"

Another interviewee added:

"I have got some machinery that I need to use but it is not suitable for my horticultural crops so I decided to grow also arable crops"

- Profitability (28%) - Herb production became very popular in the last few years due to the available market demand from some Western countries (SENER, 2000)
- Using the produce within the farm e.g. feeding the animal with home produced fodder (27%) - Some farms combined agriculture/horticulture along with animal production, therefore they cultivated some other forage crops. One of the farmers stated:

"I am feeding my animals with my own production because: 1) I am using the land 2) I do not need to buy forage for them and 3) I do not need to look for a market for this production"

- Crop rotation (8%) - As vegetables are intensive crops their rotation was a necessary activity because the soil would become poor and the yields would decrease in the case of growing the same vegetables on the same plot of land every year.

More than half of the farms of different sizes were not only involved with horticultural crops as they also cultivated 'other' crops (more frequently arable crops) (Table 6.9). One of the respondents stated:

"I am cultivating arable crops because I have to use my restituted land and it will be inefficient to grow 50 ha tomatoes or peppers with the inefficient markets in Bulgaria"

Cross-tabulation of the land ownership and the 'other' crop cultivation indicated superficial similarities. However, the results revealed that all the 11 co-operatives studied cultivated 'other' crops together with their horticultural crops (Table 6.9) and the average area under 'other' crops grown by them was 967 ha (Mean = 967.24) which was about 86% of the average area of the co-operatives within the sample. They had mainly arable crops because 64% of them have been paying their rent for leasing the restituted land by giving the landowners products instead of dividends. In their study, Kanchev and Doichinova (1999) explained earlier that due to the economic situation in Bulgaria and the low standard of living in rural areas many of the landowners are happy to receive products instead of dividends.

6.3 CHARACTERISTICS OF THE FARMERS AND FARMS IN THE SAMPLE

Both, farm managers with their individual characteristics and the farms with their resources (land, staff and capital) and business characteristics have major influences upon the process of strategy evaluation. Therefore, it is important to present the personal characteristics of the respondents in order to help provide a better understanding of their perceptions in terms of future development of their enterprises. Many field researchers recognise the importance of age, education and some other demographic factors of the respondents. This study included the following demographic characteristics: age, gender, education and experience.

6.3.1 Farmers' profile

6.3.1.1 Age distribution

The age factor could help to understand the current situation and trends in the age structure of the farm managers *i.e* the people involved in the decision making process in agriculture/horticulture. The results revealed that the majority of the farmers involved in this investigation (79%) were more than 40 years old and young people (under 30 years) were only 6% of the respondents. The proportion of the interviewees who were over 60 years old was 25% (Table 6.10). In comparison the results of the previous investigations of FAO (1999) and EC (2001a) reported that 60% the people who run a farm business in Bulgaria were over 60 years of age. Therefore, it may be argued that the age structure of the respondents can be perceived as positive for the future development of their farms in the Plovdiv region as the results show that more people (75%) were of working age (under 60 years). The horticultural focus of this research might explain this finding, as young people were more likely to go to horticultural crops because these crops (especially grapes and fruits) were more profitable during the period 1989-2001 compared to the other crops. One of those interviewees stated:

"I perceived agriculture/horticulture as an unattractive industry. However, planting grapes and vegetables provided me with incomes that I will not earn elsewhere in the village or even in the town. I am working hard and at the same time I can enjoy my life as a young person"

Table 6.10: Age of the farmers with different types of farm

Age	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
< 30 years	3	12	4	7	0	0	7	6
31-40 years	1	4	10	17	5	20	16	15
41-50 years	8	32	16	28	4	16	28	26
51-60years	7	28	14	24	9	36	30	28
> 60 years	6	24	14	24	7	28	27	25
Total	25	100	58	100	25	100	108	100
Age	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
< 30 years	5	8	2	5	0	0	7	6
31-40 years	8	13	7	19	1	9	16	15
41-50 years	15	25	12	32	1	9	28	26
51-60years	14	23	11	30	5	46	30	28
> 60 years	18	30	5	14	4	36	27	25
Total	60	100	37	100	11	100	108	100
Age	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
< 30 years	0	0	3	10	4	6	7	6
31-40 years	2	29	5	16	9	13	16	15
41-50 years	2	29	11	35	15	21	28	26
51-60years	1	14	7	23	22	31	30	28
> 60 years	2	28	5	16	20	29	27	25
Total	7	100	31	100	70	100	108	100

The farmers had a similar age structure irrespective of farm size, land ownership patterns and types of crops of their production units.

The results also revealed that the majority of the farm managers of the co-operatives investigated (82%) were more than 50 years old, while 36% were over 60 years old. Only one collective farm was managed by a respondent under 40 years (Table 6.10).

6.3.1.2 Gender

Gender was another demographic characteristic that contributed to identify the profile of the farmers (decision-makers) in the sample. The results revealed that 81% were male and less than one fifth (19%) were women (Table 6.11). No comparable data was available about the gender of the farm managers in the Plovdiv region of Bulgaria. The only existing data was with regard to employees in the agricultural sector and stated that 45% of the workforce in agriculture in Bulgaria are women (FAO, 1999).

Table 6.11: Gender of the farmers with different types of farm

Gender	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Male	16	64	47	81	24	96	87	81
Female	9	36	11	19	1	4	21	19
Total	25	100	58	100	25	100	108	100
Gender	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Male	44	73	33	89	10	91	87	81
Female	16	27	4	11	1	9	21	19
Total	60	100	37	100	11	100	108	100
Gender	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Male	4	57	22	71	61	87	87	81
Female	3	43	9	29	9	13	21	19
Total	7	100	31	100	70	100	108	100

The gender of the respondents with farms of different sizes indicated differences. More than one third of the respondents with small' farms (36%) were female while only one woman cultivated more than 10 ha (Table 6.11). In the recent past, the man was the 'key' person in the family who took the decisions regarding the family business and was fully responsible for the living expenses of the family, whereas the role of the women was to look after the children, the house and to help the husband. These traditions are very strong in the rural areas even nowadays and women are not used to taking business responsibilities and managerial functions. However, some of them were trying to adapt to changes in the society and had started cultivating mainly small plots of land (less than 2 ha). One female respondent stated:

"My land was restituted and my husband has his full-time job therefore I decided to take advantage of this opportunity and to try to cultivate my land and to see whether the farm will survive in this unstable economic situation in the country. Now, 7 years later I am still in the business even though I am a woman"

The gender of the interviewees was similar despite the land ownership patterns of their farms. Males were managing more than 70% of the three groups of farms in the sample (Table 6.11).

The proportion of the women interviewed who cultivated perennial crops was high (43%) compared to the other two groups of farms (Table 6.11). This could be explained by the fact that perennial crops were inherited after the land restitution process and have been profitable. One of the women explained:

“Farm business is a man’s job in the rural society, however at the moment I am responsible for the vineyard because my husband died a few years ago and I need to ensure the family income”

6.3.1.3 Educational background

The education level achieved by the respondents may act as a proxy for the degree to which they comprehend local, national and international issues as this can affect how they run their farm business and how they plan the future business development. The results indicated that the farmers of the sample were educated because all of them had at least primary education (7 years study) and only 11% of them had only primary education and had not continued to study further. Primary education was compulsory in Bulgaria during the period of Socialism and secondary education was necessary in order to develop a professional career. More than half of the respondents (57%) had secondary qualification (11-12 years education) and 32% had a university degree (Table 6.12).

An apparent difference can be seen between the educational level of the farmers and the size of their farms. More than 60% of the respondents with ‘small’ and ‘medium size’ farms had a secondary education whereas 68% of those with ‘big farms’ had attended higher education in most cases agricultural (discussed below) which built up their confidence to have a bigger farms (more than 10 ha) (Table 6.12). An interviewee explained that:

“I am not afraid to cultivate 4 ha more because I know the technologies of my crops I know the tips about the crop rotations and I know where to go if I need specialised advice”

SENER (2000) argued that the existence of well-educated farmers is one of the main competitive advantages of the Bulgarian agricultural industry.

The educational level of the farmers that had a production unit with different land ownership patterns was different. 63% of the farmers who cultivated only their own land and 59% of those who had a mixture of their own and leased land had secondary qualifications. The managers of the co-operatives differed from the other two groups of farms as the majority of them (91%) held a University degree (Table 6.12).

Table 6.12: Education of the farmers with different types of farm

Education	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Primary	2	8	8	14	2	8	12	11
Secondary	16	64	39	67	6	24	61	57
Higher	7	28	11	19	17	68	35	32
Total	25	100	58	100	25	100	108	100
Education	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Primary	8	13	4	11	0	0	12	11
Secondary	38	63	22	59	1	9	61	57
Higher	14	24	11	30	10	91	35	32
Total	60	100	37	100	11	100	108	100
Education	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Primary	1	14	4	13	7	10	12	11
Secondary	3	43	22	71	36	51	61	57
Higher	3	43	5	16	27	39	35	32
Total	7	100	31	100	70	100	108	100

No difference was apparent between the educational level of the farmers and the different cropping patterns of their farms (Table 6.12).

In addition to enquiring about their educational level respondents were asked to state whether they had a specialised agricultural education. 39% of them had an agricultural qualification (secondary or higher). The only Agricultural University in Bulgaria is situated in Plovdiv (SENER, 2000). Equally, 61% of them had not received any agricultural qualifications. This could be explained by the fact that some of the respondents had not intended to become farmers but the challenging economic situation in Bulgaria and in the Plovdiv region forced them into agriculture/horticulture. One of the respondents explained:

“I am engineer. The factory I was working for was closed down and I became a farmer because at that time I received my land back. It was difficult in the beginning but I learned very quickly”

Nevertheless, the interviewees demonstrated confidence with regard to their agricultural/horticultural activities. One of them said:

“Agriculture has been a traditionally important sector in the Plovdiv region. I have always lived in the rural area where everybody has a house garden for self-consumption. Therefore, I do not need an agricultural degree to know how to grow different vegetables because I am quite familiar with the technologies”

6.3.1.4 Experience

Having experience in agriculture may also influence the farmers' decision making. The respondents were asked if they had previous agricultural experience and more than two thirds of them (69%) had worked in the agricultural/horticultural sector previously. The FAO (1999) and the OECD (2000) argue that the experience of the farmers was gained either within the state AIC's or as a result of having small household gardens (for self-consumption) during the period of Socialism or during the first years of transition towards a free market economy. The respondents confirmed this and one of them said:

“I used to work for the co-operative during the period of Socialism and I have learned a lots of tips for cultivating different crops so now I am ready to start my own farm business”

Another one explained:

“My family has always had a household garden so I am very familiar with planting vegetables”

Various published reports clarify the rationale as to why people went into agriculture/horticulture and these reasons were:

- increased level of unemployment due to the liquidation of the big inefficient agricultural companies (e.g. AIC);

- private land ownership that resulted from the process of land restitution;
- lack of employment opportunities in the rural areas;
- opportunities to earn money without big investments (EC, 1998c; MAF, 2000a; OECD, 2000).

The SENTER (2000) study identified that the farmers who run a business in Bulgaria have substantial experience and combined with their good education could be perceived as a competitive advantage of Bulgarian agriculture. The research results of this study confirmed this as the years of experience of the interviewees varied between 1 and 50 with an average of 21 years (Mean = 21.04). This could be seen as a positive driver for the revitalisation and the development of the horticultural industry in the Plovdiv region within the dynamic economic environment.

Less than one third (31%) of the respondents had no previous experience in agriculture before establishing their farms, as they were obliged to begin cultivating their own land in order to “*ensure food supply and incomes for their families*”. One of the respondents explained:

“I have not worked in the agricultural sector before but the inherited orchard and vineyard after the restitution changed my life. I was on the list for redundancy from my company therefore I decided that the most feasible opportunity for me was to become a farmer”

The interviewees with farms of different sizes indicated differences in terms of whether they had previous experience in agriculture. The majority of the interviewees with ‘big’ farms (88%) had prior practical skills in agriculture/horticulture (Table 6.13) that had built up their confidence in running large-scale farm business within a difficult business environment which was expressed by an interviewee:

“I know what I am doing therefore, I am not wasting my time with a small size farm”

Table 6.13: Experience of the farmers with different types of farm

Experience	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	18	72	35	60	22	88	75	69
No	7	28	23	40	3	12	33	31
Total	25	100	58	100	25	100	108	100
Experience	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	38	63	27	73	10	91	75	69
No	22	37	10	27	1	9	33	31
Total	60	100	37	100	11	100	108	100
Experience	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	3	43	21	68	51	73	75	69
No	4	57	10	32	19	27	33	31
Total	7	100	31	100	70	100	108	100

Examining the land ownership patterns of the farms did not indicate any differences with regard to the farmers' previous experience. The results show that the vast majority of the managers of the co-operatives investigated (91%) and more than 60% of those with own or 'mixed/leased' land had previous agricultural experience, which was gained in the old organisational structures that existed during the period of Socialism (Table 6.13). The years of practical knowledge of the respondents who managed the co-operatives varied between 13 and 50 years with an average experience of 28 years (Mean = 28.30).

The respondents who cultivated different types of crops had similar patterns of experience in agriculture/horticulture. The findings revealed that more than half of the respondents with different types of crops had previous experience in this sector except those with perennials only which might be explained by the small number of the group of farms with fruits and grapes only (Table 6.13).

6.3.2 Farm business characteristics

This sub-section discusses some characteristics of the farms within the sample as these characteristics may have a significant impact upon farmers' way of strategy evaluation. The internal capacity of those farms and their external relationship in terms of contacts with international organisations and companies are examined. The influence of the

external environment upon the decision making process of the farm managers is discussed further in the next chapter.

6.3.2.1 Establishment of the farms in the sample

When the transition towards a 'free market' economy began in 1989, the large Agricultural Industrial Complexes (AIC) were liquidated. At the end of 1991, the Government approved the Law for Agricultural Land Ownership and Land Use (LALOLU) and the Law on Co-operatives (LC) that were applied in 1992 and built up the legal basis for the establishment of the new private organisational structures: individual private farms and private co-operatives. However, receiving the official document 'title deeds' has been a much longer process.

The LALOLU was amended in 1992 and as a result, the owners of the land took advantage of their rights and founded their own private farms (OECD, 2000). Almost two thirds of the horticultural enterprises within the sample (62%) were established in 1992 when the legal framework was developed (Table 6.14). Land ownership was a new situation for the new owners and they were eager to take advantage of this political transformation and to earn income from their own land during a period of dramatic economic change in the country. This motivation was clearly expressed by the respondent who said:

"I lost my job because the factory I was working for bankrupted. I could not find another job but luckily I had my restituted land, therefore I had to take this opportunity and start cultivating it in order to ensure the living expenses for my family"

Almost one third of the farms included in the study (38%) were established after 1992 when they were able to lease or buy land. One of the respondents explained:

"My own land is only 1 ha so it was necessary to lease land in order to develop my farm business. However, due to the poor legislation in regards to leasing land, I needed to wait for a few years"

The last production unit involved in this study was established in 1999.

There was no significant difference between the year of establishment of the farms

within the sample and their size ($\chi^2 = .125$). The results revealed that more than 60% of the 'small' and 'medium size' farms (76% and 62% respectively) came into existence in 1992 while, 52% of the 'big' farms were established after 1992 because their organisation mainly depended on the processes of leasing or buying land due to the fragmentation of the land restituted (Table 6.14).

Table 6.14: Establishment of the different types of farm

Establishment	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
In 1992	19	76	36	62	12	48	67	62
After 1992	6	24	22	38	13	52	41	38
Total	25	100	58	100	25	100	108	100
Chi-square Sig.	$(\chi^2 = .125)$							
Establishment	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
In 1992	46	77	15	41	6	55	67	62
After 1992	14	23	22	59	5	45	41	38
Total	60	100	37	100	11	100	108	100
Chi-square Sig.	$(\chi^2 = .002)$							
Establishment	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
In 1992	3	43	19	61	45	64	67	62
After 1992	4	57	12	39	25	36	41	38
Total	7	100	31	100	70	100	108	100

The farms with different land ownership patterns demonstrated a significant difference in terms of the year of establishment of their farms ($\chi^2 = .002$) but the strength of this relationship was not strong (Cramer's $V = .347$). Effectively, 77% of the 'own' farms were established in 1992 as a consequence of the economic transformation towards a 'free market' economy and land restitution process in particular, whereas 59% of the 'mixed/leased farms' were created after 1992 (Table 6.14). This result could be explained by poor Law for Land Leasing and lack of active Land market during the first 7-8 years of economic changes in Bulgaria, which was identified earlier by the OECD study (OECD, 2000). Many of the 'mixed/leased' farms under investigation began as production units where individuals were only cultivating their own land. A respondent explained his situation in this way:

“In 1992 I began my agricultural business by cultivating my own restituted land and afterwards I started leasing land as I built up my confidence as a farm manager and started thinking about expansion”

More than half of the sample of private co-operatives in the Plovdiv region (55%) were established when the Law on Co-operatives came into force in 1992 and provided the legal basis for the creation of the new private co-operatives. Their establishment was quick due to some reasons that were identified in some of the previous research undertaken in Bulgaria by Lerman (1999) and OECD (2000). They identified that the majority of the private co-operatives in Bulgaria existed before 1989 and they only changed their registration and name in order to be officially recognised and to operate within the conditions of a ‘free market’ economy. These private co-operatives retained the same old structures and continued functioning as before, keeping all the weaknesses and inefficiencies of the old socialist collectives. The rest of the private co-operatives investigated (45%) were created after 1992 and the last one in this sample was established in 1995 (Table 6.14).

The horticultural enterprises within the sample, irrespective of their types of crops, demonstrated similar patterns for establishing their farms (Table 6.14).

6.3.2.2 Employment patterns of the farms

The employment patterns of the horticultural enterprises of the sample were investigated in order to outline the structure of the workforce of the farms within the sample. The farmers were asked to indicate the number of their full-time staff as well as the number of part-time employees (seasonal workers were included in the part-time personnel). The number of employees in the sample of farms (co-operatives included) varied from 2 to 400. The average workforce size was 24.17 (Mean = 24.17) employees for each farm and the total number of jobs in the 108 agricultural enterprises studied was 2,610 jobs.

The review of the literature also suggested that private co-operatives are overstaffed (OECD, 2000). Therefore, it would be helpful to understand the employment patterns of private individual farms and co-operatives separately in order to identify if the co-operatives within the sample are overstaffed.

Private individual farms

The first step was to investigate how the employment patterns of the farms involved in this research would change if the co-operatives were excluded. The results revealed that the average number of employees of the private individual farms (farm managers included) would halve and would be 11.73 (Mean = 11.73) for each farm and the total jobs on the 97 farms would be 1,138 jobs.

Co-operatives

The number of workers of the co-operatives in the sample varied from 35 to 400 people and their average size of workforce was 134 (Mean = 133.82). The 11 collective farms provided jobs for 1472 workers. This result revealed that there were 8 workers per ha in the new private co-operatives, while in 1980s there were 6 workers per ha in the large AIC. This could be explained by the fact that the co-operatives investigated were member-oriented and their main advantage has been offering jobs for their members and very often they are overstaffed (OECD, 2000). A tendency for the number of co-operatives to decline was observed in the last 6-7 years due to their inefficient functioning within an open market competitive environment (EC, 1998c; FAO, 1999; OECD, 2000).

In order to further explore the employment patterns of the sample of farms in the Plovdiv region and to identify the differences between the different groups of farms (based on the independent variables), the number of employees (full-time and part-time) was classified into three groups, which were:

- less than 10 people;
- 11-50 people;
- more than 51 people.

The majority of the private farms within the sample (70%) had less than 10 employees, 16% of those had between 11 and 50 workers and 14% of those had more than 51 employees (Table 6.15). A series of cross tabulations were performed in order to establish the relationship between the number of employees and different groups of farms observed (in terms of different size, land ownership and cropping patterns).

Table 6.15: Employment patterns of the different types of farm

Employees	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Less than 10 workers	24	96	49	84	3	12	76	70
11-50 workers	1	4	8	14	8	32	17	16
More than 51 workers	0	0	1	2	14	56	15	14
Total	25	100	58	100	25	100	108	100
Employees	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Less than 10 workers	57	95	19	51	0	0	76	70
11-50 workers	2	3	14	38	1	9	17	16
More than 51 workers	1	2	4	11	10	91	15	14
Total	60	100	37	100	11	100	108	100
Employees	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Less than 10 workers	4	57	23	74	49	70	76	70
11-50 workers	2	29	4	13	11	16	17	16
More than 51 workers	1	14	4	13	10	14	15	14
Total	7	100	31	100	70	100	108	100

A relationship was indicated between the farms of different size and their employment patterns. The vast majority of the 'small' farms (96%) had less than 10 employees (full-time and part-time) while more than half of the 'big' farms (56%) had more than 51 workers (Table 6.15). This result reveals that the large-scale horticultural enterprises provide significant employment opportunities. Nevertheless, if co-operatives were excluded from the group of the 'big' farms this percentage would halve and only 24% of them would have more than 51 workers. The OECD (2000) and Georgieva (2003) indicated that people went into agriculture in order to ensure a livelihood for themselves and their families due to the increased level of unemployment and the limited job opportunities in the rural areas. This was very applicable for the respondents with farms of less than 2 ha.

The farms with different land ownership patterns differed in terms of the number of their employees. The bulk of the farms that were cultivating only their own restituted land (95%) had less than 10 employees, while 89% of the 'mixed/leased' private horticultural enterprises employed up to 50 workers. If we compare these findings with those for the private-co-operatives, it demonstrates that the majority of the co-operatives (91%) had more than 51 workers employed (Table 6.15).

The farms within the sample with different types of crops did not differ in their number of employees. More than half of the three groups of farms investigated with different cropping patterns had less than 10 workers (full-time and part-time) (Table 6.15).

6.3.2.3 Marketing

The review of the literature undertaken suggested that marketing in agriculture refers to food consumption, customer analysis, pricing, distribution and marketing research (Damianos and Skuras, 1996, David, 1997, Oosten, 1998). Both, the OECD (2000) and SENTER (2000) argued that the poor marketing structure in Bulgaria was one of the major constraints for the development of the agricultural/horticultural industry. This study includes the following key aspects of marketing: pricing and distribution/food supply chain.

Pricing

David (1997) suggested that pricing depends on the decisions of consumers, rivals, distributors and suppliers. The respondents in the Plovdiv region were asked to explain how they priced their agricultural/horticultural products in order to be able to examine their competitive position and bargaining power that could influence their future business. Four pricing mechanisms were drawn to their attention, which were acceptance pricing, break-even pricing, full cost pricing and market pricing. The respondents found this question difficult to understand. This may be explained by the fact identified by the EC in 2001 that the farm managers have a limited knowledge in running commercial farming after the period of a centrally planned economy.

The results revealed that the majority of the farmers interviewed adopted market pricing for their fruits (86%), grapes (90%), vegetables (90%) and other agricultural crops (93%) (Table 6.16). Due to their weak market position with restricted bargaining power and limited marketing skills they were pressed to accept the price offered at the market (FAO, 1999; EC, 2001a). A respondent confirmed:

“I know what price I need to get for my produce in order to cover my expenses and to obtain some profit but if I can not have this price it is better to sell at any price than throw everything away”

Table 6.16: The pricing of the agricultural/horticultural products

Pricing	Fruits		Grapes		Vegetables		'Other' crops	
	Count	%	Count	%	Count	%	Count	%
Acceptance pricing	1	2	-	-		-		
Full cost pricing	7	12	5	10	6	7	4	5
Break even pricing	-	-	-	-	2	2	2	2
Market pricing	47	86	44	90	73	91	75	93
Total:	55	100	49	100	81	100	81	100

The farms with different sizes, land ownership patterns and types of crops used similar pricing for their products (Table 6.17).

Table 6.17: The pricing of the agricultural/horticultural products using independent variables

Pricing	SF	MF	BF	OF	M/LF	C	PF	NPF	MXF
	%	%	%	%	%	%	%	%	%
Fruits									
Acceptance pricing	11	0	0	4	0	0	17	0	0
Full cost pricing	22	7	16	8	23	0	17	0	12
Break even pricing	0	0	0	0	0	0	0	0	0
Market pricing	67	93	84	88	77	100	66	0	88
Total	100	100	100	100	100	100	100	100	100
Grapes									
Acceptance pricing	0	0	0	0	0	0	0	0	0
Full cost pricing	15	8	9	11	13	0	25	0	9
Break even pricing	0	0	0	0	0	0	0	0	0
Market pricing	85	92	91	89	87	100	75	0	91
Total	100	100	100	100	100	100	100	100	100
Vegetables									
Acceptance pricing	0	0	0	0	0	0	0	0	0
Full cost pricing	10	5	11	8	10	0	0	3	10
Break even pricing	0	2	6	2	0	11	0	0	2
Market pricing	90	93	83	90	90	89	0	97	88
Total	100	100	100	100	100	100	100	100	100
Other crops									
Acceptance pricing	0	0	0	0	0	0	0	0	0
Full cost pricing	7	2	9	2	11	0	0	0	6
Break even pricing	0	0	9	0	4	11	0	5	2
Market pricing	93	98	81	98	85	89	0	95	92
Total	100	100	100	100	100	100	100	100	100

Note: SF – 'small' farms; MF – 'medium' farms; BF – 'big' farms; OF – 'own' farms; M/LF – 'mixed/leased' farms; C – co-operatives; PF – farms with perennials; NF – farms with non-perennials; MXF – farms with mixed types of crops

Current status of the distribution/food supply chain

Another important part of marketing is distribution which includes distribution systems, storage places, sales territories, wholesaling and retailing (David, 1997). In agriculture, this is associated with food supply chain. Eastham *et al.* (2001) argued that

food supply chains and their management is a relatively new topic and has recently become an important and emerging field of interest. Webster (2001) stated that:

'The food and drink supply chain has been a linear relationship involving the primary producers, or farmers, the manufacturers or processor who 'fabricate' the food for the table, and a retailers who gather a range of such products and sell them to the consumer' (Webster, 2001, p38).

He also outlined the food and drink supply chain in the UK in terms of value and stated that international trade is a significant factor at all stages of the UK's food chain. Hobbs *et al.* (1997) and Beer (2001) discussed the evolution of supply chain and the relationship between the producer and the consumer and the increasing role of retailers in the UK.

The food supply chain in Bulgaria in terms of market channels used by the farmers has been under continuous development due to the reforms towards a free market economy that began in 1989. FAO (1999), OECD (1999) and SENTER (2000) argue that the marketing system in agriculture together with the market channels are not well developed. In the transition economy of Bulgaria, the small-scale farms have difficulties implementing new technologies and modernising their business, which does not allow them to increase their productivity. On the other hand, if they increase their productivity they would face the problem with the market and how they would sell their production. This could lead partially to the suggestion that the Bulgarian small-scale farms in the conditions of a transition economy are like Schultz 'poor but efficient' peasants.

After 1989, the large state monopolies in marketing and distribution in Bulgaria were dismantled in Bulgaria. The wholesale and retail channels were privatised and that process resulted in the emergence of a large numbers of new private agents (suppliers, processors, intermediaries) (FAO, 1999; OECD, 2000). There is limited data available relating to the newly developed distribution structure, which has evolved after the collapse of the centrally planned economy and its monopoly structures (FAO, 1999; Ivanova, 1999). However, this research investigated the current distribution/market channels of the farms within the sample in order to understand the current situation and problems that inter-link directly or indirectly with the process of the evaluation of

alternative strategic options.

There was one factor that has to be considered as an advantage for the farmers of this study and it is that one of the three established wholesale markets in Bulgaria was located in the Plovdiv region. However, according to FAO (1999), the existing wholesale markets function ineffectively. This issue is discussed further.

The majority of the interviewees (76% with fruit production; 72% with vegetables; 84% with grapes and 82% with other crops) were using only one distribution/market channel for their produce, therefore further discussions will be based on this main channel used by the farmers.

About half of the farms in the sample used a wholesale market for their fruits (54%), grapes (47%), vegetables (53%) and other crops (53%). About a quarter of the fruit (22%), 37% of vegetables and 16% of the other crops were marketed by the respondents at the market by themselves (Table 6.18). These producers did not have any market strength, having to accept the price offered (FAO, 1999).

Table 6.18: The distribution of the agricultural/horticultural products

Distribution channels	Fruits		Grapes		Vegetables		'Other' crops	
	Count	%	Count	%	Count	%	Count	%
Wholesale market	30	54	23	47	43	53	43	53
Through distributors	8	15	13	27	5	6	14	17
Contract relations	5	9	4	8	3	4	12	14
By yourself at the market	12	22	9	18	30	37	13	16
Total	55	100	49	100	81	100	81	100

The results revealed that the market channels for grapes were better developed, especially for wine grapes due to the available market demand and the increased number of small private wineries. As mentioned earlier, the OECD (2000) and SENTER (2000) argued in their studies that the wine industry was stable and was the only one viable and export oriented agri-food sector in the last 10 years, whereas the distribution for vegetables was more difficult. This was also identified by the FAO (1999) who explained this poor situation by referring to the agri-food processing factories, which were the main buyer of different vegetables as raw materials and the reduced consumption of fresh vegetables.

Farms of different sizes used similar distribution channels for their fruits and other crops whereas they had different market channels for their grapes and vegetables. Equal proportions of the 'small' farms (39%) used wholesale markets or distributors to sell their grapes while 73% of the farms of more than 10 ha used wholesale market. More than half of the farms of less than 2 ha (55%) sold their vegetables by themselves at the market while more than half of those who cultivated more than 2 ha used wholesale market for their vegetables (Table 6.19). This was explained by one of the respondent:

"The distributors are not interested in the 100 kg of tomatoes offered by me, they will look for a bigger producer who is selling more than 100 kg ...as they can also sign a contract. Therefore, I am selling my products by myself at the market"

Similar distribution channels were used by the farms with different ownership patterns for their fruit production and other crops. There was a difference indicated between the distribution channels of the farms with different ownership patterns and market channels of their grapes and vegetables. An equal proportion of the farms that cultivated their own restituted land (32%) used the wholesale market or distributors for their grapes whereas 82% of the 'mixed/leased' farms and 60% of the co-operatives used the wholesale market for those products. More than half of the 'own' farms in the sample sold their vegetables by themselves at the market while 67% of the 'mixed/leased' farms and co-operatives used the wholesale market for their vegetable production (Table 6.19). This can be explained by the finding discussed earlier that the majority of the 'small' farms cultivated only their own land.

The marketing channels of the production units with different types of crops had similar distribution channels for their grapes, vegetables and other crops. These farms with different types of crop had different distribution channels for their fruits as 40% of those that only had perennials either had a contract or sold their fruits by themselves at the market whereas 59% of those cultivating 'mixed crops' used the wholesale market to sell their fruits (Table 6.19).

Table 6.19: Distribution channels of the different types of farm

Distribution channels	SF	MF	BF	OF	M/LF	C	PF	NPF	MXF
	%	%	%	%	%	%	%	%	%
Fruits									
Wholesale market	56	52	57	52	45	78	0	0	59
Through distributors	0	15	22	12	15	22	20	0	15
Contract relations	11	11	6	4	20	0	40	0	6
By yourself at the market	33	22	15	32	20	0	40	0	20
Total	100	100	100	100	100	100	100	100	100
Grapes									
Wholesale market	39	48	73	32	82	60	50	0	51
Through distributors	39	20	0	32	6	0	25	0	20
Contract relations	7	4	27	7	6	40	0	0	11
By yourself at the market	15	28	0	29	6	0	25	0	18
Total	100	100	100	100	100	100	100	100	100
Vegetables									
Wholesale market	45	56	56	41	67	67	0	42	60
Through distributors	0	0	28	0	7	33	0	3	8
Contract relations	0	2	11	0	10	0	0	3	4
By yourself at the market	55	42	5	59	16	0	0	52	28
Total	100	100	100	100	100	100	100	100	100
Other crops									
Wholesale market	34	57	67	43	67	73	0	55	54
Through distributors	13	15	10	18	7	9	0	14	14
Contract relations	13	7	19	7	15	18	0	4	14
By yourself at the market	40	21	4	32	11	0	0	27	18
Total	100	100	100	100	100	100	100	100	100

Note: SF – ‘small’ farms; MF – ‘medium’ farms; BF – ‘big’ farms; OF – ‘own’ farms; M/LF – ‘mixed/leased’ farms; C – co-operatives; PF – farms with perennials; NF – farms with non-perennials; MXF – farms with mixed types of crops

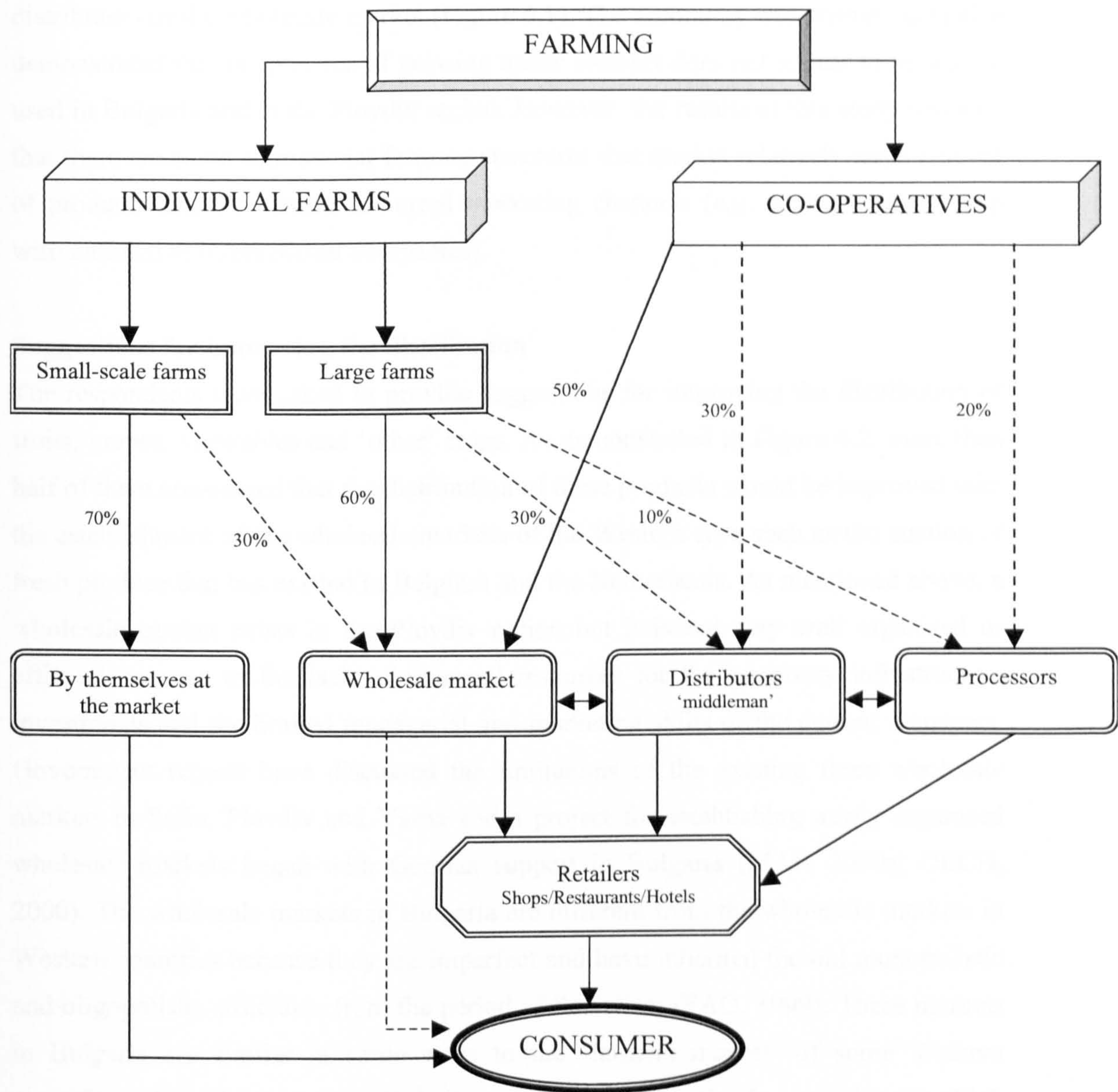
The distribution system in the country and in the Plovdiv region was poor during the period of transition from a centrally planned to a ‘free market’ economy due to dramatic economic changes that led to the loss of the main international markets (former CEE countries), reduced domestic purchasing power, the slow process of privatisation of the agri-food industry, lack of marketing skills of the farmers and limited governmental marketing support (FAO, 1999, Mihailova, 2000). Therefore, the government has responded to these needs and has taken actions such as improving the wholesale system, providing market information and establishing an effective information network. The Government took the first steps towards this in 1997 with the establishment of the Agricultural Market Information Service (AMIS) which was at the time of this research in an evolutionary stage (OECD, 2000; SENTER, 2000).

In conclusion, the secondary sources (FAO, 1999; MAF, 2000a; OECD, 2000) and the primary data suggested that traditional forms of direct selling by producers (street and farmers markets) have become very common for the small-scale and subsistence farms who sell a small proportion of their production. On the other hand, the large producers and the co-operatives often engaged longer supply chain (e.g. distributors, retailers and then consumer) or directly contract their production with wholesalers, processors or other trade partners. It also has to be mentioned that the capacity utilisation of the agri-food processing industry has been low compared to pre-reform period due to a range of problems facing this sector including the lack of investment, low productivity, over capacity, obsolete equipment (OECD, 2000).

Figure 6.1 demonstrates the food supply chain and the main market channels of the farmers in Bulgaria and in the Plovdiv region in particular that were informed by both secondary and primary data. No data was available regarding the value and the volume of each elements of food supply chain, however some 'guesstimates' are made.

Figure 6.1: The food supply chain in Bulgaria

(Source: Author)

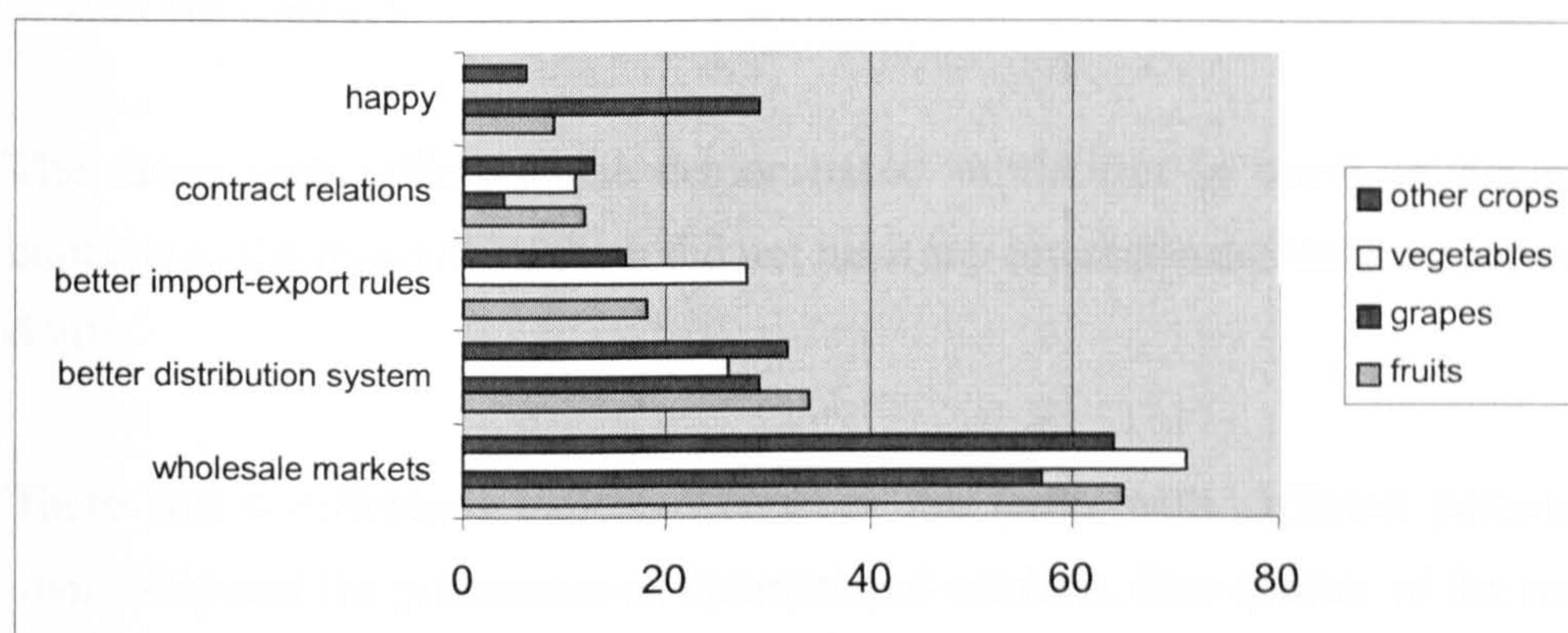


The majority of small and medium size farms have serious marketing problems because of their small size and consequently weak market position (FAO, 1999; OECD, 2000). These farms keep some of their production for self-consumption and sell the rest of it by themselves at the market. The large farms, due to their bigger capacity, marketed their produce mainly at the wholesale market. However, some of

them use distributors or processors. On the other hand, some of the co-operatives use their previous contacts with processing factories and deliver their production or use distributors or the wholesale market (Figure 6.1). The secondary and primary data also demonstrated that the practice of growing under contract does not appear to be widely used in Bulgaria and in the Plovdiv region. However, the results of this study revealed that there are some commercial farming structures that market relatively large amount of products and have more advanced marketing channels (e.g. contract relationship with national or international companies).

Suggestions for improving the distribution

The respondents were asked to provide suggestions for improving the distribution of fruits, grapes, vegetables and 'other' crops. As demonstrated in Figure 6.2, more than half of them considered that the distribution of these products would be improved with the establishment of the wholesale markets of the Western type such as the auction of fresh produce that has existed in Belgium and the Netherlands. As mentioned above, a wholesale market exists in the Plovdiv region but it is not very well organised or efficient because of the lack of financial resources for the necessary infrastructure investments and the limited managerial and marketing skills of the current managers. Government reports have discussed the limitations of the existing three wholesale markets in Sofia, Plovdiv and Varna and a project for establishing newly organised wholesale markets began with German support in Bulgaria (MAF, 2000a; OECD, 2000). The wholesale markets in Bulgaria are different from the wholesale markets in Western countries because they are imperfect and have inherited the old monopolistic and oligopolistic structures from the period of Socialism (FAO, 1999). These markets in Bulgaria are similar in some ways to the 'farmers market' of some Western countries, where the growers sell their produce. However, the farmers also face high competition from distributors who are also able to market agricultural produce. In most cases these distributors have higher market power and can sell at a lower price.

Figure 6.2: Suggestions for improving the distribution

About one third of the farm managers interviewed agreed that the distribution system for agricultural/horticultural products had to be improved but they did not give any specific action or suggestion (Figure 6.2). The results revealed that 32% of the grape producers were happy with the distribution of their products conversely none of the vegetable producers was pleased and they suggested improvements to the import/export regulations (28%). A respondent explained:

“Our local market is full of apples from Macedonia offered at a very low price. I cannot understand how the producers or the ‘distributors’ are making any profit”

6.3.3 External background

6.3.3.1 International business partnership

The availability of contacts with international organisations or companies was assessed in this research in order to identify whether these contacts would affect the future business performance of the farms investigated. Only 12 of the farmers in the Plovdiv region had contacts with foreign partners (Table 6.20). This aspect was further investigated and 8 of those farmers with foreign collaborations had contract market relationships, while two of them received only investment support or only organisational support. Half of them ($n = 6$) developed their international connections through personal contacts. EU programmes supported four of these farms and two of them developed the overseas contact by attending international agricultural exhibitions. One of the respondents explained his situation:

“I have got a contract with a French company, which is buying all my produce (strawberries) at a contract price. As far as I know some other farms are also working with this company”

The farms with different size demonstrated similarities in terms of having foreign contacts as the majority of them did not have any international business partners (Table 6.20).

There was a difference indicated between the farms with different patterns of land ownership and the possession of international contacts. One quarter of the respondents who cultivated a mixture of their own and leased land or only leased land (22%) had contacts with foreign organisations and companies compared to 5% of the interviewees with only their own land (Table 6.20). This could be considered as a sign of economic development by these production units that were aiming to expand their business. Only one of the co-operatives investigated had a foreign contact that was for market support.

Table 6.20: Possession of contacts with foreign organisation

Contacts with foreign organisation	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	1	4	5	9	6	24	12	11
No	24	96	53	91	19	76	96	89
Total	25	100	58	100	25	100	108	100
Contacts with foreign organisation	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	3	5	8	22	1	9	12	11
No	57	95	29	78	10	91	96	89
Total	60	100	37	100	11	100	108	100
Contacts with foreign organisation	TYPES OF CROPS						Total	
	Perennials		Perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	3	43	3	10	6	9	12	11
No	4	57	28	90	64	91	96	89
Total	7	100	31	100	70	100	108	100

The results show that the farms with different types of crops differed in their contacts with foreign organisations. A relatively high proportion of the farms that cultivated only perennial crops had international partners (43%) compared to 10% of those with non-perennials and 8% of those with mixed crops (Table 6.20). This finding indicated that interviewees who grow fruits and grapes were more proactive with much better

market position. One of those explained his situation:

“I expanded the personal contact with my Slovak partner, whom I met in my previous company before I was made redundant”

It has been argued that foreign participation in agriculture/horticulture will only increase in a stable environment that provides a sound basis for long-term investments (Hobbs *et al.*, 1997).

6.3.3.2 Policy issues – critics and advice

The review of the literature suggested that the agricultural/horticultural industry in Bulgaria has been in deep crisis in the last 10 years. The OECD (2000) and SENTER (2000) stated that after 1989 agricultural and rural development policies have been unclear as some regulations contradicted each other or essential policy activities had been postponed. Therefore, the farmers of the sample who are the ‘main actors’ in agriculture/horticulture were asked to give advice to the Bulgarian Government for the economic development of this sector in the Plovdiv region of Bulgaria. This innovative ‘bottom up’ approach was novel for the respondents due to the fact that prior to 1990 they were given no choice but to follow Government directions. For many of them being asked to give advice to the Bulgarian government was perceived as a ‘new’ positive experience. On one side, they identified a range of activities that the Government needed to consider carefully and they were pleased to express their vision in regard to agriculture/horticulture. On the other hand, they did not believe that their advice would be taken into consideration by the governmental authorities and the policy makers, consequently they considered this question as a ‘waste of time’.

The majority of the farm managers responded (73%) stated that the government needed to provide *financial support* in terms of an improved credit system and by providing grants (Table 6.21). The nature of agriculture/horticulture was regarded as having been primitive over the last 11 years (1989-2000) by SENTER (2000) and Mihailova (2000) and the development of this sector required finance for buying new machinery, implementing modern technologies and research for introducing new crop varieties. An interviewee confirmed this and stated:

“If the Government do not provide any financial ‘injection’ to us the farmers to improve our farm technologies there is a danger of individuals leaving horticulture at the first opportunity that will occur”

Table 6.21: Advice of the farmers with different types of farm to the Bulgarian Government

Bulgarian Government

Advice*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial support	14	56	45	78	20	80	79	73
Marketing support	14	56	18	31	12	48	44	41
Better import/export regulations	10	40	22	38	11	44	43	40
Incentives to stay in the agriculture	8	32	19	33	3	12	30	28
Better legislation	2	8	5	9	9	36	16	15
Total of cases	25	100	58	100	25	100	108	100
Advice*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial support	44	73	27	73	8	73	79	73
Marketing support	24	40	14	38	6	55	44	41
Better import/export regulations	23	38	16	43	4	36	43	40
Incentives to stay in the agriculture	22	37	8	22	0	0	30	28
Better legislation	5	8	4	11	7	64	16	15
Total of cases	60	100	37	100	11	100	108	100
Advice*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial support	4	57	20	65	55	79	79	73
Marketing support	3	43	10	32	31	44	44	41
Better import/export regulations	1	14	24	77	18	26	43	40
Incentives to stay in the agriculture	3	43	7	23	20	29	30	28
Better legislation	1	14	3	10	12	17	16	15
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the top five answers and exclude all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Over the last 10 years, the banks have considered giving loans for agricultural activities to be very risky, therefore it has been very difficult for the farmers to find financial resources. Another obstacle to obtaining loans was that agricultural land was not accepted as a guarantee for a loan, which made the procedure very complicated and long. An agricultural credit association had been established in the Plovdiv but its capacity was still below the demand for loans (OECD, 2000). The specificity of the farm business required specific procedures such as low interest credits or long-term loans as clarified by one of the respondents:

“The Government has to introduce specific regulations for long-term loans for agricultural purposes because returning the capital invested requires more time. For example, for establishing new orchards it will take 3-4 years”

The respondents suggested also that offering grants to farmers for buying machinery would increase the efficiency and the competitiveness of the horticultural enterprises. One farmer said:

“Without any kind of governmental financial support the farms' survival will be very difficult. Every country supports their agricultural sector e.g. Greece, Portugal, France, etc.”

Various national and international reports have identified that the marketing structure has been poor in Bulgaria since 1989, which was mentioned earlier (FAO, 1999; MAF, 2000; OECD, 2000). 41% of the farmers confirmed this fact and suggested that the Government have to take action to improve the *marketing system* (Table 6.21). The farmers proposed actions such as:

- establishment of auctions of a Western type;
- developing a market network available to the farmers and distributors;
- supporting the agri-food processing industry that before 1989 had used huge quantities of agricultural products as raw materials.

It was also identified in earlier studies made by SENTER (2000) and EC (2001b) that Bulgarian farmers had not been prepared for the sudden change from a centrally planned economy to a free market economy, which demands a commercial approach to farming. Consequently, Bulgarian farmers did not have enough business and marketing skills and proposed that the Government should initiate training courses for improving the business and marketing skills of the producers (SENTER, 2000; EU, 2001b).

It has to be acknowledged that the Government did take some actions towards improving the marketing system such as running a project for the establishment of wholesale markets (supported by the German Government), building an advisory and network information system and trying to find a market for agri-food products. All these attempts were at their ‘start’ point, therefore the farmers had not experienced any

positive impact (MAF, 2000a; SENTER, 2000).

According to 40% of the interviewees, *import/export regulations* were unfavourable (Table 6.21). On one side, with the collapse of the Communist regime in 1989, Bulgaria lost its main international markets (other CEE countries and former USSR), that were not replaced, therefore the export of agricultural produce fell dramatically. On the other hand, Bulgarian farmers have faced increased competition from the Western countries, which was a new issue for them and they did not have the skills to deal with it. The competition was amplified because of the various agreements for low tariff barriers with CEFTA and EU (OECD, 2000; SENTER, 2000; Mihailova, 2000).

At the same time the farmers were pressed by the illegal imports from neighbouring countries for example Macedonia and Turkey as it was mentioned above. One interviewee explained:

“How it is possible for these people to sell apples at such a low price at the market. My production expenses are slightly higher than their price”

Therefore, the farm managers suggested improving the import/export regulations by implementing a stable and clear trade policy that would protect local producers and would support the export of Bulgarian agricultural produce. The main activities that were recommended by them were:

- reducing imports;
- increasing import taxes for the protection of the local agricultural/horticultural production;
- supporting the export of Bulgarian agricultural/horticultural production.

One of these respondents added:

“The Government has to improve market contacts with the former CEE countries because it will be very difficult for Bulgarian production to gain a niche in the EU market”

Another suggestion given by 28% of the respondents was the provision of *incentives to*

stay in agriculture/horticulture. Addressing the problems of the rural areas by improving the infrastructure and the social environment, reducing the level of bureaucracy supporting the small and medium businesses, as well as young farmers, were the main suggestions that interviewees proposed. One of them stated:

“I am a 35 year old farmer but I have got children who need to go to school but in our village we do not have school. So I need to drive my children every day to the school at the neighbouring village. I am really considering the idea of moving out from my village and giving up farming”

Due to the process of accession towards EC, some EU programmes (e.g. SAPARD) have introduced a range of measures relating to the problems of the rural areas. The measures promoted by the EU are supporting young farmers, providing adequate training programmes (e.g. diversified economic activities) and improving the infrastructure in the rural areas (EC, 1998c; OECD, 2000; EC, 2000a).

Only 15% of the producers in the Plovdiv region involved in this study recommend that the Government should improve the *legislation* in regards to agriculture/horticulture (Table 6.21). A developed legislation could provide a sound basis for attracting foreign investments in agriculture (FAO, 1999). The Bulgarian government has to develop workable, clear and consistent legislation. The Laws in agriculture have been changed several times since 1990, which provides an unstable basis for farm business development. The laws for the Land market was postponed for a long time while the Law for Co-operatives and LALOLU was amended several times over the last decade and have provided different priority activities. This unstable legislative basis slowed the process of land consolidation and led to a range of problems mentioned above.

The farm managers who cultivated farms of different sizes gave similar advice to the Government for financial and marketing support and better import/export regulations (Table 6.21).

However, the vision of the leaders of the co-operatives differed from the vision of the producers with ‘own’ and ‘mixed/leased’ farms in their second suggestion which was improving the legislation (64%) followed by a demand for providing financial support

(73%) (Table 6.21). In 1991, the Law on Co-operatives was set up relating to the formation of new private co-operatives. However, the limitations of this Law negatively affected their organisational structure because the procedure for land leasing was temporary and did not allow long-term planning (Mishev *et al.*, 1999). FAO (1999) argued that co-operatives have been an unstable organisational structure with poor economies of scale. Therefore, the banks categorised loans to these co-operatives as high risk.

Respondents who cultivated only non-perennial crops gave a different response. Their most important advice was to improve the import/export regulations (77%) followed by providing financial support (65%). This may be explained as a reaction to the loss of the export markets for fresh and processed vegetables (former USSR and other ex-socialist countries).

6.4 SUMMARY

The findings of this survey demonstrate that the farms of the sample in the Plovdiv regions are relatively small, with a size of less than 10 ha. They cultivated mainly their own restituted land or have a mixture of their own and rented land. However, leasing land was not a common practice at the time. The production units within the sample mainly cultivated a mixture of perennial and non-perennial crops. About half of these enterprises had fruits and grapes because they were inherited after the restitution and they were profitable during the transition period. The majority of them cultivated vegetables and other agricultural crops (*e.g.* arable, herbs, tobacco, etc.) either because they were traditionally grown in the region or own resources (equipment, labour) were available at no additional costs.

The majority of the respondents were male and more than 40 years old. They were educated (at least secondary education) and with significant experience of working in agriculture, which could be perceived as a valuable competitive advantage that still needs to be strengthened.

The horticultural enterprises involved in the sample were farms with less than 10 employees that were mainly established in 1992 after the final approval of the Law for Land Ownership and Land Use.

Product marketing was inefficient due to the fact that during the period of Socialism everything was centrally planned and the market was not the main 'driver'. Therefore, lack of experience in running farming commercially together with the lack of market knowledge has led to great difficulties in the area of marketing. The farmers accepted the market price offered to them because of their poor market position and limited bargaining power. The main distribution channel for products was the wholesale market, which was inefficient due to use of the old organisational structure and a lack of financial resources. Therefore, improving the structure of wholesale markets was the main suggestion for improving the distribution system. The vast majority of the farm managers did not have any contacts with foreign companies and organisations, while the few farmers had market contracts with their foreign partners.

The lack of capital for investments, lack of, or uncertain markets, illegal imports, the loss of the main export markets and the changeable legislation were the basic obstacles identified by the interviewees. Therefore, the farm managers in the Plovdiv region as the main 'actors' in this sector gave their advice for the revitalisation of the agricultural/horticultural industry to the Bulgarian Government and three of their most important suggestions were financial support, marketing support and improving the import/export regulations.

After the presentation of the basic operational and business characteristics of the sample of farms in the Plovdiv region and their farm managers, the next chapter investigates how the respondents evaluated the proposed alternative strategic options/scenarios.

CHAPTER 7: ANALYSIS OF THE PROCESS OF EVALUATION OF THE ALTERNATIVE STRATEGIC OPTIONS

7.1. INTRODUCTION

This chapter discusses the results from the primary research of the process of evaluation of a range of proposed alternative strategic options (scenarios) for the future development of the horticultural industry in the Plovdiv region of Bulgaria. The purpose is to identify and analyse the feasibility of different strategic options for the next 5 years, in particular how the business environment (internal and external factors) has influenced the business decisions of the farmers of the sample and what outcomes they anticipated would be achieved with the introduction of one or more of those strategies. This chapter includes the following sections:

7.1 Introduction.

7.2 Provides SWOT analysis of the farms within the sample. In other words, discussing their internal capacity (strengths and weaknesses) and their external opportunities and threats that resulted from the dynamic economic changes occurring in Bulgaria over the period 1989-2001.

7.3 Discusses the farmers' expectation for the business development of their farms in relation to farm size, products and markets;

7.4 Describes the conceptual framework for the evaluation process, in particular how farmers understand the terminology in this process;

7.5 Evaluates a range of alternative strategic options proposed to the farmers, including:

- 'dreams' - ideal scenario;
- 'withdrawal from horticulture';
- 'doing what you currently do but better';
- 'developing new products';
- 'developing new markets';
- 'developing new agricultural activities';
- 'developing new non-agricultural activities'.

7.6 Provides a summary of the chapter.

As in the previous chapter, farm size, land ownership and types of crops are used as independent variables that may influence the decision-making process of the farm managers (see Chapter 5, section 5.4.4).

The primary data was analysed using the statistical package SPSS (Version 10). Frequency analysis, the arithmetic mean, median and mode are discussed in order to identify the overall patterns and tendencies of responses. Cross-tabulations were undertaken in order to demonstrate any patterns between two variables (one independent and one dependent). Chi-square (χ^2) tests were performed in order to test the null hypothesis (H_0) assuming that the variables are independent of each other (Bryman and Cramer, 1997). The Kruskal-Wallis test was also used for hypothesis testing between one ordinal and one nominal variable when the independent variable has more than two groups (Siegel and Castellan, 1988). Multiple response cross-tabulations were also used for analysing open-ended questions with more than 1 possible answer. In most cases only the first 4-5 top answers were discussed and included in the tables presented in this chapter.

The validity of some of the chi-square test results was restricted because 20% of the cells had an expected count of less than 5 and one or more cells had an expected value of less than 1. The main reason is the small sample size and the fact that some of the groups of farms within the sample (*e.g.* co-operatives and farms with only perennials) were very small. A variety of approaches (*e.g.* reducing the number of possible answers, filtering out of the independent variable categories) were considered and it was decided that these approaches would not significantly add to the overall understanding of the situation (see Chapter 8, section 8.2.3). Therefore, most of the results of the test of significance were used as a guide to the subjective interpretation of the data. Only the valid Chi square test results are presented in this chapter and all the results of the Chi-square and Cramer's V tests are presented in Appendix E.

7.2 SWOT ANALYSIS OF THE FARMS

7.2.1 Strengths of the farms

An internal audit of a business unit should include the identification of the internal factors (strengths and weaknesses). Their examination was a vital part of this research because studying the internal capacity of the farms provided helpful information for

the strategy evaluation stage when the main encouraging/discouraging business factors for each of the proposed strategy were discussed.

The results revealed that the *key strengths* of the farms within the sample were:

- possession of considerable experience in the agriculture/horticulture (63%), (see Chapter 6, section 6.3.1.4);
- availability of their own machinery (48%). Some respondents managed to buy machinery from the old organisational structures (*e.g.* AIC's) after their liquidation. This they regarded as a valuable business advantage for their survival and development;
- agriculture/horticulture has traditionally been an important sector in the Plovdiv region (41%). Various reports emphasise that for centuries cultivating agricultural/horticultural crops was main activity in Bulgaria and in the Plovdiv region respectively (FAO, 1999; OECD, 2000);
- good natural conditions (37%). The Plovdiv region is very suitable for growing horticultural crops due to the mild weather and fertile soils (see Chapter 2, p.42-43).
- independent management (24%) (Table 7.1). During the period of Socialism, the government took all the managerial decisions and the role of the farm manager was to follow their directions without any criticism. Whereas, in the condition of a 'free' market economy, the farm manager has the responsibility for taking all the business decisions, which is a challenging task that has been welcomed by some and frightened others.

Other strengths that were mentioned by the respondents were good location of the farm, *i.e.* near the market (20%), and having big plots of consolidated land (16%).

Cross-tabulation between *farm size* and farms' strengths indicated some differences. The vast majority of the farmers with 'big' farms (84%) identified availability of their own machinery, while those with plots of less than 10 ha stated that their experience in agriculture/horticulture was their key strength. Another disparity observed was that 36% of the producers with a farm of more than 10 ha considered that independent

management was one of their vital strengths compared to 16% of the growers with ‘small’ farms (Table 7.1). An interviewee explained:

“I am so happy that I can take business decisions and I do not need to follow any direction, which was the case during the period of Socialism, because I know much better what is the most suitable crop for this area”

Table 7.1: The top five strengths of different types of farm

(‘Farm profile’ survey)

Strengths*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Having experience	17	68	37	64	14	56	68	63
Own machinery	4	16	27	47	21	84	52	48
Traditionally grown crops	16	64	24	41	4	16	44	41
Good natural conditions	15	60	19	33	6	24	40	37
Independent management	4	16	13	22	9	36	26	24
Total of cases	25	100	58	100	25	100	108	100
Strengths*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Having experience	42	70	21	57	5	46	68	63
Own machinery	19	32	24	65	9	82	52	48
Traditionally grown crops	32	53	9	24	3	27	44	41
Good natural conditions	29	48	6	16	5	46	40	37
Independent management	11	18	14	38	1	9	26	24
Total of cases	60	100	37	100	11	100	108	100
Strengths*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Having experience	3	43	20	65	45	64	68	63
Own machinery	1	14	15	48	36	51	52	48
Traditionally grown crops	3	43	12	39	29	41	44	41
Good natural conditions	4	57	11	36	25	36	40	37
Independent management	2	29	12	39	12	17	26	24
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the tops five answers and exclude all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Land ownership patterns when cross-tabulated with the strength of the farms also demonstrated some differences. The most important strengths of the ‘mixed/leased’ farms and co-operatives was the availability of their own machinery (65% and 82% respectively), followed by possession of previous experience (57% and 46% respectively). In comparison, the growers who cultivated only their own land identified

their previous experience as their main strong point (70%) followed by growing crops that have been traditional in the region (53%) and the availability of their own machinery was in fourth place, stated by 32% of them (Table 7.1). Surprisingly, only one leader of the private co-operatives involved in the sample considered that independent management was a strength while nine of them identified the availability of machinery as a key strength. This confirmed the results of a previous study by Kanchev and Doichinova (1999) who argued that the private co-operatives had enough technical equipment received after the liquidation of the old organisational structures (AICs).

Comparing the strengths of the farms with different *cropping patterns* demonstrated that the respondents who had only annual crops or 'mixed' crops argued that their experience was their key strength, while those with perennials considered the good natural conditions in the Plovdiv region as their strong point. The availability of their own machinery was stated as a strength by only one farm that planted only perennial crops (14%) compared to those with annual and mixed crops (48% and 51% respectively). This could be explained by the fact that machinery is not essential for the farmers who cultivate fruits and grapes. However, they perceive that the most important strength for them were the good natural conditions (57%) (Table 7.1).

7.2.2 Weaknesses of the farms

The FAO report in 1999 stated that in the previous 10 years, agriculture/horticulture in Bulgaria had been characterised by a low level of technological innovation due to a lack of financial support for buying new machinery, equipment and technologies. It also identified that the machinery and technologies inherited from the large AICs were not suitable for small-scale farming (FAO, 1999). Table 7.2 demonstrates the most important weaknesses of farms identified by the interviewees. The results were not unexpected keeping in mind the above study of the FAO. The *key weaknesses* stated by the respondents are demonstrated in Table 7.2 and they were:

- lack of machinery or having obsolete machinery (72%);
- using old technologies (65%);
- having fragmented land (58%). This was to be expected because the process of land restitution resulted into high fragmentation of the land due to the fact one plot of land had often had too many heirs (MAF, 1999; OECD, 2000 Mihailova, 2000);

- having old plots of perennial crops (28%).

Table 7.2: The top four weaknesses of different types of farm

('Farm profile' survey)

Weaknesses*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or old machinery	20	80	39	68	18	73	77	72
Using old technologies	21	84	37	64	12	49	70	65
Having fragmented land	12	48	38	66	12	49	62	58
Having old plots of perennial crops	6	24	15	26	9	36	30	28
Total of cases	25	100	58	100	25	100	108	100
Weaknesses*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or old machinery	46	77	20	55	11	100	77	72
Using old technologies	46	77	18	49	6	55	70	65
Having fragmented land	34	57	23	63	5	46	62	58
Having old plots of perennial crops	14	23	11	30	5	46	30	28
Total of cases	60	100	37	100	11	100	108	100
Weaknesses*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or old machinery	4	57	22	71	51	73	77	72
Using old technologies	4	57	29	94	37	53	70	65
Having fragmented land	2	29	16	51	44	64	62	58
Having old plots of perennial crops	4	57	0	0	26	37	30	28
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Although the farms within the sample in the Plovdiv region inherited the same problems, accumulated over the period of Socialism there were some minor differences in terms of the weaknesses of the different types of farm in relation to size, land ownership and cropping patterns.

Farm size

The results revealed that more than two thirds of the respondents with farms of more than 2 ha considered the lack of machinery or possession of obsolete machinery (more than 15-20 years) as their main weakness. However, the growers with farms of less than 2 ha stated their major weakness to be the use of old technologies (84%) followed by lack of machinery (80%) (Table 7.2).

Land ownership patterns

The main weakness of the 'mixed/leased' agricultural/horticultural enterprises investigated was the fragmentation of their land (63%) as they cultivated land in different places. One of the interviewees explained his frustration:

"I have three plots of land in different places so it is very frustrating for me to go to different places any time I need to do some agricultural work or to move my equipment from one plot of land to another"

Whereas the respondents who cultivated only their own land stated that lack of machinery or using obsolete machinery (77%) and old technologies (77%) were their key weaknesses. All of the co-operatives investigated were disadvantaged mainly by their obsolete machinery, which they inherited from the old AICs (Table 7.2).

Types of crops

Comparison of the weaknesses of farms with different cropping patterns demonstrated that farms with perennial crops were strongly disadvantaged because the perennial plots that they inherited were very old as well as the technologies and machinery they had at their disposal (Table 7.2), which resulted in reduced production outputs. One of the growers explained:

"When I inherited my vineyard they were more than 15 years old and their yields have dropped in the last few years, therefore I need to re-new them but there are some financial constraints that I have to overcome"

7.2.3 Opportunities of the farms

As a result of the economic transition in Bulgaria, the respondents confirmed that some opportunities had arisen and they identified the following common *key opportunities*:

- planting new crops (41%). In their studies, Damianos and Skuras (1996) and Oosten (1998) argue that the customers are changing their product preferences relatively quickly and the farmers have to be flexible in terms of product orientation. Therefore, it was not unexpected that the respondents stated planting new crops as an opportunity for maintaining a profitable farm business.

- expanding farm land (36%) - The official completion of the process of land restitution and the establishment of the Land market created a positive basis for increasing the size of the farms.
- maintaining existing business level (25%) – Running a farm business in Bulgaria and in the Plovdiv region had been a challenging task as expressed by one of the respondents:

“There are two major constraints that make the farm business very problematical and they are uncertain markets and the lack of finance, however I accept the challenge for business survival”

- implementing new technologies (24%).
- expanding new markets (22%) (Table 7.3).

Farm size

A cross-tabulation between the opportunities and the size of the farms revealed that the key opportunity for the ‘small’ farms investigated was the application of new technologies (40%), whereas, the ‘medium size’ farms identified farm expansion in terms of their land as the key opportunity (47%) and the farms of more than 10 ha were mainly oriented towards developing new crops (36%) (Table 7.3). The OECD (2000) argue that the ongoing development of the size structure of the private farms in Bulgaria is still not completed and that the middle sized farms (2-5 ha) are most likely to be affected.

Land ownership patterns

The interviewees of private farms and co-operatives in the sample identified different opportunities for development. The ‘own’ and ‘mixed/leased’ farms stated that their main opportunity was planting new crops (35% and 58% respectively), whereas the co-operatives were aiming at market expansion (46%) and maintaining their existing business (27%) (Table 7.3). Kanchev and Doichinova (1999) suggest that providing technical services to the small private farms using the available machinery of the co-operatives could be a vital opportunity for their future development.

Table 7.3: The top five opportunities of different types of farm

('Farm profile' survey)

(Farm profile survey)

Opportunities*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Planting new crops	9	36	26	45	9	36	44	41
Farm size expansion	7	29	27	47	4	16	38	36
Maintaining the same business	6	24	16	28	5	20	27	25
Applying new technologies	10	40	10	17	5	20	25	24
Market expansion	7	29	10	17	6	24	23	22
Total of cases	25	100	58	100	25	100	108	100
Opportunities*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Planting new crops	21	35	21	58	2	18	44	41
Farm size expansion	20	33	18	49	0	0	38	36
Maintaining the same business	18	30	6	17	3	27	27	25
Applying new technologies	16	27	7	19	2	18	25	24
Market expansion	13	22	5	14	5	46	23	22
Total of cases	60	100	37	100	11	100	108	100
Opportunities*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Planting new crops	3	43	9	29	32	46	44	41
Farm size expansion	5	71	7	23	26	37	38	36
Maintaining the same business	1	14	10	33	16	23	27	25
Applying new technologies	4	57	5	16	16	23	25	24
Market expansion	0	0	4	13	19	27	23	22
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the top five answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Types of crops

The interviewees producing fruits and grapes had a profitable business (see Chapter 6, p.223 and 226). Therefore, it was not unexpected that the main opportunity they perceived was to enlarge the level of their farm business (71%) whereas the producers with annual crops wanted to maintain their business (33%) and those with mixed types of crops to have new product orientation (46%) (Table 7.3).

7.2.4 Threats of the farms

Changes in the external environment may either have beneficial or harmful effects upon different businesses, therefore these negative influences have to be avoided or overcome. Table 7.4 shows that the most important common *key threats* identified by the farm managers under investigation were:

- unpredictable weather conditions (77%) – A respondent explained the following:

“The quality and the yields of the agricultural/horticultural production strongly depend on the weather. Even if you use modern technologies and equipment, hail can destroy all your produce”

- lack of or uncertain market (66%) – discussed earlier (see Chapter 6, section 6.3.2.3 and 6.3.3.2).
- bad agricultural policies and the high level of bureaucracy (58%) – This finding is in agreement with OECD (2000) and SENTER (2000) reports that identified that the Government did not have clear objectives and policies in regards to agriculture/horticulture in the first 6-7 years of transition (1990-1997) due to the political conflict between the two major parties (ex-socialist and new democratic), which badly affected the farm businesses.
- decline in consumer demand (29%) (Table 7.4) - This may be explained by the increased level of unemployment, limited job opportunities and price liberalisation that were stated earlier by OECD in 2000. Hristova and Hristov (1999) discussed further that reducing the real income of the population was a result of price liberalisation that led to inflation and a high rate of unemployment.

Farm size

No difference was demonstrated when comparing the threats perceived by farmers operating different size of farms. They all identified the unpredictable weather as the main threat (Table 7.4).

Land ownership patterns

The respondents with their own and leased land showed some differences with the co-operatives. The leaders of co-operatives in the sample felt threatened mainly by the poor agricultural policies (91%) (Table 7.4). One of these managers explained:

“There was a Law for new registration of the private co-operatives, which was approved in 1991 but there were no guidelines or regulations regarding the application of the co-operative approach to a competitive environment”

Table 7.4: The top four threats of different types of farm

(‘Farm profile’ survey)

Threats*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Unpredictable weather	20	80	44	76	19	76	83	77
Lack of or uncertain market	19	76	39	67	13	52	71	66
Bad agricultural policies	15	60	31	53	17	68	63	58
Decreased consumer demand	7	28	17	29	7	28	31	29
Total of cases	25	100	58	100	25	100	108	100
Threats*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Unpredictable weather	47	78	27	73	9	89	83	77
Lack of or uncertain market	45	75	22	60	4	36	71	66
Bad agricultural policies	34	57	19	51	10	91	63	58
Decreased consumer demand	12	20	17	46	2	18	31	29
Total of cases	60	100	37	100	11	100	108	100
Threats*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Unpredictable weather	1	14	28	90	54	77	83	77
Lack of or uncertain market	4	57	19	61	48	69	71	66
Bad agricultural policies	5	71	19	61	39	56	63	58
Decreased consumer demand	2	29	6	19	23	33	31	29
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Types of crops

Cross-tabulation between cropping patterns and the perceived threats revealed some differences. According to 71% of the farmers who cultivated only perennial crops the most important threat was the poor agricultural policies (Table 7.4). These policies resulted in inadequately developed systems of land leasing and an inefficient Land market. These were obstacles to making long-term investments in establishing new orchards and vineyards (MAF, 2000a; OECD, 2000).

7.3 EXPECTATIONS FOR FUTURE FARM BUSINESS DEVELOPMENT

7.3.1 Introduction

In order to begin building up an overall ‘picture’ of the horticultural industry in the Plovdiv region of Bulgaria and its future development, the farmers within the sample were asked about their hypothetical expectation (or general vision) for their farm business over the next 7 years in terms of farm size and the product/market interaction.

7.3.2 Expectations in terms of farm size

The farmers were asked whether they expected to increase or decrease the size of their farms. More than half of the respondents (52%) expected their land area to grow in the next 7 years (Table 7.5). As mentioned earlier, the process of land restitution has been completed officially and a Land market established (OECD, 2000; SENTER, 2000). This, the interviewees believed, would provide a sound basis for increasing the size of the farms. One of them stated:

“I am pleased with my life as a farmer and I would like to increase the size of my apple orchard, therefore I need to buy or lease more land”

Effectively, 38% of them were planning to maintain the same size level and one of them explained:

“I have vegetables, which are intensive crops and I do not think that it would be efficient to increase their size”

Only 7% of them intended to reduce their land size and 3% of them were planning to leave agriculture and either sell or rent out their land (Table 7.5)

The only differences observed from the cross-tabulations between expectations in terms of land size of the respondents with different farm size, land ownership patterns and types of crops were with regard to the ‘big’ farms and the co-operatives investigated. More than half (54%) of the respondents with a size of more than 10 ha and 91% of those with private co-operatives anticipated maintaining their size, whereas the farms of less than 10 ha and those with own or own and leased land thought that they will grow in terms of size (Table 7.5). Keeping the same size level would not be an easy task for the co-operatives due to their poor economic performance and having to pay dividends to their members (land owners) which was identified earlier by the FAO in 1999. If the co-operatives are excluded from the group of the ‘big’ farms the results revealed that 57% the private farms with a size of more than 10 ha would increase their size and only 29% of them would remain the same size levels (Table 7.5).

Table 7.5: Expectations of different types of farm relating to land size
(‘Farm profile’ survey)

Land size expectations	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Grow	13	52	35	61	8	32	56	52
Keep same level	10	40	17	29	14	56	41	38
Decrease	2	8	6	10	0	0	8	7
Disappear	0	0	0	0	3	12	3	3
Total	25	100	58	100	25	100	108	100
Land size expectations	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Grow	31	52	25	68	0	0	56	52
Keep same level	23	38	8	22	10	91	41	38
Decrease	6	10	2	5	0	0	8	7
Disappear	0	0	2	5	1	9	3	3
Total	60	100	37	100	11	100	108	100
Land size expectations	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Grow	5	71	13	41	38	54	56	52
Keep same level	2	29	12	39	27	39	41	38
Decrease	0	0	3	10	5	7	8	7
Disappear	0	0	3	10	0	0	3	3
Total	7	100	31	100	70	100	108	100

7.3.3 Expectations in terms of products/markets

During the ‘farm profile’ survey, the farmers’ expectations with regard to their products/markets were also studied in terms of their level of agreement with a range of alternatives that were formulated using an Ansoff product/market matrix (see Chapter 3, section 3.5.1). These alternatives were:

- same crops to existing markets;
- same crops to new markets;
- new crops to existing markets;
- new crops to new markets;
- withdrawal from farming.

The results revealed that 77% of the respondents did not want to maintain the same crops and markets and disagreed with this alternative, while only 18% of them were happy with maintaining their businesses in terms of products and markets unchanged. However, the majority of them (88%) were interested to continue growing their current crops but to explore new markets (19% strongly agreed and 69% agreed). The vast

majority of them (89%) disagreed in respect of introducing new crops in to existing markets (Table 7.6). This finding may be explained by the poor market structure in the country and in the Plovdiv region respectively, which has been a subject of discussion in various reports made by the Bulgarian government and some international associations (FAO, 1999; SENTER, 2000; EC, 2001a).

Table 7.6: Farm business expectations relating to products/markets
(‘Farm profile’ survey)

Alternatives	Strongly agree		Agree		Neutral		Disagree		Strongly disagree		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Same crops to same markets	2	2	19	18	1	1	84	77	2	2	108	100
Same crops to new markets	20	19	75	69	0	0	13	12	0	0	108	100
New crops to same markets	3	3	5	5	3	3	96	89	1	1	108	100
New crops to new markets	38	35	32	30	2	2	36	33	0	0	108	100
Withdrawal from farming	0	0	7	6	3	3	28	26	70	65	108	100

Two thirds of the horticultural producers responded positively to the proposal of introducing new crops to new markets (30% agree and 35% strongly agree). They acknowledged that the development of new markets and products could be vital for the revitalisation of the agricultural/horticultural industry, an approach that was also suggested by the EC that encourages such initiatives (EC, 1998b; EC, 1998c; MAF, 2000a). The issue of farm diversification was discussed later as it was a part of two of the proposed alternative strategies. Although they were operating in a very difficult economic situation, leaving agriculture was approved only by 6% of the respondents (Table 7.6).

A significant difference between the size of the farms and the alternative of producing new crops for new markets was found ($KW = .025$) (Table 7.8). Less than half of the ‘small’ farms either strongly agreed or agreed to develop ‘new crops for new markets’ (24% and 20% respectively) compared to more than two thirds of the respondents with farms of a more than 2 ha who supported this alternative (Table 7.7 and Table 7.8). This difference may be explained by their perceived low production capacity and weak market position of the ‘small’ holdings. Another reason may be the lack of marketing knowledge although it was demonstrated in Chapter six that the respondents were well educated. A project for training the farmers began in 2000 and its main aim was providing better marketing and business skills via training courses in different regions of Bulgaria (SENTER, 2000; EC, 2001b)

Table 7.7: Farm business expectations of different types of farm relating to products/markets

('Farm profile' survey)

	SIZE OF FARMS															
	Small farms						Medium farms							Big farms		
	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	
Strongly agree	4	28	4	24	0	0	17	2	33	0	4	12	4	52	0	
Agree	16	60	4	20	4	21	72	5	35	5	12	72	4	28	12	
Neutral	4	0	0	0	0	0	0	3	3	5	0	0	4	0	0	
Disagree	72	12	88	56	36	79	11	90	29	23	80	16	88	20	24	
Strongly disagree	4	0	4	0	60	0	0	0	0	67	4	0	0	0	64	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	LAND OWNERSHIP															
	Own farms						Mixed/leased farms							Co-operatives		
	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	
Strongly agree	2	23	3	26	0	3	16	3	43	0	0	0	0	55	0	
Agree	21	63	5	32	5	19	73	5	27	8	0	90	0	28	9	
Neutral	2	0	2	2	2	0	0	5	3	5	0	0	0	0	0	
Disagree	75	14	88	40	31	75	11	87	27	19	100	10	100	17	18	
Strongly disagree	2	0	2	0	62	3	0	0	0	67	0	0	0	0	73	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	TYPES OF CROPS															
	Farms with perennials						Farms with non-perennials							Farms with mixed types of crops		
	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	Same crops to same markets (%)	Same crops to new markets (%)	New crops to same markets (%)	New crops to new markets (%)	Withdrawa l from farming (%)	
Strongly agree	0	57	14	14	0	3	26	0	39	0	2	11	3	36	0	
Agree	44	29	14	29	0	13	61	7	16	19	78	3	3	36	1	
Neutral	0	0	0	0	0	3	0	0	0	3	0	0	5	3	3	
Disagree	44	14	72	57	14	81	13	93	45	23	80	11	88	25	29	
Strongly disagree	12	0	0	0	86	0	0	0	0	55	2	0	1	0	67	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

Farmers with different land ownership patterns or different types of crops had very similar expectations for their farm business in the next 7 years (Table 7.8).

Table 7.8: Results from Kruskal - Wallis (K-W) test

SIZE OF FARMS															
	Same crops to same markets			Same crops to new markets			New crops to same markets			New crops to new markets			Withdrawal from farming		
	SF	MF	BF	SF	MF	BF	SF	MF	BF	SF	MF	BF	SF	MF	BF
N	25	58	25	25	58	25	25	58	25	25	58	25	25	58	25
Mean Rank	53.60	53.64	57.40	49.98	54.36	59.34	57.00	54.03	53.08	66.26	54.17	43.50	53.08	55.59	53.40
Chi-Square	.532			1.703			.751			7.403			.214		
Asymp. Sig.	.766			.427			.687			.025			.899		
LAND OWNERSHIP															
	OF	M/LF	C	OF	M/LF	C	OF	M/LF	C	OF	M/LF	C	OF	M/LF	C
N	60	37	11	60	37	11	60	37	11	60	37	11	60	37	11
Mean Rank	52.96	54.03	64.50	52.78	55.05	62.00	54.89	52.38	59.5	59.85	49.55	41.95	53.43	55.11	58.27
Chi-Square	2.433			1.252			1.544			4.967			.342		
Asymp. Sig.	.296			.535			.462			.083			.843		
TYPES OF CROPS															
	PF	NF	MCF	PF	NF	MCF	PF	NF	MCF	PF	NF	MCF	PF	NF	MCF
N	7	31	70	7	31	70	7	31	70	7	31	70	7	31	70
Mean Rank	48.14	54.32	55.21	37.14	51.42	57.6	43.64	56.05	54.90	70.07	57.21	51.74	66.50	46.90	56.66
Chi-Square	.622			4.772			3.120			2.803			4.486		
Asymp. Sig.	.733			.092			.210			.246			.106		

Note: SF-small farms; MF-medium size farms; BF-big farms; OF-own farms; M/LF-mixed/leased farms; C-co-operatives; PF-farms with perennials; NF – farms with non-perennials; MCF-farms with mixed crops

7.4 BUILDING THE CONCEPTUAL FRAMEWORK FOR THE PROCESS OF EVALUATION OF A RANGE OF STRATEGIC OPTIONS

7.4.1 Introduction

The process of transition towards a ‘free market’ economy began in Bulgaria in 1989, therefore management and business issues and skills have become important and essential for running commercial farming. A range of outcomes was proposed to the interviewees and it was necessary to investigate how they understand their meaning due to the fact that, as was demonstrated earlier, the business knowledge of the Bulgarian farmers was poor (EC, 2001b).

7.4.2 Business viability

The first term that required explanation by the respondents was business viability because increasing business viability was one of the anticipated outcomes of each strategic option. They articulated their understanding of the above-mentioned term and they perceived this question as difficult due to the following:

- the lack of similar terminology in the Bulgarian language;

- their confusion because they did not understand their work on their farm as a business activity as one of them explained:

“What a farm manager I am and what a business I am developing with 1.7 ha. The truth is that I am trying to survive in this difficult time and to earn some income”

Turner and Taylor (1998) proposed three indicators of business viability, which are profitability, feasibility and worthwhileness (return on capital). According to 76% of the respondents business viability meant gaining profit. Less than one third (28%) of them understood this term as having available capital for re-investment, 22% thought that improved efficiency was another aspect for business viability and 15% suggested having a market for their production (Table 7.9). One of these farmers stated:

“My business is viable when I can obtain profit and have capital for re-investments”

Table 7.9: Understanding of business viability

(‘Strategic options’ survey)

Business viability means*:	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Profitability	12	86	33	72	13	81	58	76
Capital for re-investment	2	14	13	28	6	38	21	28
Efficiency	2	14	12	26	3	19	17	22
Available market	0	0	8	17	3	19	11	15
Total of cases	14	100	46	100	16	100	76	100
Business viability means*:	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Profitability	30	77	24	75	4	80	58	76
Capital for re-investment	9	23	11	34	1	20	21	28
Efficiency	8	21	8	25	1	20	17	22
Available market	4	10	6	19	1	20	11	15
Total of cases	39	100	32	100	5	100	76	100
Business viability means*:	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Profitability	2	67	20	82	36	74	58	76
Capital for re-investment	0	0	8	33	13	27	21	28
Efficiency	0	0	6	25	11	22	17	22
Available market	1	33	5	21	5	10	11	15
Total of cases	3	100	24	100	49	100	76	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Another respondent added:

“If you have certain markets for your products you would be able to think about business improvements that would make your business more viable”

There were no differences indicated between the understanding of business viability of the respondents with different size, land ownership or types of crops.

7.4.3 Profit rates

As the respondents stated that profitability was the main indicator of business viability, they were also asked to identify what net profit rates they were aiming for. The farmers found the identification of the desired net profit rates a difficult question. They emphasised that their target net profit levels varied between 10% and 50% and their average net profit level was almost 26% (Mean = 25.66). More than one third (37%) of the interviewees looked for a net profit rate of more than 30% because of their business philosophy. One of them explained why the producers aimed such high profit rates:

“I am not accounting any salary for me and my family over the whole year because if I do not have any profit at the end of the year that means that my wages have to be transferred for buying seeds or something else that I would need for the next agricultural year”

The private co-operatives and the farms cultivating only perennial crops had a different approach to identifying their target net profit rates. The profit level that the co-operatives were looking for varied between 10-15% and the average rate was 13%. This organisational structure had official accountancy records that followed all the legal regulations and accounted for promptly payment of monthly salaries to their workers. The FAO (1999) argue that the co-operatives offer good job security and their weakness was that they were massively overstaffed. One manager of the co-operative within the sample stated:

“I have got so many workers, consequently my labour costs are very high so if the co-operative has 10% profit that would be satisfactory”

In comparison, the private farmers that cultivated only perennial crops stated that their average target net profit rate was 50%, which may be explained by the fact that they

included their labour costs in the profit due to the lack of proper accountancy records. On the other hand, it was mentioned earlier that fruits and grapes were the most profitable crops (FAO, 1999, OECD, 2000). One of the respondents explained:

"I am lucky to have a cherry orchard and due to available market demand and high price of the cherries I can aim a higher net profit rates than my colleagues who grow vegetables"

All the other types of farm had average profit rates between 25-27%.

7.4.4 Better quality of life

One of the EU priorities relating to the rural development is improving the quality of life in rural areas (EC, 1999b, MAF, 2000a). Therefore, another term that was investigated during the 'strategic option' survey was 'better quality of life' because this was another proposed outcome of the proposed strategies. The respondents in the Plovdiv region expressed their understanding of improving the quality of life for themselves and their families and 92% of them clearly stated that they would have a better quality of life if they had financial security in terms of obtaining sufficient incomes that would provide them with a reasonable life (Table 7.10). One of them explained:

"I do not want an expensive car or/and holidays abroad I just need enough money to be able to provide a decent life for my family"

For 36% of them better quality of life also meant improving their living standard while for 7% of them it meant building a new house (Table 7.10).

The respondents with different farm sizes, land ownership and cropping patterns had a similar understanding of the term 'better quality of life', the vast majority of them linked this term with improved financial security (Table 7.10).

Table 7.10: Understanding of better quality of life
(‘Strategic options’ survey)

Better quality of life means*:	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial security	14	100	42	91	14	88	70	92
Better life standard	2	14	20	44	5	31	27	36
Building new house	1	7	3	7	1	6	5	7
Total of cases	14	100	46	100	16	100	76	100
Better quality of life means*:	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial security	36	92	30	94	4	80	70	92
Better life standard	11	28	16	50	0	0	27	36
Building new house	4	10	0	0	1	20	5	7
Total of cases	39	100	32	100	5	100	76	100
Better quality of life means*:	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Financial security	3	100	21	88	46	94	70	92
Better life standard	0	0	10	42	17	35	27	36
Building new house	1	33	3	13	1	2	5	7
Total of cases	3	100	24	100	49	100	76	100

Note: * This table includes only the top three answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

7.5 EVALUATION OF A RANGE OF ALTERNATIVE STRATEGIC OPTIONS

7.5.1 Introduction

Developing different potential alternatives for an organisation based on the impact of the major environmental factors and drivers, which have a high level of uncertainty, and then taking strategic decisions to deal with specific situations are the main aspects underlying business scenario development (Aaker, 1984; Luffman *et al.*, 1988; Webb, 1989; Johnson and Scholes, 1999).

The review of the literature had suggested that strategy evaluation has become very important due to the rapidly changing business environment and that it should inform an organisation in relation to its future and consistency against fast changing external forces (David, 1997; Johnson and Scholes, 1999). Horton *et al.* (1993) recommended that the first step of narrowing this evaluation is to answer the questions ‘what will be evaluated’, followed by ‘what are the reasons’ and ‘to whom will it be done’.

During the ‘farm profile’ survey, farmers were asked to describe their dreams (ideal scenario) for their farm business. Other possible scenario withdrawal from horticulture

was also examined, which helps to identify the opposite end of business development. These two extreme options within the continuum of business development were examined. However, the discussion does not follow the evaluation structure used for the last five strategies but only discusses the reasons for the choice of the farmers. During the 'strategic option' survey, the emphasis was on comprehensive investigation and evaluation of a range of alternative strategies (a set of five). These five strategic options were proposed for evaluation by the farmers only who intended to continue with their horticultural business when asked to identify which option they considered as a most feasible for the next 5 years, taking into consideration the changes of the business environment in Bulgaria and in the Plovdiv region in particular.

The alternative strategies in this research based on Ansoff product/market matrix were evaluated, as well as the underlying context in terms of the factors that encouraged/discouraged the farmers business decisions. These contextual factors were personal (*e.g.* age, knowledge and experience, etc.), business (*e.g.* farm profit, cash flow, business risk etc.) and economic (*e.g.* inflation rate, market demand, subsidies, import/export regulations etc). Similar factors, *i.e.* personal, land-related, economic and institutional, were used by Gary and Wilkinson (1997) for assessing the profitability of conservation orientation of the farms in New Zealand. As part of the evaluation process, the respondents were also asked to identify the anticipated outcomes of the introduction of the strategic options.

The five strategies that were evaluated by the respondents were:

- 1) Doing what you currently do but better;
- 2) Developing new horticultural products;
- 3) Developing new markets;
- 4) Developing new supportive agricultural activities;
- 5) Developing new supportive non-agricultural activities.

As mentioned above, only the respondents who wanted to stay in horticulture evaluated the last five strategies, which were formulated upon the Ansoff product/market matrix (see Chapter 4, section 3.5.1). They were asked to identify the feasibility of each option, the factors influencing their decision and the expected outcomes.

7.5.2 Farmers' dreams - ideal scenario

The farm managers were asked to describe their dreams for their farm business, in any ideal scenario *i.e.* if all the obstacles are removed. More than half of the interviewees (57%) stated that their dream was to have a *modern farm* (Table 7.11). As mentioned earlier, agriculture/horticulture in Bulgaria and in the Plovdiv region in particular has been in crisis for the last 11 years (1989-2000) and farmers have had to use obsolete machinery, inherited after the process of liquidation of the AICs. They also have had to use old technologies and crop varieties that were not necessarily suitable for small-scale farming (MAF, 2000a; OECD, 2000; SENTER, 2000). All these aspects combined with the lack of finance for buying new machinery and grants for research for developing new technologies that are more efficient and varieties help to explain the difficulties the respondents had in modernising their farms. As a result, such a high percentage of farmers dreamt of having a modern farm while in West Europe farms modernisation would be a short-term objective, which was stated by one of the interviewees:

"I cannot understand why I have to dream about modernisation of my farm and in Greece (the neighbouring country) my colleagues have all this new and modern equipment"

Another farmer responded:

"I do want to buy a new model small tractor because that would give me pleasure in being a farmer. I hope one day I would achieve it"

After 1989, a series of new economic processes and legislation were introduced in Bulgaria, which resulted in positive economic progress in 1994/95. However, the negative processes were stronger and caused the collapse of the banking system and escalating inflation in 1996. In 1997, the newly elected government began a general programme for economic and legislative stability (SENER, 2000; OECD, 2000). The first steps towards achieving economic stability in Bulgaria influenced farmers' dreams and they started considering the idea of being bigger and stronger in economic terms. Therefore, the second dream of the respondents was *farm expansion* (40%) (Table 7.11). One of them explained:

“What kind of farm business I am running now with only 2.5 ha land. I know that if I want to be in the ‘real’ business I have to expand the size of my farm but it is very difficult within the unstable economic situation in Bulgaria”

Table 7.11: The dreams of the farmers managing different types of farm

(‘Farm profile survey’)

Dreams*	SIZE OF FARMS						Total	
	Small		Medium		Big		Total	
	Count	% of cases	Count	% of cases	Count	% of cases		
Modern farm	10	40	41	71	11	44	62	57
Farm expansion	14	56	21	36	7	28	43	40
Having perennial crops	2	8	18	31	11	44	31	29
Effective marketing	2	8	3	5	11	44	16	15
Diversified activities	0	0	7	12	5	20	12	11
No dreams	5	20	5	9	2	8	12	11
Total of cases	25	100	58	100	25	100	108	100
Dreams*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives		Total	
	Count	% of cases	Count	% of cases	Count	% of cases		
Modern farm	37	62	19	51	6	55	62	57
Farm expansion	23	38	17	46	3	27	43	40
Having perennial crops	14	23	13	35	4	36	31	29
Effective marketing	4	7	2	5	10	91	16	15
Diversified activities	5	8	6	16	1	9	12	11
No dreams	10	17	2	5	0	0	12	11
Total of cases	60	100	37	100	11	100	108	100
Dreams*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops		Total	
	Count	% of cases	Count	% of cases	Count	% of cases		
Modern farm	3	43	20	65	39	56	62	57
Farm expansion	3	43	15	48	25	36	43	40
Having perennial crops	2	29	3	10	26	37	31	29
Effective marketing	0	0	5	16	11	16	16	15
Diversified activities	2	29	2	6	8	11	12	11
No dreams	1	14	6	19	5	7	12	11
Total of cases	7	100	31	100	70	100	108	100

Note: * This table includes only the tops five answers and exclude all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

The official completion of land restitution and improving land legislation has provided a basis for business expansion. However, there were also some obstacles identified by both the FAO (1999) and SENTER (2000) such as the fact that only a low percentage of people (about 28%) have received their title deeds for their land, an inefficient Land market and turbulent political, technological and economic changes. Therefore, respondents were afraid of leasing land due to the high level of uncertainty as one of them explained:

“I am cultivating only my own land because the risk of renting land has been too high and I may lose all my investment that I made on the leased land due to the lack of official documentation that would protect my rights”

The results also revealed that 29% of the farmers dreamt of *growing perennial crops* (fruits and grapes) (Table 7.11). Both, MAF (2000a) and OECD (2000) argue that fruits and grapes had been the most profitable crops over the previous 10 years due to available demand. Growing perennial crops could ensure capital for running the existing business as well as for business expansion. One of the interviewees stated:

“If I had fruits or grapes I would not have any problems because I would be able to cover the maintenance of my machinery, buy seeds for the next agricultural year and even think of buying land”

The lack of finance (own or borrowed) for investments has made the establishment of new orchards and vineyards very difficult due to the limited governmental support, the long and complicated loan procedure and the fact that agricultural land cannot be a guarantee when applying for a bank loan (SENER, 2000). The other aspect that made growing perennial crops to be a dream was the poor development of the long-term leasing arrangements.

Less than one fifth (15%) of the farm managers dreamt about *effective marketing* (Table 7.11), also discussed in Chapter six, section 6.3.2.3. They suggested that a market information database or establishing new wholesale markets (auctions) would improve the marketing system. Various national and international reports have argued that the marketing structure has been poor in Bulgaria for the period 1989-2000 (FAO, 1999; OECD, 2000). This ‘dream’ confirms that marketing problems have yet to be solved.

Only 11% of the interviewees dreamt of scenarios other than those related to primary production such as developing *farm diversification* (agri-food processing units, establishing organic farming, plant nursery, agri-tourism, etc.) (Table 7.11). Again, the lack of finance has been the major obstacle for developing alternative economic activities. A respondent explained:

“I would love to have a small apple juice processing unit as a part of my farm business because I would be able to use my apple production but it is so difficult to find investment capital for buying all the necessary processing equipment”

Another farmer added:

“If I can develop agri-tourism my son would decide to stay in the village so all my family would be involved in the business. He does not like agricultural work but welcoming tourists (local and foreign) would be suitable for him”

Just 11% of the producers that responded said they did *not have any dreams* due to either their difficult life or their age (over 60 years) (Table 7.11). One of them stated quite simply that:

“Real life is very difficult and complicated so I do not have time for dreams”

Another added:

“I will leave the dreams for the young people like my children. What I can dream for at my age of 68 years”

There were some differences in the dreams of those with farms of *different size*. However, for more than half of the interviewees with ‘small’ farms (56%) the first dream was of farm expansion, which they believe was essential if they wanted to stay in the agriculture and be competitive. The dreams of the managers of the ‘big’ production units placed equal emphasis (44%) upon farm modernisation, better marketing and cultivating perennial crops based on the potentially bigger profits that would allow them to make an investment in these activities. A relatively high percentage of farmers with ‘small’ enterprises (20%) declared that they did not have dreams about their farms (Table 7.11). One of them explained:

“I am 67 years old and I am not dreaming for professional career and business development but if I was 40 I would do so many things”

Patterns of land ownership demonstrated some differences because more than half of the respondents of the private individual farms dreamt of modernisation while the vast

majority of the managers of the newly registered co-operatives (91%) were dreaming about improved marketing (Table 7.11). This may be explained by the fact that during the period of Socialism the markets were guaranteed by the government, as suggested by one of these respondents:

“I cannot understand why the government did not help us with the markets because we (co-operatives) are cultivating the majority of the agricultural land and we produce relatively large quantities of products”

Kanchev and Doichinova (1999) and the OECD (2000) have argued that the survival of the private co-operatives depends on how they will manage competition within the condition of a ‘free market’ economy, keeping in mind that their great strength was having the necessary equipment even if the machinery inherited was old (average age of 18 years). More than half (55%) of the co-operative leaders also emphasised the issue of modernisation as their dream.

No major differences could be related to farms with different *cropping patterns* and their dreams other than the fact that those with perennial crops dreamt equally about farm modernisation and expansion (43%) (Table 7.11).

7.5.3 Withdrawal from farming

The results from the ‘farm profile’ survey revealed that the majority of the horticultural producers in the Plovdiv region either strongly disagreed or disagreed (26% and 65% respectively) with the alternative of withdrawing from farming. Effectively, 3% of them were neutral and unsure about their business survival due to the dynamic changes of the business environment (Table 7.7). One of the respondents with a viable business stated:

“I am running a profitable farm business with my private vineyards. I have to be crazy to lose this opportunity in the unstable economic situation in Bulgaria”

During the ‘strategic option’ survey that was undertaken a year later than the ‘farm profile’ survey, the scenario of withdrawal from farming was narrowed to withdrawal from horticulture, which was the main focus of this research. The findings revealed that the 10% of the farmers intended to leave horticulture (Table 7.12). This could be

explained by the poor economic situation in Bulgaria and in the Plovdiv region together with the slow pace of improvements especially in the rural areas, which was identified by SENTER in 2000.

No differences were indicated between the intention to withdraw from horticulture and farm size, land ownership patterns or different types of crop. The majority (over 75%) of different types of farm (in terms of size, land ownership patterns and types of crops) were planning to continue their horticultural activities. All of the farms of less than 2 ha and the farms that cultivated only perennial crops included in the study intended to continue producing horticultural crops because it was a way of surviving for the respondents with ‘small’ farms or profitability for those with fruits and grapes (Table 7.12).

Table 7.12: Intention to withdraw from horticulture

(‘Strategic options’ survey)

Withdraw from horticulture	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	14	100	42	91	12	75	68	90
No	0	0	4	9	4	25	8	10
Total	14	100	46	100	16	100	76	100
Withdraw from horticulture	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	37	95	27	84	4	80	68	90
No	2	5	5	16	1	20	8	10
Total	39	100	32	100	5	100	76	100
Withdraw from horticulture	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	3	100	19	79	46	94	68	90
No	0	0	5	21	3	6	8	10
Total	3	100	24	100	49	100	76	100

Those who stated they intended to withdraw from horticulture were asked to give their rationale. The key reason that emerged was lack of, or uncertain markets (100%). The majority (88%) stated that high production costs was their second reason, which was to be expected because the horticultural crops are intensive crops. An equal proportion of them (50%) identified other reasons such as the poor credit system or lack of subsidies and financial grants provided by the Government. Additionally, 38% of them emphasised the highly fragmented nature of their land holdings (Table 7.13), which was identified as a weakness above. Some other reasons that were mentioned by them

(13%) were poor legislation and insurance policy in regards to agriculture, and age limitations. A respondent explained:

“I wanted to insure my future agricultural production but this activity was unsuccessful due to the fact that I was supposed to pay a very high price that was not reasonable”

The highest percentage of the farms of the sample who intended to withdraw from horticulture were those with more than 10 ha (25%) and those that only cultivated non-perennial crops (21%), all of whom were discouraged mainly by the uncertain market conditions and high production costs (Table 7.12 and Table 7.13).

Table 7.13: The top five reasons of withdrawal from horticulture
(‘Strategic options’ survey)

Reasons*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or uncertain market	0	0	4	100	4	100	8	100
High production expenses	0	0	3	75	4	100	7	88
No subsidies and donation	0	0	2	50	2	50	4	50
Bad credit system	0	0	1	25	3	75	4	50
Fragmented land	0	0	2	50	1	25	3	38
Total of cases	0	0	4	100	4	100	8	100
Reasons*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or uncertain market	2	100	5	100	1	100	8	100
High production expenses	1	50	5	100	1	100	7	88
No subsidies and donation	1	50	3	60	0	0	4	50
Bad credit system	1	50	2	40	1	100	4	50
Fragmented land	1	50	2	40	0	0	3	38
Total of cases	2	100	5	100	1	100	8	100
Reasons*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Lack or uncertain market	0	0	5	100	3	100	8	100
High production expenses	0	0	5	100	2	67	7	88
No subsidies and donation	0	0	2	40	2	67	4	50
Bad credit system	0	0	1	20	3	100	4	50
Fragmented land	0	0	3	60	0	0	3	38
Total of cases	0	0	5	100	3	100	8	100

Note: * This table includes only the top five answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

7.5.4 Strategy - ‘doing what you currently do but better’

7.5.4.1 Feasible strategy - why

The strategy of ‘doing what you currently do but better’ was considered as feasible by the vast majority (90%) of the producers included in this research (Table 7.14). This was in clear contradiction with their expectation expressed in the ‘farm profile’ survey in the previous year. When asked to identify hypothetically their future strategies, more than 70% of the respondents disagreed with having ‘same crops to same markets’ (Table 7.7). The factors that may explain their decision are discussed later.

There was a relatively higher proportion of the ‘small’ and the ‘big’ farms (79% and 75% respectively) that stated that maintaining their current business with improvement was an appropriate for their future development, compared to those with size between 2-10 ha (98%), the reasons are explained below. The respondents with different land ownership patterns or types of crops had a similar vision about the feasibility of this strategic option.

Table 7.14: Feasibility of the strategy ‘doing what you currently do but better’ relating to different types of farm
(‘Strategic options’ survey)

Feasible strategy	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	11	79	41	98	9	75	61	90
No	3	21	1	2	3	25	7	10
Total	14	100	42	100	11	100	68	100
Feasible strategy	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	34	92	23	85	4	100	61	90
No	3	8	4	15	0	0	7	10
Total	37	100	27	100	4	100	68	100
Feasible strategy	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	3	100	17	90	41	89	61	90
No	0	0	2	10	5	11	7	10
Total	3	100	19	100	46	100	68	100

It was necessary to investigate how the current business could be improved in the future by doing what they currently did but better. The results indicated that more than half of the interviewees (54%) intended to produce better quality products. Both, the OECD (2000) and SENTER (2000) argue that agricultural/horticultural crops produced

in Bulgaria are of low quality. Therefore, improving the quality of the products could be a vital step for revitalising the horticultural industry. Further results show that one third (33%) of the participants were planning to increase the area of their current profitable crops, about one quarter (26%) of them were proposing to implement new technologies and one fifth (20%) were intending to use new varieties of their current crops (Table 7.15).

Similar solutions to improve their farm businesses were put forward by farms of different sizes and those that differ in the patterns of crops that they cultivated.

Table 7.15: Improving the current farm business of different types of farm

(‘Strategic options’ survey)

Improving the business by*:	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Producing better quality	6	55	21	51	6	67	33	54
Increasing the area of the profitable crops	1	9	15	37	4	44	20	33
Implementing modern technologies	4	36	11	27	1	11	16	26
Using new more efficient varieties	2	18	8	20	2	22	12	20
Total of cases	11	0	41	100	9	100	61	100
Improving the business by*:	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Producing better quality	22	65	9	39	2	50	33	54
Increasing the area of the profitable crops	8	24	12	52	0	0	20	33
Implementing modern technologies	9	27	6	26	1	25	16	26
Using new more efficient varieties	6	18	4	17	2	50	12	20
Total of cases	34	100	23	100	4	100	61	100
Improving the business by*:	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Producing better quality	2	67	9	53	22	54	33	54
Increasing the area of the profitable crops	0	0	2	11	18	44	20	33
Implementing modern technologies	0	0	6	35	10	24	16	26
Using new more efficient varieties	1	33	4	24	7	17	12	20
Total of cases	3	100	17	100	41	100	61	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Some minor differences were indicated between the ways of improving the current business based on the land ownership patterns. Equal proportions of the managers of co-operatives (50%) intended either to improve the quality of their produce, or to use new modern varieties of their current crops. However, the respondents with

‘mixed/leased’ farms thought to improve their farm business mainly by specialising into existing crops that they were most efficient at producing (52%) (Table 7.15).

The most important factors that encouraged respondents to find the strategy ‘doing what they currently do but better’ feasible were:

- Possession of knowledge and experience –77%;
- Improved personal and financial security – 48%
- Increased farm profit – 46%;
- Available market demand – 31%;
- No age limitations – 21%.

Knowledge and experience was the most frequent factor that encouraged the respondents to maintain their current business with improvements irrespective of the *size of the farms* (Table 7.16). That was expected because, as identified earlier, farmers interviewed in the Plovdiv region were well educated and had an average of 21 years of experience (see Chapter 6, sections 6.3.1.3 and 6.3.1.4). SENTER (2000) identify that one of the competitive advantages of Bulgarian agriculture is that farmers are well educated and experienced, a result that was confirmed in this research.

The farmers with farms of different size also perceived improved personal/financial security as supportive for this strategy. However, there were some differences in terms of farm profit and available markets. Farms of more than 2 ha identified increased profit rates as an important encouraging characteristics whereas those with less than 2 ha did not find this factor of great importance due to their small production capacity and low competitive power (Table 7.16).

The results revealed that about one third of the two groups of farms of less than 10 ha did not have problems with finding markets for their products while the ‘big’ farms had some difficulties with selling their produce (Table 7.16). This was to be expected due to the fact that distribution system in the country was poor and the fact that farmers with ‘small’ production units sold partly their production by themselves on the street or market, which would be very complicated for a large horticultural units due to their larger surplus of products.

Table 7.16: Encouraging factors for strategy - 'doing what you currently do but better' relating to size of farms

ENCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security	55	49	33	48
2.	Age – young	18	24	11	21
3.	Having knowledge and experience	91	71	89	77
4.	Aware of the opportunities				
BUSINESS FACTORS					
5.	Increased farm profit	18	49	67	46
6.	Reduced risk	18	12	22	15
7.	Having available machinery		20		15
8.	Increased cash flow of business	9	12		12
9.	Reduced cost of production	18	2	11	8
10	Good quality of workforce		2		5
11	Available capital available for investment		2		2
ECONOMIC FACTORS					
12	Available market demand	27	39		32
13	Good road network				2
14	Improved credit system	9	2		3
15	Stable rate of inflation				
16	Better advisory system for horticulture				
17	Sufficient distribution system for horticultural products	9	2		3
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products	9		11	3
22	Favourable export regulations for horticultural products			11	2
23	Having promotion of products to markets				
24	More subsidies for horticulture		7		5
25	More subsidies to horticultural research	9	2		2
26	No taxation of inputs	9			2
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Empty cells are options presented to the respondents but were not selected by them

Respondents representing different patterns of *land ownership* had similar view with what encouraged them to perceive this strategy feasible for their farm business in the next 5 years as all three groups identified their knowledge and experience and personal and financial security as the main positive factors. The only notable difference was with regard to the co-operatives studied, which were encouraged to stay in horticultural business due to the good quality of their workforce. However, their profit levels were decreasing (Table 7.17). The OECD (2000) states that over the period 1989-2000 private co-operatives became less competitive due to their difficulties in operating within conditions of a free market economy and because they were overstaffed.

Table 7.17: Encouraging factors for strategy - 'doing what you currently do but better' relating to land ownership patterns of farms

ENCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security	56	34	50	48
2.	Age – young	24	22		21
3.	Having knowledge and experience	65	91	100	77
4.	Aware of the opportunities				
BUSINESS FACTORS					
5	Increased farm profit	32	70	25	46
6	Reduced risk	18	9	25	15
7	Having available machinery	11	17	25	15
8	Increased cash flow of business	12	13		12
9	Reduced cost of production	9	4		8
10	Good quality of workforce	3		50	5
11	Available capital available for investment	3			2
ECONOMIC FACTORS					
12	Available market demand	32	26		32
13	Good road network	2			2
14	Improved credit system	6			3
15	Stable rate of inflation				
16	Better advisory system for horticulture				
17	Sufficient distribution system for horticultural products	6			3
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products	3	4		3
22	Favourable export regulations for horticultural products		4		2
23	Having promotion of products to markets				
24	More subsidies for horticulture	8			5
25	More subsidies to horticultural research	3			2
26	No taxation of inputs		4		2
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore do not sum to 100%

Empty cells are options presented to the respondents but were not selected by them

The respondents who cultivated *different crops* had slightly different opinions in terms of what encouraged them to support this strategy. The respondents that cultivated only perennial crops were encouraged mainly by the demand for their products followed by them being knowledgeable and experienced, whereas the interviewees with non-perennials and mixed cropping patterns pointed to their knowledge and experience (77% and 78%) in first place, followed by improved personal and financial security (47% and 49%) and increased farm profit (41% and 48%) (Table 7.18).

Table 7.18: Encouraging factors for strategy - 'doing what you currently do but better' relating to types of crops of the farms

ENCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security	33	47	49	48
2.	Age – young		29	20	21
3.	Having knowledge and experience	67	77	78	77
4.	Aware of the opportunities				
BUSINESS FACTORS					
5	Increased farm profit	33	41	48	46
6	Reduced risk		24	12	15
7	Having available machinery		18	15	15
8	Increased cash flow of business	33	6	12	12
9	Reduced cost of production		24	2	8
10	Good quality of workforce		6	5	5
11	Available capital available for investment		6		2
ECONOMIC FACTORS					
12	Available market demand	100	18	32	31
13	Good road network			3	2
14	Improved credit system			5	3
15	Stable rate of inflation				
16	Better advisory system for horticulture				
17	Sufficient distribution system for horticultural products	33	6		3
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products			5	3
22	Favourable export regulations for horticultural products			2	2
23	Having promotion of products to markets				
24	More subsidies for horticulture			7	5
25	More subsidies to horticultural research			3	2
26	No taxation of inputs			2	2
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Empty cells are options presented to the respondents but were not selected by them

Both, the FAO (1999) and OECD (2000) acknowledge that fruit and grape outputs decreased after 1989 due to lack of capital for investment, the ageing of the plants and high production expenses. This resulted in an increased demand of these products and an increase in their price.

It was apparent that despite the difficulties in running a farm business in the Plovdiv region, some respondents managed to create a viable business. The FAO (1999) argue that the economic performance of the private farms in Bulgaria has been poor since 1989. However, the FAO study also acknowledged that some business oriented and

competitive enterprises started to appear in the last few years and predicted that their number would increase progressively.

7.5.4.2 Expected outcomes

The outcomes that would be expected from the introduction of the strategic option of 'doing what you currently do but better' were proposed to the respondents to examine their management style in terms of whether they are aiming to: respond to a changing environment and create an efficient business, apply effective marketing, produce high quality products, maintain/improve their families life style or just survive. The majority of the respondents (84%) indicated that they would expect to improve the quality of life for themselves and their families, which was stated as of greatest importance (Table 7.19). This confirmed that of highest priority for the horticultural producers was ensuring personal survival. One of the respondents stated:

"I am responsible for my family income and I cannot afford a big investment or high risk production changes because my family is more important"

The second most frequently given answer was producing better quality products, which was, as mentioned earlier, the most feasible way for improving their existing farm business. Increased business viability was the least expected outcome given by the respondents (49%). The results reveal that the farmers who expected to maintain their current farm business with improvements put in a first place their personal happiness and security and their business was only a tool for achieving this aim.

The majority of the respondents with different sized farms and land ownership patterns would expect to improve their life style with the introduction of this strategy. However, those with 'big' farms and co-operatives were equally concerned about their business viability and standard of life (Table 7.19).

Table 7.19: Expected outcomes of strategy ‘doing what you currently do but better’ relating to different types of farm

('Strategic options' survey)

Strategic options survey

Outcomes*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	3	27	21	51	6	67	30	49
Better quality of life	11	100	34	83	6	67	51	84
Better quality of products	8	73	27	66	5	57	41	67
Total of cases	11	0	41	100	9	100	61	100
Outcomes*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	14	41	13	57	3	75	30	49
Better quality of life	29	85	19	83	3	75	51	84
Better quality of products	25	74	14	61	2	50	41	67
Total of cases	34	100	23	100	4	100	61	100
Outcomes*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	1	33	9	53	20	49	30	49
Better quality of life	2	67	14	82	35	85	51	84
Better quality of products	3	100	11	65	27	66	41	67
Total of cases	3	100	17	100	41	100	61	100

Note: * Percentages are based on multiple responses of the first two answers given by the respondents therefore they do not sum to 100%

The farmers that cultivated perennial crops had different anticipation as all of them were mainly aiming to produce better quality products in order to explore new export markets. Conversely, those with annual or mixed cropping patterns expected to improve their quality of life (Table 7.19).

7.5.4.3 Not feasible a strategy – why?

Only seven of the producers rejected the strategy of ‘doing what you currently do but better’ (Table 7.14). The key reasons identified by them were:

- lack of, or obsolete, machinery (43%);
- decreased farm profit (29%);
- poor credit systems (29%);
- lack of market demand (29%);
- high business risk (29%);
- poor distribution and decreased cash flow (29%).

Size of the farms

The interviewees with farms of different size were discouraged by rather different factors. The only one 'medium size' holding that found maintaining their existing business not feasible was negatively influenced by its limited own financial resources (profit and cash flow) and lack of machinery, while the 'small' enterprises were discouraged mainly by their existing poor distribution structure (as they were mainly selling their produce by themselves) and lack of machinery. The farms of more than 10 ha were discouraged mainly by the increased business risk if they do not adapt their business to the environmental changes. The other negative influences mentioned by them were financial limitations and poor import/export regulations (Table 7.20).

Table 7.20: Discouraging factors for strategy – 'doing what you currently do but better' relating to size of farms

DISCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security				
2.	Age – old	33			14
3.	Lack knowledge and experience				
4.	Not aware of the opportunities				
BUSINESS FACTORS					
5	Decreased farm profit		100	33	29
6	Decreased cash flow of business		100	33	29
7	Increased business risk			67	29
8	Lack of or obsolete machinery	67	100		43
9	Lack capital available for investment	33			14
10	Increased cost of production				
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system	67			
13	Poor credit system	33		33	29
14	Poor road network				
15	Unstable rate of inflation				
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets				
19	Lack market demand	33		33	29
20	Unfavourable import regulations for horticultural products	33			14
21	Unfavourable export regulations for horticultural products			33	14
22	High level of bureaucracy				
23	Lack of promotion of products to markets				
24	Lack of subsidies for horticulture			33	14
25	Lack of subsidies to horticultural research				
26	Taxation of inputs			33	14
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

There were some disparities between the perception of the interviewees with 'own' and 'mixed/leased' farms. The first group was discouraged by lack of machinery and poor distribution system whereas the holdings that also leased some land were discouraged mainly by the poor financial results of their current business (low profit levels, low cash-flow) and increased business risk. Some of them also mentioned other factors such as unfavourable export and import regulations (Table 7.21).

Table 7.21: Discouraging factors for strategy – 'doing what you currently do but better' relating land ownership patterns of farms

DISCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old				
3.	Lack knowledge and experience	33			14
4.	Not aware of the opportunities				
	BUSINESS FACTORS				
5	Decreased farm profit		50		29
6	Decreased cash flow of business		50		29
7	Increased business risk		50		29
8	Lack of or obsolete machinery	67	25		43
9	Lack capital available for investment	33			14
10	Increased cost of production				
11	Poor quality of workforce				
	ECONOMIC FACTORS				
12	Poor distribution system	67			29
13	Poor credit system	33	25		29
14	Poor road network				
15	Unstable rate of inflation				
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets				
19	Lack market demand	33	25		29
20	Unfavourable import regulations for horticultural products	33	25		29
21	Unfavourable export regulations for horticultural products		25		14
22	High level of bureaucracy				
23	Lack of promotion of products to markets				
24	Lack of subsidies for horticulture				
25	Lack of subsidies to horticultural research				
26	Taxation of inputs		25		14
	Total of percentage of cases	100	100		100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

The interviewees who cultivated only annual crops were discouraged by a range of external economic factors such as poor credit and distribution system and undeveloped import and export regulations together with lack of own finance. Whereas the farms with ‘mixed’ crops mainly had problems with renting machinery for cultivating their plots followed by increased business risk (Table 7.22).

Table 7.22: Discouraging factors for strategy – ‘doing what you currently do but better’ relating to types of crops of the farms

DISCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old			20	14
3.	Lack knowledge and experience				
4.	Not aware of the opportunities				
	BUSINESS FACTORS				
5	Decreased farm profit		50	20	29
6	Decreased cash flow of business			20	14
7	Increased business risk			40	29
8	Lack of or obsolete machinery			60	43
9	Lack capital available for investment		50	20	29
10	Increased cost of production				
11	Poor quality of workforce				
	ECONOMIC FACTORS				
12	Poor distribution system		50	20	29
13	Poor credit system		50	20	29
14	Poor road network				
15	Unstable rate of inflation				
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets				
19	Lack market demand		50		14
20	Unfavourable import regulations for horticultural products		50		14
21	Unfavourable export regulations for horticultural products		50		14
22	High level of bureaucracy				
23	Lack of promotion of products to markets				
24	Lack of subsidies for horticulture			20	14
25	Lack of subsidies to horticultural research				
26	Taxation of inputs			20	14
	Total of percentage of cases		100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

The findings revealed that the main influences that persuaded the respondents against this strategic option was business oriented, resulting from perceived poor business performance.

7.5.5 Strategy – ‘developing new horticultural crops’

7.5.5.1 Background

Prior to investigating any production changes within the farms of the sample it was necessary to identify the main horticultural products in terms of their profitability in 2000. The results revealed that grapes were the most profitable crops for 27% of them followed by tomatoes (22%), apples (21%) and peppers (15%) (Table 7.23). Both, the FAO (1999) and the OECD (2000) argue that perennial crops were the most profitable products in Bulgaria during the last 11 years of the transition period (1989-2000). The respondents confirmed this statement, however they also identified some vegetables such as tomatoes and peppers as profitable in 2000. The OECD (2000) stated that 0.5 ha of intensive crops such as vegetables or 1 ha vineyards could be cost effective and could generate sufficient incomes for a small family of 3 members.

A few of the respondents identified some other crops (not included in Table 7.23) such as potatoes, strawberries or cabbage as their most profitable products.

The farms within the sample of *different sizes* had different most profitable crops, for one third (33%) of the ‘big’ farms tomatoes were the most profitable crops, while for those with size between 2-10 ha the most profitable product was grapes (29%). Those with size of less than 2 ha equally identified grapes and tomatoes as their main crops (Table 7.23).

Land ownership also determined differences in the results because grapes were the most profitable crops of the ‘own’ farms (30%), apples were for the ‘mixed/leased’ farms, whereas the co-operatives emphasised that peppers were their most rewarding crops. One of the managers explained:

“We cultivate vegetables especially peppers and tomatoes in order to ensure work for the people who are our full-time workers while our other products are arable crops but they are not labour intensive”

Table 7.23: The top four most profitable crops of different types of farm in 2000

('Strategic options' survey)

Most profitable horticultural crops *:	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Grapes	5	36	12	29	1	8	18	27
Tomatoes	5	36	6	14	4	33	15	22
Apples	1	7	10	24	3	25	14	21
Peppers	1	7	7	17	2	17	10	15
Total of cases	14	100	42	100	12	100	68	100
Most profitable horticultural crops *:	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Grapes	11	30	7	26	0	0	18	27
Tomatoes	10	27	4	15	1	25	15	22
Apples	2	5	11	41	1	25	14	21
Peppers	6	16	2	7	2	50	10	15
Total of cases	37	100	27	100	4	100	68	100
Most profitable horticultural crops *:	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Grapes	0	0	0	0	18	39	18	27
Tomatoes	0	0	9	47	6	13	15	22
Apples	2	67	0	0	12	27	14	21
Peppers	0	0	6	32	4	9	10	15
Total of cases	3	100	19	100	46	100	68	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Apples were the most profitable *crops* on the farms that grew only perennial crops (67%), while tomatoes were the most profitable on the farms with annual crops (47%). Effectively, grapes were the most profitable for the production units with 'mixed' types of crop (39%) (Table 7.23).

7.5.5.2 Feasible strategy - why

Almost half of the farmers involved in this research in the Plovdiv region (49%) perceived this strategic option of 'developing new horticultural products' as feasible (Table 7.24). There was no relationship between the different types of farm (in terms of size, land ownership and types of crops) and the anticipation of their managers to introduce production change. However, only one co-operative within the sample found developing new horticultural crops feasible because of their critical economic situation.

Table 7.24: Feasibility of the second strategy ‘developing new horticultural crops’ relating to different types of farm
(‘Strategic options’ survey)

Feasible strategy	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	10	71	19	45	4	33	33	49
No	4	29	23	55	8	67	35	51
Total	14	100	32	100	12	100	68	100
Feasible strategy	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	18	49	14	52	1	25	33	49
No	19	51	13	48	3	75	35	51
Total	37	100	27	100	4	100	68	100
Feasible strategy	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	2	67	9	47	22	48	33	49
No	1	33	10	53	24	52	35	51
Total	3	100	19	100	46	100	68	100

It was essential also to investigate what were the most desirable ‘new’ crops that the interviewees wished to implement in their production scheme. The results revealed that they wanted to grow the following crops (Table 7.25):

- apricots – 27%;
- grapes – 18%;
- peaches – 15%;
- apples – 12%;
- tomatoes – 9%.

The respondents who chose perennial crops such as apricots and grapes as their desired products did so because of their perceived profitability and certain markets. One of the interviewees explained:

“Apricots are very appealing fruits because there is a market demand for dried apricots in Western countries. This is a market niche that we can exploit”.

SENER (2000) argue that although the grape production outputs decreased compared to the pre-reform period, they were the most profitable products during the period of transition due to the increased number of small private wineries and the export

orientation of the wine industry. Therefore, it was not unexpected that 18% of the respondents would like to introduce grapes in to their production system. There were no differences observed between the different types of farm as all of them intended to develop perennial crops (apricots and grapes) except the co-operatives as they are looking for low investment and intensive labour crops such as vegetables.

Table 7.25: The top five new horticultural crops of different types of farm

(‘Strategic options’ survey)

New horticultural crops*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Apricots	3	30	6	32	0	0	9	27
Grapes	3	30	2	11	1	25	6	18
Peaches	2	20	3	16	0	0	5	15
Apples	2	20	2	11	0	0	4	12
Tomatoes	0	0	2	11	1	25	3	9
Total of cases	10	100	19	100	4	100	33	100
New horticultural crops*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Apricots	5	28	4	29	0	0	9	27
Grapes	5	28	1	7	0	0	6	18
Peaches	4	22	1	7	0	0	5	15
Apples	3	17	1	7	0	0	4	12
Tomatoes	0	0	2	14	1	100	3	9
Total of cases	18	100	14	100	1	100	33	100
New horticultural crops*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Apricots	1	50	2	22	6	27	9	27
Grapes	0	0	4	44	2	9	6	18
Peaches	0	0	1	11	4	18	5	15
Apples	0	0	1	11	3	13	4	12
Tomatoes	0	0	1	11	2	9	3	9
Total of cases	2	100	9	100	22	100	33	100

Note: * This table includes only the top five answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

Some soft products such as strawberries and raspberries were also mentioned by some of the respondents as desired ‘new’ crops for their business and the reasons were explained by one of them:

“I have a market contract with a French company for selling my berries. They are looking for some other producers who wants to grow soft fruits and as far as I know they also established contacts with them”

The farmers intended to introduce this strategy because a range of positive factors influenced their decision. These factors were:

- Available market demand (67%);
- Increased farm profit (67%);
- Possession of knowledge and experience (33%);
- Increased cash flow (18%)
- Aware of this opportunity (18%).

As mentioned earlier, the reduced supply of fruits and grapes increased their prices (FAO, 1999). Consequently, the respondents regardless of the *size of their farms*, were aware of the fact that there was available demand for fruits and grapes (domestic and potential international) and they stated that any increase of their profit rates would be invested in establishing new plots of perennial crop. One of these farmers explained:

“Perennial crops were the most profitable crops in the last 10 years, therefore if I gain any profit I would prefer to invest it in vineyards than anything else because it is worthwhile ”

The interviewees with farms of less than 10 ha were also encouraged to develop new horticultural crops due to their knowledge and experience whereas the ‘big’ farms identified the available machinery as the other positive driving force (Table 7.26).

Table 7.26: Encouraging factors for strategy – ‘developing new horticultural crops’ relating to size of farms

ENCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	10	21		15
2.	Age – young	10	21		15
3.	Having knowledge and experience	40	37		33
4.	Aware of the opportunities	10	21	25	18
	BUSINESS FACTORS				
5	Increased farm profit	80	63	50	67
6	Reduced risk	10	21		15
7	Having available machinery		16	50	15
8	Increased cash flow of business	40	5	25	18
9	Reduced cost of production	10	5		6
10	Good quality of workforce				
11	Available capital available for investment				
	ECONOMIC FACTORS				
12	Available market demand	60	68	75	67
13	Good road network				
14	Improved credit system		5		3
15	Stable rate of inflation		5		3
16	Better advisory system for horticulture			25	3
17	Sufficient distribution system for horticultural products	10	5	25	9
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets	10			
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products	10	5		6
23	Having promotion of products to markets				
24	More subsidies for horticulture			25	3
25	More subsidies to horticultural research				
26	No taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

The individual farms included in the sample with different *land ownership patterns* differed from the co-operatives and they were encouraged to establish new orchards and vineyards due to the perceived existence of markets, increased farm profit and their considerable knowledge and experience (discussed earlier). In comparison, only one co-operative investigated wanted to introduce a ‘new’ crop and chose tomatoes as a new crop due to its available machinery suitable for tomatoes production and would receive grants and export advice (Table 7.27).

Table 7.27: Encouraging factors for strategy – ‘developing new crops’ relating to land ownership patterns of farms

ENCOURAGING FACTORS		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	17	14		15
2.	Age – young	17	14		15
3.	Having knowledge and experience	33	36		33
4.	Aware of the opportunities	11	29		18
	BUSINESS FACTORS				
5	Increased farm profit	72	64		67
6	Reduced risk	17	14		15
7	Having available machinery	6	21	100	15
8	Increased cash flow of business	22	14		18
9	Reduced cost of production	11			6
10	Good quality of workforce				
11	Available capital available for investment				
	ECONOMIC FACTORS				
12	Available market demand	61	79		67
13	Good road network				
14	Improved credit system	6			3
15	Stable rate of inflation	6			3
16	Better advisory system for horticulture			100	3
17	Sufficient distribution system for horticultural products	11	7		9
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets	6			3
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products	6	7		6
23	Having promotion of products to markets				
24	More subsidies for horticulture			100	3
25	More subsidies to horticultural research				
26	No taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Available market demand, increased own financial resources and having knowledge and experience were the encouraging factors that were identified by the respondents irrespective of the *types of crops* they were cultivating (Table 7.28).

In summary, various business and economic forces were the major factors that encouraged the respondents to support this strategic option. Introducing new fruits or grapes to their production system required investment therefore, it was not a surprise that the markets and the profit levels were the key positive drivers for developing new horticultural crops for all types of farm from the sample (Table 7.26; 7.27; 7.28).

Table 7.28: Encouraging factors for strategy – ‘developing new crops’ relating to types of crops

ENCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	50	11	14	15
2.	Age – young		11	18	15
3.	Having knowledge and experience	50	33	41	33
4.	Aware of the opportunities			27	18
	BUSINESS FACTORS				
5	Increased farm profit	50	56	73	67
6	Reduced risk		22	14	15
7	Having available machinery		11	9	15
8	Increased cash flow of business	50	33	9	18
9	Reduced cost of production		22		6
10	Good quality of workforce				
11	Available capital available for investment				
	ECONOMIC FACTORS				
12	Available market demand	100	78	59	67
13	Good road network				
14	Improved credit system			5	3
15	Stable rate of inflation			5	3
16	Better advisory system for horticulture		11		3
17	Sufficient distribution system for horticultural products			14	9
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets			5	3
20	Reduced level of bureaucracy				
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products			9	6
23	Having promotion of products to markets				
24	More subsidies for horticulture		11		3
25	More subsidies to horticultural research				
26	No taxation of inputs				
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.5.3 Expected outcomes

The most frequently expected outcomes from developing new horticultural crops were increasing business viability and improving their quality of life (70%) followed by the development of potential new markets with the new products (42%) (Table 7.29).

Size of the farms

Cultivating different farm size influenced the outcomes of the respondents because those with ‘small’ farms were aiming to achieve a better quality of life for themselves (80%), whereas those with size between 2-10 ha expected to develop potential new markets (79%) and those with ‘big’ farms expected outcomes such as better quality of horticultural products (100%) (Table 7.29). The FAO (1999) identify that some farms

of more than 2 ha have the potential for business expansion because they have established a relationship with various governmental and non-governmental organisations for long-term credits, organisational and market support. The farm managers of the sample with more than 2 ha were market and business oriented and they can play a vital role for the economic development and the revitalisation of horticultural industry in the Plovdiv region of Bulgaria.

Table 7.29: Expected outcomes of strategy ‘developing new horticultural crops’ relating to different types of farm

(‘Strategic options’ survey)

Outcomes*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	7	70	13	68	3	75	23	70
Better quality of life	8	80	12	63	3	75	23	70
Better quality of products	6	60	11	60	4	100	21	64
Diversity of products	4	40	6	32	0	0	10	30
Diversity of markets	5	50	15	79	2	50	22	67
Total of cases	10	100	19	100	4	100	33	100
Outcomes*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	11	61	11	79	1	100	23	70
Better quality of life	12	67	10	71	1	100	23	70
Better quality of products	12	67	8	57	1	100	21	64
Diversity of products	8	44	2	14	0	0	10	30
Diversity of markets	11	61	11	79	0	0	22	67
Total of cases	18	100	14	100	1	100	33	100
Outcomes*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	1	50	6	67	16	73	23	70
Better quality of life	2	100	6	67	15	68	23	70
Better quality of products	1	50	7	78	13	59	21	64
Diversity of products	1	50	2	22	7	32	10	30
Diversity of markets	1	50	6	67	15	68	22	67
Total of cases	2	100	9	100	22	100	33	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Land ownership patterns

About two thirds of respondents who cultivated only their own land (67%) would expect to have a better life or to produce better quality products by introducing new horticultural crops. The ‘mixed/leased’ farms were market and business oriented therefore they equally aimed to increase their business viability and to gain new markets with the ‘new’ crops (79%). Whereas the only co-operative that found this strategic option feasible identified the outcome of improving the quality of life of the employees (Table 7.29).

Types of crops

Increasing the quality of life was the most important outcome for the two respondents who only had perennial crops (Table 7.23). The farmers with non-perennials differed from their colleagues because they identified better quality of products as their main outcome (78%) whereas the interviewees with mixed types of crops (73%) prioritised business viability as the desired result (Table 7.29).

Based on the above, the farmers with 'small', 'own' farms, those with perennials and the co-operatives were mostly concerned about their personal security and well-being. The managers with 'big' farms and those who cultivated only non-perennials were 'dedicated producers' because they were aiming at high quality production with careful planning. The respondents with a size between 2-10 ha, those who leased some land and those with mixed types of crops had the managerial style of 'flexible strategist' because they tried to respond to the rapid changing business environment in Bulgaria and to explore potential new market opportunities (see Chapter 4, p.159-160). Kopeva and Noev (2001) also argue that the larger farms in Bulgaria performed better (more effective) compared to the smaller farms.

7.5.5.4 Not feasible strategy – why?

More than half of the farm managers interviewed (51%) stated that developing new horticultural crops was not feasible for their farm business (Table 7.24). The main factors that discouraged them were:

- high production cost (49%);
- high business risk (31%)
- lack of market demand (31%);
- unfavourable import regulations (29%);
- unfavourable export regulations (29%).

Farm size

The farms of different sizes were discouraged by the high production costs that could be explained by the fact that horticultural crops are intensive crops. The long process of land restitution, privatisation and changing economic environment affected their decisions and they perceived that investing in new perennial crops represented a high business risk. The producers with 'big' farms demonstrated some disparities in terms

of the importance of the negative factors as they were mainly discouraged by the lack of market demand and unfavourable export and import regulations as they had bigger production capacity (Table 7.30). A respondent explained:

“Horticulture is a highly intensive sector and within the condition of uncertain market it might be very risky to plant new crops without a guarantee in relation to markets”

Table 7.30: Discouraging factors for strategy – ‘developing new crops’ relating to size of farms

DISCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Reduced personal/family financial security		4		3
2.	Age – old	50	9	13	14
3.	Lack knowledge and experience	25	13		11
4.	Not aware of the opportunities	25		25	9
	BUSINESS FACTORS				
5	Decreased farm profit		9		6
6	Decreased cash flow of business	25	9	13	11
7	Increased business risk	50	30	25	31
8	Lack of or obsolete machinery		21		14
9	Lack capital available for investment		9	25	11
10	High cost of production	50	57	25	49
11	Poor quality of workforce				
	ECONOMIC FACTORS				
12	Poor distribution system			13	11
13	Poor credit system		4	13	6
14	Poor road network				
15	Unstable rate of inflation	25			3
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets		9	25	11
19	Lack market demand		30	50	31
20	Unfavourable import regulations for horticultural products		35	25	29
21	Unfavourable export regulations for horticultural products		30	38	29
22	High level of bureaucracy	25			3
23	Lack of promotion of products to markets		4		3
24	Lack of subsidies for horticulture	25	8	13	11
25	Lack of subsidies to horticultural research				
26	Taxation of inputs		4		3
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Empty cells are options presented to the respondents but were not selected by them

Another farmer with a ‘medium size’ farm added:

“Imagine, if you invest (very difficult to find financial resources) in a new vineyard. You do not have any revenue for at least 3-4 years. If you are lucky and the vineyard is still alive after very cold winter in Bulgaria you could face the fact that you can not sell your production due to export restrictions”

Land ownership patterns

The respondents with 'own' or 'mixed/leased' farms were discouraged mostly by the high production costs, increased business risk, limited market demand and unfavourable import and export regulations. In comparison, the co-operatives identified lack of market demand as the most important discouraging aspect (Table 7.31). The literature suggested that the existence of private co-operatives would depend on their level of competitiveness within the condition of a free market economy without any special support provided by the Government. The results revealed that after almost a decade of survival (1990-2000) as a private organisation the major barrier for the farms was finding markets for their produce. This may be explained by the lack of marketing skills of their managers who were used to the fact of the Government providing market support during the Socialist period.

Table 7.31: Discouraging factors for strategy – 'developing new crops' relating to land ownership patterns of farms

DISCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security	5			3
2.	Age – old	21	7		14
3.	Lack knowledge and experience	16	7		11
4.	Not aware of the opportunities	5	7	33	9
BUSINESS FACTORS					
5	Decreased farm profit	5	7		6
6	Decreased cash flow of business	16	7		11
7	Increased business risk	26	39	33	31
8	Lack of or obsolete machinery	21	7		14
9	Lack capital available for investment	5	15	33	11
10	High cost of production	47	54	33	49
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system	5	23		11
13	Poor credit system	5		33	6
14	Poor road network				
15	Unstable rate of inflation		8		3
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets	5	15	33	11
19	Lack market demand	32	23	67	31
20	Unfavourable import regulations for horticultural products	26	31		29
21	Unfavourable export regulations for horticultural products	21	31	33	29
22	High level of bureaucracy		7		3
23	Lack of promotion of products to markets	5			3
24	Lack of subsidies for horticulture	16	7		11
25	Lack of subsidies to horticultural research				
26	Taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

The possibility of decreased financial results (profit and cash flow) and lack of a market discouraged the interviewees with perennial crops from developing new horticultural crops. In comparison, the respondents with annual crops and those with mixed types of crops thought that high production costs, increased risk and poor import/export rules were the main negative aspects that worked against the feasibility of this second strategic option (Table 7.32).

Table 7.32: Discouraging factors for strategy – ‘developing new crops’ relating to types of crops of the farms

DISCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security			4	3
2.	Age – old		20	13	14
3.	Lack knowledge and experience		10	13	11
4.	Not aware of the opportunities		10	8	9
BUSINESS FACTORS					
5	Decreased farm profit	100		4	6
6	Decreased cash flow of business	100	10	8	11
7	Increased business risk		30	33	31
8	Lack of or obsolete machinery		20	13	14
9	Lack capital available for investment			17	11
10	High cost of production		50	50	49
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system		10	13	11
13	Poor credit system		10	4	6
14	Poor road network				
15	Unstable rate of inflation			4	3
16	Poor advisory system				
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets		10	13	11
19	Lack market demand	100	30	29	31
20	Unfavourable import regulations for horticultural products		40	25	29
21	Unfavourable export regulations for horticultural products		40	25	29
22	High level of bureaucracy			4	3
23	Lack of promotion of products to markets			4	3
24	Lack of subsidies for horticulture			17	11
25	Lack of subsidies to horticultural research				
26	Taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.6 Strategy – ‘developing new markets

7.5.6.1 Background

An investigation of the existing markets of the farms of the sample in the Plovdiv region was essential in order to understand the current market situation of the farms investigated. The existing literature suggested that the market system in the country and in the Plovdiv region was poor during the period of transition from a centrally planned to a ‘free market’ economy due to dramatic economic changes that led to the loss of main international markets (former socialist countries), reduced domestic purchasing power, the slow process of privatisation of the agri-food industry, the lack of marketing skills of the farmers and the limited marketing support (FAO, 1999; OECD, 2000).

The results revealed that 75% of the investigated farms sold their production locally in the Plovdiv region (Table 7.33). One of the three wholesale markets in Bulgaria is located near Plovdiv, which was very fortunate for horticultural producers in the region (FAO, 1999; OECD, 2000).

Table 7.33: The main markets of different types of farm in 2000

(‘Strategic options’ survey)

Current market	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Local	13	93	34	81	4	33	51	75
National	1	7	7	17	6	50	14	21
International	0	0	1	2	2	17	3	4
Total	14	100	42	100	12	100	68	100
Current market	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Local	32	86	18	67	1	25	51	75
National	5	14	7	26	2	50	14	21
International	0	0	2	7	1	25	3	4
Total	37	100	27	100	4	100	68	100
Current market	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Local	1	33	14	74	36	78	51	75
National	2	67	4	21	8	17	14	21
International	0	0	1	5	2	4	3	4
Total	3	100	19	100	46	100	68	100

The national market was supplied by 21% of the farms investigated and only 4% of them had international markets (Table 7.33). Prior to 1989, Bulgaria was a major exporter of agri-food products to the former USSR and other ex-socialist countries. Since then the country has lost its international market position and has not gained a new market niche principally due to low competitive power, poor quality of products and increased competition from Western countries (EC, 1998; SENTER, 2000; OECD, 2000).

Farms of *different size* used different markets for their produce. The results revealed that 50% of the farms of more than 10 ha sold their production nationally. In comparison, the vast majority of the 'small' and 'medium size' farms (93% and 81%) were oriented towards their local market due to their weak market position (Table 7.33).

A difference was indicated between current markets and the patterns of *land ownership*. Half of the investigated co-operatives marketed their produce nationally and most frequently their leaders used contacts established prior to 1989 as they registered as new private co-operatives but kept their existing equipment, contacts and network, while more than two thirds of the 'own' and 'mixed/leased' farms sold their production locally (Table 7.33).

The farms growing *different types of crops* had similar current markets for their produce. However, 67% of the respondents with perennial crops supplied national markets compared to 21% of those with non-perennials and 17% of those with the 'mixed' crops (Table 7.33). It was stated in Chapter two, section 2.5.3.2, that Plovdiv region is one of the biggest fruit and grape producer in the Bulgaria. Therefore, it was not a surprise that they marketed their products nationally. Both, MAF (1999) and OECD (2000) confirm that market structure has been poor in Bulgaria. However, the situation of the perennial crops has been better due to available demand for these products.

7.5.6.2 Feasible strategy - why

Developing new markets was seen as a feasible strategy for 44% of the respondents (Table 7.34). These results are at variance with the findings from the 'farm profile' survey when almost 90% of the farmers investigated agreed to develop new markets

with their existing product and about 65% of them wished to have new markets for new products (Table 7.7). Therefore, it was appropriate to investigate what caused this change of mind.

Table 7.34: Feasibility of the strategy ‘developing new markets’ relating to different types of farm

(‘Strategic options’ survey)

Feasible strategy	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	6	43	21	50	3	25	30	44
No	8	57	21	50	9	75	38	56
Total	14	100	42	100	12	100	68	100
Feasible strategy	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	16	43	13	48	1	25	30	44
No	21	57	14	52	3	75	38	56
Total	37	100	27	100	4	100	68	100
Feasible strategy	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	2	67	9	47	19	41	30	44
No	1	33	10	53	27	59	38	56
Total	3	100	19	100	46	100	68	100

Neither land size, land ownership nor cropping patterns influenced the farm managers assessment of this strategy. However, the results revealed that only 25% the respondents of ‘big’ farms and co-operatives considered that developing new markets was practicable for their business compared to about half of the ‘medium size’ and ‘mixed/leased’ farms (50% and 48%). As mentioned earlier the respondents who cultivated perennial crops were encouraged by their positive business results and better market position therefore 67% of them wanted to explore new markets (Table 7.34).

Half of the producers who perceived this strategy feasible intended to develop new national markets (Table 7.35). A respondent explained:

“I would be very pleased and my business would become more viable if I could sell my produce at the seacoast or in Sofia. These markets are big and the consumer buying capacity there is higher”

The other half of them emphasised more challenging targets such as gaining a new international market niche (Table 7.35). Review of the literature suggested that this might be an adventurous task for the farmers because of their weak competitive position compared to the farms from the Western European countries especially for the horticultural products and vegetables. Other obstacles identified by the FAO (1999) and SENTER (2000) were the low quality of the horticultural products and their poor packaging. A respondent agreed with this and expressed his position:

“I believe I can export my products because I am sure their quality is very good but the competition is high and I do not think that I am strong enough to compete with the ‘big players’ in this industry”

Table 7.35: The desired new markets of different types of farm

(‘Strategic options’ survey)

(Strategic options survey)

New markets	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
National	4	67	11	52	0	0	15	50
International	2	33	10	48	3	100	15	50
Total	6	100	21	100	3	100	30	100
New markets	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
National	10	63	5	39	0	0	15	50
International	6	37	8	62	1	100	15	50
Total	16	100	13	100	1	100	30	100
New markets	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
National	1	50	5	56	9	47	15	50
International	1	50	4	46	10	53	15	50
Total	2	100	9	100	19	100	30	100

Again neither farm size, land ownership patterns or types of crops indicated any relationship with the farmers’ intention to develop new markets. It can be seen in Table 7.35 that the farms with less than 10 ha cultivating only their own land aimed to expand to new national markets (more than 52%) whereas all of the ‘big’ farms and co-operatives wanted to be export-oriented. They perceived developing new international markets for agricultural/horticultural production as a driver for their business survival and expansion.

The main factors encouraging the farm managers to develop new markets (national and international) were:

- Increased farm profit (73%);
- Available market demand (37%);
- No age limitation (30%);
- Available market information (30%)
- Increased cash-flow (23%).

These factors support the anticipation that the respondents who wished to develop new markets have more efficient business and marketing and therefore can be considered as key players in the revitalisation of the horticultural sector in the Plovdiv region. Earlier, some governmental and international reports discussed that there were some farms that were prosperous within the condition of a free market economy and they managed to build up a competitive advantage. In addition, their farm managers have flexible business skills and were familiar with market changes that emerged as they were also capable of finding vital market information despite the limited market network and poor marketing structure in the country (FAO, 1999; MAF, 2000a; SENTER, 2000).

Farm size

Managers of different sized farms were encouraged by similar factors such as increased farm profit and available market demand. Those with farms of more than 10 ha also identified as a positive factor their age (Table 7.36). One of them stated:

“I am young farmer in my 40s, therefore, I would like to expand my farm business because I feel I have the physical power to overcome the negative factors that arose”

The poor market structure in Bulgaria did not influence 33% of the interviewees with farms of less than 10 ha because they considered that market information was available even it was limited. One of the participants explained:

“If you are looking really hard for market information you will find what you need but some farmers expect everything to be given to them. Eh, this is a ‘free market’ economy!”

Another one added:

“Although the available market information is limited if you know where to look you will be able to find very useful data”

Table 7.36: Encouraging factors for strategy – ‘developing new markets’ relating to size of farms

ENCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	17	19	33	20
2.	Age – young		33	67	30
3.	Having knowledge and experience	17	24		20
4.	Aware of the opportunities		5	33	7
	BUSINESS FACTORS				
5	Increased farm profit	83	71	67	73
6	Reduced risk		10		7
7	Having available machinery				
8	Increased cash flow of business	50	19		23
9	Reduced cost of production				
10	Good quality of workforce				
11	Available capital available for investment		5		3
	ECONOMIC FACTORS				
12	Available market demand	50	33	33	37
13	Good road network		10		7
14	Improved credit system			33	3
15	Stable rate of inflation	17			3
16	Better advisory system for horticulture		5		3
17	Sufficient distribution system for horticultural products	17	14		13
18	Stable exchange rate of Bulgarian currency		10		7
19	Available markets information	33	33		30
20	Reduced level of bureaucracy		5		3
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products	17			3
23	Having promotion of products to markets				
24	More subsidies for horticulture		5		3
25	More subsidies to horticultural research				
26	No taxation of inputs			33	3
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The respondents who cultivated either their own or some leased land, demonstrated a similar pattern of encouraging factors such as increased rates of profit, perceived market demand, knowledge and experience and the existence of market information. In comparison, the only interviewee managing a co-operative perceived as most

encouraging factors, his knowledge and experience, the fact that he is young, in his 40s, and had a market relationship with a processing factory (Table 7.37). He stated:

“I am young compared to the managers of the other co-operatives and I would like to make this organisation profitable. I have got a plan and hopefully it will work well in the near future”

Table 7.37: Encouraging factors for strategy – ‘developing new markets’ relating to land ownership patterns of farms

ENCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	13	7	100	20
2.	Age – young	25	25	100	30
3.	Having knowledge and experience	25	31		20
4.	Aware of the opportunities	6	7		7
	BUSINESS FACTORS				
5	Increased farm profit	69	85		73
6	Reduced risk		15		7
7	Having available machinery				
8	Increased cash flow of business	38	8		23
9	Reduced cost of production				
10	Good quality of workforce				
11	Available capital available for investment		8		3
	ECONOMIC FACTORS				
12	Available market demand	43	31		37
13	Good road network	6	7		7
14	Improved credit system		7		3
15	Stable rate of inflation	6			3
16	Better advisory system for horticulture	6			3
17	Sufficient distribution system for horticultural products	13	7	100	13
18	Stable exchange rate of Bulgarian currency		15		7
19	Available markets information	38	31		30
20	Reduced level of bureaucracy	6			3
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products		7		3
23	Having promotion of products to markets				
24	More subsidies for horticulture	6			3
25	More subsidies to horticultural research				
26	No taxation of inputs	6			3
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore, they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

All farm managers, irrespective of the types of crops they grown were motivated to develop new markets due to their increased profit margins and availability of market information. However, those who had only perennials were encouraged mostly by the perceived demand. This also influenced positively the decision of the respondents with

mixed crops, which may have been influenced by the fact that they also cultivated fruits or grapes. However, the interviewees with annual crops wanted to develop new markets mainly because they felt they were still young (less than 50 years), a fact that encouraged them to accept more challenging tactics. It was observed that 50% of the respondents with perennials, 11% of those with non-perennials and 21% of those with mixed types of crops stated that they have knowledge and experience to expand into new markets (Table 7.38).

Table 7.38: Encouraging factors for strategy – ‘developing new markets’ relating to types of crops of the farms

ENCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security		22	11	20
2.	Age – young		44	26	30
3.	Having knowledge and experience	50	11	21	20
4.	Aware of the opportunities		11	5	7
BUSINESS FACTORS					
5	Increased farm profit	50	55	84	73
6	Reduced risk			11	7
7	Having available machinery				
8	Increased cash flow of business		44	16	23
9	Reduced cost of production				
10	Good quality of workforce				
11	Available capital available for investment			5	3
ECONOMIC FACTORS					
12	Available market demand	100	33	32	37
13	Good road network			11	7
14	Improved credit system		11		3
15	Stable rate of inflation			5	3
16	Better advisory system for horticulture	50			3
17	Sufficient distribution system for horticultural products			21	13
18	Stable exchange rate of Bulgarian currency		11	5	7
19	Available markets information	50	33	32	30
20	Reduced level of bureaucracy			5	3
21	Favourable import regulations for horticultural products				
22	Favourable export regulations for horticultural products			5	3
23	Having promotion of products to markets				
24	More subsidies for horticulture			5	3
25	More subsidies to horticultural research				
26	No taxation of inputs		11		3
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.6.3 Expected outcomes

The findings clearly revealed that the participating farm managers included in the sample who wanted to develop new markets were market and business oriented. The

majority of them (87%) stated that their main anticipated outcome would be to increase their business viability followed by 73% of them who were intending to diversify their markets (Table 7.39). One of the respondents stated:

“I will have a viable farm business if I do not rely only on one market, the diversity of markets would help me to find a better price for my production”

The farms of *different size* had similar expectations in terms of the expected outcomes of the strategy of ‘developing new markets’ as for more than two thirds of them the most frequent answer was to increase the business viability. All of the interviewees with farms of more than 10 ha also intended to improve the quality of their products while those of less than 2 ha were also concerned about their life standards as they move to new markets (Table 7.39).

Table 7.39: Expected outcomes of strategy ‘developing new markets’ relating to different types of farm
(‘Strategic options’ survey)

Outcomes*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	5	83	18	86	3	100	26	87
Better quality of life	5	83	15	71	1	33	21	70
Better quality of products	4	67	12	57	3	100	19	63
Diversity of products	1	17	1	5	0	0	2	7
Diversity of markets	3	50	17	81	2	67	22	73
Total of cases	6	100	21	100	3	100	30	100
Outcomes*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	13	81	12	92	1	100	26	87
Better quality of life	10	63	10	77	1	100	21	70
Better quality of products	13	81	5	39	1	100	19	63
Diversity of products	2	13	0	0	0	0	2	7
Diversity of markets	10	63	12	92	0	0	22	73
Total of cases	16	100	13	100	1	100	30	100
Outcomes*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	2	100	7	78	17	90	26	87
Better quality of life	1	50	4	44	16	84	21	70
Better quality of products	1	50	7	78	11	58	19	63
Diversity of products	0	0	1	11	1	5	2	7
Diversity of markets	2	100	8	89	12	63	22	73
Total of cases	2	100	9	100	19	100	30	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Respondents with different *patterns of land ownership* or *types of crops* anticipated similar outcomes from the development of new markets as they were aiming to increase business viability. However, those with farms with perennials, non-perennials and those with their own and mixed/leased land also stated diversification of their markets as their most important expected result while the ‘big’ farms were also concerned about the quality of their products (Table 7.39).

The respondents who were considering entering new national and international markets and aiming to increase their business viability could be classified as ‘flexible strategists’ due to the fact that they intended to respond to the fast changing environment in running commercial farming by applying flexible and effective management and marketing (see Chapter 4, p.159-160).

7.5.6.4 Not a feasible strategy – why?

More than half of the respondents (56%) considered that developing new markets was not a viable strategic option (Table 7.34). Their decision was influenced by perceptions, which included:

- lack of market information (63%);
- lack of market promotion (61%);
- lack of market demand (24%);
- unfavourable import regulation (24%);
- unfavourable export regulation (24%).

Respondents were not discouraged by their limited knowledge and experience in entering new markets which contradicted the data collected by Dutch and EU investigations in regards to the training needs of farmers in Bulgaria. Both, SENTER (2000) and EC (2001) reported that the business and marketing skills of the farmers were very limited, consequently a range of training courses have to be organised in different regions of Bulgaria for improving their skills in running commercial farms and how to survive within the condition of competitive environment (EC, 2001b).

Size of farms

Lack of market promotion and information was perceived to be the most discouraging aspect for the farmers who wished to develop new markets irrespective of their farm

size (Table 7.40). The review of the literature suggested that in the first 6-7 years (1989-1996) of the transition period finding market information was almost impossible due to the lack of an authorised body for collecting and analysing such kind of data. In 1995, the government established the National Agricultural Advisory Service (NAAS) whose main task has been to provide market information however due to the early stage of its development it has not been very efficient and provided assistance only to a small numbers of producers. Furthermore, there has been no promotion available for the agricultural/horticultural products (FAO, 1999; OECD, 2000). One of the interviewees explained:

"My source of market information is my neighbour. He is trying to analyse and predict what kind of crops will have market next year but very often his guess has been wrong"

Poor import and export regulations were also stated as discouraging factors by those respondents. This could be explained with the loss of export markets (*i.e.* ex-socialist and some Arab countries) that were not replaced; increased level of competition (after CEFTA and EU agreements for free trade) and lack of finance (OECD, 2000; SENTER, 2000). Some minor differences emerged with regards to the 'small' farms, as 38% of them were also discouraged by their age (over 60 years) (Table 7.40).

Table 7.40: Discouraging factors for strategy– ‘developing new markets’ relating to size of farms

DISCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old	38	5		11
3.	Lack knowledge and experience		24	11	16
4.	Not aware of the opportunities		5		3
	BUSINESS FACTORS				
5	Decreased farm profit				
6	Decreased cash flow of business				
7	Increased business risk		10	22	11
8	Lack of or obsolete machinery				
9	Lack capital available for investment		5	11	5
10	Increased cost of production	13	19		13
11	Poor quality of workforce	13			3
	ECONOMIC FACTORS				
12	Poor distribution system		5	11	5
13	Poor credit system		5		3
14	Poor road network	25		11	8
15	Unstable rate of inflation	13			3
16	Poor advisory system	13	10	11	11
17	Unstable exchange rate of Bulgarian currency				
18	Lack of market information	38	72	56	63
19	Lack market demand	25	29	11	24
20	Unfavourable import regulations for horticultural products	38	29	33	24
21	Unfavourable export regulations for horticultural products	25	29	44	24
22	High level of bureaucracy		19	22	16
23	Lack of promotion of products to markets	63	62	56	61
24	Lack of subsidies for horticulture				
25	Lack of subsidies to horticultural research				
26	Taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The cross-tabulation between the discouraging factors of the farms with different land ownership patterns show very similar patterns in terms of most frequently stated discouraging factors. Limitation of available information for the markets and lack of promotion together with the unfavourable import/export regulation were identified as having the strongest negative impact upon their decision to develop new markets (national and international) (Table 7.41).

Table 7.41: Discouraging factors for strategy – ‘developing new markets’ relating to land ownership patterns of farms

DISCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old	19			11
3.	Lack knowledge and experience	9	14		16
4.	Not aware of the opportunities		7		3
	BUSINESS FACTORS				
5	Decreased farm profit				
6	Decreased cash flow of business				
7	Increased business risk	14	7		11
8	Lack of or obsolete machinery				
9	Lack capital available for investment	5		33	5
10	Increased cost of production	24			13
11	Poor quality of workforce	5			3
	ECONOMIC FACTORS				
12	Poor distribution system		14		5
13	Poor credit system	5			3
14	Poor road network	10		33	8
15	Unstable rate of inflation		7		3
16	Poor advisory system	10	14		11
17	Unstable exchange rate of Bulgarian currency				
18	Lack of market information	52	71	100	63
19	Lack market demand	29	14	33	24
20	Unfavourable import regulations for horticultural products	29	21		24
21	Unfavourable export regulations for horticultural products	19	36		24
22	High level of bureaucracy	10	29		16
23	Lack of promotion of products to markets	62	50	100	61
24	Lack of subsidies for horticulture				
25	Lack of subsidies to horticultural research				
26	Taxation of inputs				
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

Only one farmer that cultivated perennials (Table 7.34) rejected the strategy of ‘developing new markets’ because of the lack of promotion, illegal imports (see Chapter 6, p.253) and the poor road network existing in the small villages in the Plovdiv region, while growers that cultivated annual and ‘mixed’ crops did not consider the opportunity of developing new markets feasible because there was no market information and promotion available to help them (Table 7.42).

Table 7.42: Discouraging factors for strategy – ‘developing new markets’ relating to types of crops of the farms

DISCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old		20	7	11
3.	Lack knowledge and experience		20	15	16
4.	Not aware of the opportunities			4	3
	BUSINESS FACTORS				
5	Decreased farm profit				
6	Decreased cash flow of business				
7	Increased business risk			15	11
8	Lack of or obsolete machinery				
9	Lack capital available for investment			7	5
10	Increased cost of production		30	7	13
11	Poor quality of workforce		10		3
	ECONOMIC FACTORS				
12	Poor distribution system			7	5
13	Poor credit system			4	3
14	Poor road network	100	20		8
15	Unstable rate of inflation			4	3
16	Poor advisory system			15	11
17	Unstable exchange rate of Bulgarian currency				
18	Lack of market information		60	67	63
19	Lack market demand		30	22	24
20	Unfavourable import regulations for horticultural products	100	30	19	24
21	Unfavourable export regulations for horticultural products		20	26	24
22	High level of bureaucracy		30	11	16
23	Lack of promotion of products to markets	100	30	70	61
24	Lack of subsidies for horticulture				
25	Lack of subsidies to horticultural research				
26	Taxation of inputs				
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.7 Farm diversification

7.5.7.1 Introduction

The last two strategic options that were evaluated by the respondents related to the issue of farm diversification (‘related’ and ‘unrelated’), which is discussed briefly at first in order to provide some basic background information. Data with regard to the overall reasons, obstacles and the most appealing activity in respect to farm diversification was collected during the ‘farm profile’ survey and provide the overall context. However, the subsequent evaluation of these last two strategies (‘related and ‘unrelated’ diversification) provides a more comprehensive view and used the three independent variables.

Hobbs *et al.* (1997) and Sofer (2001) argue that agricultural incomes have been declining in the last two decades on a world scale and other sources of incomes have to be found based on an assessment of the farm’s resources, identification of the potential opportunity and if feasible, implementation of a new income generating activities – agricultural or non-agricultural. In recent years, farm business viability has increasingly depended upon the ability of the enterprise to develop new alternative sources of income and through this to relocate its labour force. Farm diversification has been introduced successfully in different Western countries as a way of generating alternative sources of incomes. Consequently, it has been promoted by the EU as a valuable option for alternative farm incomes in Bulgaria within the frame of the SAPARD programme (EC, 2002a).

During the ‘farm profile’ survey, the farm managers of the sample were asked to express their willingness to diversify their farm business and to explain their rationale and obstacles to its development. More than half of them (58%) indicated hypothetically that they would like to diversify their business while 31% of them rejected this idea and 11% of them were uncertain (Table 7.43). This result confirmed that farm diversification was not well accepted by the respondents in the Plovdiv region.

Table 7.43: Willingness for farm diversification of the farmers

('Farm profile' survey)		
	Count	%
Yes	63	58
No	33	31
Don't know	12	11
Total	108	100

Only 8 of the farmers interviewed had diversified their activities in the last few years but they were at the beginning stage. Four of them have combined their agricultural/horticultural activity with animal husbandry and have been facing great market difficulties. Another two respondents developed plant-nurseries along with their crop-growing activity and another two of them have successfully diversified their business by establishing small wineries.

The review of the literature suggested that the most important *reasons* for introducing farm diversification were increasing income, reducing the risk, creating new job opportunities and business expansion. Consequently, the respondents were requested to identify which of the above reasons would be most important for developing farm diversification. Almost two thirds (61%) of the producers stated that increasing their incomes was their most important reason. While 15% of them considered that reducing the business risk was their main motive (Table 7.44). One of the respondents said:

“If one of the business activities is not profitable I can always rely on the second income stream activity”

Table 7.44: The most important reasons to farm diversification

	Count	(‘Farm profile’ survey) %
Increasing the incomes	66	61
Reducing the business risk	11	10
Better employment opportunities	16	15
Business expansion	15	14
Total	108	100

The difficult process of economic reform has severely affected the agricultural/horticultural industry, which has resulted in reduced farm incomes (OECD, 2000). Hence, according to 87% of the respondents the main obstacle for farm diversification was lack of capital for investment (Table 7.45). Limited capital of their own combined with the lack of finance from external sources such as banks and credit associations was also reported as an obstacle by EC (1998c), OECD (2000) and SENTER (2000). The difficulties of obtaining finance was expressed by a respondent who stated:

“Forget the idea of receiving grant from the Government. The bank was another source but they asked for my house as a loan guarantee and I am not ready to lose my house in order to diversify my farm business”

Only 5% of the interviewees stated that lack of information and appropriate advisory services was their main barrier in regards to farm diversification (Table 7.45). One of them stated his vision:

“I cannot understand what farm diversification is. Everybody interprets it in a different way so if there was an available authority that could provide such kind of information it would be very helpful for us the ‘ordinary’ farmers”

Table 7.45: The most important obstacles to farm diversification

('Farm profile' survey)		
	Count	%
Lack of capital for investments	94	87
Lack of information and advisory services	6	5
Lack of resources (land, buildings, staff)	4	4
Other (market, policies, legislation)	4	4
Total	108	100

The respondents were also asked to identify their level of support of a range of alternative economic activities. The vast majority of them either liked very much or liked the activity of planting new agricultural/horticultural crops (44% and 41%). They also strongly supported the alternative of transferring their traditional farms into organic farms (14% very much liked it and 52% liked it) (Table 7.46). One of the respondents said:

“I know there are export opportunities for organic produce but it is very difficult to certify these production because at the moment you need to test and certify these products abroad”

According to both the OECD (2000) and SENTER (2000) the lack of regulations, standards and legal controlling body for organic produce in Bulgaria were at that time major barriers for the development of organic farms in Bulgaria.

During the first few years of transition (1989-1996) having a mixed farming system (arable and animals) was a common practice. However, in the last few years these enterprises have not been profitable due to the lack of markets and high competition, therefore their number has decreased (MAF, 2000a; OECD, 2000). Therefore it was not a surprise that more than half of the respondents (52%) did not accept the idea of diversification into ‘mixed’ farming (Table 7.46). One of the interviewees explained:

“During the first 5 years of transition I was involved in agricultural activities and had a small animal farm but I did not make any profit from the animals due to the lack of market. Therefore, I closed this business and now I am involved only with arable and horticultural crops, however I am open for diversification into organic farming”

Almost half of the interviewees (45%) did not wish to develop non-agricultural activity. However, 39% of them liked the idea (14% liked it very much and 25% liked it) (Table 7.46). One of the respondents stated:

“I would love to establish a small processing unit for apple juice but financial and legal barriers have discouraged me”

Agri-tourism was acceptable only to 18% of the farmers and the main reason for their negative response was explained by one of them:

“I can not understand what is exactly agri-tourism. So many people have different vision about it so I would appreciate if I can obtain more detailed information about this matter”

Another one added:

“What does it mean? Why somebody from the city will come to the small village on a holiday where the infrastructure is poor and the house is not conformable enough. I cannot understand that”

Table 7.46: The alternatives for farm diversification

(Farm profile survey)

Alternatives	Very likely		Likely		Neutral		Unlikely		Very unlikely		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Planting new crops	48	44	43	41	7	7	9	8	1	1	108	100
Combining agriculture with animals	15	14	30	28	6	6	56	52	1	1	108	100
Organic farming	15	14	56	52	11	10	25	24	1	1	108	100
Small-scale processing unit	15	14	27	25	15	14	49	45	2	2	108	100
Agri-tourism	3	3	16	15	19	18	69	63	1	1	108	100

The issue of farm diversification discussed above was explored in terms of assessing two strategic options that were proposed to the farm managers during the ‘strategic option’ survey. The first strategy was known as ‘related diversification’ and the second one as ‘unrelated diversification’ (Miles *et al.*, 1999).

7.5.7.2 Strategy – ‘developing new agricultural activities’

7.5.7.2.1 Feasible strategy - why

The farmers were asked to evaluate this strategic option of ‘developing new agricultural activities. More than one third of them (38%) considered this strategy feasible (Table 7.47).

No differences were indicated between the feasibility of this strategy and either farm size and land ownership patterns. However, those interviewees with different types of crops had a different vision for the feasibility of ‘developing new agricultural activities’. None of the farms with perennials felt that ‘related’ diversification was feasible for their business presumably because they were happy with their current farm business in terms of products and markets. More than two thirds of the respondents with non-perennial crops (68%) considered developing new agricultural income streams as feasible, compared to 28% of those with ‘mixed’ cropping patterns (Table 7.47). The reasons that influence this decision are investigated below.

Table 7.47: Feasibility of the strategy ‘developing new agricultural activities’ relating to different types of farm
(‘Strategic options’ survey)

Feasible strategy	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	5	36	18	43	3	25	26	38
No	9	64	24	57	9	75	42	62
Total	14	100	42	100	12	100	68	100
Feasible strategy	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	18	49	7	26	1	25	26	38
No	19	51	20	74	3	75	42	62
Total	37	100	27	100	4	100	68	100
Feasible strategy	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	0	0	13	68	13	28	26	38
No	3	100	6	32	33	71	42	62
Total	3	100	19	100	46	100	68	100

First, it was necessary to determine the most feasible alternative activity considered by the interviewees who intended to introduce this strategy. They stated their preferences for cultivating herbs (35%), combining agricultural/horticultural activities with animal husbandry (27%) and oil-bearing crops (15%) (Table 7.48). The SENTER report

The factors encouraging respondents to consider developing new agricultural income streams were:

- increased farm profit (62%);
- available market demand (54%);
- possession of knowledge and experience (35%);
- sufficient distribution (31%);
- reduced business risk (23%);
- reduced cost of production (23%).

Farm size

Those producers who cultivated farms of different size were mostly encouraged by similar factors such as available demand, increased profit rates and having knowledge and experience. As was discussed in Chapter six, section 6.3.2.2, farms with less than 10 ha employed one or more family members. Therefore, they were also encouraged by improved personal and financial security. 40% of the interviewees with 'small' and 33% of those with 'big' farms who wanted to introduce 'related diversification' considered that this would reduce the business risk (Table 7.49). One of the respondents with a farm of more than 10 ha explained:

"Spreading the business risk between more than one activity is vital in agriculture because some external forces are unpredictable and can badly affect the overall business performance of the farm and drop the income significantly"

Table 7.49: Encouraging factors for strategy – ‘developing new agricultural activities’ relating to size of farms

ENCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security	40	39		35
2.	Age – young	20	22		19
3.	Having knowledge and experience	40	33	33	35
4.	Aware of the opportunities				
BUSINESS FACTORS					
5	Increased farm profit	40	72	33	62
6	Reduced risk	40	16	33	23
7	Having available machinery		6	33	8
8	Increased cash flow of business			33	4
9	Reduced cost of production	20	22	33	23
10	Good quality of workforce	20			4
11	Available capital available for investment				
ECONOMIC FACTORS					
12	Available market demand	60	56	33	54
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system	20	33	33	31
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations				
23	Having promotion of products to markets				
24	More subsidies for horticulture				
25	More subsidies to horticultural research				
26	No taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The only co-operative in the sample that found this fourth strategy feasible wanted to start cultivating oil-bearing crops such as sunflower because they had the machinery (although obsolete), there was an available market and the manager had the necessary knowledge and experience. Available market, increased profit levels and their knowledge and experience mainly encouraged the respondents with ‘mixed/leased’ and ‘own’ farms. However, those farmers who had a mixture of their own and leased land or only leased land pointed out as a very important positive factor the good distribution system for these products (oil-bearing crops, herbs) (Table 7.50).

Table 7.50: Encouraging factors for strategy – ‘developing new agricultural activities’ relating to land ownership patterns

ENCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Improved personal/family financial security	50			35
2.	Age – young	22			19
3.	Having knowledge and experience	28	43	100	35
4.	Aware of the opportunities				
BUSINESS FACTORS					
5	Increased farm profit	67	43		62
6	Reduced risk	22	29		23
7	Having available machinery		29	100	8
8	Increased cash flow of business		14		4
9	Reduced cost of production	22	14		23
10	Good quality of workforce				4
11	Available capital available for investment				
ECONOMIC FACTORS					
12	Available market demand	56	57	100	54
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system	22	57		31
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations				
23	Having promotion of products to markets				
24	More subsidies for horticulture				
25	More subsidies to horticultural research				
26	No taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

The producers with different types of crops were encouraged to develop new agricultural activities by similar factors such as increased farm profit, available markets demand and possession of knowledge and experience. The respondents with mixed crops also considered that if they develop ‘related diversification’ they would reduce their business risk. This however, was not stated by the farmers with non-perennials (Table 7.51).

Table 7.51: Encouraging factors for strategy – ‘developing new agricultural activities’ relating to types of crops of the farms

ENCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security		46	23	35
2.	Age – young		23	15	19
3.	Having knowledge and experience		38	31	35
4.	Aware of the opportunities				
	BUSINESS FACTORS				
5	Increased farm profit		67	54	62
6	Reduced risk			46	23
7	Having available machinery		8	8	8
8	Increased cash flow of business			8	4
9	Reduced cost of production		31	15	23
10	Good quality of workforce		8		4
11	Available capital available for investment				
	ECONOMIC FACTORS				
12	Available market demand		54	54	54
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system		23	39	31
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations				
23	Having promotion of products to markets				
24	More subsidies for horticulture				
25	More subsidies to horticultural research				
26	No taxation of inputs				
	Total of percentage of cases		100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.7.2.2 Expected outcomes

With the development of alternative agricultural activities, 81% of the respondents would expect to improve the quality of life for themselves and their family as their main result. This can be explained by the fact that these farmers were aiming to generate incomes in a situation of high levels of unemployment and limited job opportunities in their communities.

Size of the farms

As indicated earlier (see Chapter 6, section 6.3.2.3), the producers with ‘small’ farms sold their produce by themselves at the market so they would want to diversify their

markets. The respondents of farms between 2-10 ha intended to improve their quality of life with the development of new agricultural activities. While those with 'big farms' were equally interested in increasing the viability of their business or improving the quality of the products which suggests that they are responding to the changes of business environment in Bulgaria (Table 7.52).

Land ownership patterns

With the development of new agricultural activities the interviewees with different land ownership were mostly aiming to improve their quality of life. However, those with 'mixed/leased' farms and those with co-operatives were also concerned about their business viability (Table 7.52).

Table 7.52: Expected outcomes of strategy 'developing new agricultural activities' relating to different types of farm

(‘Strategic options’ survey)

Outcomes*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	3	60	14	78	3	100	20	77
Better quality of life	3	60	16	89	2	67	21	81
Better quality of products	2	40	7	39	3	100	12	46
Diversity of products	3	60	3	17	0	0	6	23
Diversity of markets	4	80	14	78	1	33	19	73
Total of cases	5	100	18	100	3	100	26	100
Outcomes*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	13	72	6	86	1	100	20	77
Better quality of life	14	78	6	86	1	100	21	81
Better quality of products	7	39	4	57	1	100	12	46
Diversity of products	6	33	0	0	0	0	6	23
Diversity of markets	14	78	5	71	0	0	19	73
Total of cases	18	100	7	100	1	100	26	100
Outcomes*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	0	0	9	69	11	85	20	77
Better quality of life	0	0	11	85	10	77	21	81
Better quality of products	0	0	5	39	7	54	12	46
Diversity of products	0	0	4	31	2	15	6	23
Diversity of markets	0	0	10	77	9	69	19	73
Total of cases	0	0	13	100	13	100	26	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Types of crops

The expected outcomes differed based on the cropping pattern. Those farms with annual crops were aiming for a better quality of life which could define them as

‘survivors’ compared to those with mixed crops who prioritised the business viability of their farm and could be classified as ‘flexible strategists’ (Table 7.52).

7.5.7.2.3 Not feasible strategy – why?

Two thirds of the respondents (62%) thought that developing new activities relating to agriculture was not feasible for the development of their business over the next 5 years (Table 7.47). A range of negative factors discouraged them and the most important that they perceived were:

- lack of market demand (50%);
- decreased farm profit (33%);
- high production costs (33%);
- lack of subsidies (26%)
- lack of machinery (23%).

Size of the farms

Irrespective of the size of their production units the respondents agreed that lack of market demand was the primary factor discouraging them from developing new agricultural activities together with low rates of profitability and increased production costs. Identifying the other negative factors differed for the different groups as the respondents with less than 10 ha did not have the necessary machinery while those with ‘big’ farms were negatively affected by the lack of subsidies (Table 7.53).

Table 7.53: Discouraging factors for strategy – ‘developing new agricultural activities’ relating to size of farms

DISCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security		13		7
2.	Age – old	22	4	11	10
3.	Lack knowledge and experience	11	8	11	10
4.	Not aware of the opportunities		4	11	5
BUSINESS FACTORS					
5	Decreased farm profit	33	38	33	33
6	Decreased cash flow of business	22	8		12
7	Increased business risk	22	21	11	21
8	Lack of or obsolete machinery	33	33		24
9	Lack capital available for investment	22	13	22	17
10	Increased cost of production	33	33	33	33
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system		13	22	12
13	Poor credit system		8		5
14	Poor road network				
15	Unstable rate of inflation				
16	Poor advisory system			22	5
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets	11	13		10
19	Lack market demand	33	58	44	50
20	Unfavourable import regulations	11		11	5
21	Unfavourable export regulations	11		11	5
22	High level of bureaucracy		8	11	7
23	Lack of promotion of products to markets	11	4		5
24	Lack of subsidies	22	21	44	26
25	Lack of subsidies for research				
26	Taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The farmers who cultivated their own land and some leased land did not consider ‘related diversification’ feasible because they were discouraged by limited demand, increased production costs and decreased profit. In comparison, the managers of the co-operatives who did not intended to introduce this strategy, had different opinions because they were strongly relying upon Governmental support and they were discouraged by the lack of subsidies and lack of finance (own and borrowed) for investment (Table 7.54).

Table 7.54: Discouraging factors for strategy – ‘developing new agricultural activities’ relating to land ownership patterns

DISCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security	5	10		7
2.	Age – old	11	10		10
3.	Lack knowledge and experience	5	15		10
4.	Not aware of the opportunities	5			5
BUSINESS FACTORS					
5	Decreased farm profit	32	40		33
6	Decreased cash flow of business	21	5		12
7	Increased business risk	16	30		21
8	Lack of or obsolete machinery	21	30		24
9	Lack capital available for investment	26		67	17
10	Increased cost of production	37	35		33
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system	5	15	33	12
13	Poor credit system	5	5		5
14	Poor road network				
15	Unstable rate of inflation				
16	Poor advisory system		10		5
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets	16	5		10
19	Lack market demand	42	60	33	50
20	Unfavourable import regulations	5	5		5
21	Unfavourable export regulations	5		33	5
22	High level of bureaucracy	5	5	33	7
23	Lack of promotion of products to markets	5	5		5
24	Lack of subsidies	32	15	67	26
25	Lack of subsidies for research				
26	Taxation of inputs				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

All the interviewees with only perennial crops within the sample (n=3) did not accept the idea of introducing new agricultural activities because they were afraid that this would increase the business risk and the production costs and decrease their profits. One of them stated:

‘It is risky to do something that you never experienced before such as growing herbs because I have never practised their production technology’

The other farms with non-perennials or mixed cropping patterns were discouraged initially by a lack of market demand for these new agricultural products. The interviewees with annual crops were also negatively affected by the lack of subsidies and their own limited financial resources. One of them stated:

“I know the technologies, the capital required and the markets of my current products so I do not want to cultivate oil-bearing crops or something else without any support from the government”

While those with ‘mixed’ crops identified other discouraging factor such as lack of machinery (Table 7.55).

Table 7.55: Discouraging factors for strategy– ‘developing new agricultural activities’ relating to types of crops of the farms

DISCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security			9	7
2.	Age – old			12	10
3.	Lack knowledge and experience		17	9	10
4.	Not aware of the opportunities		17	3	5
BUSINESS FACTORS					
5	Decreased farm profit	100	33	27	33
6	Decreased cash flow of business		33	9	12
7	Increased business risk	100	17	15	21
8	Lack of or obsolete machinery			30	24
9	Lack capital available for investment		33	15	17
10	Increased cost of production	100		33	33
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system			15	12
13	Poor credit system			6	5
14	Taxation of inputs				
15	Unstable rate of inflation				
16	Poor advisory system		17	3	5
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets		17	9	10
19	Lack market demand		67	52	50
20	Unfavourable import regulations			6	5
21	Unfavourable export regulations			6	5
22	High level of bureaucracy			9	7
23	Lack of promotion of products to markets			6	5
24	Lack of subsidies		50	24	26
25	Lack of subsidies for research				
26	Poor road network				
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.7.3 Strategy – ‘developing new non-agricultural activities

7.5.7.3.1 Feasible strategy - why

Less than one third of the farm managers considered that the strategy of developing new non-agricultural activities was feasible for their farm business over the next 5 years (Table 7.56). This finding confirmed that the respondents did not support the idea of ‘unrelated’ diversification and they did not intend to introduce major product/market changes in their business. The reasons for this are discussed below.

Farms with different size and land ownership patterns did not differ with respect to the feasibility of this strategy. However, a difference was observed in terms of the feasibility of developing new non-agricultural activities and farms with different types of crops. The vast majority of the respondents with annual crops (95%) rejected the alternative associated with developing new non-agricultural activities. This may be explained by their low level of revenue and difficulties in finding markets.

Table 7.56: Feasibility of the strategy ‘developing new non-agricultural activities’ relating to different types of farm
(‘Strategic options’ survey)

Strategic options survey

Feasible strategy	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	%	Count	%	Count	%	Count	%
Yes	2	14	13	31	5	42	20	29
No	12	86	29	69	7	58	48	71
Total	14	100	42	100	12	100	68	100
Feasible strategy	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	%	Count	%	Count	%	Count	%
Yes	10	27	10	37	0	0	20	29
No	27	73	17	63	4	100	48	71
Total	37	100	27	100	4	100	68	100
Feasible strategy	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	%	Count	%	Count	%	Count	%
Yes	1	33	1	5	18	39	20	29
No	2	67	18	95	28	61	48	71
Total	3	100	19	100	46	100	68	100

Those interviewees who accepted the challenge of developing new non-agricultural activities were asked to identify alternative ways of diversifying their business. The activities that were proposed as the most desirable were establishing a small-scale winery (40%), completing the production cycle with a fruit processing unit (30%) or a

cured meat (sausage) processing unit (10%) or by obtaining special equipment for drying fruits and vegetables (10%) (Table 7.57).

Respondents with different types of production enterprises differed in their preferences. Those with ‘small’, ‘medium size’ ‘own’ and ‘mixed crops’ farms that wished to introduce this strategy intended to develop small private winery. The review of the literature identified that this activity was efficient in the condition of transition towards a ‘free market’ economy in Bulgaria. In comparison, the farmers with ‘big’ production units had more innovative ideas and they wished to develop the alternative to dry their production (e.g. fruits) due to the developing market niche in the EU countries as stated by a respondent:

“There is an export market for dried fruits in Western Europe and I think it will worth to invest in equipment for drying fruits”

Table 7.57: The top four new non-agricultural activities of different types of farm

('Strategic options' survey)

New non-agricultural activities*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Small winery	1	50	6	46	1	20	8	40
Small fruits processing unit	0	0	5	39	1	20	6	30
Drying room	0	0	0	0	2	40	2	10
Meat processing unit	1	50	1	8	0	0	2	10
Total of cases	2	100	13	100	5	100	20	100
New non-agricultural activities*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Small winery	6	60	2	20	0	0	8	40
Small fruits processing unit	2	20	4	40	0	0	6	30
Drying room	0	0	2	20	0	0	2	10
Meat processing unit	2	20	0	0	0	0	2	10
Total of cases	10	100	10	100	0	0	20	100
New non-agricultural activities*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Small winery	0	0	0	0	8	44	8	40
Small fruits processing unit	1	100	0	0	5	28	6	30
Drying room	0	0	0	0	2	11	2	10
Meat processing unit	0	0	1	100	1	6	2	10
Total of cases	1	100	1	100	18	100	20	100

Note: * This table includes only the top four answers and excludes all the other answers
Percentages are based on multiple response answers. They are the percentages of cases rather than responses therefore they do not sum to 100%

The respondents with ‘mixed/leased’ farms and perennials wanted to establish fruit-processing units (e.g. for apple juice). Some unexpected alternative activities were considered by one of the respondent with ‘small’ farms and one who cultivated only non-perennial crops, which was establishing meat/sausage processing unit (Table 7.57). He explained his reason:

“The meat factory in Plovdiv is in a big financial crisis, therefore, they are working with minimum capacity, which will increase the demand very soon”

Some other possible non-agricultural activities that were mentioned by interviewees were establishing a farm shop or producing frozen fruits.

According to the respondents the major positive driving forces for developing non-agricultural activities were:

- increased farm profit (75%);
- no age limitation (40%);
- increased cash flow (40%);
- having knowledge and experience (35%);
- available market demand (30%).

Size of the farms

Development of new supportive non-agricultural activities requires financial investment, therefore it was not a surprise that farms regardless of their size were encouraged by increased farm profit and cash flow and their confidence that they have the necessary knowledge and experience. The view of the respondents with ‘medium size’ farms differed from those with ‘small’ and ‘big’ farms because they were also encouraged by the fact that they are perceived themselves as being young, although it was shown in the previous chapter that almost half of them (48%) were over 50 years old (Table 7.58). One of them explained:

“I am young and I would like to live and work in my small village, therefore I have to find a new economic alternative for surviving because the incomes from agriculture/horticulture are low and unstable”

Another added:

“I am still young (under 45 years) and I am considering the idea of introducing some new activities such as a small winery so that I can make my business more sustainable”

Table 7.58: Encouraging factors for strategy – ‘developing new non-agricultural activities’ relating to size of farms

ENCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total`
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security		7	20	10
2.	Age – young		54	20	40
3.	Having knowledge and experience	100	31	40	35
4.	Aware of the opportunities				
	BUSINESS FACTORS				
5	Increased farm profit	50	85	60	75
6	Reduced risk		23	20	20
7	Having available machinery				
8	Increased cash flow of business	50	31	60	40
9	Reduced cost of production				
10	Good quality of workforce			20	5
11	Available capital available for investment			20	5
	ECONOMIC FACTORS				
12	Available market demand		39	20	30
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system	50	23		25
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations			20	10
23	Having promotion of products to markets		7		5
24	More subsidies				
25	More subsidies for research				
26	No taxation of inputs				
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The farmers with their ‘own’ or ‘mixed/leased’ enterprises were encouraged by their satisfactory financial performance and young age. However, they differed slightly between themselves, because the respondents that cultivated only their own land perceived distribution system as satisfying, whereas those with ‘mixed/leased’ farms

built up their confidence for production changes upon to their knowledge and experience (Table 7.59).

Table 7.59: Encouraging factors for strategy – ‘developing new non-agricultural activities’ relating to land ownership patterns

ENCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	TOTAL
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security	20			10
2.	Age – young	50	50		40
3.	Having knowledge and experience	20	50		35
4.	Aware of the opportunities				
	BUSINESS FACTORS				
5	Increased farm profit	90	60		75
6	Reduced risk	20	20		20
7	Having available machinery				
8	Increased cash flow of business	50	30		40
9	Reduced cost of production		10		
10	Good quality of workforce				
11	Available capital available for investment		10		5
	ECONOMIC FACTORS				
12	Available market demand	20	40		30
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system	30			25
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations		20		10
23	Having promotion of products to markets		10		5
24	More subsidies				
25	More subsidies for research				
26	No taxation of inputs				
	Total of percentage of cases	100	100		100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

The interviewees with different types of crops identified relatively different encouraging factors. The only one factor that was common for all of them was the increased farm profit. The only farmer of the sample who grew only perennial crops was encouraged by the fact that with introducing new activity he would reduce the business risk because it would be spread between two or more activities. Further encouragement came from the fact that there was an available market demand for the new non-agricultural products. However, the only interviewee with annual crops and

those with 'mixed' crops were encouraged by their knowledge and flexible managerial skills as well as by their youth (Table 7.60).

Table 7.60: Encouraging factors for strategy – 'developing new non-agricultural activities' relating to types of crops of the farms

ENCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Improved personal/family financial security			11	10
2.	Age – young		100	39	40
3.	Having knowledge and experience		100	33	35
4.	Aware of the opportunities				
	BUSINESS FACTORS				
5	Increased farm profit	100	100	72	75
6	Reduced risk	100		17	20
7	Having available machinery				
8	Increased cash flow of business			44	40
9	Reduced cost of production			6	
10	Good quality of workforce				
11	Available capital available for investment			6	5
	ECONOMIC FACTORS				
12	Available market demand	100		28	30
13	Good road network				
14	Improved credit system				
15	Stable rate of inflation				
16	Better advisory system				
17	Sufficient distribution system			17	25
18	Stable exchange rate of Bulgarian currency				
19	Available information about markets				
20	Reduced level of bureaucracy				
21	Favourable import regulations				
22	Favourable export regulations			11	10
23	Having promotion of products to markets			6	5
24	More subsidies				
25	More subsidies for research				
26	No taxation of inputs				
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

7.5.7.3.2 Expected outcomes

With the development of non-agricultural activities, 90% the respondents expected to increase their business viability followed by improving the quality of life for themselves and their families (70%) and having a diversity of markets (60%) (Table 7.61).

The results suggested that the horticultural producers who wished to develop new non-agricultural economic activities, irrespective of their *farm size, land ownership patterns* and *types of crops*, were business driven because business viability came on top of their list of expected outcome. They were eager to explore any opportunities that arose due to the rapidly changing external environment and they intended to apply effective management and marketing, as it was summarise by a farmer:

“I have to take the chance that arose due to the dramatic economic changes in Bulgaria if I want to have a profitable business that will still exist over the next 5 or 10 years”

Table 7.61: Expected outcomes of strategy ‘developing new non-agricultural activities’ relating to different types of farm
(‘Strategic options’ survey)

Outcomes*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	2	100	12	92	4	80	18	90
Better quality of life	2	100	9	69	3	60	14	70
Better quality of products	1	50	6	46	3	60	10	50
Diversity of products	0	0	4	31	1	20	5	25
Diversity of markets	1	50	8	62	4	80	13	65
Total of cases	2	100	13	100	5	100	20	100
Outcomes*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	8	80	10	100	0	0	18	90
Better quality of life	8	80	6	60	0	0	14	70
Better quality of products	5	50	5	50	0	0	10	50
Diversity of products	4	40	1	10	0	0	5	25
Diversity of markets	5	50	8	80	0	0	13	65
Total of cases	10	100	10	100	0	0	20	100
Outcomes*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Increased business viability	0	0	1	100	17	94	18	90
Better quality of life	1	100	1	100	12	67	14	70
Better quality of products	1	100	1	100	8	44	10	50
Diversity of products	0	0	0	0	5	28	5	25
Diversity of markets	1	100	0	0	12	67	13	65
Total of cases	1	100	1	100	18	100	20	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

The only exception was made by a respondent growing only perennials, who was concerned about his quality of life, quality of products and diversity of markets. Some other farmers such as those with farms of less than 2 ha, as well as those with ‘own’ farms and those with non-perennials only, were also concerned to increase the quality

of their life. Whereas, those with 'big' farms expected to enter new markets with their new non-agricultural products or services (Table 7.61).

7.5.7.3.3 Not feasible strategy – why?

The majority of the farmers (71%) perceived developing supportive non-agricultural activities not feasible for their farm business (Table 7.56). The factors that led them to this conclusion were:

- Lack of capital for investment – own and borrowed (73%);
- Poor advisory system (38%);
- Lack of subsidies (35%);
- Low cash flow (23%);
- High business risk (17%).

Size of the farms

Both the literature reviewed and the findings showed above demonstrated that in general, the economic performance of the farms after the economic reform began in 1989, could be classified as poor, therefore, their capital available for investments was very limited. Consequently, this constraint did not allow the production units, irrespective of their size, to make major investments in their business due to lack of own finance. On the other hand, to borrow capital has been a very complicated task due to the fact that loans for agricultural activities were perceived as high risk for the banks. Another negative reason they quoted was lack of advisory offices that could direct the farmers who wished to diversify. Those with 'small' farms were also strongly discouraged by the fact that they were too old to begin such a challenging task. The interviewees with farms of more than 10 ha perceived that their business was more likely to receive any grants due to their bigger business capacity. Further, they were also greatly concerned about the fact that there was no subsidies available for farm diversification (Table 7.62). An interviewee stated:

“Without financial support I do not know how long I would be able to survive in this difficult economic situation in Bulgaria, therefore, I cannot even think about agri-food processing unit or anything else”

Table 7.62: Discouraging factors for strategy – ‘developing new non-agricultural activities’ relating to size of farms

DISCOURAGING FACTORS*		Small farms	Medium size farms	Big farms	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security				
2.	Age – old	33	3	14	13
3.	Lack knowledge and experience	8	14	14	15
4.	Not aware of the opportunities	8	10		8
BUSINESS FACTORS					
5	Decreased farm profit	8			2
6	Decreased cash flow of business	25	35	29	23
7	Increased business risk	17	14	29	17
8	Lack of or obsolete machinery	17	7		8
9	Lack capital available for investment	67	79	57	73
10	Increased cost of production		10	29	10
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system				
13	Poor credit system	8	7	14	8
14	Poor road network	8			2
15	Unstable rate of inflation		3		2
16	Poor advisory system	33	41	29	38
17	Unstable exchange rate of Bulgarian currency				
18	Lack information about markets	8	7		6
19	Lack market demand	8	21		15
20	Unfavourable import regulations				
21	Unfavourable export regulations				
22	High level of bureaucracy	17	17		15
23	Lack of promotion of products to markets	8			2
24	Lack of subsidies	17	35	71	35
25	Lack of subsidies for research	8	3		4
26	Taxation of inputs		3		2
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%

Empty cells are options presented to the respondents but were not selected by them

Land ownership patterns

The respondents with different land ownership stated a similar range of discouraging factors. They rejected the development of new non-agricultural activities due to lack of capital for investments, lack of subsidies followed by poor advisory system. Acquiring specialised advice was not possible due to the lack of such kinds of services therefore establishing advisory offices could make the idea of diversification more transparent and attractive to the farmers in Bulgaria and in the Plovdiv region. One of the respondents stated:

“When the Government establishes advisory services that could provide useful information in regards to agri-tourism I may consider introducing the idea of agri-tourism but now I cannot understand it”

The respondents with co-operatives were greatly discouraged by the lack of subsidies, which may be explained by their low competitive power discussed earlier. Whereas, those with ‘mixed/leased’ farms and the co-operatives were discouraged also by the poor credit system and increasing the business risk (Table 7.63).

Table 7.63: Discouraging factors for strategy – ‘developing new non-agricultural activities’ relating to land ownership patterns

DISCOURAGING FACTORS*		Own farms	Mixed/ leased farms	Co-operatives	Total
		% of cases	% of cases	% of cases	% of cases
PERSONAL FACTORS					
1.	Reduced personal/family financial security				
2.	Age – old	15	12		13
3.	Lack knowledge and experience	11	12		15
4.	Not aware of the opportunities	11	6		8
BUSINESS FACTORS					
5	Decreased farm profit	4			2
6	Decreased cash flow of business	28	35	25	23
7	Increased business risk	7	29	25	17
8	Lack of or obsolete machinery	11	6		8
9	Lack capital available for investment	78	77	50	73
10	Increased cost of production		24		10
11	Poor quality of workforce				
ECONOMIC FACTORS					
12	Poor distribution system				
13	Poor credit system	7	29	25	8
14	Poor road network				2
15	Unstable rate of inflation	4			2
16	Poor advisory system	48	29	50	38
17	Unstable exchange rate of Bulgarian currency		6		2
18	Lack information about markets		12		6
19	Lack market demand	11	24		15
20	Unfavourable import regulations				
21	Unfavourable export regulations				
22	High level of bureaucracy	15	18		15
23	Lack of promotion of products to markets				2
24	Lack of subsidies	41	12	100	35
25	Lack of subsidies for research	8			4
26	Taxation of inputs		6		2
Total of percentage of cases		100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

Types of crops

The farmers who rejected this strategy irrespective of the types of crops they grew, no doubt did so due to the lack of capital for investments (Table 7.64). However, those with perennials stated that financial obstacles were discouraging but there was another obstacle of greater importance, the high level of bureaucracy. One of them explained:

"I am trying to plan and build up the construction where I will process my products and almost one year I am struggling with collecting all the necessary documents, licences and approval by different authorities"

Table 7.64: Discouraging factors for strategy – ‘developing new non-agricultural activities’ relating to types of crops of the farms

DISCOURAGING FACTORS*		Farms with perennial crops	Farms with non-perennial crops	Farms with mixed crops	Total
		% of cases	% of cases	% of cases	% of cases
	PERSONAL FACTORS				
1.	Reduced personal/family financial security				
2.	Age – old		6	18	13
3.	Lack knowledge and experience		28	7	15
4.	Not aware of the opportunities		22		8
	BUSINESS FACTORS				
5	Decreased farm profit	50			2
6	Decreased cash flow of business		28	21	23
7	Increased business risk	50	17	14	17
8	Lack of or obsolete machinery			14	8
9	Lack capital available for investment	50	72	75	73
10	Increased cost of production	50	6	11	10
11	Poor quality of workforce				
	ECONOMIC FACTORS				
12	Poor distribution system				
13	Poor credit system			14	8
14	Poor road network			4	2
15	Unstable rate of inflation			4	2
16	Poor advisory system		44	36	38
17	Unstable exchange rate of Bulgarian currency			4	
18	Lack information about markets		6		6
19	Lack market demand		11	18	15
20	Unfavourable import regulations				
21	Unfavourable export regulations				
22	High level of bureaucracy	100	11	11	15
23	Lack of promotion of products to markets		6		2
24	Lack of subsidies		39	36	35
25	Lack of subsidies for research		6	3	4
26	Taxation of inputs			4	2
	Total of percentage of cases	100	100	100	100

Note: * Percentages are based on multiple responses of the first three answers given by the respondents therefore they do not sum to 100%
Empty cells are options presented to the respondents but were not selected by them

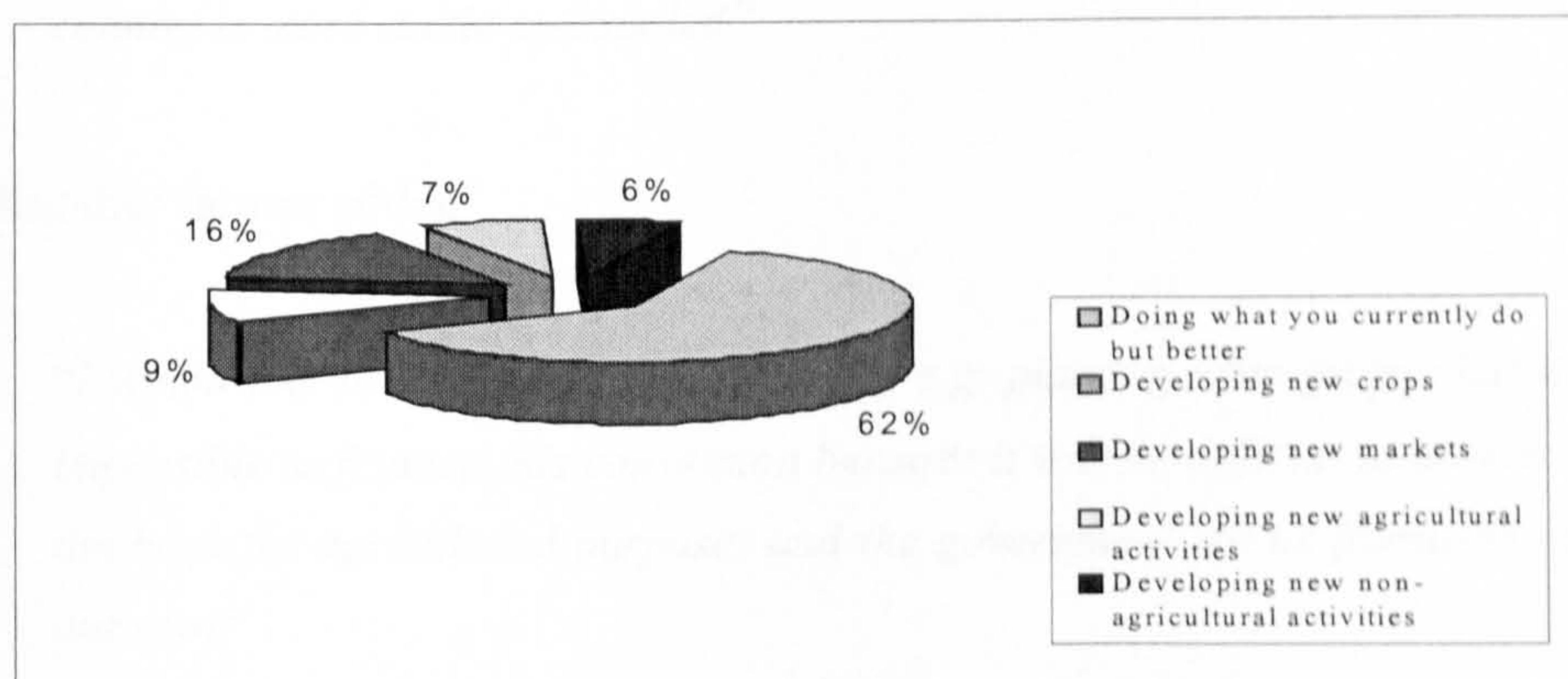
The farms that cultivated non-perennials and 'mixed' types of crops were also discouraged by limited financial support by the Government and lack of advisory offices (Table 7.64).

7.5.8 The most feasible strategic option

The respondents who intended to stay in horticulture evaluated the last five strategic options in terms of how different internal and external factors and drivers with high levels of uncertainty and the influence upon their farm business. Based on this assessment they were asked to identify the most feasible strategic option over the next 5 years. Andrews (1987) argues the chosen strategy has to be identifiable and explicit; unique; consistent in terms of competence and resources; to exploit all the environmental opportunities; appropriate to the society and to constitute stimuli to a company's efforts.

Consequently, the farmers were asked to rank the last five proposed strategies in terms of their feasibility for their future farm business. The strategy of continuing with their current farm business combined with some improvements in the future such as improving the quality of their products was ranked as their most feasible strategic option over the next 5 years (62%) (Figure 7.1).

Figure 7.1: The most feasible strategy for the farms



The results underlined that these farm managers were very conventional in running their farm business and their most likely strategy lacked uniqueness and stimuli for development. However, they were aware of the existing business opportunities in Bulgaria but the real economic situation was very inconsistent and unpredictable,

therefore, the farming contributed substantially to the household incomes in the rural areas (OECD, 2000).

The fall of the Socialist regime and the following dramatic changes, which began in 1989, were not expected. Therefore, the people were not prepared to run a farm business in a 'free market' economy. They did not have business knowledge in commercial farming, while the young people were not attracted to the rural areas and agriculture in particular.

Additionally, the Government did not take correct and consistent decisions with regard to agriculture/horticulture due to the unstable political and economic situation, therefore the agricultural industry went deeper into crisis. Consequently, the unstable external business environment totally discouraged existing farmers from the challenge of business change and innovation. These respondents were very busy thinking about the present rather than considering the future business prospects and modifications. Nevertheless, they identified that the accessibility of finance and guarantee of the markets could increase the level of farm profit and would give vital incentives for business expansion and viability that would revitalise horticultural industry in the Plovdiv region. An interviewee stated:

"One day I will make some business changes when the economic situation in the country is more stable and settled"

Another farmer added:

"I would like to implement some changes e.g. planting wine grapes but it was almost impossible to finance this conversion because it was so difficult to borrow money from the bank for agricultural purposes and the government left us (farmers) to manage on our own"

Although the majority of the producers interviewed were traditional in their view of future business there were some who were more innovative, aware of the business opportunities, willing to take advantage of it and most importantly were ready to take the risk of the business change. These farmers can be classified as early adopters (see Chapter 4, section 4.6.2). 16% of the respondents intended to improve their market position and gain new markets. In addition, 9% of them considered developing new

horticultural products. The issue about farm diversification was ranked last as only 13% of them intended to develop new agricultural or non-agricultural activities, mainly due to the lack of own capital, governmental financial support and advisory services. However, they expressed their willingness for innovation.

It was necessary to identify whether the farmers with different farm sizes, patterns of land ownership and types of crops would identified different 'most feasible' strategies and the results revealed that no differences were observed. As a result, more than two thirds of them intended to continue with their current business with improvements mainly with regard to improving the quality of their production (Table 7.65).

Table 7.65: The most feasible strategy of different types of farm

(‘Strategic options’ survey)

Strategic options survey

Strategies*	SIZE OF FARMS						Total	
	Small		Medium		Big			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Doing what you currently do but better	10	71	35	83	9	75	54	79
Developing new horticultural crops	8	57	8	19	3	25	19	28
Developing new markets	3	21	16	38	2	17	21	31
Developing new agricultural activities	2	14	12	29	2	17	16	24
Developing new non-agricultural activities	1	7	8	19	4	33	13	19
Total of cases	14	100	42	100	12	100	68	100

Strategies*	LAND OWNERSHIP						Total	
	Own		Mixed/leased		Co-operatives			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Doing what you currently do but better	28	76	22	82	4	100	54	79
Developing new horticultural crops	12	32	6	22	1	25	19	28
Developing new markets	11	30	10	37	0	0	21	31
Developing new agricultural activities	10	27	6	22	0	0	16	24
Developing new non-agricultural activities	7	19	6	22	0	0	13	19
Total of cases	37	100	27	100	4	100	68	100

Strategies*	TYPES OF CROPS						Total	
	Perennials		Non-perennials		Mixed crops			
	Count	% of cases	Count	% of cases	Count	% of cases	Count	% of cases
Doing what you currently do but better	3	100	15	79	36	78	54	79
Developing new horticultural crops	1	33	6	32	12	26	19	28
Developing new markets	2	67	5	26	14	30	21	31
Developing new agricultural activities	0	0	9	47	7	15	16	24
Developing new non-agricultural activities	0	0	1	5	12	26	13	19
Total of cases	3	100	19	100	46	100	68	100

Note: * Percentages are based on multiple responses of the first two answers given by the respondents therefore they do not sum to 100%

7.6 SUMMARY

Agriculture/horticulture has been in a critical situation in Bulgaria and in the Plovdiv region since the economic reform began in 1989. Therefore, a range of alternative scenarios for the revitalisation of the horticultural industry in the Plovdiv region of Bulgaria were proposed to the farm managers interviewed in order to assess the future development of their farms over the next 5 years.

An investigation of the internal business capacity of the farms together with the external forces in terms of the opportunities and threats was undertaken. The main strengths of the farms investigated in the Plovdiv region were previous experience in agriculture/horticulture, existing machinery (although obsolete) and cultivating crops that have traditionally been grown for centuries, while their major weaknesses were lack of or obsolete machinery, application of old technologies and inefficient crop varieties.

The external environment (political, economic and agricultural reforms) has a major influence upon the farm businesses in Bulgaria and in the Plovdiv region in particular due to the collapse of the Socialist system, the process of transition towards a free market economy and the process of accession to the EU. The last process has included measures for developing equal policies and regulations with regards to agriculture, rural development and other economic, political and social areas. The main opportunities were developing new products and land expansion that were encouraged by the official completion of the process of land restitution. The key threats were the unpredictable weather conditions, uncertain markets and poor agricultural policies.

A range of alternative strategic options were proposed to the respondents for evaluation. The first two discussed their dreams in terms of their ideal scenario. Another possible alternative strategic option assessed the intention to withdraw from horticultural business as a possible way forward for their business. The other five strategies were based on Ansoff product/market matrix. The results revealed that more than half of the farmers dreamt of having a modern farm. They also had a vision for farm expansion due to their current poor competitive position, this was particularly applicable for the farms of less than 2 ha. Perennial crops were widely acknowledged to be the most profitable since the transition towards a 'free market' economy began and one third of the respondents dreamt of cultivating fruits and grapes. However, the

respondents with co-operatives dreamt of effective marketing due to their enormous market difficulties. In a stable economy with well developed legislation, available financial resources and markets, the farmers' dreams may not be so difficult to be achieved.

Withdrawing from horticulture was examined and the findings revealed that 8 respondents considered to go out of horticulture due to a variety of reasons such as uncertain markets, high production costs, lack of grants and poor credit system. All types of farms were operating within this unstable and dynamic external environment (OECD, 2000). Therefore it was expected that the managers of different types of production units would not show different opinions.

The respondents with different size of farms, land ownership patterns and types of crops who intended to stay in horticulture evaluated the strategic option of 'doing what they currently do but better' in a very similar way. Almost all of them (90%) found this strategy feasible for their future business and they wished to improve the quality of their current products. Personal factors such as obtained knowledge and experience together with increased personal and financial security were perceived as the main common drivers for all types of farm and they anticipated very similar outcome such as improving their quality of life except the participants with 'big' farms who were aiming business viability. Only 7 respondents rejected this scenario mainly due to their poor financial performance of their current businesses.

In 2000, grapes, tomatoes, apples and peppers were the main current products in terms of profitability for the production units within the sample. Almost half of them wished to introduce new horticultural products to their business and the most wanted products were fruits and grapes. Again, the interviewees evaluated this strategy in a very similar way. Those with different farm size and land ownership patterns and types of crops were encouraged mainly by their increased farm profit and the availability of demand for these new products. However, only one co-operative that intended to introduce this strategy had a different vision. This co-operative wished to plant tomatoes as a new crop due to available machinery, offered free advice (scientific and market) and grant. The expected outcome of this strategic option differed for the different enterprises investigated. The respondents with 'small', 'own', only perennials and co-operative were concerned mostly about their quality of life whereas those with 'big' farms and

only non-perennials expected to improve the quality of their products. More than half of the farm managers in the sample were discouraged to develop new horticultural products by the increased production costs and business risk. The only farm with perennials that supported this strategy demonstrated different opinion and identified that lack of demand and decreased financial results were the most discouraging factors.

Two thirds of the farms within the sample in the Plovdiv region used local markets for their produce. However, only 44% of them intended to develop new markets over the next 5 years because they had relatively good profits rates, necessary market information and there was an available market demand. Again, one co-operative of the sample differed in this judgement as he was encouraged by the advisory system, his age and personal and financial security. Nevertheless, all types of farm, irrespective of their size, land ownership patterns and types of crops, identified increasing their business viability with entering new markets. More than half of the interviewees were discouraged to introduce this strategy due to the poor market structure in the Plovdiv region in terms of lack of promotion and market information. Unfavourable import and export regulation also badly affected most types of the farm except co-operatives and farms with only perennials, most probably due to their limited number in the sample.

The review of the literature and the respondents suggested that farm diversification was one important way to increase farm incomes. The respondents who wished to diversify expressed agreement with the literature. However, their main obstacle was lack of finance (own and borrowed).

Developing new agricultural activities (related diversification) was considered feasible by more than one third of the farm managers that were planning to start producing herbs, oil-bearing crops or to combine agriculture/horticulture with husbandry. They (irrespective of their size, land ownership patterns and types of crops) wanted to introduce this strategy because they had the necessary knowledge and previous experience, there was a demand for these new products and they were encouraged by their good profit rates except the co-operatives investigated. However, there were some differences observed in terms of their expected outcomes. The farms of more than 10 ha, those with a combination of their own and leased land and those with mixed crops expected to increase their business viability. The respondents with 'small' enterprises wished to diversify their markets while the producers of all the other types of farm

expected to increase the quality of life for themselves and their families. Less than two thirds of the interviewees perceived that developing new agricultural crops was not feasible for their business because of the low profits and lack of demand for new products irrespective of their size, land ownership patterns and types of crops. Only the farms with perennials demonstrated some difference because of the increased business risk and costs of production.

Developing new non-agricultural activities was feasible for less than one third of the respondents regardless of their size, land ownership patterns and types of crops and the most popular activities were establishing small processing units (*e.g.* wine, apple juice, etc.). Those farms were encouraged mainly by their good financial results. Age was perceived as another positive factor for most types of farm, except those with land plots of less than 2 ha and those with farms of more than 10 ha. Regardless of farm size, land ownership and types of crops, these farms who intended to introduce non-agricultural activities were business oriented and expected to increase their business viability. The majority of the farm managers within the sample rejected this strategy mainly due to lack of capital for investments (own and borrowed).

Farmers who intended to continue producing horticultural crops evaluated the last five scenarios in terms of their feasibility for their business over the next 5 years. The overall results revealed that 79% of the respondents emphasised 'doing what you currently do but better' to be their most feasible strategy for their farm business in a medium term.

It could be summarised that the farms within the sample in the Plovdiv region would continue with their traditional business and aspects such as size, land ownership patterns and types of crops would not affect their business development over the next 5 years.

The last two chapters presented the results and a brief discussion (in some cases) of the primary data collection in terms of characteristics of the farms, farmers and the process of evaluation of a range of alternative strategies. The overall discussion of these results, together with the evaluation of this research, is presented in the next chapter.

CHAPTER 8: EVALUATION, DISCUSSION AND CONCLUDING REMARKS

8.1. INTRODUCTION

This research analysed farm businesses in the Plovdiv region and identified a range of alternative strategic options for different types of horticultural farms in terms of farm size, land ownership patterns and types of crop in this region for the next 5 years. The respondents evaluated these strategic options in terms of internal and external factors and then they identified what was to them the most feasible strategy for the future development of the horticultural farms in the Plovdiv region.

The aim of this final chapter is to evaluate the theoretical, methodological and analytical approaches adopted and to summarise and discuss the main findings and recommendations so that future research priorities can be identified. This chapter comprises the following sections:

8.1 An introduction

8.2 Evaluates the theoretical, methodological and analytical approaches adopted in this study. The main limitations and challenges are reviewed in order to understand how they influenced this research.

8.3 Discusses the main findings in terms of achieving the research objectives.

8.4 Outlines the contribution of this research to the body of knowledge and identifies priorities for future research.

8.5. Summarises the main concluding remarks that arose from the research.

8.2. EVALUATION OF THE THEORETICAL, METHODOLOGICAL AND ANALYTICAL APPROACHES ADOPTED

The overall research process in terms of the theoretical, methodological and analytical approaches of this study are evaluated using the criteria of validity, reliability and representativeness that are discussed in Chapter 5, section 5.4.3. Validity refers to whether the data reflects the phenomenon under investigation, whereas reliability identifies whether the process of the study is consistent and reasonably stable over time. Representativeness identifies whether the conclusions can be generalised (Miles and Huberman, 1994; Denscombe, 1998; Kumar, 1999; Jennings, 2001; Rudestam and Newton, 2001; Robson, 2002).

8.2.1 Evaluation of the theoretical approaches adopted

The theoretical approach adopted in this research is that of strategic theory and its application to agriculture/horticulture. A review of the different concepts of strategic theory is presented in Chapter three and the application of strategic issues in agriculture/horticulture is reviewed in Chapter four.

Strategy theory has developed significantly in the last few decades (McGee and Thomas, 1986; Feurer and Chaharbaghi, 1997; Johnson and Scholes, 1999; Mintzberg *et al.*, 1999; Hutchinson, 2001; Markides, 2001, Oliver 2002). This research reviewed the relevant range of concepts of strategy development and evaluation practices. Different strategy-related concepts were adopted in this research: Ansoff product/market matrix, SWOT analysis, PEST analysis, GAP analysis, scenario planning. Their application is explained in relation to each survey in Chapter 5, sections 5.3.1.3, 5.3.2.3 and 5.3.3.3.

The Ansoff product/market matrix was used as a basis for the formulation of the alternative strategic options proposed to the farmers for evaluation. The rationale behind this decision is that in the context of a free market economy the farmers have to be product and market oriented. In other words, they have to assess different issues such as the quality of their products in order to maintain existing market positions or gain new markets. Similar product/market oriented strategies were used by Damianos and Skuras (1996) in Greece and Ilbery *et al.* (1998) in England to analyse farm businesses there. However, they were not based on Ansoff product/market matrix.

SWOT, PEST, GAP analyses, benchmarking and scenario planning are concepts that were also adopted in this study in order to help the process of defining and evaluating a range of strategies from the farmers' point of view. A study by the EC (2001b) argued that the business skills of the farmers in Bulgaria were limited. Therefore, while flexible and widely used elsewhere (Marsden *et al.*, 1989; Kaine *et al.*, 1993; Hastings, 1996; Neumann, 1997; Grundy, 1998; Jen, 1998; Blignaut, 1999; Batt, 2000; Attila, 2001; Saad, 2001; Martinez *et al.*, 2002), more complicated concepts such as Porter's generic strategies, Boston Consulting Group (BCG), economic analysis may have restricted the study due to some of the farmers having difficulty in understanding the concepts and related questions. Equally, the results from the 'exploratory' survey

suggested that the farmers were not prepared to provide financial data as either the majority of them did not keep accounting records or were fearful of releasing such types of information outside of the business. This fact reduced further the number of investigative approaches that could be applied in this research.

A wide range of material on evaluation theory was available, although the focus of much of the material was on policies, programmes and projects as the main objects for evaluation at a geographical level (Lichfield *et al.*, 1975; Patton, 1982; Rossi and Freeman, 1982; Breakwell and Millward, 1995; EC, 1999b; EC MEANS, 1999a; Farthing, 1999; Owen and Rogers, 1999; EC 2000a) rather than on the evaluation of strategies for individual enterprises.

The review of strategic issues in agriculture/horticulture, discussed in Chapter 4, reflected upon the application of different strategic concepts to individual farm businesses: the majority of the information being obtained from articles and reports. It demonstrated that most of the available research had used a variety of analytical and methodological approaches focusing mainly on the financial performance of the farms and the economic consequences of introducing alternative economic activities or on environmental concerns (Macrae *et al.*, 1993; Schroder and Mavondo, 1994; Damianos and Skuras, 1996; Aubert *et al.*, 1999; Farthing, 1999; Ivanova, 1999; Mishev *et al.*, 1999; Morris and Winter, 1999; Albisu *et al.*, 2000; Ellis, 2000; Kajanus, 2000; Poole, 2000; Attila, 2001; Hristova 2001; Hossain *et al.*, 2002; Martinez *et al.*, 2002; Saugeres, 2002; Bontkes and Keulen, 2003). Although these issues were not the focus of this study, the review undertaken offered valuable information that was used to provide general principles, guidelines and concepts. This finding supports the assertion of Battershill and Gilg (1997) that a farmer focus remains overlooked in research undertaken in the UK and Europe.

In conclusion, no research using strategic theory as an approach, and more specifically the Ansoff product/market matrix, had previously been undertaken with regard to the agriculture/horticulture in Bulgaria except for the SWOT analysis of the agricultural sector in Bulgaria that was used by MAF in 2000 (MAF, 2000a). This confirmed the innovative nature of this research undertaken in the Plovdiv region of Bulgaria.

Nevertheless, the innovative nature of this research could be criticised in terms of

applying the strategic management theory and its strategic analytical approaches (e.g. Ansoff product-market matrix, Porter's Five Forces, GAP analysis, etc.) for atomistic structures (relatively small farms in Bulgaria). It has to be acknowledged that strategy theory was designed for oligipolistic structures (e.g. big companies). However, one can argue that atomistic structures follow similar business principles, procedures and confront the same questions as any monopolistic structures such as: where are the markets, which product to sell to a certain market, who are the buyers, who are the competitors. Due to the nature of this study and its limitations (see Chapter 5, section 5.4.3), strategy theory provided an essential objective and analytical approach relating to the process of formulation and evaluation of a range of strategic options that gave a sound basis for the primary data collection. In the area of general agriculture, other authors have adopted aspects of strategic management theory (Hemedy, 1996; Miles et al., 1999; Olson, 2001; Tuskaev, 2002) and strategic analytical techniques (see Chapter 3, section 3.4) for more atomistic competitive situation at farm level have been used by others Damianos and Skuras (1996) analysed a range of strategic business paths for future development of the farms in Greece; Traill (1997) investigated the competitiveness of the horticultural farm in the UK; Blignaut (1999) studies Porter's generic strategies in South Africa and Albisu et al. (2000) analysed the competitiveness of the agri-food companies in Spain. Furthermore, strategic theory was adopted within the context of some CEE countries for example by Neumann (1997) who used SWOT analysis in Eastern Germany and Attila (2001) who discussed some competitive strategies in Hungary.

8.2.2 Evaluation of the methodological approaches adopted

This study, throughout the whole research process, adopted a positivist paradigm, which is grounded on employing quantitative methodology. A positivist paradigm adopts a deductive approach that is based on theories and concerns casual relationships that can be empirically tested (Jennings, 2001). In this study, the strategic theory and its analytical tools provided an objective approach that informed the primary research and the choice of research methods and questions.

This research also used a range of open-ended questions during the three surveys. One may argue that this refers to an interpretive paradigm that assumes an inductive approach to research and develop explanation of phenomenon (Jennings, 2001). However, in this study the open-ended questions were employed in order to inform the

objective framework adopted as to explain the motivation of the farmers (e.g. farmers' dreams), which was an attempt to provide more comprehensive information. However, this qualitative data collected was interpreted and analysed as a quantitative data. Therefore, the epistemological roots did not change during the research process.

8.2.2.1 Secondary data collection

Shipmen (1988) argues that finding adequate secondary data can be a major obstacle in social science research. Data may have been collected by governmental or private organisations but very often does not provide the exact information needed. Therefore, existing data must be evaluated on the basis of how it was collected, what assumptions were made, what items were excluded, why the data was collected and by whom. Banchev and Terziev (1999) state that secondary data on the agricultural sector in Bulgaria is limited and not comprehensive. They also argued that the available data is inaccurate and unreliable because it has been collected in order to achieve different aims, priorities and stakeholders' expectations.

Although considerable efforts were made to find data on farm businesses in Bulgaria and/or in the Plovdiv region, very little was found about a range of issues including size structure, the total number of horticultural farms and the production of the farms in the Plovdiv region. As a result, some of the data used in this study was taken from the unpublished materials of the regional authorities and regional statistics office and it was not possible to independently corroborate the accuracy of much of this data.

In order to confirm the reliability of the existing data it was cross-checked, if it was available from two or more sources. Nevertheless, some of the existing data was found to be inconsistent, but was used in this study, as it was the only data available. For example, some of the data about the areas and production of different horticultural crops in Bulgaria and in the Plovdiv region was missing or was assumed to be inaccurate. For example, the areas of plums in Bulgaria apparently increased dramatically from 12,000ha in 1997 to 20,000 ha in 1998, while in the Plovdiv region the area of apples increased from 5.9 thousand ha in 1997 to 6.9 thousand ha in 1998 for which it was not possible to provide an explanation.

Other limitations were encountered during the secondary data collection such as the fact that some information was either not easily accessible or there was restricted

public access. These problems were largely overcome by establishing collaborative contacts at Ministry level as well as by contacting local and EU experts in Bulgaria who were supportive of this research topic and provided valuable data.

Conversely, this research benefited significantly, with regard to updated and comprehensive information, due to the fact that data became available as it was collected by the authorities in order to prepare a National Agriculture and Rural Development Plan (2000 – 2006) that was requested and approved by the EU in 2000. This plan reviewed the situation of agriculture and rural development and proposed future priorities for the development of agriculture and rural areas in Bulgaria (MAF, 2000a). Some international associations (German and Dutch) have also been investigating Bulgarian agriculture/horticulture in order to assess the conditions for foreign investment in this sector and again as a result additional data became available (SENER 2000). Therefore, a significant amount of information used in this research has been incorporated over time, as more became available from governmental and private organisations together with international organisations and associations.

8.2.2.2 Primary data collection

The decision to collect new information often depends on the costs and time involved, compared to the quality and adaptability of the existing data. The data available and the need to prepare a new data set can shape the type of analysis undertaken. Many researchers face problems relating to lack of good quality data or lack of time and resources to collect new additional information. Such data deficiencies are often the most common cause of identified research limitations (Shipmen, 1988). While the current study was fortunate in being able to collect primary data (see below) the limitations of the secondary data used have to be recognised.

Design of primary data collection is an important and critical step in any research and requires careful consideration and assessment. The alternative approaches are discussed in Chapter 5 and structured face-to-face interviews were adopted. Three surveys were undertaken within the framework of this research. The results produced by the ‘exploratory’ survey provided the basis for designing and running the second ‘farm profile’ survey, which itself provided the foundation of the third ‘strategic options’ survey. The following overall limitations were encountered during the design of the primary data collection:

- Time constraints, as the research had to be completed in a limited period of time. The limited secondary data combined with the iterative approach adopted and the lack of experience of the farmers in responding to the research interviews required three periods of fieldwork. It took more than nine months to conduct the three surveys (1999, 2000, 2001).
- The budget constraints combined with the time constraint restricted the duration of this study and consequently the sample size, which subsequently restricted the choice of analytical procedure (discussed later in this chapter).
- The number of respondents to the 'strategic option' survey decreased to 76 from the 108 during the 'farm profile' survey either because they rejected further co-operation or the farms no longer existed. Therefore, analyses of the non-respondents was necessary in order to demonstrate whether the lack of input from farmers who did not respond to the final survey was likely to have affected the research findings. Non-response was found not to be a problem (see Chapter 5, section 5.4.5).
- The innovative nature of this study in terms of using research interviews (common in Western countries) but novel in Bulgaria. For example, some of the respondents did not see any difference between a research interview and a radio/TV interview.

The next sub-sections will analyse each step of the research design discussed in Chapter 5, section 5.2.4.

The adoption of quantitative methodology

This research reviewed both qualitative and quantitative research and adopted quantitative research. Given the limitations of the secondary data:

- it was necessary to produce a profile of the horticultural farms and their managers in the Plovdiv region;
- it was essential that the experience and the opinions of the farmers, who are the real 'actors' in agriculture/horticulture, be investigated as the principal evaluators of a range of proposed strategies;
- the findings needed to explain the logic and the reasons of the business decisions and this reflected in the structure and sequence of the questions. For example, the

evaluation of the strategic option of developing new markets followed a strict order of questions and fixed-alternative options: what was the existing market, what were the targeted markets, what would encourage them to introduce this strategy and what would be the expected outcomes.

Sampling

This study used non-probability sampling, and purposive sampling in particular, due to the lack of data regarding the population of horticultural farms in the Plovdiv region. This immediately raises the question as to whether the sample is representative and if the results can be extrapolated to all horticultural farms in the Plovdiv region or even in the whole country. Different types of farm within the sample demonstrated similar patterns for future development, therefore it might be assumed that these results might be applicable also for the other horticultural farms in the Plovdiv region. Keeping in mind that the horticultural farms in Bulgaria have been operating within a similar external environment (legal/political and economic) it also might be suggested that the results of this research might be applicable to all horticultural farms in Bulgaria. However, this study cannot be conclusively demonstrated to be representative because of the limited secondary data about the total number and distribution of the horticultural farms in the Plovdiv region.

Although there is some uncertainty about the representativeness of the sample, the chosen sampling procedure (purposive sampling) produced valid information in terms of description of the business characteristics of different types of farm, social characteristics of their managers and how they evaluated a range of alternative strategic options. Identification of the population of the farms in Bulgaria and in the Plovdiv region would be necessary in order to undertake investigations that use probability sampling that could increase the level of representativeness.

Research methods

Face-to-face interviews based upon a questionnaire were the chosen research method of this study. This method was argued to be the most appropriate because it assured the collection of valid, relevant and comprehensive information, which it would have not have been possible to collect by using other methods such as self-administrative questionnaires or telephone interviews. As mentioned earlier, some of the issues

investigated were innovative for Bulgarian farmers and without face-to-face contact with the interviewer the quality of the data would have been poor.

Face-to-face interviews also increased the depth and accuracy of the data collected. Due to the specificity of the topic and the limited business knowledge of the respondents, this method reduced the level of misunderstanding. For example, during the 'strategic options' survey there was a danger of repetition of the encouraging/discouraging factors for the feasibility of the proposed strategies as they were the same for each of the evaluated strategies.

Questionnaire design

A very critical aspect was the design of the three questionnaires that were used to assist the face-to-face interview, because they aimed to collect very specific and novel information in a strict and logical order about the business characteristics of the horticultural farms and their future business development. As a result, between 8-15 iterations of each of the three questionnaires were made (the 'strategic option' questionnaire went through 15 iterations as it was the most critical one) in order to suit the social and educational status of the respondents (farmers) and for them to be able to understand the context of the study. Equally, the translation of the questionnaires from English into Bulgarian was also problematic because in some cases there were no adequate words in Bulgarian (*e.g.* strengths, business viability, etc.). Hence respondents needed more time to understand the context and in some cases, explanations were required. For example, the word 'strength' was translated in Bulgarian using 2 words, which also have other meanings. The information collected in Bulgaria was translated into English and it was necessary to devote considerable efforts to ensure that none of the underlying meaning of the original text was lost or misrepresented during the translation process.

Actual data collection

As mentioned earlier, the research topic is new for Bulgaria and the Plovdiv region in particular, and the limited experience of the respondents in participating in social science research, also led to some difficulties in data collection and they were:

- A detailed introduction of the aim of this research and an explanation of some of the terms and innovative concepts (*e.g.* diversification) were necessary in order to

help the respondents relax and feel confident to discuss the various issues. However, this inevitably increased the time duration of the interviews.

- Some difficulties emerged regarding the farmers' co-operation. Some respondents were very helpful while others were very suspicious about participating in this research due to the fact that their farms were not registered officially and they were afraid of publicity. Therefore, it was extremely difficult in some cases to go a second or third time to the same farmers. This problem was partly overcome by disseminating information (not easily accessible) to the farmers about different EU programmes and projects in exchange for their participation.
- The majority of the interviews were not recorded because the respondents did not wish it and therefore some comments may not have been noted although considerable effort was made to ensure that no comment was missed.

However the primary data collection was completed successfully and a sufficient range of information was collected to meet the research aim and objectives.

8.2.3 Evaluation of the analytical approaches adopted

Quantitative analytical approaches were employed in this research. However, the sample sizes of the three surveys limited the scope for using tests of significance to identify significant differences in the data between the different types of horticultural enterprise. Overall the sample sizes were small (20 interviews in the 'exploratory' survey, 108 interviews in the 'farm profile' survey, and 76 interviews in the 'strategic options' survey). In addition, the three surveys resulted in small sample sizes for specific types of farm (farms with perennials, co-operatives). The reasons for the sample sizes are explained elsewhere (Chapter 5, section 5.4.4).

As stated above, the sample sizes affected the use of tests of significance within this research. First, it was possible to use tests of significance to identify whether the change in the sample between the farm profile survey and the strategic options survey could have resulted in any bias in the results (Chapter 5, section 5.4.5). Such bias could arise if, for example, specific types of farm(er) did not take part in the strategic options survey. Second, the sample sizes precluded the identification and reporting on statistically significant differences in the analyses of the farm profile survey and the strategic options survey. The reason was that the data, in most cases, did not meet the statistical validity/reliability criteria for Chi-Square analysis due to the expected cell

size constraints outlined earlier.

The decision not to incorporate tests of significance in the 'results' chapters of this thesis was not a straightforward decision because there were a number of options. The first option (very commonly adopted in research) that was considered was to reduce the number of possible answers (dependent variable answers) in order to reduce the number of cells. This reduction resulted in the hypothesis testing expected cell value criteria being met. However, the detail of the answers was reduced to such an extent that it was decided that more was being lost through the aggregation of answers than was being gained through the use of the significance testing. The second potential option (less commonly adopted in research) that was examined was the identification of what caused the failure to meet the statistical testing criteria, the filtering out of the offending independent variable categories and the running of the tests using only the remaining categories. For example, only a small number of co-operatives were interviewed and thus the number in the sample would always mean that expected cell criteria under Chi-Square analysis would be violated. However, even with co-operatives excluded there was still the need to aggregate the answers contained within the dependent variables and, as a result, it was decided that such a procedure would not significantly add to the overall understanding of the situation. The third option considered was that of using the results of the tests of significance as a guide to the subjective interpretation of the farm profile and strategic options surveys. This was the option that was adopted in this research. As a result, the interpretative procedures adopted were subjective rather than objective (based on statistical tests).

8.3 SUMMARY OF THE MAIN FINDINGS

8.3.1 Characteristics of the agriculture/horticulture in Bulgaria

Bulgaria enjoys good natural conditions for agriculture and horticulture as the fertile soils, combined with a mild continental climate, provide a diversity of agricultural production systems (EC, 1998c). Agriculture has traditionally been an important sector within the economy of Bulgaria and agricultural land accounts for about 55% of the total territory of Bulgaria (6.2 million ha) (SENER, 2000). The share of total employment created by the agricultural sector has fluctuated over the period 1989-2000 and reached 27% in 2000 (OECD, 2000).

The period of Socialism (1944-1989) was characterised by the establishment of large

state-controlled agricultural industrial complexes (AICs) that were characterised by high levels of specialisation, centrally determined prices, with little responsibility for decision-making being given to the managers of the AICs and no recognition of market forces. Gross agricultural output decreased in the middle of the 1980s and it became obvious that radical reform of the agricultural sector was required (Bloomen and Petrov, 1994; EC, 1998c; OECD, 2000).

At the end of 1989, the transition towards a 'free market' economy began in Bulgaria and political, economic and agricultural reforms took place in the country. However, the reform in agriculture started later in 1991 with a range of new regulations and laws that were developed in order to re-introduce private farming after 45 years of a Socialist regime. With the economic reform that was introduced in 1989, the crisis in the agricultural industry became even deeper due to the unexpected economic changes that took place such as the liquidation of the state controlled co-operatives (AIC), the process of land restitution and privatisation, price liberalisation, reduced domestic demand and loss of the main export markets (former USSR and ex-socialist countries) (MAF, 1999).

The literature review identified that in 1994-95 some positive changes occurred in Bulgaria (e.g. a growth of agricultural production). However, the negative economic processes were more powerful and resulted in a deep economic crisis at the end of 1996. Again, some positive results with regard to the agricultural sector have been observed after 1997 when radical reform began in Bulgaria with the election of new democratic Governments. Land restitution was completed, the Land market was established and new, more efficient agricultural and rural development policies were introduced. Nevertheless, the agricultural industry is still in a critical situation and this research seeks to evaluate a range of scenarios for the future development of the horticultural industry so as to identify the positive forces that have to be strengthened and the negative influences that have to be overcome.

The two major farming structures that emerged after the liquidation of the state AICs are a large number of private farms with an average size about 1.5 ha and private co-operatives with an average size about 700 ha (MAF, 1998c, NSI, 1998). However the number of co-operatives is decreasing due to the fact that they have difficulty in being efficient within a competitive environment (EC, 2002b).

The horticultural industry, as a part of the agricultural industry, has also been in a critical situation over the period 1989-2001 when the area and the output of fruits and grapes decreased due to restitution and fragmentation of orchards and vineyards, unfavourable age structure of the perennials, lack of capital for investment, high production costs and changing weather conditions (EC, 1998c; OECD, 2000). Since 1998 the area of orchards and vineyards has stabilised (see Chapter 2, section 2.4.3). However, the production outputs are still very low compared to the pre-reform period. It was observed that the area of vegetables has been stable over the period of transition due to the emergence of many private household farms and the fact that vegetables realised relatively high prices. However, their production fluctuated over the period of transition towards a free market economy and in 2001 accounted for about 80% of the levels of 1990. The reasons were a lack of co-ordinated management of the small size farms, a lack of modern technologies and machinery and changeable weather conditions (OECD, 2000).

Since 1997 the main priorities of the Government, relating to the agricultural sector, have been to develop a competitive export-orientated agriculture, to increase income in the agricultural sector and to prepare for EU accession (MAF, 2000a). The Special Accession Programme for Agriculture and Rural Development (SAPARD) started in Bulgaria in 2000 and is the main tool of the process of preparing agriculture and rural areas more generally for integration into the EU.

8.3.2 Characteristics of horticulture in the Plovdiv region of Bulgaria

This research was undertaken in the Plovdiv region of Bulgaria. It was chosen for this research because it is one of the most important regions of Bulgaria for producing horticultural crops. Almost all of the development processes and problems described above about Bulgarian agriculture/horticulture are applicable to the Plovdiv region.

MAF (2000a) identified the strengths, weaknesses, opportunities and threats to Bulgarian agriculture that were used in this study with regard to horticulture in the Plovdiv region. Identification of the strengths and the weaknesses of the horticultural industry in the Plovdiv region provided the background for further investigation of the business operational characteristics of the farms. The review of the literature (OECD, 2000; SENTER, 2000; MAF, 2001a) helped to identify the key strengths of the

horticultural industry in the Plovdiv region as being:

- good natural condition, such as fertile soils, underground water and a mild climate, which is very suitable for horticultural crops;
- fruits, grapes and vegetables have traditionally been grown in the region;
- farmers have considerable experience in cultivating horticultural crops;
- one of the traditional Bulgarian wine varieties of grape, 'Mavrud', is 'unique' to this region.

The respondents gave similar answers in terms of strengths and added others such as available, although obsolete, machinery and independent management. During the period of Socialism, the Government took all the managerial decisions and the role of the farm manager was to follow their directions precisely. However, in the condition of a 'free' market economy, the farmers have the responsibility for taking all the business decision, which was seen as strength by some of the interviewees.

The major weaknesses of the horticultural sector in the Plovdiv region identified by both the review of the literature (MAF, 2001a; OECD, 2000; SENTER, 2000) and the replies of the respondents were:

- fragmented land;
- lack of, or obsolete, machinery;
- unfavourable age structure of the orchards and vineyards;
- using old technologies;
- inappropriate crop varieties.

The external business environment has had a major influence upon farm businesses, especially in the last few years due to the ongoing process of accession to the EU. EU policies and regulations have significantly informed the development of Bulgarian policies and regulations with regard to agriculture, rural development and other economic areas. The dynamics of the external environment presented a variety of opportunities as well as threats. The main opportunities that were identified by the review of the literature (MAF, 2001a; SENTER, 2000) and primary data gained for the horticultural industry in the Plovdiv region were:

- farm expansion in terms of size (due to the small size of the private farms in Bulgaria and in the Plovdiv region and the establishment of the Land market);
- planting new crops that are more competitive in national and international markets;
- developing new income streams – e.g. farm diversification (related and non-related). SENTER (2000) and Fischler (2003), for example, strongly recommended the alternative of organic farming as a very suitable option for Bulgarian agriculture/horticulture.

As mentioned above, the external environment could also have negative impacts on farm businesses, therefore, the threats have to be identified and avoided. The key threats discussed in both the review of the literature (MAF, 2001a; OECD, 2000; SENTER, 2000) and the analysis of respondent answers were:

- the unpredictable weather conditions;
- uncertain markets and poor import/export regulations;
- poor agricultural policies and legislation;
- poor marketing system;
- decrease in consumer demand;
- lack of strategic planning (MAF, 2001a).

8.3.3 Summary of the key characteristics of the farm businesses in the Plovdiv region of Bulgaria

The size of the sample of farms within the Plovdiv region was relatively small (less than 10 ha), this being a result of the fact that many heirs divided the inheritance of one plot of land. Farmers mainly cultivated their own restituted land or had a mixture of their own and leased land. Both secondary and primary data demonstrated that after 1997 some of the production units increased in size either by leasing land or the establishment of new farms with a size of more than 10 ha when leasing land became more feasible due to the establishment of the Land market, the end of the land restitution process and the improved Law for Leasing Land (1999).

The farms within the sample were located in the Maritsa valley which is one of the most fertile regions in Bulgaria for producing fruits, grapes, vegetables and some agricultural crops (cereals, herbs, etc.). The Plovdiv region is the biggest apple

producer and second biggest producer of plums and grapes in Bulgaria (SENER, 2000; MAF, 2001a). Those enterprises within the sample, which had fruits and grapes in their production scheme, did so because the orchards and/or the vineyards were inherited during restitution. Additionally as they were also the most profitable products, during the transition period, the farmers had every incentive to retain them. This explanation was also given by the FAO (1999), Ivanova (1999) and the OECD (2000). Annual crops such as vegetables and other agricultural crops (*e.g.* arable, herbs, tobacco, etc.) were also cultivated because they have traditionally been grown in the Plovdiv region. Another reason the respondents gave for having annual crops was the more efficient use of their own existing resources (equipment, labour, and land). Additionally, MAF (2000c) and OECD (2000) have also argued that the farmers have annual crops because they do not need long term investments and these crops have had relatively stable prices over the last 10 years.

Cultivating a mixture of perennial and non-perennial crops was commonly observed in the production enterprises irrespective of their size and pattern of land ownership as they were able to spread the financial and labour resources equally during the year, reduce the business risk of planting a range of crops and effectively use their own resources (machinery, labour and capital).

The findings of this research revealed that after the transition towards a 'free market' economy, private farms in the Plovdiv region started appearing in 1992 with the final approval of the Law for Land Ownership and Land Use at the end of 1991 and its further amendment in 1992. Effectively, the farms that leased some land were established after 1992 because before this the land leasing regulations were poor. This has also been discussed in various reports (EC, 1998c; Bentcheva and Georgiev, 1999; FAO, 1999; MAF, 2000a; OECD, 2000; SENER, 2000). Lerman (1999) and the OECD (2000) argued that the majority of the private co-operatives existed before 1989 and they only changed their registration in order to cover the new legal requirements according to the new laws. This analysis was supported by this research as only one of the co-operatives within the sample was established after 1992.

The horticultural enterprises within the sample provided jobs for local people and the findings show that they employed on average 11 people (full time and part-time) whereas the co-operative provided on average jobs for 134 people. The OECD in 2000

stated that the private co-operatives are overstaffed which, however, was one of their business advantages (ensuring jobs for the local people).

Farmers, regardless of farm size, land ownership patterns and types of crops, commonly accepted the market price offered to them because of their poor market position and limited bargaining power, a factor also discussed by the FAO (1999) and EC (2001a). The results revealed that only a very few of them managed to use full-cost pricing for their products. The main distribution channels for the horticultural production was the wholesale market which can be explained in part by the fact that one of the three wholesale markets operating in Bulgaria is located near Plovdiv, although it was, according to FAO (1999) and Ivanova (1999), very inefficient. The wholesale structure has been poor in Bulgaria and in the Plovdiv region because the existing three wholesale markets were the re-structured old organisational structures that have been managed by the same people from the period of Socialism and have lacked financial resources for renovation and new infrastructure. Only a very few of the respondents used distributors or had contract relations. Both the review of the literature and the interviewees demonstrated that a relatively high proportion of them preferred to sell their production by themselves in the market, this was particularly common for vegetables. Therefore, improving the structure of the wholesale markets was the main suggestion made by the respondents for improving distribution in the Plovdiv region of Bulgaria.

The personal characteristics of the people running the farm businesses also plays an important role in business decision making. The farmers of the sample in the Plovdiv region were predominantly males and more than 40 years old. They were also well educated (at least secondary education) with significant experience of working in agriculture/horticulture: a characteristic that was stated by SENTER (2000) as an important competitive advantage of Bulgarian agriculture.

The respondents identified that the future development the horticultural industry in the Plovdiv region and in the whole country depends very much upon the availability of financial and marketing support, improving the import/export regulations and policies and promoting farm diversification (agricultural and non-agricultural). Mihailova (2000) and SENTER (2000) argued that the revitalisation of agriculture/horticulture requires finance for modernisation (new equipment and technologies). The FAO

(1999), MAF (2000c) and the OECD (2000) also argued that the marketing structure was poor and needed improvement. Bulgaria has lost its main international markets (former CEE countries), which were not replaced, therefore export production declined dramatically. On the other hand, imported production increased due to the illegal importation of horticultural products, a factor frequently mentioned by the respondents. This combined with the increased competition from the Western countries, discussed by a range of national and international reports, are issues that require careful examination and consideration by the Government.

8.3.4 Evaluation of the alternative ways of farm business development and alternative strategic options

The analysis of the farms within the sample provided the background to assist in understanding why the interviewees evaluated the proposed alternative ways for farm business development in the ways summarised below.

In the beginning, all the respondents expressed their expectations both in terms of dreams (ideal scenario) or in terms of withdrawal from horticulture, which are the two extreme options within the continuum of business development. Only the respondents who wanted to continue with their horticultural business subsequently evaluated the five alternative strategic options that were based on the Ansoff product/market matrix. These strategies were evaluated using the same approach and are referred to as:

- Option 1: Doing what you currently do but better
- Option 2: Developing new horticultural products
- Option 3: Developing new markets
- Option 4: Developing new supportive agricultural activities
- Option 5: Developing new supportive non-agricultural activities.

8.3.4.1 Expectation - dreams

Bearing in mind the weaknesses of, and the threats to, the horticultural industry in the Plovdiv region outlined above, the findings revealed that more than half of the respondents with different types of farm (in terms of size, land ownership patterns and types of crops) within the sample had the dream of having a 'modern' farm. This supports several reports by MAF (1999), OECD (2000) and SENTER (2000) who

recognised that Bulgarian farmers have been using obsolete machinery inherited after the liquidation of the AICs as well as being restricted to old technologies and crop varieties that are not necessarily suitable for small-scale farming. Equally, farmers have had great difficulty in finding finance for investing in the modernisation of their farms, for example buying new machinery or introducing new technologies. Another dream (in terms of ideal situation) that was described by some of them (especially the respondents with 'small' farms) was to expand their farm, which might be related to the more stable business environment prevailing in Bulgaria after 1997. Another dream stated by some of the interviewees was the cultivation of perennial crops (fruits and grapes). The explanation to this may relate to the profitability of these crops over the period 1989-2001. This last dream, of establishing perennials, was perceived as being very difficult by the respondents due to their lack of finance (own and borrowed) for establishing new orchards and vineyards, a fact identified and discussed earlier by Bentcheva and Georgiev (1999), Kantchev and Doichiniva (1999), SENTER (2000), Kostov and Lingard (2002). In a stable and developed economy, where some financial support is available and marketing and distribution structure are advanced the dreams that the interviewees stated might not be such a difficult and 'impossible' task to achieve.

8.3.4.2 Withdrawal from horticulture

Another possible direction for the future development of the farm businesses is withdrawal from horticulture. Due to the fact that Bulgaria is a country with a transitional economy, many processes are transitional and are evolving such as farming structures, market structures, etc. The rationale for leaving of horticulture identified by the farmers who intended to do this pointed to a variety of negative external forces (economic and legal/political) such as lack of, or uncertain, markets, lack of grants and poor credit systems as well as high production costs. All types of farm operated within an unstable and dynamic external environment. Therefore, it is understandable that respondents with different types of farm gave similar reasons for withdrawing from horticulture.

8.3.4.3 Evaluation of alternative strategic options

Five alternative strategic options were evaluated by the respondents who intended to continue with their horticultural activities in respect to the three previously selected independent variables; size, land ownership patterns and types of crops. First, the

encouraging factors for the introduction of one or more strategic options is discussed followed by a summary of the expected outcomes and identification of the discouraging factors.

Encouraging factors

Farm size

Table 8.1 demonstrates that a range of personal, business and economic factors (having knowledge and experience, increased farm profit and available market demand) encouraged farmers, regardless of their farm’s size, to continue with their horticultural activities and to introduce at least one of the five proposed alternative strategies based on a product/market relationship. SENTER (2000) stated that one of the competitive advantages of Bulgarian agriculture is the fact that the farmers are well educated and experienced, this is also applicable to the farmers of the sample in the Plovdiv region.

Table 8.1: The principal factors encouraging the five strategies relating to the farms with different sizes

Encouraging factors*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	S	M	B	S	M	B	S	M	B	S	M	B	S	M	B
Personal factors															
Possession of knowledge and experience	v	v	v	v	v					v	v	v	v	v	v
No age limitations								v	v					v	
Improved personal and financial security	v	v	v							v	v				
Business factors															
Increased farm profit		v	v	v	v	v	v	v	v	v	v	v	v	v	v
Increased cash flow				v			v						v	v	v
Reduced business risk										v		v			
Available machinery						v									
Economic factors															
Available market demand	v	v		v	v	v	v	v	v	v	v	v		v	
Sufficient distribution system											v	v	v		
Available market information								v	v						
Good credit system									v						

Note: S – ‘small’ farms; M – ‘medium size’ farm, B – ‘big’ farms
* This table includes only the top few factors given by the respondents

The finding of this study revealed that those respondents who found ‘doing what you currently do but better’ (*strategic option 1*) as a feasible strategy did so because they saw this as likely to improve their personal and financial security. The only difference emerging regarding the development of new horticultural crops (*strategic option 2*) was that the ‘big’ farms identified as positive the availability of their own machinery. In relation to *strategic option 3*, the respondents with farms over 2 ha emphasised the fact that they are young and they lacked marketing knowledge and experience. It was interesting to observe that possession of knowledge and experience in terms of

developing new markets were not identified by the respondents as encouraging factors although they were well educated and had a considerable production oriented experience (see Chapter 6, section 6.3.1.3 and 6.3.1.4). This contradictory fact could also be explained by the limited marketing and business skills of the farmers in Bulgaria identified by both SENTER (2000) and the EC (2001b) who argued that a range of training courses have to be organised for improving skills in running commercial farms and surviving in a competitive environment. Another factor that was identified by both the 'medium size' and 'big' farms was their ability to find market information in order to develop new markets. The respondents with farms of more than 10 ha also identified that they have better opportunities to borrow money from banks compared to those with 'small' farms (Table 8.1). The FAO (1999) argued that some prosperous and business oriented farms started to appear after 1997 and they predicted that their number would gradually increase.

The respondents in the sample explained that they were not very familiar with the issue of farm diversification. However, their openness to adopt innovative business ideas was examined in terms of two diversification strategies (*strategic option 4 and 5*) that were proposed for evaluation. The results revealed that they more readily accepted the development of new agricultural activities (related diversification) whereas, unrelated diversification was perceived as an option that might be appropriate in the long term but not in the short or even medium term. Nevertheless, a few of them intended to expand their farm business by developing non-agricultural activities. This was due to their good profit and cash flow combined with their knowledge and experience, which gave them the confidence to adopt the opportunities that arose as a result of the changing environment (Table 8.1). Those few farmers who intended to diversify their farm business could be classified as early adopters of innovative ideas.

Land ownership patterns

The major differences between the factors that encouraged the respondents, categorised according to land ownership, to introduce alternative strategic option/s related to *option 2* (developing new horticultural crops). The farms with their own or leased or mixed (own and leased) land intended to develop new horticultural crops due to their internal capability (profit, knowledge and experience), whereas the co-operatives did not demonstrate confidence in their own capability and strongly depended on external support such as subsidies and advisory services. However, the

literature suggests that the future existence of the private co-operatives depends on how they will manage competition within the condition of a free market economy keeping in mind that their greatest strength was the availability of equipment even though it was obsolete (Kanchev and Doichinova, 1999; OECD, 2000). The respondents, categorised by different land ownership patterns, also identified different factors that positively influenced their support for *strategic option 3* developing new markets. The 'own' and 'mixed/leased' farms were encouraged mainly by their good financial results, personal strengths and ability to find essential market information, whereas the only co-operative that would introduce the strategy was encouraged by a personal factors as this manager was young and proactive (Table 8.2).

Farm diversification was not very popular among the co-operatives, as only one co-operative within the sample intended to introduce new agricultural activities (*strategic option 4*) and none of them wanted to develop non-agricultural activities (*strategic option 5*). The OECD (2000) reported that the newly established co-operatives have financial problems, which did not allow them to make any kind of investments for big transformations in terms of markets and products. However, about one third of the individual farms ('own' and 'mixed/leased') were more innovative and were encouraged to support product and market changes by business and personal factors (Table 8.2).

Table 8.2: The principal factors encouraging the five strategies relating to the farms with different land ownership patterns

Encouraging Factors*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C
Personal factors															
Possession of knowledge and experience	v	v	v	v	v			v		v	v	v		v	
No age limitations									v				v	v	
Improved personal and financial security	v	v	v						v						
Good quality workforce			v												
Business factors															
Increased farm profit	v	v	v	v	v		v	v		v	v		v	v	
Increased cash flow							v						v	v	
Available machinery						v						v			
Economic factors															
Available market demand	v	v		v	v		v	v		v	v	v			
Sufficient distribution system									v		v		v		
Available market information							v	v							
Good advisory system						v									
Available subsidies						v									

Note: O – 'own' farms; M/L – 'mixed/leased' farm; C – co-operatives

* This table includes only the top few factors given by the respondents

Types of crops

The top three factors that encouraged the respondents, irrespective of their types of crop, to stay in horticulture and to develop at least one of the proposed strategic options were partly personal, business and/or economic (having previous knowledge and experience, increased profit levels and market demand). Developing new markets (*strategic option 3*) was considered a feasible option only for those who were able to find necessary market information, which a number of respondents acknowledged as being a difficult task (Table 8.3).

Table 8.3: The principal factors encouraging the five strategies relating to the farms with different types of crops

Encouraging Factors	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	P	N	MC	P	N	MC	P	N	MC	P	N	MC	P	N	MC
Personal factors															
Possession of knowledge and experience	v	v	v	v	v	v	v				v	v		v	v
No age limitations								v	v					v	v
Improved personal and financial security	v	v	v	v							v				
Business factors															
Increased farm profit	v	v	v	v	v	v	v	v	v		v	v	v	v	v
Increased cash flow	v			v	v			v							v
Reduced business risk													v		
Economic factors															
Available market demand	v		v	v	v	v	v		v		v	v	v		v
Available market information							v	v	v						
Sufficient distribution system												v			

Note: P – farms with perennial crops; N – farm with non-perennial crops; MC – farms with 'mixed' crops
This table includes only the top few factors given by the respondents

The findings revealed that none of the interviewees who cultivated only perennials found the alternative of developing new agricultural activities (*strategic option 4*) feasible (Table 8.3). This can be explained by fact that fruits and grapes were the most profitable crops during the transition towards a free market economy (Bankova, 1999; FAO, 1999; Mishev *et al.*, 1999; OECD, 2000) and diversifying into new agricultural activities would, interviewees stated, increase their business risk.

Expected outcomes of the proposed strategic options

The evaluation process adopted in this study suggested that the introduction of one or more of these strategic options would reflect their wish to achieve particular outcomes. The results revealed that the interviewees with 'small' farms aimed to improve their quality of life in respect to ensuring their financial security with the introduction of one

or more of the proposed alternative strategies. The exception was those who intended to develop new agricultural activities as they wished to diversify their markets. Those respondents with farms between 2-10 ha who were planning some production or market changes mainly expected a more viable business as an outcome, whereas those who cultivated more than 10 ha stressed the importance of the quality of their products and their business viability (Table 8.4). Therefore, it can be concluded that the respondents with farms of less than 2 ha had prioritised the security of their livelihood. In contrast, those with farms of more than 2 ha were more market and business oriented and could potentially play a vital role in the economic development and the revitalisation of the horticultural industry in the Plovdiv region.

Table 8.4: The principal anticipated outcomes from the five strategies relating to different types of farm

Outcomes*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	SIZE OF FARMS														
	S	M	B	S	M	B	S	M	B	S	M	B	S	M	B
Increased business viability			v				v	v	v			v	v	v	v
Better quality of life	v	v	v	v			v				v		v		
Better quality of products						v			v			v			
Diversity of products															
Diversity of markets					v					V					v
Outcomes*	LAND OWNERSHIP PATTERNS														
	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C
Increased business viability			v		v	v	v	v	v		v	v	v	v	
Better quality of life	v	v	v	v		v			v	V	v	v	v		
Better quality of products				v		v	v		v				v		
Diversity of products															
Diversity of markets					v			v							
Outcomes*	TYPES OF CROPS														
	P	N	MC	P	N	MC	P	N	MC	P	N	MC	P	N	MC
Increased business viability						v	v		v			v		v	v
Better quality of life		v	v	v							v		v	v	
Better quality of products	v				v								v	v	
Diversity of products															
Diversity of markets							v	v					v		

Note: S – ‘small’ farms; M – ‘medium size’ farm, B – ‘big’ farms; O – ‘own’ farms; M/L – ‘mixed/leased’ farm; C – co-operatives P – farms with perennial crops; N – farm with non-perennial crops; MC – farms with ‘mixed’ crops
*This table includes only the top one or two outcomes given by the respondents

The respondents of farms with different land ownership patterns expected outcomes such as improved quality of life and increased business viability. The ‘mixed/leased’ farms could be distinguished as more business and market oriented with the development of new products or markets while the ‘own’ farms and co-operatives were also concerned about the quality of their produce (Table 8.4)

The relation of outcomes to the cropping patterns is demonstrated in Table 8.4. The farms with only perennials and mixed crops that planned some production and market changes aimed at outcomes such as increased business viability. However, the horticultural enterprises with only annual crops prioritised the issue of improving their quality of life.

Based on the analysis presented, the farmers with 'small', 'own' farms, those with perennials and the co-operatives were mainly concerned about their personal security and well-being and could be classified as 'lifestylers' (see Chapter 4, section 4.6.3). However, in a Bulgarian context, this would refer to security of their livelihood while in a Western context this would be interpreted as rejecting higher income opportunities in favour of a better life style. In contrast, the interviewees with 'big' farms and those with only perennials were 'dedicated producers' as they were aiming at better quality production with careful planning. The respondents with farms between 2 and 10 ha, those who leased some land and those with mixed crops could be classified as 'flexible strategist' because they tried to respond to the rapidly changing environment in Bulgaria and to explore potential new market opportunities (see Chapter 4, p.159-160).

Discouraging factors

Table 8.5, 8.6 and 8.7 summarise the negative influences upon the farm businesses in relation to the intention of respondents to stay in the horticultural business. The results reveal that a wide range of external economic forces, together with the poor business performance of the horticultural enterprises within the sample, discouraged them from introducing business or production changes. However, some differences between the different types of farm within the sample are identified and discussed below.

Farm size (Table 8.5)

Those who intended to remain in horticulture but who did not intend to continue with their existing traditional horticultural activities (*strategic option 1*) gave reasons which had business and economic orientation (e.g. decreased profit, cash flow, obsolete machinery, poor credit and distribution systems and lack of subsidies). The respondents with farms of more than 10 ha that rejected strategic option 1 were also adversely affected by factors such as poor import/export regulations. It was mentioned several times that there were illegal imports of fruits from neighbouring countries such as Turkey and Macedonia and that export regulations were restricted by the new trade

agreement with CEFTA and EU (OECD, 2000; SENTER, 2000). The farmers who had different size production units did not find developing new horticultural crops (*strategic option 2*) feasible mainly due to business factors. Some respondents with 'small' farms also pointed to their advanced age as a negative factor, whereas those with farms of more than 2 ha were discouraged from introducing option 2 due to market related factors. The farmers in the sample irrespective of the size of their farms responded to the prospect of developing new markets (*strategic option 3*) by suggesting that the unfavourable external economic environment in Bulgaria discouraged such an initiative (Table 8.5).

Table 8.5: The top factors discouraging the five strategies relating to the farms with different sizes

Discouraging Factors*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	S	M	B	S	M	B	S	M	B	S	M	B	S	M	B
Personal factors															
Age limitations				v			v						v		
Business factors															
High business risk			v	v	v	v									v
Decreased farm profit		v	v							v	v	v			
Decreased cash flow		v	v										v	v	v
High production costs				v	v	v				v	v	v			
Lack of or obsolete machinery	v	v									v				
Lack of capital for investments	v												v	v	v
Economic factors															
Lack of market demand					v	v		v		v	v	v			
Lack of subsidies			v									v	v	v	v
Unfavourable import regulations			v		v	v	v	v	v						
Unfavourable export regulations			v		v	v		v	v						
Lack of advisory services												v	v	v	v
Lack of market information							v	v	v						
Lack of promotion							v	v	v						
Poor credit system	v		v												
High level of bureaucracy									v						

Note: S – 'small' farms; M – 'medium size' farm; B – 'big' farms

* This table includes only the top few factors given by the respondents

The issue of farm diversification (related and unrelated) was rejected by almost two thirds of the sample of respondents due to their own limited finance, which they considered necessary, to manage such a transformation. They were also, they argued, not supported by the external economic environment, as there were no subsidies or efficient advisory services that could help them overcome the difficult time of transition towards a free market economy (Table 8.5). Combining agriculture/horticulture with animal husbandry (*strategic option 4*) was rejected by the respondents almost certainly due to the great financial and market difficulties reported by the farmers with a mixed farming system over the period 1989-1996 and recognised

by MAF (2000c). On the other hand, OECD (2000), SENTER (2000) and Fischler (2003) argued that organic farming (an agri-related diversification) in Bulgaria could be profitable and export oriented. However, new regulations, standards and a legal controlling body for organic produce would need to be established.

Land ownership patterns (Table 8.6)

The production units that used only their own restituted land and intended to introduce the strategy of 'doing what you currently do but better' (*strategic option 1*) differed from those that also cultivated leased land as they were discouraged mainly by the unfavourable external economic forces, while the respondents with 'mixed/leased' enterprises were only discouraged by their poor business performance. All of the co-operatives were in favour of running their business in a traditional way as their managers were, in most cases, the same people who managed the state co-operatives before 1989 and who strictly followed the direction of the Government. Again the unfavourable external environment discouraged the respondents, irrespective of their land ownership patterns, from developing new markets (*strategic option 3*) (Table 8.6).

Table 8.6: The top factors discouraging the five strategies relating to the farms with different land ownership patterns

Discouraging Factors*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C	O	M/L	C
Personal factors															
Lack of knowledge and experience								v							v
Business factors															
High business risk		v		v	v	v									
Decreased farm profit		v								v	v				
Decreased cash flow		v											v	v	v
High production costs				v	v	v				v	v				
Lack of or obsolete machinery	v														
Lack of capital for investments										v		v	v	v	
Economic factors															
Lack of market demand	v			v		v	v		v	v	v	v		v	
Lack of subsidies										v		v	v		v
Unfavourable import regulations	v			v	v		v								
Unfavourable export regulations					v	v	v	v				v			
Lack of market information						v	v	v	v						
Lack of promotion							v	v	v						
Lack of advisory services													v		v
Poor distribution	v											v			
Poor credit system	v														
High level of bureaucracy													v		

Note: O – 'own' farms; M/L – 'mixed/leased' farm; C – co-operatives

*This table includes only the top few factors given by the respondents

Farm diversification requires capital for investment. Therefore, interviewees of farms with different land ownership did not intend to introduce the last two strategies (*strategic options 4 and 5*) due to their limited financial resources and lack of external financial support and professional advice (Table 8.6). The review of the literature had previously identified that borrowing capital from banks was very difficult and complicated because loans for agricultural activities were perceived as high risk for the banks and agricultural land was not accepted as a guarantee for loan.

Types of crops (Table 8.7)

Some differences were observed between the farms with only perennials and those with non-perennials or mixed crops as to what discouraged them from introducing one or more of the proposed strategic options. None of the farmers who cultivated fruits and/or grapes rejected the alternative of continuing along their existing farm business (*strategic option 1*) due to the profitability of those crops as demonstrated by both the primary and the secondary data. They were discouraged from introducing new crops (*strategic option 2*) due to a danger of decreasing their profit levels. In contrast, the production units with annual crops or mixed crops expressed very similar opinions as to what discouraged them from introducing production changes in terms of business and economic factors. Only economic forces were stated as discouraging by the farms regardless of their cropping patterns with regard to developing new markets (*strategic options 3*). (Table 8.7).

With regard to farm diversification (*strategic option 4 and 5*), the three groups of farms were discouraged by business factors such as limited finance for product/market transformations and increased business risk that might decrease their profit levels. Other discouraging aspects, particularly for developing non-agricultural activities, that were identified by the farms with non-perennials and mixed types of crops were the lack of financial and organisational support (subsidies and available advisory services) (Table 8.7).

Table 8.7: The top factors discouraging the five strategies relating to the farms with different types of crops

Discouraging Factors*	Option 1 'same business'			Option 2 'new crops'			Option 3 'new markets'			Option 4 'related diversification'			Option 5 'unrelated diversification'		
	P	N	MC	P	N	MC	P	N	MC	P	N	MC	P	N	MC
Business factors															
High business risk			v		v	v				v			v	v	
Decreased farm profit		v		v						v	v	v	v		
Decreased cash flow			v	v										v	v
High production costs					v	v				v		v			
Lack of or obsolete machinery			v						v			v			
Lack of capital for investments		v									v		v	v	v
Economic factors															
Lack of market demand		v		v	v	v					v	v			v
Unfavourable import regulations		v			v	v	v	v							
Unfavourable export regulations		v			v	v			v						
Lack of subsidies											v	v		v	v
Lack of promotion							v	v	v						
Poor distribution		v	v												
Poor credit system		v	v												
Lack of market information								v	v						
Lack of advisory services														v	v
High level of bureaucracy													v		
Poor road network							v								

Note: P – farms with perennial crops; N – farm with non-perennial crops; MC – farms with ‘mixed’ crops
* This table includes only the top few factors given by the respondents

8.3.4.4 The most feasible strategic option

The findings revealed that the majority of the respondents (79%) found the option of ‘doing what you currently do but better’ as the most feasible strategy for their future farm business (5 years). This suggests that the respondents were very conventional in running their business and lacked originality, innovativeness and stimuli for long term sustainability. However, this was understandable due to the unpredictable and inconsistent external environment within which they were operating.

Equally, the fall of the Socialist regime in 1989 and the changes which followed were not expected by farmers who were not prepared for running commercial farms, as they did not have the skills to run businesses under the conditions of a free market economy.

Subsequent Bulgarian Governments have also failed to take consistent decisions in regard to agriculture/horticulture in the unstable political and economic situation which have prevailed since the economic reforms began in Bulgaria. The unstable external business environment contributed significantly to the discouragement of the farmers in

introducing business changes and innovativeness. The farmers were engaged in finding ways of surviving rather than considering business modifications and applying flexible management.

The interviewees argued that the revitalisation and future development of the horticultural industry required rapid actions to:

- improve the legislation, which would attract foreign investment;
- introduce better financial and credit systems answering to the specific features of this sector;
- provide marketing support in terms of the establishment of 'real' wholesale markets;
- provide efficient advisory services.

In other words they chose to take 'safe' business decisions and run traditional business with relatively modest improvements for the next 5 years and they hope that in the long-term the external environment will be more encouraging and they will subsequently be able to see their dreams realised.

8.4 CONTRIBUTION OF THE RESEARCH AND RECOMMENDATIONS FOR FUTURE INVESTIGATIONS

Evaluation of the research process and the discussion of the main findings provide a sound basis for the identification of the contribution of this research to the development of strategic theory as it applies to agriculture in the transitional economy of an accession country and the priority areas for future research. Considering that the issues relating to private farm businesses in Bulgaria and in the Plovdiv region are relatively new, the opportunities for future study are considerable. The main outputs of this study are insights into the current nature of farm business in the Plovdiv region of Bulgaria and the nature of their short to medium term (5 years) strategic development as determined by the farmers.

The overall design of this research was innovative in that a soft system-type approach was adopted that divides each subject of this research into four components: process, content, output and outcome (see Chapter 5, section 5.2.2). This helped understand the logical sequence and evolution of this study as a whole and each subject in particular.

Similar approaches have been used in agriculture in a few studies, for example Hill and Ray (1987) who studied the interaction between agriculture and its environment and Attonaty and Pasquier (1996) who analysed farm businesses in France. The further development of such soft systems approaches could be applied and further refined in future studies, for example in terms of analysing the financial performance of the farms as well as investigating their long term (more than 5 years) strategic development.

Bearing in mind that one of the main constraint of this study was the limited secondary data, an initial comprehensive review of Bulgarian horticulture was undertaken in terms of the policy context, farm structures and the development and performance of the agricultural and horticultural sector. In so doing this, this research has added significantly to the understanding of the current situation of the horticultural industry in the Plovdiv region and how the farm businesses were operating within the transition economy. This provided the background context of the external environment within which the farms are functioning.

Most past research in regard to agriculture/horticulture in Bulgaria (Bankova, 1999; Kanchev and Doichivova, 1999; Mishev *et al.*, 1999; FAO, 2000; SENTER, 2000; Mergos *et al.*, 2001; EU, 2002b) has paid attention to and reviewed the most important issues that the Bulgarian agricultural industry experienced after the economic reform towards a 'free' market economy such as land reform, privatisation, unemployment, and the evolution of agricultural and rural development policies. However, there was a shortfall of previous research on the implications of these changes for the farmers and their farm business as well as how the CAP (Common Agricultural Policy), the EU accession process and trade liberalisation would affect farm businesses in Bulgaria. The farmers' perceptions and behaviour towards environmentally related topics and organic farming, also needs to be investigated not least because a number of foreign organisations and associations have suggested that organic farming represents an opportunity to increase the competitiveness of Bulgarian agriculture, as suggested by Fischler (2003).

Strategic theory has been investigated and developed in considerable detail in the last three-four decades, as was mentioned earlier. However, it was decided to present the review of the strategy theory in this research in a creative way in terms of organisation

by adopting a soft system-type approach, that divided the subject into the following sub-divisions: strategy process, strategic analysis, alternative strategies and strategy evaluation that interact with each other.

Ansoff's product/market matrix was used to formulate alternative strategic options for the horticultural industry in the Plovdiv region. Farmers were asked to evaluate the proposed strategies by responding to questions that were derived by a series of analytical procedures including SWOT, PEST, GAP analysis, benchmarking and scenario planning (see Chapter 5, sections 5.3.1.3, 5.3.2.3 and 5.3.3.3). Therefore, future research could use Porters generic strategies or one of the other alternative strategies, proposed in Chapter 3, section 3.5, in order to provide different sets of information and different perspectives about the farm businesses in the Plovdiv region. Other strategic analytical tools, such as Porter's Five Forces, Porter Value Chain or the BCG matrix, discussed in earlier chapters, could be explored in respect of Bulgarian farm businesses in order to investigate in greater detail the competitiveness of the agricultural/horticultural industry and the competitive positions of these farms in the country.

This research has contributed to the identification, organisation, review and understanding of the application of strategic concepts to agriculture/horticulture and in particular it has added to our understanding of how strategic theory relates to the individual farmer and their business. More research in this area should be encouraged within the CEE context in a stage of accession towards EU.

In this investigation a range of strategic options were formulated and evaluated in terms of encouraging and discouraging factors influencing farmers' decision making. The alternative strategic options were 'dreams/ideal scenario', withdrawal from horticulture', 'doing what you currently do but better', 'developing new horticultural crops', 'developing new markets', 'developing new agricultural activities and 'developing new non-agricultural activities'. Therefore, future research could usefully be directed to the stage of strategy implementation. The business environment in Bulgaria has been rapidly changing, a study addressing the initial results of strategy implementation at a business level, as is being undertaken by the Bulgarian government in respect to SAPARD programme, would help to find out how the business environment (internal and external) influences strategy implementation and

whether the strategies adopted are working in practice or if some changes are necessary. This should help plans to improve the farm business and/or the management style approaches. Other research could address the assessment of the final outputs and outcomes of the implemented strategies and identify whether the 'intended' strategies were realised, the planned outcomes were achieved and the resources were used in the most efficient way. Determining and understanding the factors responsible for the success and failure of particular strategies would be of real value in terms of ensuring the viability of farm businesses and their future development.

The context in which strategic approaches are applied and investigated will, in the majority of cases, influence the methodological approach selected. Using research approaches developed in Western Europe market economies was new and genuinely innovative when applied to the Bulgarian context and met with various degrees of resistance from some of the respondents. This 'bottom up' approach was adopted to gain feedback from the main 'actors' in the agricultural/horticultural industry who had not been asked to comment either during the period of Socialism or in the first few years of economic reform. Limited secondary data and the fact that the people/farmers involved in the surveys had little, if any, previous experience of involvement in studies of this kind restricted the choice of sample selection and size, research methods and number of surveys. On the other hand, the selection of strategic analytical approaches and alternative strategies was also constrained by the limited business knowledge of the respondents (discussed in previous chapters), their unwillingness to present financial data about their farms and in some cases lack of financial records of the farms (e.g. 'small' farms that cultivated their own land).

The sampling procedure adopted in this study was purposive (non-probability) sampling due to the lack of the total population of horticultural farms in the Plovdiv region. The research technique employed was face-to-face interviews supported by questionnaires, as it was the most practical way for collecting valid and reliable data. Any future research could potentially use some other sampling (e.g. probability sampling) that would increase reliability of the results and the level of generalisation. Other methods such as in-depth interviews or focus groups could be considered for future investigation for obtaining further detailed qualitative information on those managing and influencing the development of the agricultural/horticultural industry. Alternatively, the use of self-administrated questionnaires could potentially increase

the sample size and potentially the statistical validity and reliability of the findings.

Due to time and financial considerations, this study was undertaken in only one region of Bulgaria and there is no substantive evidence that this region represents the whole country although it was suggested earlier, that it may be representative of the horticultural farms in the Plovdiv region of Bulgaria. Therefore, there is a need to collect information from other agricultural/horticultural regions in the country in order to understand and explore further the future development of the agricultural/horticultural industry in the country. Furthermore, a representative study of the private farms in Bulgaria and their size structure is also necessary in order to provide a foundation for conducting future representative studies. It is recommended that a system for collecting longitudinal data should be established in order to monitor farm businesses as these businesses continue to play a major role within the rural economy. Similarly, there is a need to establish a permanent system of monitoring and reviewing of a representative sample of establishments to provide up-to-date information on potential changes. By collecting data on the operational characteristics of the farms, the efficiency of the agricultural and rural development policies could be assessed.

The review of the literature influenced the choice of independent variables and this study used three: farm size, land ownership patterns and types of crops (see Chapter 5, section 5.4.4). In any other studies, farms could be classified by other variables, for example by: personal strengths (education, experience) - would illustrate the role of people in farm business development; the numbers of employees - would demonstrate the level of efficiency of farms; business motives (profit orientation) - would outline whether different farms with different business goals run their business in different ways; markets (local, national, international) - would allow a comprehensive investigation of farm marketing structures; foreign partnership or management - would facilitate a comparison of farms with different types of management. All these aspects would provide different insights and knowledge of the farm businesses.

It is argued that experts, professionals and authorities at various levels involved both directly and indirectly in the agricultural/horticultural industry could potentially benefit from the findings of this study, for example:

- International level - EU and other foreign organisations and associations who may intend to provide assistance or investment funds for Bulgarian agriculture will be able to better understand: 1) the 'bottom up' context of the horticultural industry in Bulgaria (what the real 'players' think, expect and intend to do); 2) the strategic development of the horticultural industry (where the farms are aiming to go), and 3) the current and potential competitive position of the farms (what is the unique competitive advantage of the farms).
- National level - 1) The results of this study will help policy makers to understand the complexity and difficulties perceived by farmers in running their businesses within the rapidly changing business environment of a transitional economy. It will assist them in understanding better the benefits and problems of agricultural policies and to discover gaps, if they exist, between the expected outcomes of a policy and the its practical implementation. 2) It also has the potential to inform those concerned with the integration of Bulgarian agricultural policy with EU policy (*e.g.* CAP) during the accession period with the bottom up context of the situation in horticulture;
- Regional level - Plovdiv regional authorities will benefit from understanding the essential business operational characteristics of the horticultural farms in the region. In addition, they will be informed about the possible strategic development for these horticultural enterprises for the next 5 years, which will give them essential information in order to assess and readjust their priorities and to improve the support provided to the local/regional horticulture.

This study could also contribute in encouraging the local, regional and national authorities to establish the concept and practice of evaluating the farming community and farm businesses.

The actual respondents may benefit because they were being introduced to new business ideas (*e.g.* farm diversification) during the collection of primary data.

The farm business in the medium term (5 years) is addressed in this study. However, long-term strategic planning research (10-20 years) would be very helpful for the policy-makers to improve the policies about agriculture/horticulture and rural development. This would address one of the main threats stated by the MAF report (2000a), which was the lack of strategic planning in agriculture in Bulgaria. It is hoped

that this research has begun the process of providing a sound research base upon which the necessary strategic planning can build.

8.5 MAIN CONCLUDING REMARKS ARISING FROM THIS RESEARCH

As mentioned earlier, agriculture/horticulture in Bulgaria is an emerging field of research. Very few studies have been undertaken that address the farmers' expectations, perceptions and visions. Therefore, this study was one of the first attempts to adopt such a 'bottom up' approach and to directly ask the people who managed the different types of farm both what they thought about their business (advantages, problems, opportunities, etc.) and how they evaluated alternative strategies for the future development of their business.

The process of this study was comprehensive and integrated, proceeding from an investigation of different strategic concepts to a formulation of alternative strategies and their evaluation. It has been adapted to farm businesses in the Plovdiv region of Bulgaria where the horticultural industry has existed for centuries. The methodology adopted helped to identify the key problems that have to be solved regarding the future development of horticulture and in most cases they were linked to the external environment (mainly legal/political and economic), discussed below.

The research results suggested that there were three major types of farm. The first type, consisting of small-scale farms (less than 2 ha) that are involved primarily in vegetable production and their farmers (most often the land owners), perceived farming generally as a way of living. The second type of farm was more market and business orientated (mainly farms over 10 ha) and was aiming at business viability within the unstable and competitive environment. The third type was private co-operatives, which are decreasing in numbers and in capacity since the transition towards a free market economy began in Bulgaria. The existence of these three types of farm is a reflection of the culmination of previous experience during both the period of Socialism and the unstable and changeable economic environment, which has prevailed over the last decade, which have created common problems for all farms.

Another main finding that arose from this study was that the different types of horticultural farm, irrespective of their size, land ownership patterns and types of crops were planning to continue to run their farm business in a 'traditional' way with some

small improvements. The respondents were generally aware of some of the alternatives of new product/market changes. However, these innovative strategic options were not seen to be feasible in the medium term (5 years). For example, two diversification strategies ('related' and 'unrelated') proposed for evaluation to the farmers only received limited support. The main reason for this result, according to the interviewees, was the unfavourable external environment. The interviewees argued that the external environment had a very strong influence upon their business and strategic development, irrespective of size, land ownership patterns and types of crops. The external environment has been inconsistent and unstable in Bulgaria especially during the period 1989-2001 creating a range of problems that significantly influenced the strategic decision-making process. These problems were:

- an undeveloped land market;
- poor credit systems;
- undeveloped market structures;
- unfavourable import/export regulations;
- poor and inconsistent legislation.

With these obstacles in mind, the respondents gave some recommendations for improving farm businesses in Bulgaria. Synthesising both the secondary and the primary data it can be summarised that the support (financial and market) provided by the Government has been limited, and in the cases when it was provided it did not reach the key 'players' in agriculture (farmers). It could be recommended, therefore, that the Government has to increase its efforts in investigating and solving the farmer's problems by implementing consistent and encompassing strategies, rather than solving each problem separately as it arises i.e. to move from a reactive approach to a proactive one.

Despite the difficult economic environment of the country, it can be summarised that the farm businesses have a lot of potential due to favourable natural and weather conditions while the tradition of growing horticultural crops has existed for centuries. Equally, the completion of the process of accession towards joining the EU will present new challenges and opportunities for the successful and sustainable future development of farm businesses in Bulgaria. Although the majority of farmers rejected

the adoption of new business approaches over the next 5 years, they were aware of these opportunities but were waiting for the political/legal and economic stability of the country to provide a favourable business environment for product and/or market transformation. The FAO (1999) predicted that the numbers of the entrepreneurial farms would increase and they would play an important role in the revitalisation of the agricultural sector in Bulgaria. This research has confirmed the continuing significance of horticultural industry both in the Plovdiv region and in Bulgaria.

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Appendix D: Chi-square test results and Cramer’s V statistics in Chapter sixA-15

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APPENDIX A: ‘EXPLORATORY’ QUESTIONNAIRE

QUESTIONNAIRE - 1

Bournemouth University is assessing the opinion of the Bulgarian farmers about the revitalisation and development of the horticultural industry in the Plovdiv region of Bulgaria. We would be grateful for your assistance in completing this questionnaire.
It is completely confidential!

Name, position, age.....
Name and place of the farm

1. When did you establish your farm/co-operative?
.....
2. What is the type of your farm?

a/ own-land farm☐

b/ rented farm☐

c/ (own+rented land) farm☐

d/ co-operative☐
3. What is the size of your farm/co-operative?
.....
4. How many people are working on your farm/co-operative ?

a/ family☐ number.....

b/ full-time☐ number

c/ part-time☐ number
5. What kind of crops are you planting? Why? Size, production, value?

a/ fruits.....
.....

b/ vegetables.....
.....

c/ grapes

.....
6. Do you think that your farm/co-operative is a leader in the region? Why?

yes☐no☐

.....
7. What are the strengths of your business?
.....
.....
8. What are the weaknesses of your business?
.....
.....

9. What are the opportunities of your farm business?

.....
.....

10. What are the threats in your farm business?

.....
.....

11. Would you like to diversify your business and how /i.e. agri-tourism, processing
factory, organic farming, etc./?

.....
.....

12. What is the use of your production? Why?

a/ for fresh consumption ☐

b/ for processing ☐

.....
13. Where and how you are selling your products?

.....
14. What do you think about the distribution now and what are your suggestions?

.....
.....

15. How are you pricing your products?

.....
16. What are you doing to follow the increasing market requirements for quality
products?

.....
17. How do you manage the process of handling and packaging on your farm? What are
your suggestions?

.....
18. How and why you are making contacts with commercial/distribution companies?

.....
19. Do you have any relations with regional/national association and organisation?

yes ☐ no ☐

If 'no', go to question 20
If 'yes', go to questions 21 and 22

20. Do you think that any contacts with them will be useful for your business? Why?

.....
.....

21. Do you have any difficulties with this association and organisation?

yes ☐ no ☐

If 'yes', please specify

22. Do they give you any support in your business?

.....
23. Do you have any contacts with foreign organisations and firms? Why?

.....

24. Are you pleased from your business now?
.....
25. How could your business and your life as a farmer be improved?
.....
.....
26. What are the barriers now?
.....
27. What other advice could you give to the people from government for revitalisation of
the agricultural industry and development of rural areas?
.....
.....

Thank you for your co-operation in completing this questionnaire!

APPENDIX B: ‘FARM PROFILE’ QUESTIONNAIRE

QUESTIONNAIRE - 2

Bournemouth University is assessing the opinion of the Bulgarian farmers about the revitalisation and development of the horticultural industry in the Plovdiv region of Bulgaria. We would be grateful for your assistance in completing this questionnaire.
It is completely confidential!

I. Part – Production Strategy

1. When did you establish your farm/co-operative?
2. What is the type of your farm?

a) own farm☐ 1

b) rented farm☐ 2

c) (own + rented land) farm☐ 3

d) co-operative☐ 4
3. What is the total size of the your farm/co-operative in decare?
4. Did you have any previous experience in the agricultural sector before having this farm?

Yes☐ 1

No☐ 2

If ‘Yes’, fill in question No 5 if ‘No’ go to question No 6
5. How many years have you been working in agricultural sector?
6. How many people are working in your farm/co-operative?

	Family	Non-family
Full time		
Part time		

7. What is your dream for your farm (all the necessary resources are available)?
-
8. What kind of crops are you cultivating? What is their size and production value for 1999?

Crops	Size - dka	Yields - kg/dka	Sale price
a) fruits			
-			
-			
-			
b) vegetables			
-			
-			
-			
c) grapes			
-			
-			
d) other (specify)			
-			
-			

9. Why are you cultivating:

- fruits☐

- vegetables☐

- grapes☐

- other (specify)☐
10. Why are you cultivating this range of crops?
-
11. Do you think that it will remain your pattern of crops in the next 7 years?

Yes☐ 1

No☐ 2

Don’t know☐ 3
- If ‘Yes’ Why?
- If ‘No’ Why not?

II Part – Marketing strategy

12. How are you distributing your production? (please state the rank order in kg/tonnes of the main distribution channels that you are using)

	Fruits	Vegetables	Grapes	Other
a) wholesale market				
b) through distributors (farm gate)				
c) contract relations				
d) by yourself at market place				
e) other (specify)				

13. How are you developing your contacts with commercial/distribution companies? (please rank your answers)

	Fruits	Vegetables	Grapes	Other
a) we are looking for them				
b) they are looking for us				
c) by chance				
d) not looking for them				

14. How could your distribution be improved?

- for fruits
- for vegetables
- for grapes
- other

15. How do you price your products?

	Fruits	Vegetables	Grapes	Other
a) acceptance pricing				
b) full cost pricing				
c) brake even pricing				
d) market pricing				

16. What are the three most important strengths of your farm business? (please order them with magnitude of importance)

Strengths
1.
2.
3.

17. What are the three most important weaknesses of your farm business? (please order them with magnitude of importance)

Weaknesses
1.
2.
3.

18. What are the three most important opportunities for your business? (please order them with magnitude of importance)

Opportunities
1.
2.
3.

19. What are the three main threats for your farm business? (please order them with magnitude of importance)

Threats
1.
2.
3.

20. What are your expectations for your farm business for the next 7 years?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
a) crops to existing market	1	2	3	4	5
b) same crops to new market	1	2	3	4	5
c) new crops to existing market	1	2	3	4	5
d) new crops to new market	1	2	3	4	5
e) withdrawal from farming	1	2	3	4	5

21. Your business will:

	In land size	In crop value
a) grow?		
b) same level?		
c) reduced?		
d) disappear?		

III Part – Diversification strategy

22. Would you like to diversify your business /i.e. agri-tourism, processing factory, organic farming, etc./?
Yes ☐ 1 No ☐ 2 Don't know ☐ 3

23. Why would you diversify your business?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Rank
a) increasing incomes	1	2	3	4	5	
b) reducing the risk	1	2	3	4	5	
c) better employment opportunities	1	2	3	4	5	
d) business expansion	1	2	3	4	5	
e) other (specify)	1	2	3	4	5	

24. What are the main obstacles of diversification? (please rank your answers)

- a) capital investment ☐
- b) lack of information ☐
- c) lack of resources (land, buildings, staff, etc.) ☐
- d) other (specify)

25. How would you diversify your business in the next years if the obstacles are removed?

	Very likely	Likely	Neither	Unlikely	Very unlikely
a) planting ‘new’ crop	1	2	3	4	5
b) combining agriculture with animal-breeding	1	2	3	4	5
c) small-scale processing factory	1	2	3	4	5
d)agri-tourism development	1	2	3	4	5
e) organic farming	1	2	3	4	5
f) other (specify)	1	2	3	4	5

26. Where did the idea of diversification come from?
.....

IV Part – Business Information

27. Do you have any contacts with foreign organisations and companies?

Yes ☐ 1

No ☐ 2

If 'Yes', fill in question No 28, if 'No' go to question No 30

28. What kind of contacts do you have with the foreign organisations and companies? (please rank your answers by importance)

a) contract market relation ☐

b) investments ☐

c) organisational support ☐

d) other (specify)

29. How were these contacts made?.....

30. What actions would you advise government to take for the revitalisation of the agricultural industry and development of rural areas?

.....

Part V - Attitude part

31. Please indicate how much you agree or disagree with each of the following statements (tick in the respond box):

Statements	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I think there are good prospects for horticultural businesses					
2. I think I feel I have good understanding about the market for my products					
3. I believe maintaining the present size of the farm is my best prospect for success and security					
4. I feel I have good understanding about the production technologies of my crops					
5. Access to free farmers training would be in a little importance.					
6. Access to free advice services would be of a great importance					
7. Financial support is not a guarantee of future success of my business					
8. Current legislation is of little relevance to my farm					
9. There is very little connection between what I do in my farm and what happened in the village					
10. I believe that the economic situation in the next 5 years will be better than in the last 5 years					
11. I believe expansion of the business is a guarantee of future success					
12. Nothing I do will make any difference					
13. Current Agricultural policy is of little relevance to what I am doing					
14. Establishing farm union is the best way for business development					
15. The Government do not support enough horticultural business					
16. I think farm business is the best way for my future development					
17. I think specialisation of the production is not guarantee for future success					
18. If I start now with some business I would not go to horticulture					
19. Accession process of Bulgaria to EU is of great relevance to my farm business.					

VI. Personal Information

32. Name, position.....

33. Age:
under 30☐ 1 41-50 ☐ 3 over 61 ☐ 5
31-40 ☐ 2 51-60 ☐ 4

34. Gender:
Male ☐ 1 Female☐ 2

35. Educational level:
Primary education ☐ 1 Secondary education ☐ 2 Higher education ☐ 3

36. Do you have agricultural education?
Yes ☐ 1 No ☐ 2

37. Name and location of the farm
.....

Thank you for your co-operation in completing this questionnaire!

APPENDIX C - ‘STRATEGIC OPTIONS’ QUESTIONNAIRE

QUESTIONNAIRE - 3

Bournemouth University is assessing the opinion of the Bulgarian farmers about the revitalisation and development of the horticultural industry in the Plovdiv region of Bulgaria. We would be grateful for your assistance in completing this questionnaire.
It is completely confidential!

1. What is the type of your farm?

a) own farm☐

b) rented farm☐

c) mixed farm (own + rented)☐

d) co-operative☐
2. What is the total land size of your farm?

a) less than 4.35 ha☐

b) more than 4.35 ha☐
3. What is your main farm business orientation in terms of land size?

a) horticultural☐

b) agricultural☐
4. Do you intend to continue producing horticultural products for sale on your farm in the next 5 years?

a) Yes☐

b) No☐

If ‘Yes’, go to question 5

If ‘No’, go to question 28
5. What is your current main horticultural product in terms profitability?

.....
6. What is your current main market for your horticultural products?

a) local☐

b) national☐

c) international☐

I Part - Continuing along your current business line but trying to improve it in the future - *except having new horticultural/agricultural products and new market*

7. Do you consider this option as feasible for your farm horticultural business in the next 5 years?

a) Yes☐

b) No☐

If ‘yes’, go to question 8

If ‘no’, go to question 9
8. How do you think your current horticultural business could be improved in the future without growing new horticultural/agricultural products or selling to a new market?

.....
9. Could you please rank the 5 most important factors that would encourage/discourage you for implementing this option of doing what you currently do but better?

	Factor	Why?/ Why not?		Rank (5)
1.	Personal/family financial security	Improved	Reduced	
2.	Age	Too young	Too old	
3.	Knowledge and experience	Possession	Lack	
4.	Farm profit	Increased	Decreased	
5.	Risk	Decreased	Increased	
6.	Cost of production	Decreased	Increased	
7.	Exchange rate of Bulgarian currency	Stable	Unstable	
8.	Taxation of inputs	No taxation	Taxation	
9.	Credit system	Improved	Current	
10.	Rate of inflation	Stable	Unstable	
11.	Bureaucracy	Reduced	Increased	
12.	Import regulations for horticultural products	Favourable	Unfavourable	
13.	Export regulations for horticultural products	Favourable	Unfavourable	
14.	Subsidies for horticulture	More	Less	
15.	Advisory system for horticulture	Better	Worse	
16.	Road network	Better	Worse	
17.	Distribution system for horticultural products	Better	Worse	
18.	Subsidies to horticultural research	More	Less	

19	Available machinery	Modern	Too old	
20	Quality of workforce	Available	Not available	
21	Cash flow of business	Increased	decreased	
22	Capital available for investment	Available	Not available	
23	Promotion of products to markets	Good	Bad	
24	Information about markets	Available	Not available	
25	Awareness of opportunities	Not aware	Aware	
26	Market demand	Yes	No	

9a. Reason for the why/why not ranked 1.

9b. Reason for the why/why not ranked 2.

9c. Reason for the why/why not ranked 3.

10. Could you please rank the outcomes of this option in terms why you might do it:

- a) increasing business viability ☐
- b) better quality of life for yourself and your family ☐
- c) better quality of horticultural products ☐
- d) other ☐

II Part - Developing new horticultural products

11. Do you think that the option of developing new horticultural products is feasible for your farm business in the next 5 years?

Yes ☐

No ☐

If 'yes', go to question 12

If 'no', go to question 13

12. What new horticultural products would you like to introduce in your production scheme in the future?

13. Could you please rank the 5 most important factors that would encourage/discourage you from introducing new horticultural products?

	Factor	Why?/ Why not?		Rank (5)
1.	Personal/family financial security	Improved	Reduced	
2.	Age	Too young	Too old	
3.	Knowledge and experience	Possession	Lack	
4.	Farm profit	Increased	Decreased	
5	Risk	Decreased	Increased	
6	Cost of production	Decreased	Increased	
7	Exchange rate of Bulgarian currency	Stable	Unstable	
8	Taxation of inputs	No taxation	Taxation	
9	Credit system	Improved	Current	
10	Rate of inflation	Stable	Unstable	
11	Bureaucracy	Reduced	Increased	
12	Import regulations for horticultural products	Favourable	Unfavourable	
13	Export regulations for horticultural products	Favourable	Unfavourable	
14	Subsidies for horticulture	More	Less	
15	Advisory system for horticulture	Better	Worse	
16	Road network	Better	Worse	
17	Distribution system for horticultural products	Better	Worse	
18	Subsidies to horticultural research	More	Less	
19	Available machinery	Modern	Too old	
20	Quality of workforce	Available	Not available	
21	Cash flow of business	Increased	decreased	
22	Capital available for investment	Available	Not available	
23	Promotion of products to markets	Good	Bad	
24	Information about markets	Available	Not available	
25	Awareness of opportunities	Not aware	Aware	
26	Market demand	Yes	No	

13a. Reason for the why/why not ranked 1.

13b. Reason for the why/why not ranked 2.

13c. Reason for the why/why not ranked 3.

14. Could you please rank the outcomes of this option in terms of why you might do it:
- a) increasing business viability ☐
 - b) better quality of life for yourself and your family ☐
 - c) better quality of horticultural products ☐
 - d) diversity of horticultural products ☐
 - e) potential new markets ☐
 - f) other ☐

III Part - Developing new markets

15. Do you think that the option of developing new markets is feasible for your farm horticultural business in the next 5 years?

Yes ☐ No ☐

If ‘yes’, go to question 16

If ‘no’, go to question 17

16. Which new market would you like to develop for your horticultural products in the future?

- a) local ☐ b) national ☐ c) international ☐

17. Could you please rank the 5 most important factors that would encourage/discourage you from developing new markets?

	Factor	Why?/ Why not?		Rank (5)
1.	Personal/family financial security	Improved	Reduced	
2.	Age	Too young	Too old	
3.	Knowledge and experience	Possession	Lack	
4.	Farm profit	Increased	Decreased	
5	Risk	Decreased	Increased	
6	Cost of production	Decreased	Increased	
7	Exchange rate of Bulgarian currency	Stable	Unstable	
8	Taxation of inputs	No taxation	Taxation	
9	Credit system	Improved	Current	
10	Rate of inflation	Stable	Unstable	
11	Bureaucracy	Reduced	Increased	
12	Import regulations for horticultural products	Favourable	Unfavourable	
13	Export regulations for horticultural products	Favourable	Unfavourable	
14	Subsidies for horticulture	More	Less	
15	Advisory system for horticulture	Better	Worse	
16	Road network	Better	Worse	
17	Distribution system for horticultural products	Better	Worse	
18	Subsidies to horticultural research	More	Less	
19	Available machinery	Modern	Too old	
20	Quality of workforce	Available	Not available	
21	Cash flow of business	Increased	decreased	
22	Capital available for investment	Available	Not available	
23	Promotion of products to markets	Good	Bad	
24	Information about markets	Available	Not available	
25	Awareness of opportunities	Not aware	Aware	
26	Market demand	Yes	No	

17a. Reason for the why/why not ranked 1.

17b. Reason for the why/why not ranked 2.

17c. Reason for the why/why not ranked 3.

18. Could you please rank the outcomes of this option in terms of why you might do it:

- a) increasing business viability ☐
- b) better quality of life for yourself and your family ☐
- c) better quality of horticultural products ☐
- d) diversity of horticultural products ☐
- e) diversity of markets ☐
- f) other ☐

IV Part - Developing new supportive agricultural incomes streams

19. Do you think that the option of developing new agricultural activities is feasible for your farm business in the next 5 years?

Yes ☐

No ☐

If 'yes', go to question 20

If 'no', go to question 21

20. What kind of agricultural alternatives would you like to develop as supportive activities towards your farm business in the future?

.....
21. Could you please rank the 5 most important factors that would encourage/discourage you from developing new agricultural activities?

	Factor	Why?/ Why not?		Rank (5)
		Improved	Reduced	
1.	Personal/family financial security	Improved	Reduced	
2.	Age	Too young	Too old	
3.	Knowledge and experience	Possession	Lack	
4.	Farm profit	Increased	Decreased	
5.	Risk	Decreased	Increased	
6.	Cost of production	Decreased	Increased	
7.	Exchange rate of Bulgarian currency	Stable	Unstable	
8.	Taxation of inputs	No taxation	Taxation	
9.	Credit system	Improved	Current	
10.	Rate of inflation	Stable	Unstable	
11.	Bureaucracy	Reduced	Increased	
12.	Import regulations for agricultural products	Favourable	Unfavourable	
13.	Export regulations for agricultural products	Favourable	Unfavourable	
14.	Subsidies for agriculture	More	Less	
15.	Advisory system for agriculture	Better	Worse	
16.	Road network	Better	Worse	
17.	Distribution system for agricultural products	Better	Worse	
18.	Subsidies to agricultural research	More	Less	
19.	Available machinery	Modern	Too old	
20.	Quality of workforce	Available	Not available	
21.	Cash flow of business	Increased	decreased	
22.	Capital available for investment	Available	Not available	
23.	Promotion of products to markets	Good	Bad	
24.	Information about markets	Available	Not available	
25.	Awareness of opportunities	Not aware	Aware	
26.	Market demand	Yes	No	

21a. Reason for the why/why not ranked 1.

21b. Reason for the why/why not ranked 2.

21c. Reason for the why/why not ranked 3.

22. Could you please rank the outcomes of this option in terms of why you might do it:

- a) increasing business viability ☐
- b) better quality of life for yourself and your family ☐
- c) better quality of agricultural products ☐
- d) diversity of agricultural products ☐
- e) diversity of markets ☐
- f) other ☐

V Part - Developing new supportive non-agricultural incomes streams

23. Do you think that the option of developing new non-agricultural supportive activities is feasible for your farm business in the next 5 years?

Yes ☐

No ☐

If 'yes', go to question 23

If 'no', go to question 25

24. What kind of new non-agricultural income stream would you like to develop as supportive activities towards your farm business in the future?

25. Could you please rank the 5 most important factors that would encourage/discourage you from developing non-agricultural income streams?

	Factor	Why?/ Why not?		Rank (5)
1.	Personal/family financial security	Improved	Reduced	
2.	Age	Too young	Too old	
3.	Knowledge and experience	Possession	Lack	
4.	Farm profit	Increased	Decreased	
5.	Risk	Decreased	Increased	
6.	Cost of production	Decreased	Increased	
7.	Exchange rate of Bulgarian currency	Stable	Unstable	
8.	Taxation of inputs	No taxation	Taxation	
9.	Credit system	Improved	Current	
10.	Rate of inflation	Stable	Unstable	
11.	Bureaucracy	Reduced	Increased	
12.	Import regulations for agricultural/horticultural products	Favourable	Unfavourable	
13.	Export regulations for agricultural/horticultural products	Favourable	Unfavourable	
14.	Subsidies for developing non-agricultural economic activities	More	Less	
15.	Advisory system for developing non-agricultural economic activities	Better	Worse	
16.	Road network	Better	Worse	
17.	Distribution system for non-agricultural activities	Better	Worse	
18.	Subsidies to agricultural research	More	Less	
19.	Available machinery	Modern	Too old	
20.	Quality of workforce	Available	Not available	
21.	Cash flow of business	Increased	decreased	
22.	Capital available for investment	Available	Not available	
23.	Promotion of products to markets	Good	Bad	
24.	Information about markets	Available	Not available	
25.	Awareness of opportunities	Not aware	Aware	
26.	Market demand	Yes	No	

25a. Reason for the why/why not ranked 1.

25b. Reason for the why/why not ranked 2.

25c. Reason for the why/why not ranked 3.

26. Could you please rank the outcomes of this option in terms of why you might do it:
- a) increasing business viability ☐
 - b) better quality of life for yourself and your family ☐
 - c) quality of non-agricultural products ☐
 - d) diversity of non-agricultural products ☐
 - e) diversity of markets ☐
 - f) other ☐

27. Could you please rank the following alternative options in terms of your preferences and appropriateness for your farm horticultural business:
- a) doing what is currently done better ☐
 - b) developing new crops ☐
 - c) developing new markets ☐
 - d) developing agricultural income streams ☐
 - e) developing non-agricultural activities ☐

28. Why would you like to withdraw from horticultural production?
.....
29. How do you understand the expression business viability?
.....
30. What is your meaning of better quality of life?
.....
31. What sort of profit rates of your farm business do you looking for?
.....
32. Name, position
33. Age:

- | | | | |
|----------------|--------------------------|----------------|--------------------------|
| a) under 30 | <input type="checkbox"/> | b) 31-40 years | <input type="checkbox"/> |
| b) 41-50 years | <input type="checkbox"/> | d) 51-60years | <input type="checkbox"/> |
| c) over 61 | <input type="checkbox"/> | | |

34. Gender:
- | | |
|----------------------------------|------------------------------------|
| a) Male <input type="checkbox"/> | b) Female <input type="checkbox"/> |
|----------------------------------|------------------------------------|

Thank you for your co-operation in completing this questionnaire!

APPENDIX D:

CHI-SQUARE (χ^2) TEST RESULTS AND CRAMER'S V
STATISTICS IN CHAPTER SIX

Table 1: Independent variable - Size

Dependent variables	χ^2	Cramer's V	df	Sig.
Land ownership	62.457	.538	4	.000*
Type of crops	2.264	.102	4	.687*
Cultivation of fruits	7.519	.264	2	.023
Cultivation of grapes	.583	.073	2	.747
Cultivation of vegetables	.438	.064	2	.803
Cultivation of other crops	5.934	.234	2	.051*
Age	7.839	.190	8	.449*
Gender	8.190	.275	2	.017*
Education	20.076	.305	4	.000*
Previous experience	6.397	.243	2	.041*
Establishment of the farms	4.161	.196	2	.125
Employment patterns	64.179	.545	4	.000*
Pricing of the fruits	7.025	.253	4	.135*
Pricing of the grapes	.528	.104	2	.768*
Pricing of the vegetables	.2.280	.119	4	.684*
Pricing of the other crops	7.258	.212	4	.123*
Distribution channels of fruits	3.184	.172	6	.785*
Distribution channels of grapes	13.296	.368	6	.039*
Distribution channels of vegetables	28.284	.418	6	.000*
Distribution channels of other crops	9.618	.242	6	.142*
Having foreign contacts	5.849	.233	2	.054*

Note:

For 2x2 Fisher's exact test was computed

The values shown in bold indicate a statistical significance at the .05 level of confidence

* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1

Table 2: Independent variable – Land Ownership

Dependent variables	χ^2	Cramer's V	df	Sig.
Size of the farms	62.457	.538	4	.000*
Type of crops	4.481	.144	4	.345*
Cultivation of fruits	5.414	.224	2	.064*
Cultivation of grapes	.108	.032	2	.947
Cultivation of vegetables	1.342	.111	2	.501*
Cultivation of other crops	3.760	.187	2	.153*
Age	8.512	.199	8	.385*
Gender	4.512	.204	2	.105*
Education	19.646	.302	4	.001*
Previous experience	3.662	.184	2	.160*
Establishment of the farms	12.975	.347	2	.002
Employment patterns	86.157	.632	4	.000*
Pricing of the fruits	5.164	.219	4	.219
Pricing of the grapes	.668	.117	2	.716*
Pricing of the vegetables	4.409	.165	4	.353*
Pricing of the other crops	6.686	.203	4	.153*
Distribution channels of fruits	8.296	.287	6	.178*
Distribution channels of grapes	18.019	.429	6	.006*
Distribution channels of vegetables	33.502	.455	6	.000*
Distribution channels of other crops	11.715	.267	6	.069*
Having foreign contacts	6.453	.244	2	.040*

Note: For 2x2 Fisher's exact test was computed
The values shown in bold indicate a statistical significance at the .05 level of confidence
* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1

Table 3: Independent variable – Type of crops

Dependent variables	χ^2	Cramer's V	Df	Sig.
Size of the farms	2.264	.102	4	.687*
Land ownership	4.481	.144	4	.345*
Age	6.239	.170	8	.620*
Gender	6.208	.240	2	.045*
Education	5.520	.160	4	.238*
Previous experience	2.759	.160	2	.252*
Establishment of the farms	1.251	.108	2	.535*
Employment patterns	1.161	.073	4	.884*
Pricing of the fruits	8.527	.394	2	.054*
Pricing of the grapes	1.041	.146	2	.308*
Pricing of the vegetables	1.367	.130	2	.505*
Pricing of the other crops	2.025	.158	2	.363*
Distribution channels of fruits	9.467	.419	3	.024*
Distribution channels of grapes	.595	.110	3	.898*
Distribution channels of vegetables	4.795	.243	3	.187*
Distribution channels of other crops	1.755	.146	3	.625*
Having foreign contacts	7.665	.266	2	.022*

Note: For 2x2 Fisher's exact test was computed
The values shown in bold indicate a statistical significance at the .05 level of confidence
* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1

APPENDIX E:

CHI-SQUARE (χ^2) TEST RESULTS AND CRAMER'S V
STATISTICS INCLUDED IN CHAPTER SEVEN

Table 1: Independent variable – Size of farms

Dependent variables	χ^2	Cramer's V	df	Sig..
Farmers' expectation relating to land size	18.520	.293	6	.005*
Intention to withdraw form horticulture	5.370	.266	2	.068*
Feasibility of strategy 1 - 'doing what you currently do but better'	7.538	.33	2	.023*
Feasibility of strategy 2 - 'developing new horticultural crops	4.231	.249	2	.121*
Existing markets	15.252	.474	4	.004*
Feasibility of strategy 3 - 'developing new markets'	2.377	.187	2	.305*
New desired markets	3.714	.352	2	.156*
Feasibility of strategy 4 – 'developing new agricultural activities'	.1.308	.139	2	.520*
Feasibility of strategy 5 – 'developing new non-agricultural activities'	2.459	.190	2	.292*

Note: The values shown in bold indicate a statistical significance at the .05 level of confidence
* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1

Table 2: Independent variable – Land Ownership

Dependent variables	χ^2	Cramer's V	df	Sig.
Farmers' expectation relating to land size	23.918	.333	6	.001*
Intention to withdraw from horticulture	2.566	.184	2	.277*
Feasibility of strategy 1 - 'doing what you currently do but better'	1.248	.135	2	.536*
Feasibility of strategy 2 - 'developing new horticultural crops	1.006	.122	2	.605*
Existing markets	11.213	.406	4	.024*
Feasibility of strategy 3 - 'developing new markets'	.782	.107	2	.676*
New desired markets	2.692	.300	2	.260*
Feasibility of strategy 4 - 'developing new agricultural activities'	3.728	.234	2	.155*
Feasibility of strategy 5 - 'developing new non-agricultural activities'	2.524	.193	2	.283*

Note: The values shown in bold indicate a statistical significance at the .05 level of confidence

* The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1

Table 3: Independent variable – Type of crops

Dependent variables	χ^2	Cramer's V	df	Sig.
Farmers' expectation relating to land size	9.552	.210	6	.145*
Intention to withdraw form horticulture	4.069	.231	2	.131*
Feasibility of strategy 1 - 'doing what you currently do but better'	.362	.073	2	.834*
Feasibility of strategy 2 - 'developing new horticultural crops	.414	.078	2	.813*
Existing markets	4.252	.250	4	.373*
Feasibility of strategy 3 - 'developing new markets'	.848	.112	2	.654*
New desired markets	.164	.074	2	.921*
Feasibility of strategy 4 – 'developing new agricultural activities'	11.126	.404	2	.004*
Feasibility of strategy 5 – 'developing new non-agricultural activities'	7.452	.331	2	.024*

Note: The values shown in bold indicate a statistical significance at the .05 level of confidence
 * The validity of the chi-square test results is questioned because 20% of the cells have expected count of less than 5 and one or more cells have expected values less than 1