Supporting Educational Projects in Pakistan: Operationalising UN Sustainable Development Goal 4

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B. Keywords

Pakistan; Quality Education; SDG; Teaching; NGOs; Recursive Abstraction, Education projects.

C. Abstract

Pakistan has a population of over 212 million people which makes it the sixth largest country by population in the world. In 2021, the United Nations Children's Emergency Fund (UNICEF) estimated that 22.8 million children in the country did not attend school which represented 44% of this age group. As a result, due to the low educational standard of much of its population, Pakistan is not well equipped to meet the opportunities of the Fourth Industrial Revolution, that will integrate advances in knowledge including artificial intelligence, robotics, and the 'Internet of things'. The Government of Pakistan has committed to raising literacy standards urgently, and international and local Non-Governmental Organisations (NGOs) are delivering educational projects in the country to support this aspiration. The United Nations Sustainable Development Goal 4 (SDG-4) relates to Quality Education, and this is clearly of relevance to the delivery of these projects. Based upon data collected from semi-structured interviews undertaken with NGOs, Donors and Government representatives operating in Pakistan, this paper will investigate how SDG-4 is influencing the delivery of educational projects in this country, and will reflect upon how the elements of this United Nations' goal are being operationalised in practical situations to ensure that the projects being delivered are efficacious and sustainable. The key elements required to ensure the successful delivery of educational projects are identified in this chapter, and from these findings, a framework is proposed that can be used by other organisations to ensure that their own projects are 'fit for purpose' in terms of supporting SDG-4.

D. Introduction

The global population increased from 2.5 billion in 1950 to 7.7 billion in 2019 (Department of Economic and Social Affairs 2019, p.2). This continued population growth places increasing pressure on natural resources, particularly those related to food, shelter, health, sanitation, and consumption. There is therefore an urgent need to conserve our planet's resources now, so that future generations can still experience tolerable standards of living.

Sustainable development is about ensuring that our actions and activities are undertaken in a manner that can be supported indefinitely without impacting negatively upon the world in which we live. This needs to be achieved by avoiding using resources in a profligate manner (Ayers 2017). In today's world, sustainability is considered in terms of established well-being targets and indicators (Stiglitz *et al*. 2009) which include standards such as per capita income, education, health, and corporate ethical behaviour. Therefore, sustainability initiatives need to increase general awareness, through the promotion and implementation of quality standards relating to human well-being, that are 'fit for purpose' in terms of their careful and considered use of resources.

The United Nations (UN) is an international organisation, comprising of 193 member countries (United Nations 2021a). In addition to maintaining international peace and security between the member states, the UN has a range of other objectives including a mission to support the world to become more sustainable. To support this aspiration, the UN has presented a series of Sustainable Development Goals (SDGs) which countries now need to work collectively towards to ensure that the future of the planet can be safeguarded.

At the highest level, there are seventeen SDGs that together tackle a range of key topics including poverty, health, education, inequality, climatic change, and economic imbalances. Each SDG has been further sub-divided into a series of unique targets and performance indicators. SDG-4 relates to Quality Education, and as illustrated in Table 1, it has been categorised by individual targets to ensure that the scope of the goal is both focussed, and also managed within realistic and achievable boundaries.

	By 2030 ….
1	Ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and Goal-4 effective learning outcomes
2	Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
3	Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
4	Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
5	Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
6	Ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
7	Ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
8	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, nonviolent, inclusive and effective learning environments for all
9	Substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
10	Substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states

Table 1. 2030 Targets Relating to SDG-4 (Adapted from United Nations 2021b)

According to the UN's SDG-4 summary (United Nations 2021b), even before the impact of the recent and ongoing Covid-19 pandemic, across the globe, over 200 million children are expected to be missing from school by the year 2030, and just 60% of young people will complete their secondary education. These numbers had been steadily improving with the decrease in those missing school dropping from 26% (2000) to 19% (2018). Nevertheless, there remains an estimated 617 million young people lacking basic mathematics and literacy skills, that will have a significant impact upon their future earning potential, standard of living, and their ability to contribute on a personal level to the sustainability agenda. The situation has certainly deteriorated even further due to the Covid-19 pandemic that started in 2020.

Furthermore, the UN has identified that approximately 750 million adults remained illiterate by 2016 of which 67% were female, with 50% of this illiterate population living in South Asia (United Nations 2021b). Tackling this educational problem is particularly important as populations with low educational standards are not well equipped to meet the opportunities of what is described by the World Economic Forum Founder and Executive Chairman Klaus Schwab, as being the 'Fourth Industrial Revolution', which is 'characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres', integrating advances in knowledge including artificial intelligence, robotics, the Internet of Things, nanotechnology, and energy storage (World Economic Forum 2021). Therefore, at a time when existing divides between countries need to be reduced, so that we can tackle sustainability as a global collective, these differences remain still at quite substantial levels. This non-uniformity directly impacts upon the ability of humanity to work together towards a common sustainability aim.

Sharing borders with Afghanistan, China, India, and Iran, the Islamic Republic of Pakistan is one of the key countries in South Asia. Known for its multi-linguistic, cultural, traditional, and ethnic dimensions, it has the world's sixth largest population (over 212 million people) according to a recent report by the Pakistan government (Pakistan Bureau of Statistics 2021, p.2), and yet the United Nations Children's Emergency Fund (UNICEF) estimates that 22.8 million children in the country are out of school that represents 44% of this age group. 'Out of school' in this sense refers to children between the ages of 5 and 16 years old who have never been to school, or who have attended school for a short period before then leaving. According to the Pakistan Bureau of Statistics (2021), there are noticeable variations within these figures due to location, with urban areas reporting lower percentages of children being 'out of school', whereas for rural areas this figure increases significantly. There is also a decline in the numbers of children attending school in both urban areas (77% in 2015 dropping to 73% in 2020) and rural areas (53% in 2015 dropping to 52% in 2020).

Once again based upon data from the Pakistan Bureau of Statistics (2021), literacy levels in the youth population are lower than expected. Overall, only 72% of this age group are considered to be literate, although again this varies with location, and is higher in urban areas (84%) and lower in rural areas (65%), with male literacy (79%) exceeding that of female (65%).

There is also a correlation between educational attainment and subsequent employment rates (Pakistan Bureau of Statistics 2019). The role played by education in a society is noticeably evidenced by increased earnings across the population, that ultimately boosts a country's economic growth and development (Hanushek *et al*. 2015.). Therefore, ensuring that a population achieves its educational potential is important for that country's growth trajectory, for its society in terms of standards of living, and for the individuals themselves in terms of personal affluence. Due to these extreme circumstances, the country's government has taken initiatives to increase literacy in the country. The Ministry of Planning, Development and Special Initiatives of Pakistan has launched a five-year joint project called the 'National Initiative for Sustainable Development' that will aim to work towards

achieving the UN's Sustainable Development Goals of which SDG-4 (Quality Education) is one that has been identified as being a key priority (Pakistan Ministry of Planning, Development & Reform 2018).

This chapter will report on research that sets out to investigate the execution of Quality Education projects in Pakistan, to identify how SDG-4 is being operationalised in practice, to see how these projects are being efficaciously and sustainably delivered, and to understand the longer-term potential impact that these projects will have in supporting the UN's 2030 targets and aspirations.

E. Delivering Quality Education Projects in Pakistan to Support SDG-4

Within Pakistan, many of the Quality Education projects that relate to SDG-4 are being delivered by Non-Governmental Organisations (NGOs). The term Non-Governmental Organisation dates back to at least the eighth century (Davies 2014), but the phrase became more common after the establishment of the United Nations in 1945, when NGOs were more clearly defined as being 'a not-for-profit entity whose members are citizens of one or more countries (member) and whose activities are determined by the collective will of its members in response to the needs of members of one or more communities with which the NGO operates' (Simmons 1998). This definition of NGOs embraces private, voluntary, civil and society-based organisations. Examples of well-known NGOs include the United Nations High Commissioner for Refugees (UNHCR), United Nations Children's Emergency Fund (UNICEF), World Health Organisation (WHO), and the International Monetary Fund (IMF). NGOs can have a varied remit, with some being international and taking a global holistic perspective, and others being local (national or regional) in terms of their individual focus. The number of NGOs operating within Pakistan has increased so significantly that the sector is now ranked third, behind the business and government sectors, in terms of promoting social values and ethical culture (Teegen *et al*. 2004).

The data collected that is discussed in this chapter relates to specific Quality Education projects being delivered by NGOs in Pakistan. A project in this sense is a temporary endeavour designed to achieve an agreed aim or objective, i.e., a one-time venture (Pinto 2019) delivered within an agreed schedule and budget target (Turner 1993). Project management refers to the management of such projects that in this context relates to the application of specialised processes, methods, knowledge, skills, and expert advice to achieve the intended project deliverables. As such, projects are unlike managing 'day to day' processes, as with a project there is only a single chance to be successful, and the unique nature of each project means that no-one will have experienced doing this exact combination of activities before (Pearce 1993). As a result, there are risks associated with delivering projects, and these risks are managed in terms of the iron triangle of cost, time and quality (Turner 1993). However, this perspective has since been expanded to also include risks, scope and benefits (Bennett and AXELOS 2017), and in addition, benefits realisation management is now considered to be an acceptable approach to ensuring the success of a project (Serra and Kunc 2015). Furthermore, the importance of ensuring ethical and responsible business practices should not be overlooked. This is the project management context in which these Quality Education projects are being delivered, and so if the aspirations of SDG-4 are to be achieved, the plans and decisions made by a project's management function need to be undertaken in an environment that considers and aligns to sustainability.

An example of a 'project' in this context is 'Educate a Child' (https://educateachild.org/our-partners-projects/projects/educate-child-partnership) that was one of the successful Quality Educational endeavours recently delivered by the Government of Pakistan in association with UNHCR. This project provided quality primary education to approximately 200,000 refugee children in Pakistan. These

children had been forced from their homes, and into a foreign country, and so had been marginalised in terms of accessing primary education. The project offered support and education to these children to enable them to create the foundations upon which their future lives could be based. The short-term impact of such a project may be measured in terms of the number of children educated, and their level of attainment. However, the long-term impacts will not materialise for many years, and will be quite difficult to evaluate. The types of measures that may be used to evaluate future impact could include, employment, quality of life, average earnings, health, and other such factors.

Evaluating the success, or otherwise, of a Quality Education project, must therefore be based upon the current known facts regarding how the project has been delivered, and what the project has achieved (outputs, outcomes, and benefits), together with an estimation of what the likely future impact of the project will be. For this chapter, the definition of outputs, outcomes and benefits has been adopted from PRINCE2 project management (Bennett 2017) in which outputs are tangible deliverables (e.g. the development of a new education programme), outcomes are intangible deliverables (e.g. the improved knowledge and understanding of those participating in the education programme) and benefits are measurable deliverables (e.g. the number of people participating in the education programme). The further into the future these estimates are based, the more difficult it becomes to be able to attribute them to the impact of any one specific project, due to the multitude of other intervening factors that may have occurred during the interim period.

Methodology

This chapter has concentrated upon organisations that have recently, or are currently, delivering Quality Education related projects in Pakistan. Some of these NGOs are international, and others are locally based; one organisation represents the Government. A selection of staff connected with the work of these organisations has been interviewed to understand their thinking regarding the projects in which they are involved, and how they consider these projects support the targets and performance indicators relating to SDG-4.

All interviewees were selected using a purposive sampling strategy in which each person was identified specifically based upon their experience, position in their organisation, and relevance to the chapter. This is a qualitative study seeking to understand the issues based upon the views and opinions of the participants. There is no intention to generalise from the findings, and instead, the philosophical position of interpretivism has been adopted for this chapter, with an inductive approach, to enable inferences between responses to be considered. The time horizon for this chapter is cross-sectional as there is no comparison being made to previous data collected (Saunders *et al.* 2019), and the interviews undertaken represent the thoughts, views, and opinions of the participants at the time of being interviewed. These are the personal perspectives of those being interviewed based upon their many years of relevant experience supporting the delivery of educational projects in Pakistan, and as such, they do not represent any official or agreed organisational view. This is helpful for this chapter as it means that the data collected is real, rich, and informative and has not been sanitised by committees or public relations departments.

All interviewees have participated in this chapter on a voluntary basis, with their data being collected, and then stored anonymously on secure servers. The research itself has been undertaken with ethical approval from Bournemouth University (Reference 39494). Details of the those participating in this chapter are provided in Table 2, with further additional profiling data presented in the subsequent Findings section.

Interviews undertaken to gather data for this chapter were semi-structured in nature, of typically one hour in duration and held in 2021. Questions asked were derived from the following themes:

- Theme 1 – Participant's demographic data and organisation's profile.
- Theme 2 - Participant's understanding of projects and project management.
- Theme 3 - Participant's understanding of, and involvement with, UN Sustainability Goals (especially relating to SDG-4 – Quality Education).
- Theme 4 - Project success and how this is being defined, monitored, and measured in the participant's organisation.

Interviewee	Gender	Job Role
A	Male	International NGO - Programme Manager
B	Female	International NGO – Education Officer
C	Male	Government - Planning
D	Male	International NGO - Donor
E	Male	Local NGO - CEO and Founder

Table 2. Job Roles of Stakeholders Interviewed (Authors' Own Work)

The questions sought to identify and review the major issues related to ensuring the success of projects supporting SDG-4, and to understand the key drivers for delivering sustainable and efficacious educational projects in Pakistan. All interviews were recorded, with the knowledge and permission of the individual participant, to ensure the accuracy of the data collection process, and to reduce the possibility of researcher bias. In accordance with data protection requirements, these recordings were then safely deleted once anonymised transcripts for each interview had been created.

Analysis of the interview data collected was undertaken using the Recursive Abstraction method (Polkinghorne and Arnold 2014). Recursive Abstraction is a technique that has proven to be very helpful for analysing subjective qualitative data to reveal patterns and trends in responses that might otherwise not be visible (Polkinghorne and Taylor 2019; Polkinghorne and Taylor 2021). The systematic nature of the Recursive Abstraction process ensures that the analysis is repeatable. This characteristic of the analysis enables improved reliability in the research results obtained. The key steps of the Recursive Abstraction analysis process undertaken were:

- Identify key data strings within the interview transcripts. Data strings in this regard are most likely to be paragraphs, sentences and/or phrases.
- Group the data strings together that relate to similar topics.
- Paraphrase the data strings to condense them, whilst still retaining the original meaning.
- Codify the paraphrased data (removing duplicates from the same interviewee).
- Group the coded data into themes (and remove any codes supported by only a few interviewees. The threshold for this removal decision is controlled by the researcher.
- Review the responses from all interviewees to identify patterns and trends that have been revealed within the identified Themes and Codes.

Findings

Theme 1 – Profiles of Participants

Each of the five stakeholders interviewed provided a synopsis of both their own experience, and a summary relating to the nature of the organisation that they represented:

Interviewee A works for an NGO that is located only in Pakistan and is therefore categorised as being 'local' for the purposes of this chapter. The NGO operates in the humanitarian sector and has a mandate to support the most marginalised and underprivileged communities in Pakistan. This mandate enables the NGO to be active in variety of sectors, and its projects include ones with a focus upon sanitation, hygiene, shelter, and livelihood. In this context, livelihood includes community engagement, participation, and empowerment. Interviewee A has 14 years of relevant experience in this sector. Within their NGO, interviewee A manages long-term projects and programmes, and will work on each project from the design and implementation phases through to closure.

Interviewee B works for an NGO that operates globally and is therefore categorised as being an 'international' for the purpose of this chapter. Considering its work in Pakistan, the organisation aims to ensure that every child receives a quality education. The NGO supports cultural heritage and equal dignity for all cultures, and promotes scientific programmes and policies. Interviewee B has 10 years of relevant experience in this sector. Recently the NGO has been working to devise and upstream educational policies with a focus upon early childhood development programmes right through to tertiary education.

Interviewee C works for a Government organisation in Pakistan that seeks to forge relationships between a diverse range of NGOs that are delivering projects of a similar nature and is therefore categorised as being an 'international' for the purpose of this chapter. The rationale behind this strategy is to encourage scenarios in which different NGOs deliver separate phases of the same project. The organisation has a focus upon early childhood development programmes that include education projects. Interviewee C has 18 years of relevant experience in this sector and has a focus that includes the monitoring of project communications and evaluating project success. Views expressed by this participant reflect a combination of both official Government guidance and their own personal experiences of working with NGOs.

Interviewee D works for an organisation based in Qatar that focusses upon educational projects globally including many delivered in Pakistan. The organisation is therefore categorised as being 'international' for the purposes of this chapter. The NGO conducts educational projects and solves issues related to education such as enrolment and the reduction of school dropouts. Importantly, the NGO is also a Donor organisation and funds projects delivered by other NGOs that have an involvement in educational projects ranging from primary to secondary level. For the purposes of this chapter, Donors are people or organisations that fund projects. This term is therefore equivalent to the term Sponsor often used in a project management context. Interviewee D has 24 years of relevant experience in this sector and manages a large portfolio of programmes.

Interviewee E works for an NGO that conducts its projects in several different areas of Pakistan. The NGO was established in 1989. The organisation is therefore categorised as being 'local' for the purposes of this chapter and has a focus upon disaster reduction and climatic change, gender empowerment, health, education, and livelihood. Interviewee E has 30 years of relevant experience in this sector, and they are the founder and CEO of their respective NGO.

Theme 2 – Projects and Project Management

At first glance there is no reason to think that projects delivered in Pakistan are much different to projects delivered in other countries, or that projects delivered by NGOs are different from projects delivered by companies, or that educational projects are different to projects with other foci.

> *'Project management follows a certain set of activities that are being carried out sequentially'*
> Interviewee A

> *'A project is a time-bound activity having a specific objective or objective to achieve'* Interviewee C

Whilst the fundamentals of projects, and project management, do not change, the reality is far more complex once the practical issues related to the design and implementation of projects are considered. For example, Pakistan has a number of issues that make the delivery of projects in rural areas significantly more difficult, and no matter the location, a range of cultures, languages and religions need to be accounted for.

> *'NGOs … are dealing with people having different cultures, languages, backgrounds, needs, requirements, and necessities'* Interviewee D

> *'Security constraints in some rural areas … sometimes do not allow us to perform our activities in our desired way'* Interviewee C

NGOs have to work alongside Government policies and practices, but these are subject to change. Often these changes impact upon the viability of projects that can prevent new projects starting, or existing projects from undertaking the key activities considered necessary to ensure the planned deliverables become a reality.

> *'Another challenge that an NGO faces is the change of policy with changing governments'* Interviewee C

> *'The environment in which an NGO operates, keeps on changing; for instance; there might be political instability which could give rise to an entire change in policies and governance system or there could be external threats and risks associated with the projects, there are communities where the social mobilizers cannot go and perform activities due to security issues'* Interviewee D

Furthermore, there are important restrictions in place regarding which organisations can work on which projects. In particular, international NGOs may need to team up with local NGOs for project delivery. As a result, there are a large number of different projects being delivered by a range of combinations of organisations, with some partnerships proving to be more effective than others, and some projects delivering better results in comparison as a consequence.

> *'These days, international organisations are not allowed to implement the projects on their own … therefore the international NGOs have to work with the local NGOs'* Interviewee C

> *'There are so many organisations working in Pakistan on different projects, but not all of them succeed in what they are intended for'* Interviewee B

Companies are driven by both the need to deliver projects, and also by the need to make money to gratify shareholders. NGOs have different pressures; money is important in terms of the Donors funding projects, and working with agreed financial constraints, but the need to please shareholders with an ensured profitability is replaced by the desire to satisfy stakeholder's aspirations. Stakeholders are interested in making a difference to defined communities of people and invoking lasting change.

> *'There is a difference in project management practices for the NGOs sector as compared to the corporate sector … in the corporate sector, management is well equipped with relevant project management skills and abilities, and they know all the strategies to conduct the project. However, in the Non-Profit sector, this condition is not necessary'* Interviewee D

Project management was not previously seen as being so important to the NGO sector, although in recent years this view has evolved. However, NGOs use project management differently, and look for the expected management, control and reportability, yet try to do this in a flexible way that can adapt to local requirements and the changing needs of the communities being supported.

> *'The stages in NGO projects are very much similar to the normal project management life cycle … we definitely need project management practices to plan, design, monitor, and evaluate our activities'* Interviewee E

For the projects that are less successful, project failure can result from a wide range of causes, but expectations and resources are two of the most common. The UN have reported on the requirement for there to be more quality educational projects in Pakistan (Interviewee C). However, this needs to be managed carefully, as quite often Donors and NGOs try to deliver projects too quickly, whereas educational projects need much more time to mature and to generate embedded impact.

> *'Resources necessary for the project were not met [for example] a school received the books after the project met its deadline … if the organisations want to achieve results within two years' time, then it is not possible, and the [educational] project will face consequences'* Interviewee C

Furthermore, educational projects are reliant upon factors beyond the scope of the project. For example, the number and quality of available teaching staff to support an educational project is directly linked to its chances of being successful. However, there is little a project can do about influencing this factor in the short-term. Therefore, there is a difference between what needs to be done in principle by a project or programme, and what can be achieved in practice.

> *'Teaching is a difficult profession. In Pakistan, there are few options for teachers to receive training [but] quality performance necessitates training'* Interviewee B

> *'Projects such as educational projects involve extensive expertise of trained staff including qualified teachers and relevant professionals'* Interviewee C

In addition, the educational projects that are delivered need to be as sustainable as possible. This sustainability needs to be built into projects from their very inception to ensure that the principles are embedded throughout each project phase. Educational projects by their very nature are not just about delivering activities that will support SDG-4, because by doing so they will also support many of the other SDGs. For example, a Quality Education SDG-4 project may also support SDG-8 which is about Decent Work and Economic Growth. The interrelatedness of activities delivered ensures that those managing, and monitoring projects need to be aware of other direct, indirect, and even incidental impacts that may occur, and that are beneficial to communities, and to countries, and even contribute to the overall global action.

> *'We make sure that the project is sustainable as possible'* Interviewee A

> *'The [SDG] goals are interrelated, and accomplishing one generally involves resolving concerns which are more commonly associated with another'* Interviewee D

Theme 3 – Sustainability and SDG-4

From the research undertaken it is clear that the SDGs are recognised by the participating organisations as having a key role in the sustainable development of communities.

> *'Our existence is based upon preserving the natural environment and since the SDGs are working to make the environment liveable, therefore, our projects too need to be sustainable*' Interviewee E

> *'From the beginning to the finish of a project, they must adopt a sustainable life cycle mindset'* Interviewee C

If well delivered, the SDGs have the potential to ensure that societies prosper, and that communities across the globe can be protected. Together, the SDGs are acknowledged by those interviewed to consider the primary dimensions that are required to fulfil basic human needs (food, shelter, sanitary conditions, gender rights, education), and the right to expect an acceptable standard of living, no matter where people may live.

> *'The Government's implementation department needs a more focussed and serious approach towards implementing the SDGs on the ground level'* Interviewee C

> *'Funders, implementers, and evaluators of programmes must debate and agree on what sustainability means in different circumstances'* Interviewee B

Whilst many mistakenly think of the SDGs as just being about protecting the environment, they are much more than this, as they relate to how we live in the world alongside other people, and other species. Participants reported that being able to find a way of continuing our human activities without impacting upon the world around us, and upon the other living things on the planet, is now essential.

> *'[We] need to Improve people's quality of life now whilst avoiding future environmental damage … In sustainable projects, we are trying to achieve qualitative results such as changing culture'* Interviewee D

In terms of sustainability, those interviewed confirmed that projects need to be delivered in such a way that people who have been involved, not only understand what to do, but how to maintain it. An example from one interview related to a training programme to teach people how to build a water pump. This is very useful training, and the water pump will have a positive impact on the community through the provision of clean water. However, to be sustainable, those being trained also need to know how to maintain the water pump, so that it continues to operate efficiently and effectively for the foreseeable future. Interviewees reported that it can be small changes like this, relating to how we deliver projects, that can make them substantially more sustainable.

> *'If the ultimate objective of the project, which is achieving sustainability, is not preserved, then the project serves no purpose … project managers direct the use of project resources, they should consider all aspects, both inside and outside the organisation, throughout the project's life cycle'* Interviewee D

With this in mind, SDG-4 relates to Quality Education. Ensuring that everyone has the right to learn, and has access to appropriate education, is a primary step in addressing, and unlocking, the other 16 SDGs. Education is important, particularly so in Pakistan where the school drop-out rate is high, and the levels of literacy in many areas are unacceptably low. From this chapter, it is apparent that there is a significant divide between public and private school systems in Pakistan.

> *'A substantial number of people [in Pakistan] who cannot afford private schools are effectively denied access to education'* Interviewee D

> *'No one should be left behind in Pakistan's quest for universal access to inclusive and equitable quality education and learning'* Interviewee B

Students at private schools operate within a set of strict educational policies, and often obtain good grades as a result. In contrast, the public school system is under-developed and lacks funding. There is no reward system to incentivise teaching staff to do the best they can for their students, and no monitoring system in place to identify and correct poor performance. As a result, students at public schools are often neglected, that then undermines their chances of being successful educationally, that in turn reduces their ability to contribute to society through work and public duty.

> *'10% of the estimated 127,000 government-run schools do not have a proper building, 33% do not have running water, and 59% do not have power'* Interviewee D

One of the roles undertaken by NGOs operating to support public schools, is to generate an uplift in educational standards. To support this, a wide variety of projects are required, including new infrastructure within which learning can occur, an increase in teacher capacity to reduce class sizes, new teacher training programmes so that those in post are better equipped to deliver high quality educational experiences, and the provision of career counselling for students to inspire them to learn to the best of their abilities, and to go forward into the community as productive members of society.

> *'[Education] allows people to get the knowledge, beliefs, and skills they need to participate in decisions about how we do things individually and collectively, both locally and worldwide'* Interviewee D

> *'When conducting educational projects, organisations take inspiration from the Agha Khan Foundation [which] has been conducting projects for more than forty years and has deep-rooted relationships with community members'* Interviewee C

In order that they can deliver such projects, the NGOs need to work both with Government and with Donors. Donors in this sense are individuals or organisations willing to fund projects, but each Donor will probably have certain priorities of their own, and therefore not all Donors will fund all types of project, nor will they work with all communities of people. Often Donors will identify the need for a project which they are interested in funding, and then seek an NGO to deliver the project. In other circumstances, Donors need to be found and matched to relevant projects for which the need has already been identified by a third party. In either case, the inappropriate matching of Donors to projects and communities can be a major cause of projects not being sustainable.

> *'Projects fail due to reasons such as poor need identification'* Interviewee C

> *'If the need assessment is not done properly initially, then the project is very much likely to face challenges and ultimately failure'* Interviewee E

Without appropriate Donor funding, no activities can be undertaken, and no outputs, outcomes and benefits will be delivered by the project. Even when a suitable Donor has agreed to fund a project, there can be project delays whilst the promised funding is released, and in some cases, especially ones in which timing is critical, such delays can mean that the project becomes irrelevant or outdated before it has even begun.

> *'Sometimes the Donors take more than the specified time to decide upon the funds' release, the delay of which causes the project to be irrelevant or outdated'* Interviewee A

> *'Time frame is very important in this aspect. Because the projects are time-bound, even a slight delay can either cause over-expenditure or sometimes unfulfilled goals'* Interviewee D

In other circumstances, projects may be delayed due to Government bureaucratic processes, and officials who may not fully support the project for a variety of reasons, including unrealistic

expectations regarding what is practical, and deliverable, given the limited available resources, or an unwillingness to issue the required 'No Objection Certificate'. Examples of resource limitations include insufficient infrastructure to accommodate the project, too little teaching capacity to deliver the project, not enough equipment available to support the project, and insufficient security to protect the project. Such delays are frustrating to both Donors and NGOs, and in some cases, the Donor may withdraw their financial support due to the delays, and in extreme cases they may even refuse to support future educational projects to avoid the repetition of a similar situation.

> *'The need[s] of society cannot be delayed, and the working style of a government is based upon delaying everything'* Interviewee A

> *'In Pakistan, the implementation of the SDGs is not as fast as it should have been'* Interviewee C

An educated community can make wise decisions, and can work together to mobilise combined effort, that in turn has the potential to achieve significant levels of change (the whole being greater than the sum of its parts). An example of this is when communities recognise that gender is not a barrier, and that all members of society can play an equal part is developing their community, so that as a result, available human resources are allocated in the most effective way possible.

> *'The project is sometimes over-resourced, [but] sometimes it is under-resourced which also contributes to the failure of the project'* Interviewee B

> *'I would say that poverty is the biggest challenge along with gender biases'* Interviewee E

A different example is the community that decides to create a central pot of money into which many members of the community contribute, and that can then be used as a contingency fund so that the people are self-sufficient in dealing with unexpected situations. Such a pot may even be used as local funding to micro-finance new ventures from which a range of products, services and employment may result that would not have otherwise existed.

> *'Community ownership, need identification, appropriate need, acceptance from the community are the main points to consider for a successful and sustainable project'* Interviewee A

> *'We can collaborate with the government of the local community, share our intended outcomes with them, and get their consent in running the project successfully as well as sustainably'* Interviewee E

Theme 4 – Project Success

The participants in this chapter recognised that, as with other forms of projects, project management for quality education projects is about organising and delivering an agreed set of activities within specified time and resource constraints. However, in the case of NGO delivered projects, the organisational aspect is not just about delivering project outputs, outcomes, and benefits, but is also about considering the needs and requirements of the key stakeholder groups, i.e., the mandate of the NGO involved, the priorities of the Donor funding the project, and the aspirations of the target community.

> *'A project in my opinion is a practical effort to translate a concept into reality through developing mental, physical, and financial resources in order to achieve defined results'* Interviewee D

> *'A project contains different activities and phases which are interlinked with each other, and the start of one stage [often] depends upon the successful completion of another stage'* Interviewee C

Ideally, successful project delivery is reported as starting with the clear identification of a community need, followed by the involvement of that community in the delivery of the project, and the management of their expectations in terms of what the project will deliver, and when this delivery will occur. The community involvement in the identification of the project need is pivotal as Donors can otherwise fund projects that are poorly conceived. An example of a poorly conceived project is one that seeks to install multimedia equipment in a community that suffers from a power shortage and so cannot support the use of the new facility.

> *'Starting from need identification to community involvement to stakeholders' perception and then the implementation stage'* Interviewee A

> *'One of the biggest problems that an NGO faces is the lack of clarity while designing the project'* Interviewee B

This high level of community involvement from the very start of the activity helps to ensure that the project being delivered is context-specific, i.e., that the project delivers what the community actually needs, as opposed to delivering a project based upon an external perspective of what the community is perceived to need. The feasibility of the project must therefore be carefully considered in each case to ensure that sufficient resources are allocated, and that these resources are utilised effectively. This form of community ownership plays a significant role in ensuring project success, and in enabling sustainability to be achieved.

> *'The unrealistic expectations of either Donors or the NGO also contribute to project failure'* Interviewee C

> *'The need identification, and monitoring, and evaluation stages are of prime importance in the project life cycle'* Interviewee D

During project delivery, and after project completion, some form of evaluation needs to be undertaken to confirm that the project has achieved the original outputs, outcomes, and benefits identified in the planning stage. Interviewees confirmed that this type of evaluation needs to consider both project activities and overall performance. For example, in an educational project, success might be about the quantity of students receiving help and support, and also, the quality of the intervention with each student in terms of increasing their ability to read and write. In this example, the number of students supported is quantitative in nature and can be measured directly.

> *'Our monitoring procedures informed us of … improvement in subject areas such as English, Urdu, and Mathematics'* Interviewee C

> *'A comparison is made [to see] how much difference our project has made in the lives of the communities that we work for'* Interviewee E

In comparison, the quality of support delivered has both a qualitative (subjective) element such as perceived levels of satisfaction, and also a more quantitative (objective) dimension that can be related to examination progress and baseline indicators. Baseline indicators might include population statistics, or perhaps the percentage of students who should be able to obtain an agreed standard in reading and writing by the end of a 12-month period.

'A report is generated to check whether the project has achieved its baseline targets or not' Interviewee E

'In our educational projects, we ensure sustainability by measuring the level of community involvement and engagement' Interviewee C

Furthermore, proxy indicators may also be used to measure the success of a project. A proxy indicator is one that is only indirectly related to the actual project, but in which changes can occur that are known to be connected in some way to the activities of the project. An example of a proxy indicator for an educational project raising awareness of waterborne diseases, would be the reduction in local hospital cases due to exposure to unclean water. Such a reduction would imply a behavioural change in the community, and unless there is another obvious potential cause for this different behaviour, it is reasonable to link it to the success of the project being delivered.

'We check the pre-impact and the post-impact of the activities' Interviewee E

'The organisation that I work for, works on the principle of results-based monitoring and provides results-based funding' Interviewee D

NGOs will often have internal specialist staff who will monitor project progress, and report on any activities that raise concerns. This internal monitoring may include a comparison to previous projects delivered. However, interviewees also reported that external monitoring of project progress is quite common. Such external monitoring is often undertaken by the Donors themselves and will include an assessment of the NGO's performance when delivering the project. In particular, Donors may also wish to visit the communities that the project is helping, to seek feedback from those involved, and to obtain a sense of community satisfaction with the project being delivered, and with the outputs, outcomes and benefits produced.

'Donors sometimes allow us to redesign the project, and sometimes they do not allow us to redesign the project, so it varies on terms and conditions provided by the Donors' Interviewee C

'The biggest goal for the Donor organisation is to achieve immediate results/outputs/targets. The immediate outputs are normally in tangible form, i.e., quantitative results which can be measured' Interviewee D

Once the project has been completed, in addition to there being a requirement to determine achievement of deliverables, and the measurement of project sustainability against pre-stated critical success factors, the impact upon the target community needs to be compared to population statistics, and baseline indicators, to identify any change that has occurred. Conversations held with members of the target community enables their satisfaction to be assessed. This assessment is critical to clearly understand if the identified need, for which the project was designed to address, has been fully met.

'Every stage is equally important in terms of measuring the success of the project' Interviewee A

'Any deviation from the set targets and indicators is a clear indication that the project is derailed, and the desired results cannot be obtained' Interviewee C

In addition, consideration needs to take place regarding the Donor who funded the project to understand how satisfied they are with the use of their money, and with their relationship with the NGO delivering the project. Any lessons relevant to the design, planning and implementation of the

project should be captured and stored within the organisational memory of the NGO. Such lessons can be used to guide future projects so that good practice can be retained, and failures can be avoided in the future. Of most importance to ensure the sustainability of the project being delivered, there must be a clear transfer of project ownership back to the target community so that they can manage, modify and evolve it moving forward. This transfer itself may require the provision of training and guidance that could in fact be a separate project in its own right, and so a new project is often spawned.

> *'You have to monitor the project activities regularly and then evaluate the performance'*
> Interviewee A

> *'The project objectives are best known by Results Chain, which mainly contains three things, 1) immediate results, 2) medium-term results, 3) Long term results. Sustainability is concerned with the medium-term and long-term results*'
> Interviewee D

Whilst the stakeholders interviewed each held a different function, and they were therefore able to provide their own unique perspective regarding the operational issues that ensure the success of educational projects being delivered in Pakistan to support SDG-4, there was surprising commonality across their responses. A summary of the salient points raised in the five interviews undertaken regarding the operationalisation of SDG-4 projects is provided in Table 3.

		Interviewees				
		A	B	C	D	E
Project Initiation	Defined Community Need	*	*	*	*	*
	NGO Mandate Aligns to Project	*	*	*	*	*
	Donor's Priorities Align to Project	*		*		*
	Shared Expectations for Stakeholders	*	*	*		*
Project Design	Community Engages in Project Design	*	*	*	*	*
	Donor Releases Funding Promptly	*		*		
	Government Issues No Objection Certificate Promptly	*		*	*	*
	Appropriate Resources Allocated	*	*	*	*	*
	Appropriate Logical (Log) Framework Developed	*	*	*	*	*
Project Implementation	Internal Monitoring by NGO of Deliverables	*	*	*	*	*
	External Monitoring by Donor of NGO Performance	*	*	*	*	*
	Community Expectations Managed by NGOs	*		*	*	*
	Donor Seeks Community Feedback	*	*	*	*	*
	Donor Benchmarks Community Satisfaction	*	*	*	*	*
Project Evaluation	Achievement of Deliverables Determined	*		*	*	*
	Target Community Compared to Indicators	*	*		*	*
	Community Satisfaction Determined	*	*	*	*	*
	Donor Satisfaction Determined	*			*	*
	Project Sustainability Measure	*	*	*	*	*
	Ownership Transferred to Community	*	*	*	*	*
	Lessons Learnt Captured	*		*	*	*

Table 3. Summary of the Stakeholder Experiences (Authors' Own Work)

Finally, the stakeholders interviewed recognised that when delivering educational projects, activities do not always go to plan, and that the needs of the community evolve during the lifetime of the project. Whilst this is similar to other types of projects, as a result, a higher level of flexibility is required to ensure that projects are delivered as effectively as possible, and lessons learnt from all

projects, both successful and unsuccessful, should be recorded, and can be used to influence future decision making.

> *'We do need a proper project management framework to design our activities and follow the procedures to ensure that the project completes on time and within budget'* ***Interviewee C***

> *'Our organisation believes in keep learning and keep going'* ***Interviewee E***

Conclusion

Education projects being delivered by regional, national, and international NGOs in Pakistan need to support the aspirations of SDG-4, and to work together towards reaching the 2030 targets defined previously in Table 1. To achieve this, they need to both deliver their intended and agreed outputs, outcomes, and benefits, and they also need to do this in a sustainable manner in which the target communities being supported can maintain the resulting project achievements moving forward without the need for additional support.

Interviews were undertaken with a range of key stakeholders representing Donors who fund the delivery of educational projects, NGOs that actually deliver them and the Government that supports and approves them. In each case, the most significant stakeholder is the target community group identified as having the need, and for which the project is deemed to be the appropriate solution. There is clearly an important necessity for projects to be properly conceived, and so they must correctly address a genuine and achievable community need, and this need requires careful definition. The nature of the project must align to both the priorities of the Donor offering to fund the project, and to the mandate of the NGO wishing to deliver the project. Furthermore, the Donor, NGO and Government expectations for the project must be shared and aligned. When the project is designed, the target community needs to be involved in this process to ensure that the resulting activities are considered by them to be 'fit for purpose'. This level of community involvement is critical for both the short-term, and long-term, sustainability of the project being delivered.

The Donor must release the agreed funds promptly to ensure that unnecessary project delays are avoided. Similarly, the Government must be prompt with the issuing of a 'No Obligation Certificate'. Appropriate levels of resourcing need to be ensured, and a suitably detailed Logical (Log) Framework developed to manage the project. Log Frameworks are step by step guides that consider how the project will be implemented, and these steps are agreed by all stakeholders at the beginning of the project. Alongside how the project will be implemented, the sustainability of the project must be carefully considered at this stage.

During project implementation, the NGO delivering the project will monitor the deliverables to ensure that the activities remain on course in accordance with the agreed Log Framework. However, external monitoring will also occur, and this will often be organised by the Donor to ensure that the funding they have provided is being used for the intended purposes.

Community expectations need to be managed to maintain a sense of realism regarding the scale, and the timing, of the project's activities. However, this engagement with the target community may also generate a new level of understanding concerning what the project needs to achieve, and how it needs to achieve it. In such cases, projects amendments may be required. Alongside this, the Donor should liaise with the target community to seek independent feedback, and any changes in their thoughts and views relating to the project, and its delivery, will need to be monitored and benchmarked over time.

At the end of the project, evaluation is required to fully understand what has been achieved. The project deliverables (outputs, outcomes, and benefits) are more easily determined, but a sense of how the target community has changed is also required. This aspect of the evaluation is more difficult to establish, but can be achieved through a comparison against regional and national baseline indicators for the population, and against benchmark data collected during the project's actual implementation.

Ultimately, for a project to be successful, both the Donor and the target community must be satisfied with the changes that have been delivered, but for the project to be sustainable, these changes must be maintainable over time without the need for new resources or community interventions. With this in mind, it is imperative that ownership of the project is handed to the community in such a way that they can manage it into the future to ensure that current, and future, generations can benefit from the activities being undertaken now.

Finally, the NGO that delivered the project needs to consider its own performance, and to review what worked well, and what was less successful in terms of project delivery. Such lessons need to be captured in a 'lessons log' that can be used to inform future projects undertaken by the NGO, thereby ensuring an improved level of sustainability is achieved in their own operations. Together, these findings have been aggregated and summarised (Fig.1) in the form of a framework.

The framework itself is based upon the widely used 4-D Project Management concept (Maylor 2010) of Define It (Project Initiation), Design It (Project Design, Do It (Project Implementation) and Deliver It (Project Evaluation). It is the intention of the authors that NGOs delivering educational projects that support SDG-4, can use this framework as a guide to help them to maximise the operational and sustainable success of the projects that they are undertaking.

Based upon the experience of those involved in the delivery of current educational projects in Pakistan, and drawing upon their many combined years of experience, this chapter has been able to reflect upon how the elements of the United Nations Sustainable Development Goal 4 (Quality Education) have been operationalised in practical situations to ensure that the projects being delivered are efficacious and sustainable.

The key elements required to ensure the successful delivery of sustainable educational projects have been identified, and from these findings, a framework has been proposed that can be used by other organisations to ensure that their own SDG projects are 'fit for purpose', and to help them to maximise the impact and sustainability of their activities. Only by working together will we address the global issues of our generation, and so safeguard the future for those who follow in our footsteps, and who otherwise will be born into a world unlike the one that we have known in our own lifetimes.

Project Initiation	Project Design	Project Implementation	Project Evaluation
Address defined community need NGO mandate aligns to project need Donor priorities align to project need NGO, Donor and Government must have shared, expectations for project	Community engaged in project design Prompt donor funding Government approval (no objection certificate) Appropriate resource allocation Develop appropriate logical (log) framework	NGO monitoring of performance against deliverables Donor monitoring against plans and commitments Manage community expectations Seek community feedback Benchmark community satisfaction	Achievement of deliverables Comparison against baseline indicators Community satisfaction Donor satisfaction Sustainability level Project ownership transferred to community Capture lessons learnt

Project Deliverables:
Outputs, outcomes, and benefits

Figure.1. Factors Influencing the Success and Sustainability of Educational Projects Delivered by NGOs in Pakistan (Authors' Own Work)

F. References

Atkinson R (1999) Project management: cost, time and quality, two best guesses and a phenomenon, it's time to accept other success criteria. *International Journal of Project Management*, 17(6):337-342. doi: https://doi.org/10.1016/S0263-7863(98)00069-6

Ayers J (2017) Sustainability an environmental science perspective. Taylor and Francis Group, Boca Raton, Florida.

Bennett N (2017) Managing successful projects with PRINCE2. 6th Edition. The Stationery Office, London.

Davies T (2014) NGOs: a new history of transnational civil society. Oxford University Press, Oxford.

Department of Economic and Social Affairs (2019) Population division 2 - world population prospects 2019. Vol I: Comprehensive Tables. United Nations, Geneva.

Hanushek E, Woessmann L, Fuest C (2015) The knowledge capital of nations: education and the economics of growth. MIT Press, Cambridge, Massachusetts.

Maylor H (2010) Project management. 4th Edition. Pearson, London.

Pakistan Ministry of Planning, Development & Reform (2018) Summary for the national economic council (NEC) - sustainable development goals (SDGs) national framework. Government of Pakistan, Islamabad.

Pakistan Bureau of Statistics (2019) Pakistan employment trends 2018. Government of Pakistan, Islamabad.

Pakistan Bureau of Statistics (2021) Pakistan social living standards measurement (PSLM) survey – district level 2019-20. Key Findings Report. Government of Pakistan, Islamabad.

Pearce J (1993) Understanding project management. Distance Learning Tutorial Manual. Ed. Polkinghorne M. Technology Awareness Series 4. University of Plymouth, Plymouth.

Pinto J (2019) Project management: achieving competitive advantage, 5th Edition. Pearson Education, London.

Polkinghorne M, Arnold A (2014). A six step guide to using recursive abstraction applied to the qualitative analysis of interview data. Bournemouth University, Poole.

Polkinghorne M, Taylor J (2019) Switching on the BBC: using recursive abstraction to undertake a narrative inquiry based investigation into the BBC's early strategic business and management issues. SAGE Case Studies in Business and Management Research Methods, Part 2:1-20.

Polkinghorne M, Taylor J (2021) Recursive abstraction method for analysing qualitative data. In: Buhalis, D., ed. Encyclopaedia of Tourism Management and Marketing. Advanced Online Publication. Edward Elgar Publishing, Cheltenham.

Serra C, Kunc M (2015) Benefits realisation management and its influence on project success and on the execution of business strategies. International Journal of Project Management, 33(3):337-342. doi: https://doi.org/10.1016/j.ijproman.2014.03.011

Simmons P (1998) Learning to live with NGOs. Foreign Policy, 112:82-96.

Stiglitz J, Sen A, Fitoussi J (2009) *Report by the commission on the measurement of economic performance and social progress*. Paris: Stiglitz Commission.

Teegen H, Doh J, Vachani S (2004) The importance of nongovernmental organizations (NGOs) in global governance and value creation: an international business research agenda. *Journal of International Business Studies*, 35(6):463-483. doi https://doi.org/10.1057/palgrave.jibs.8400112

Turner J, (2014) The handbook of project-based management, 5th Education. Gower, Farnham.

United Nations (2021a) About us. https://www.un.org/en/about-us Accessed 16 Dec 2021.

United Nations (2021b) Sustainable development goals: 4 quality education. https://www.un.org/sustainabledevelopment/education/ Accessed 16 Dec 2021].

United Nations Children's Emergency Fund (2021) Pakistan - education. https://www.unicef.org/pakistan/education Accessed 17 Dec 2021.

World Economic Forum (2016) The fourth industrial revolution: what it means, how to respond. https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/ Accessed 16 Dec 2021.