

## Introduction

In Nepal, the nutritional status of mothers and children under five is extremely poor (DHS report of Nepal, 2017). Preschool-aged children of disadvantaged households in Nepal have a higher prevalence rate of undernutrition. A major contributing reason is inadequate maternal knowledge, existing taboos and unscientific food recommendation practices (Acharya *et al.*, 2017; 2018). Besides these, the multiple opinions also found a major barrier for a food recommendation (Acharya, 2018). Long-term malnutrition has profound, chronic effects on children's health and life prospects (Acharya, 2018). This pilot study focuses on the impact of the regular rice pudding programme, the cost, and sustainability of the programme (Acharya *et al.*, 2018).

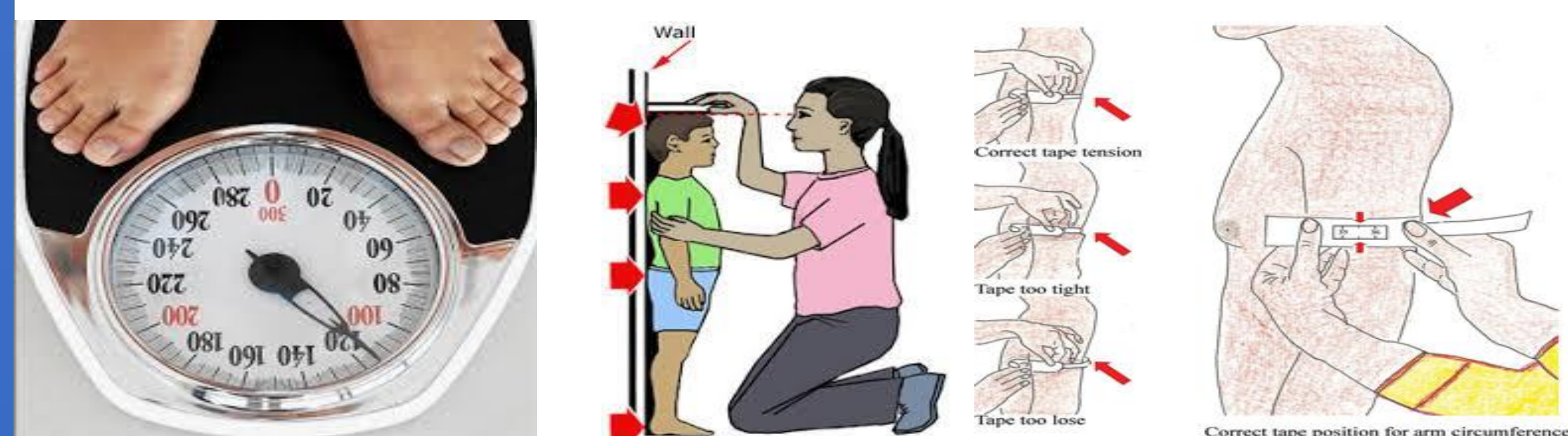
## Aim of the pilot study

- To evaluate the impact of the rice pudding feeding programme on child health.
- To calculate the costs of the preparation.
- To increase level of awareness and local involvement.

## Study method and population

- A cross-sectional pilot study in one locality in Nepal.
- Population: 42 children aged 2-5 yrs.
- Using before and after measurements of weight, height, MUAC (middle-upper arm circumference).

## Data collection instruments & form



### Data collection form

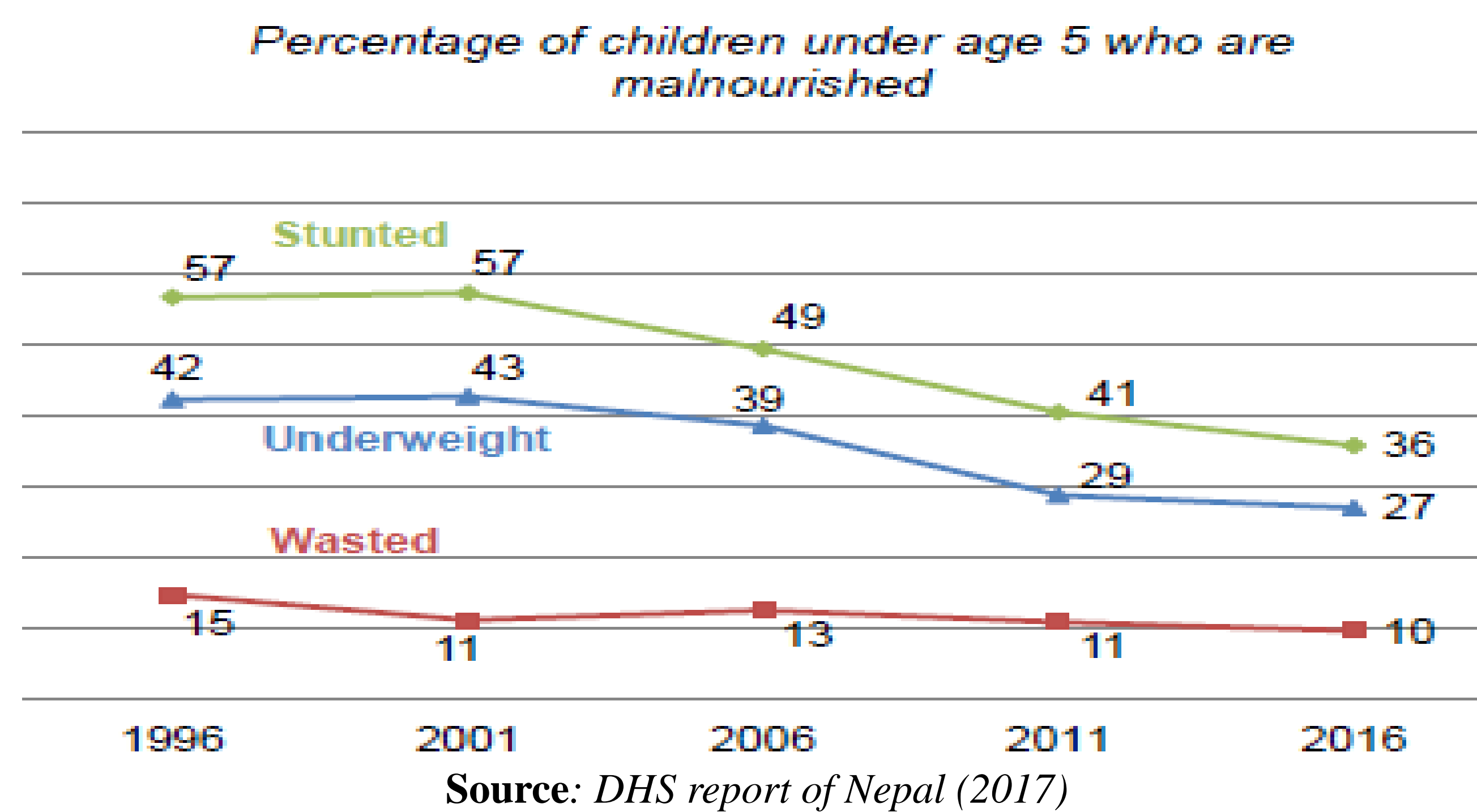
S. No.	Name of the child	Sex (M/F)	Age (in months)	Initial data record			Final data record		
				Weight (Kg)	Height (Cm)	MUAC (Cm)	Weight (Kg)	Height (Cm)	MUAC (Cm)

## Major source of funding

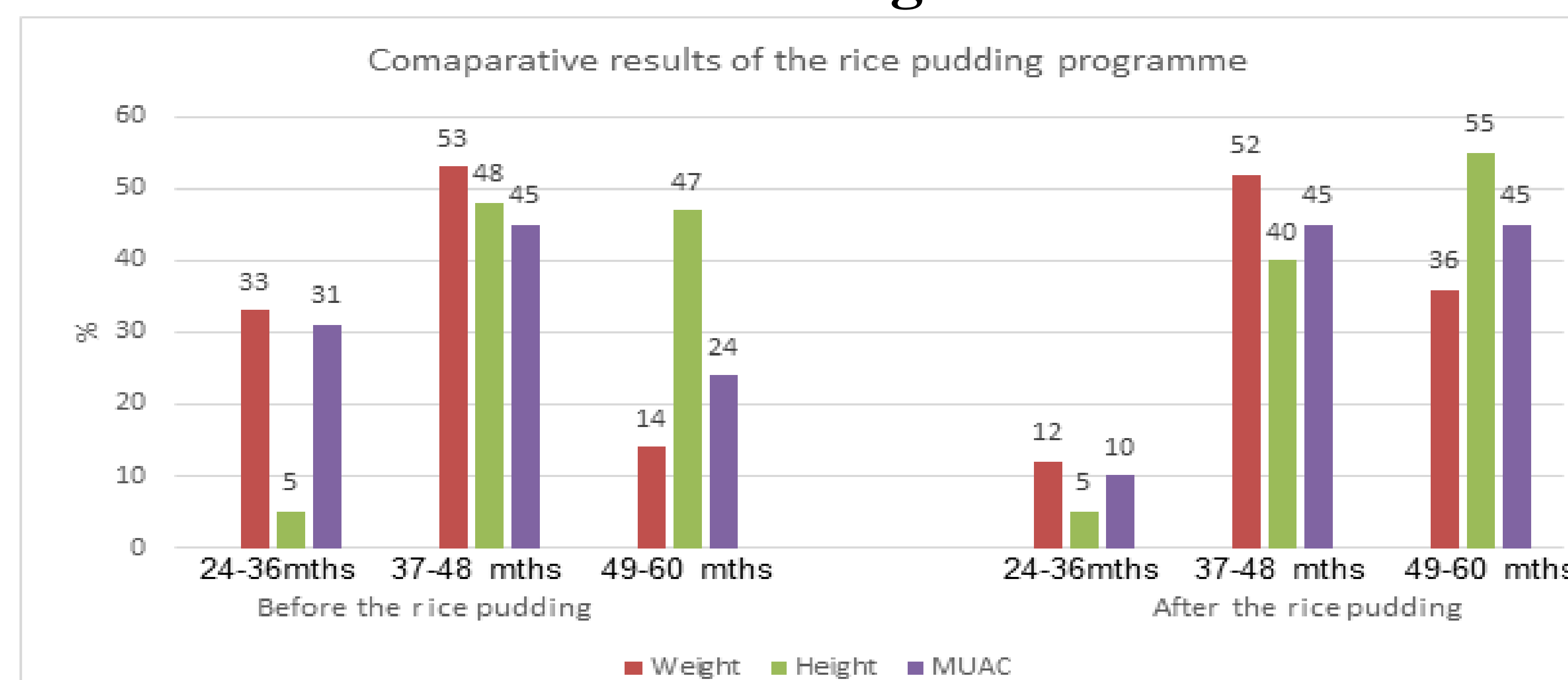


Researcher had picked up coins and notes (Geoghegan, 2008) from the road while going to his university and back to the home. He had conducted the pilot study in Nepal in collaboration with Child Nepal. In 2.5 years, he found nearly £450.00.

## Trends in children's nutritional status



## Findings



## Distribution of material and the unit costs

Particulars	Unit	Cost (NRs)	Total (USD)
Clarified butter	500ml	250	2.39
Raisins	200g	50	0.48
Sugar	1kg	80	0.76
Rice	1kg	100	0.96
Coconut	250g	25	0.24
Cashew-nut	200g	500	4.79
Cinnamon	50g	15	0.14
Milk	10 L	400	3.83
Miscellaneous	Fuel & labour charges	80	0.77
Total expenditure		1500	14.36

## Programme costs

Cost of rice pudding/child/day	USD 0.34 (NRs 35.51)
Daily cost for 42 children	USD 14.36 (NRs 1500)
Total cost for 42 children for 56 days feeding (@1USD=104.44 on 20 Dec, 2015)	USD 775.56 (NRs 81000)

## Source of funding

Source of funding	Total (USD)
Contribution by the researcher	459.59
Contribution by the local people (Mothers' group, Jugal CDC)	315.97
<b>Total</b>	<b>775.56</b>

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## Cost of the school snacks: worldwide

Source: Curtis *et al.*, (2005)

Scotland	USD 2.94/child/day
France	USD 6.43-8.27/child/day
Spain	USD 5.98/child/day
Sweden	USD 2.66/child/day
USA	USD 2.0/child/day
Australia	USD 2.32-3.09/child/day
<b>Jugal CDC study (Nepal)</b>	<b>USD 0.34/child/day</b>

## Conclusions & recommendations

### Conclusions

- Significantly increased child's weight and MUAC after rice pudding.
- Changed food behaviours of the children of the child development centre.
- Increased the level of awareness amongst the rural community.
- Increased child enrolment in the child development centre.
- Increased the knowledge of mothers about healthy diet.
- Effects on the cost of the programme by local support which lead to sustain the programme.

### Recommendations

- Similar programme should be conducted with a larger population for at least for six months.

## References

- Acharya J, van Teijlingen, E., Ellahi, B., Pariyar, B., Subedi, K., & Dangal, M. Impact of Rice Pudding on Preschool-Aged Children's Health: An Overview of a Pilot Study. *Biomed J Sci & Tech Res* 6(3)-2018. BJSTR. MS.ID.001346.
- Acharya, J., 2018. Available at: <http://eprints.bournemouth.ac.uk/30572/>.
- Acharya, J., van Teijlingen, E., Ellahi, B., Pariyar, B., Subedi, K., & Dangal, M. 2017. Available at: <http://bnac.ac.uk/wp-content/uploads/2017/03/BNAC-NSD-2017-Abstracts.pdf>.
- Geoghegan, T., 2008. *See a penny, pick it up*. News.bbc.co.uk. Available at: <http://news.bbc.co.uk/1/hi/magazine/7622792.stm> [Accessed 8 Nov. 2018].

## Photos of the activities and study site



## Acknowledgements

- Sight and Life*, Switzerland.
- District Public Health Office, Sindhupalchok, Nepal.
- District Education Office, Sindhupalchok, Nepal.
- Jugal Child Development Center (JCDC), Sindhupalchok, Nepal.
- Jugal CDC Mother Group, Sindhupalchok, Nepal.