

MQSUN Inception Report and Design Document

Impact Evaluation of the DFID Programme to Accelerate Improved Nutrition for the Extreme Poor in Bangladesh, Phase II

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Report from the Maximising the Quality of Scaling up Nutrition Programmes (MQSUN)

About MQSUN

MQSUN aims to provide the Department for International Development (DFID) with technical services to improve the quality of nutrition-specific and nutrition-sensitive programmes. The project is resourced by a consortium of eight leading non-state organisations working on nutrition. The consortium is led by PATH.

The group is committed to:

- Expanding the evidence base on the causes of undernutrition
- Enhancing skills and capacity to support scaling up of nutrition-specific and nutrition-sensitive programmes
- Providing the best guidance available to support programme design, implementation, monitoring and evaluation
- Increasing innovation in nutrition programmes
- Knowledge-sharing to ensure lessons are learnt across DFID and beyond.

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About this publication

This report was produced by The Institute of Development Studies (IDS), International Food Policy Research Institute (IFPRI), BRAC Development Institute, Center for Natural Resource Studies (CNRS) and ITAD. Edited by Nick Nisbett, Richard Longhurst and Jessica Gordon. Authors include Inka Barnett, Jessica Gordon, John Hoddinott, Anisul Islam, Ferdous Jahan, Naureen Karachiwalla, Richard Longhurst, Firdousi Naher, Nick Nisbett, Shalini Roy, Valsa Shah, Philippa Tadele and Jean-Pierre Tranchant. The report presents the objectives, design, expected outputs and governance of the Department for International Development (DFID)-funded MQSUN project, entitled 'Impact Evaluation of the DFID Programme to Accelerate Improved Nutrition for the Extreme Poor in Bangladesh'.

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Executive Summary

ES 1.1 Objectives

The DFID Programme to Accelerate Improved Nutrition for the Extreme Poor in Bangladesh aims to improve nutrition outcomes for children, mothers and adolescent girls by integrating the delivery of a number of nutrition-specific (or direct) interventions with the livelihood support provided to extremely poor people by three existing programmes in Bangladesh. These three programmes are the Chars Livelihoods Programme (CLP), the Economic Empowerment of the Poorest Programme (EEP) and the Urban Partnership for Poverty Reduction Programme (UPPR).

DFID has commissioned an evaluation of the programmes' impacts and the Terms of Reference (TOR) for a mixed-methods impact evaluation (IE) of the programmes (dated 10 June 2012) are provided as Annex 1. The purpose of this Inception Report is to map progress to-date in meeting the TOR and in particular, to convey details of the agreed design, objectives, expected outputs and governance of the evaluation.

The objectives of the evaluation have been modified substantially from the original TOR over the course of the design phase in consultation with DFID to (a) ensure a robust and cost effective design for the available resources and (b) to reflect the actual programme implementation as currently planned. An earlier feasibility study was carried out in 2012 to contribute to the design reported here.

The current objectives of the evaluation are:

1. To assess the impact of the combination of direct (specific) and indirect (livelihoods) nutrition interventions in three different DFID programmes on the nutritional status of children under two; and to compare this with the impact of the existing livelihoods interventions;
2. To explain this impact, drawing on wider qualitative and quantitative evidence describing programme specific and wider societal/contextual processes with the potential to impact on programme outcomes; and
3. To assess the cost effectiveness (value for money analysis) of integrating direct and indirect interventions in the three livelihood programmes and to specify the best delivery model for doing so.

In terms of the target audiences for the evaluation, the primary users are DFID, its programme implementing partners at all levels and the Government of Bangladesh. However, DFID expects the findings to be published and disseminated more widely, to benefit secondary users including other stakeholders in the Bangladesh nutrition and development community. Moreover, since the evaluation expects to generate evidence that has wider global significance, other secondary users include global policymakers, practitioners and researchers concerned with nutrition programming.

ES 1.2 Background on programmes to be evaluated

The Chars Livelihood Programme (CLP) aims to improve the livelihoods of 1 million extremely poor and vulnerable dwellers in the remote *char* islands of north-west Bangladesh.

The Economic Empowerment of the Poorest Programme (EEP) supports 1 million people in rural and urban areas to lift themselves out of extreme poverty with livelihoods interventions, covering a range of geographical areas. This evaluation will focus on one of the sub-projects of EEP – the Economic and Social Empowerment of Extreme Poor (ESEP) Project, being implemented by Concern Worldwide in three districts: Sunamgonj, Habiganj and Kishoregonj; targeting 22,500 extremely poor households.

The Urban Partnership for Poverty Reduction Programme (UPPR) aims to improve livelihoods of 3 million poor and extremely poor people, living in urban areas, covering ten corporations and 14 municipalities.

The three programmes vary in their approach to enhancing the livelihoods of beneficiary communities, households and individuals. The nutrition package is expected to be implemented more or less uniformly across the three programmes. Both packages are summarised for the different programmes in Table ES_1.1.

Table ES 1.1 Summary of programme interventions and beneficiaries

Programme	Livelihoods Interventions		Direct Nutrition Interventions	
	Intervention and mode of delivery	Existing beneficiaries and selection criteria	Intervention; targets and mode of delivery	Beneficiary HH
CLP	Assets plus stipends, livelihood training, water, sanitation, social development, plinths, cash for work, savings and loans, access to livestock services providers, health services, market development activities.	67,000 extreme poor households and their communities. HH must: <ul style="list-style-type: none"> – Have been living for at least 6 months on island char – Have no ownership or access to land – Have productive assets worth not more than Tk5,000 – Not own more than two goats/sheep or 10 fowl or one shared cow – Not be receiving cash/asset grants from another programme – Have no regular source of income – Be willing to attend weekly group meetings for 18 months 	<p>Nutrition support (behavioural change):</p> <ul style="list-style-type: none"> – Awareness and counselling on IYCF De-worming for pregnant women after first trimester and for the under fives – Iron and folic acid for pregnant and lactating women and for adolescent girls – Micronutrient supplementation (MNS) for children under two – Establishing nutrition and hygiene groups for adolescents – Training in hygiene and environmental health. 	66,770 HHS – nearly all livelihood households.
EEP Concern	<p>Input support for livelihoods: cropping; livestock; fishing; bamboo working; small businesses; tailoring, etc.</p> <p>Capacity building: mobilise self-help groups; facilitate CBOs; skills transfer.</p> <p>Innovation support; market linkage and access to</p>	<p>22,500 extreme poor HH and their communities. HH must have:</p> <ul style="list-style-type: none"> – <i>Per capita</i> income <BDT21/day – No access to microfinance – Homestead land: 3 decimal or less; no cultivable land. <p>Supp. criteria include destitution; food insecurity (≤ 2 meals/day); headed by widowed/divorced/abandoned/disabled; ethnic minorities; vulnerability to flood/wave.</p>	<ul style="list-style-type: none"> – Micronutrient supplementation (MNS) for children under two – Establishing nutrition and hygiene groups for adolescents – Training in hygiene and environmental health. 	All livelihoods beneficiary households.

	value chains.			
UPPR	Savings and credit, business start-up; settlement improvement funds, social development and protection.	800,000 poor and extremely poor households in urban slums/informal settlements.		Sub-selection of poorest livelihoods beneficiary households.

The expected impacts on beneficiary households' nutritional status include a 3 per cent reduction in stunting and wasting amongst children under five; a 15 per cent reduction in anaemia in this target group plus adolescent girls; and a 5 per cent reduction in anaemia amongst pregnant and breastfeeding mothers.

ES 1.3 Key questions, evaluation design and components

The primary questions proposed in the original TOR for the evaluation (Annex 1) have been modified during the feasibility study and in discussion with DFID and the programme implementing partners (hereafter 'programme partners') to focus on anthropometric outcomes for children under two. More proximate indicators will also be considered (including, e.g. service uptake, improvements in household assets, infant and young child feeding practices) as impacts by the evaluation, but other final outcomes to be measured as specified in the original TOR (including, e.g. nutritional status of adolescent girls, pregnant and breastfeeding women) were dropped at the feasibility stage due to cost considerations, along with the inclusion of a quantitative midline survey.¹

The design specified here combines a number of different analytical strands and both quantitative and mixed methods components within a strong theory-based design (see Section 1.3, main report). Table ES 1.2 maps the final three main objectives of the evaluation to the primary research questions and then to the evaluation methods to be employed within each objective. Each objective maps to a specific evaluation component:

- The *Quantitative Impact component* is designed to meet the first objective in providing quantitative estimates of outcomes and impacts of both direct and indirect nutrition interventions that support the testing of the hypotheses, as well as providing a rigorous assessment of the programme assumptions between outcomes and impacts;
- The *Exploratory/Explanatory component* is designed to meet the second objective in collecting a range of qualitative and quantitative data to explore programme-specific and wider societal and contextual processes and test programme assumptions, which might explain any detected outcomes (or lack thereof);
- The *Cost Effectiveness component* is designed to meet the third objective in providing an estimate of the costs of different interventions in terms of their impact on child under nutrition; these estimates can be compared globally.

Each component will make a unique contribution to the causal inference analysis of this evaluation, linking the interventions with the nutritional outcomes within the theory-based framework. The report identifies a number of ways in which the sequencing, management and oversight of the evaluation will

¹ A separate project document is available detailing these changes.

ensure adequate integration of these components at key stages of the evaluation, including: preparatory work, instrument design, fieldwork and analysis and reporting. In particular:

- The initial quantitative baseline survey will inform the sample selection for the *programme focus clusters and the community focus clusters* (see Section 5, main report). This will allow for issues highlighted in the baseline survey (e.g. on specific-contextual factors) to be followed up by more in-depth qualitative explorations;
- The findings from the ongoing exploratory/explanatory component will feed into the development of the quantitative endline survey to allow follow-up at a more representative and generalisable scale;
- At the final analysis stage, the different methodologies will be combined and merged using an iterative process whereby, for example, contextual factors and insights into causal mechanisms from the exploratory/explanatory component will be integrated with the quantitative estimates on impact;
- The nature of the qualitative investigations in the exploratory/explanatory component might also offer new avenues for the analysis of the quantitative survey and suggest additional strategies for the stratification and disaggregation of data.

Table ES 1.2 Evaluation objectives mapped to questions, components and methods

Evaluation Component	Evaluation Objective	Research Questions	Metrics /Type of Data or Explanation Required	Methods and Source of Data
Quantitative impact	To assess the impact of the combination of direct (specific) and indirect (livelihoods) nutrition interventions in three different DFID programmes on nutritional status of children under two. To compare this with the impact of the existing livelihoods interventions.	<p>What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions (denoting this scenario 'L+N'), relative to receiving a livelihoods intervention only (denoting this scenario 'L only')?</p> <p>What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions ('L+N'), relative to receiving no intervention (denoting this scenario 'C' for comparison)?</p> <p>What is the impact on nutrition outcomes of receiving a livelihoods intervention only ('L only'), relative to</p>	Quantitative estimates of programmes causal impacts on beneficiary outcomes compared with counterfactual of no programme intervention.	<p>Baseline and endline surveys of HHS as repeated cross-section. HHS randomised to receive nutrition component; outcomes analysed via difference in difference approach.</p> <p>Comparison HH selected via quasi-experimental methods (RDD or matching).</p>

		receiving no intervention ('C')?		
Exploratory and explanatory	To explain (any quantifiable) impact, drawing on wider qualitative and quantitative evidence describing programme-specific and wider societal/contextual processes with the potential to impact on programme outcomes.	<p>What are the critical processes and mechanisms in implementation of the programme strategy? Were the processes implemented as planned and to what extent has this affected achievement of outputs?</p> <p>How does the quality of programme delivery relate to more proximate outcomes (care, feeding, livelihoods, etc.) identified in the quantitative survey and how does this explain the impacts detected (or not detected)?</p> <p>What wider interactions between societal, community, family and programme structures might influence intervention uptake and behavioural change?</p> <p>What are the contextual factors that can enhance or hinder the programme uptake? This will include an in-depth examination and testing of the programme assumptions and causal chain processes (described in the ToC) within the context of the study communities.</p>	<p>Qualitative and quantitative data on critical components in programme planning, resourcing (including staffing) and delivery; beneficiary targeting and access.</p> <p>Quantitative data on more intermediate outcomes (e.g. assets, access to services, HH food security; infant and young child feeding practices).</p> <p>Qualitative data on the social networks, relationships, interactions and communication structures within the community.</p> <p>Qualitative data on: – Personal views, perceptions and judgements on the interventions; - Nutritional behaviour patterns and resources; – Context of programmes and interventions and how this can influence interventions; – Family structures and household decision-making processes in relation to the interventions; – Contextual factors and wider community</p>	<p>Process Mapping Process Diary.</p> <p>Quantitative survey data.</p> <p>Existing programme MIS/M&E data including reporting against logframe.</p> <p>Social mapping In-depth interviews Focus group Discussion Participatory Observation Life history</p> <p>As above</p>

			changes and the effect of the interventions on community structures; – Barriers and facilitators of intervention uptake.	
Cost Effectiveness	To assess the cost effectiveness (value for money analysis) of integrating direct and indirect interventions in the three livelihood programmes and to specify the best model for doing so.	<p>What is the unit cost of changes to child stunting for each of the three programmes for both L only, and L+N? Which nutrition intervention is the most cost effective, and why?</p> <p>How cost effective are these programmes compared with similar programmes in other countries and contexts?</p> <p>What are the main cost categories, and how do they compare to external benchmarks? If possible to assess, what are the main cost drivers that justify relatively high costs?</p> <p>What are the total costs incurred by society and opportunity costs incurred to participate in the programme?</p>	<p>Estimates of changes in child stunting: % change in HAZ (height-for-age Z score):</p> <ol style="list-style-type: none"> 1. How much did it cost to increase HAZ by x% using 'L' only? 2. How much did it cost to increase HAZ by x% using 'L+N'? <p>Conversion of HAZ scores into cost per DALY (Disability Adjusted Life Years) for each intervention. If data permits the evaluation will also attempt to convert Z scores to DALYs using standardised assumptions from WHO and region-specific literature in a model built up from first principles.</p> <p>Actual (not projected) monetary value of direct costs (project inputs, equipment, services, HR, etc.) and indirect costs (office services, security, administrative staff, etc.) per year for each programme (see Annex 5).</p> <p>Documentation of total resource costs incurred in delivery of intervention (used in unit cost analysis) and extra opportunity costs incurred and reported by beneficiaries (estimated by local</p>	<p>Cost Effectiveness Analysis of detailed financial data on programme expenditure and end-user cost data from quantitative survey.</p> <p>Quantitative survey baseline and endline data; Standardised data assumptions and threshold indicators on cost effective DALYs from WHO; region-specific literature.</p> <p>Disaggregated financial data from all programmes (see Annex 5).</p> <p>External benchmarks from similar programmes; regional literature on cost drivers</p> <p>Opportunity costs tracked in quantitative survey.</p>

		<p>What are the unquantified benefits, direct and indirect of the nutrition interventions?</p>	<p>wages in community if relevant to foregone benefits).</p> <p>Qualitative and process data on intervention efficiency; beneficiary perceptions including direct/indirect benefits and costs of intervention; barriers to accessing intervention, etc.</p>	<p>Qualitative and process-related investigations as part of Exploratory/ Explanatory component (in-depth interviews, focus group discussions, detailed life histories, participatory observation, process map and process diary).</p>
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ES 1.4 Component design summary

The key methodological approach of each component is summarised here:

The ***quantitative impact component*** will provide quantitative estimates of outcomes and impacts of both direct and indirect interventions that support the testing of the primary questions on programme impact, as well as feed into a rigorous assessment of programme assumptions between outcomes and impacts. The design of the evaluation will rely on a repeated cross-section of each of three groups: those receiving livelihoods plus nutrition support ('L+N'), livelihoods only ('L only') and a comparison group ('C') not receiving the interventions. A representative sample of children under two years of age will be drawn from the target population at baseline, and a new representative sample re-drawn from the same target population at endline. The relative impacts of the components of 'L+N' versus 'L only' will be estimated using the statistical 'double-difference' approach.

For each key nutrition outcome, the difference at baseline between 'L+N' and 'L only' groups will be subtracted from the difference at endline between the two groups (see Section 4.1, main report). Given that the livelihoods interventions began long before the inception of this evaluation, the construction of the comparison groups has required some careful thought. We will construct comparison groups formed of a group of non-beneficiary households that looked very similar to eventual-beneficiary households before any interventions were in place. These comparison groups will be constructed by assessing similarity in observable pre-intervention characteristics, collected during the baseline survey (see Section 4.2, main report).

The baseline survey instrument will elicit information on household characteristics, knowledge, attitudes and practice, measures of health status and direct measures of anthropometry. The endline survey will be fielded 24 months after the baseline and will include the modules from the baseline survey, such that changes can be detected. The endline survey will additionally include questions on beneficiary households' programme experience, as well as quantitative exploration of issues drawn from the qualitative investigation. Variations in data outcomes according to the season when the data are collected will be taken into account.

The ***exploratory/explanatory component*** will explore underlying causal processes and mechanisms operating at a community and a programme level; providing detailed contextual analysis that will help to explain how and why the combination of indirect and direct nutrition interventions may have had an impact on child nutrition outcomes if such an impact is detected, or explain the reasons why not. While this component cannot make definite claims about causality (this will be addressed by the quantitative impact component), it will allow for an in-depth exploration of the causal pathways along the programme theory of change (see Section 3.2, main report) and test the programme assumptions therein. A range of different methodological approaches (including further analysis of survey data, programme MIS data and logframe indicators, in-depth interviews, focus groups, observations and participatory mapping) carried out in both randomly and purposively sampled study locations, with a wide range of beneficiaries and programme staff, will provide a comprehensive insight into the operation of programme and community processes within each intervention. These case studies will also complement, extend and discuss the findings from the quantitative impact and cost effectiveness components.

The ***cost effectiveness component*** will allow an estimate of the costs of different interventions (internal efficiency) in terms of their impact on child undernutrition; these estimates can be compared globally, usually defined as 'cost per unit' measure of outcome. The cost per unit change in Z scores for each of the three intervention types will be estimated, so it will be possible to conclude which is the most cost effective. For external comparisons and further benchmarking, Z scores will be converted to DALYs (data permitting). This will allow a cost per DALY to be estimated for each intervention type and allow benchmarking with similar interventions in the region and globally.

This component will therefore address two central research questions, regarding (a) the greatest change in wellbeing of the beneficiaries from the intervention and (b) the most cost effective means of delivery. The cost effectiveness analysis will draw on programme costs and an analysis of evaluation findings.

ES 1.5 Governance; internal and external communications and research uptake

The evaluation is funded by DFID under the structure of its framework arrangement ‘Maximising the Quality of Scaling up Nutrition (MQSUN) that was signed with an international consortium led by PATH. The overall management and coordination and quality assurance of the evaluation will be the responsibility of IDS, with responsibilities for specific sub-components of the evaluation divided between IDS, IFPRI and ITAD and their in-country partners in Bangladesh, BRAC Development Institute, DATA and CNRS. IDS has appointed a part-time Programme Manager responsible for leading on the general management and coordination of the evaluation programme activities, ensuring effective internal and external communications, monitoring risks and reporting to PATH on behalf of all partners on the evaluation’s progress on a monthly basis, who in turn report to DFID and ensure final quality control.

In addition to the management structure described here, two formal governance structures will be utilised to uphold the overall quality and independence of the evaluation – the DFID Management Group and an independent external Specialist Evaluation and Quality Assurance Service (SEQAS) contracted by DFID to provide specialist technical advice and recommendations on the evaluation design and quality.

The primary users of the evaluation are DFID, its programme implementing partners at all levels, and the Government of Bangladesh. DFID’s implementing partners have actively participated in the design of the evaluation, most notably through discussions at the Inception Workshop held in April 2013. The evaluation will also provide valuable contributions to the wider knowledge base about improving nutritional outcomes in Bangladesh globally, and potentially shape the design of future policies and interventions implemented in the intervention sites and elsewhere. DFID therefore expects the findings to be published and disseminated more widely. Secondary users include other stakeholders in the Bangladesh nutrition and development community and, since the evaluation expects to generate evidence that has wider global significance, to global policymakers, practitioners and researchers concerned with nutrition programming.

As a guiding principle, the evaluation will be conducted in a professional and ethical manner, with strict respect for a number of ethical codes and principles of integrity, honesty, confidentiality, voluntary participation, impartiality and the avoidance of personal risk. Adherence to these guiding principles will be overseen by IDS and IFPRI in collaboration with IDS’ Research Ethics Committee and IFPRI’s Internal Review Board.

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List of Abbreviations

BDHS	Bangladesh Demographic and Health Survey
BIHS	Bangladesh Integrated Household Survey
BRAC	Bangladesh Rural Advancement Committee (formerly)
CDC	Community Development Committees
C	Comparison or Control Group – no intervention
CBA	Cost Benefit Analysis
CEA	Cost Effectiveness Analysis
CI	Confidence Interval
CLP	Chars Livelihoods Programme
CNRS	Center for Natural Resource Studies
DATA	Data Analysis and Technical Assistance Limited
DALY	Disability Adjusted Life Year
DFID	Department for International Development (UK)
EEP	Economic Empowerment of the Poorest Programme (<i>Shiree</i>)
GDP	Gross Domestic Product
GNI	Gross national income
HAZ	Height-for-Age Z score
ICDDR, B	International Centre for Diarrhoeal Disease Research, Bangladesh
IDS	Institute of Development Studies
IE	Impact Evaluation
IFA	Iron and Folic Acid
IFPRI	International Food Policy Research Institute
ITAD	Information Technology for Agricultural Development (formerly)
IYCF	Infant and Young Child Feeding
KII	Key Informant Interviews
L only	Livelihoods Interventions
L+N	Livelihoods and Direct Nutrition Interventions
M&E	Monitoring and Evaluation

MIS	Management Information System
MLGRDC	Ministry of Local Government, Rural Development and Co-operatives
MNS	Micro Nutrient Supplementation
MQSUN	Maximising the Quality of Scaling up Nutrition
MUAC	Middle Upper Arm Circumference
PE	Process Evaluation
RDD	Regression Discontinuity Design
SD	Standard Deviation
ToC	Theory of Change
TOR	Terms of Reference
UNDP	UN Development Programme
UNICEF	UN Children's Emergency Fund
UPPR	Urban Projects for Poverty Reduction Programme
VfM	Value for Money
WHO	World Health Organization

1 Introduction and Evaluation Objectives

Undernutrition is central to many health and development issues in Bangladesh, with related poor growth, susceptibility to infections, impaired cognitive development and low birth weight. Globally, more than a third of all deaths of under-five children and one-fifth of maternal deaths are associated with undernutrition (Black *et al.* 2013). According to the 2011 Demographic and Health Survey (DHS 2013), in Bangladesh, 41.3 per cent of under-fives are stunted, 36.4 per cent are underweight, 15.6 per cent are wasted, and one-fifth are born with low birth weight. More than 50 per cent of under-fives are anaemic (DHS, 2013). Sub-optimal Infant and Young Child Feeding (IYCF) practices are one of the key drivers for poor nutrition. Fewer than half (47 per cent) of all new-borns receive breast milk within one hour of birth and the same percentage of infants under six months are exclusively breastfed.

The situation is worse in extremely poor households. The extreme poor benefit least from economic growth and job opportunities due to lack of capacity. This is aggravated by Bangladesh's vulnerability to shocks – including flooding, cyclones and droughts, as well as economic shocks. Extreme poverty is concentrated in remote and climate-vulnerable parts of the country, including flood prone river islands (*chars*) and basins (*haors*); cyclone prone coastal regions; *monga* (seasonal hunger) affected areas and the Chittagong Hill Tracts; as well as urban slums. A survey of extreme poor households conducted by DFID's Economic Empowerment of the Poorest programme (EEP) found that:

- 52.2 per cent of children under the age of five are stunted;
- 47.1 per cent of children under the age of five are underweight and nearly 22.5 per cent are acutely malnourished;
- 50.5 per cent of women are chronically undernourished;
- 54 per cent of female and 32 per cent of male household heads are anaemic.

To address these concerns, DFID has recently approved a programme to integrate nutrition-specific (or direct) interventions that include household level counselling (on exclusive breastfeeding, complementary feeding and hygiene), micronutrient supplementation and regular de-worming treatment with three existing programmes, which provide livelihood support to extremely poor people. These three programmes are the (1) Chars Livelihoods Programme (CLP); (2) Challenge Fund through the Economic Empowerment of the Poorest Programme (EEP) and (3) the Urban Partnership for Poverty Reduction (UPPR). The rationale for integrating nutrition-specific interventions in existing programmes is to (a) address both immediate and underlying causes of under nutrition and (b) accelerate improved nutrition in extreme poor households and draw lessons on what works.

There is a gap in global knowledge on the appropriate integration of nutrition-specific and nutrition-sensitive measures; but a strong recognition that undernutrition needs to be tackled on both fronts in order to be addressed most effectively.² To contribute to this global evidence gap and to contribute to future programme design (by DFID, the government of Bangladesh and partners) DFID has commissioned an evaluation of the programme's impacts. The original TOR for a mixed-methods impact evaluation (IE) of the programme (dated 10 June 2012) is provided as Annex 1. The purpose of this Inception Report is to map progress to-date in meeting the TOR and in particular, to convey details of the agreed design, objectives, expected outputs and governance of the evaluation.

² For the terminology employed here and current evidence on interventions, see Black *et al.* (2013), Bhutta *et al.* (2013) and Ruel & Alderman (2013). Bhutta *et al.* (2013) estimate that nutrition-specific interventions have the potential to save around 15 per cent of child deaths or reduce the number of stunted children under five years of age, by 20 per cent. This implies that a substantial contribution (yet to be quantified) is needed from a number of wider 'indirect' programmes and interventions that relate to the food, health and care determinants of nutrition, which may be addressed in particular through nutrition-sensitive agriculture, poverty alleviation, wider health systems, water and sanitation and women's empowerment (Ruel & Alderman 2013).

The objectives of the evaluation have been modified from the original TOR over the course of the design phase in consultation with DFID, to ensure a robust and cost effective design for the available resources and reflecting the actual intervention design as currently planned by the three programmes. An earlier feasibility study was carried out to contribute to the design reported here and led to substantial modifications of the objectives, central questions and design.

The current objectives of the evaluation are:

1. To assess the impact of the combination of direct (specific) and indirect (livelihoods) nutrition interventions in three different DFID programmes on nutritional status of children under two years. To compare this with the impact of the existing livelihoods interventions;
2. To explain this impact, drawing on wider qualitative and quantitative evidence describing programme-specific and wider societal/contextual processes with the potential to impact on programme outcomes; and
3. To assess the cost effectiveness (value for money analysis) of integrating direct and indirect interventions in the three livelihood programmes and to specify the best delivery model for doing so.

2 Background

2.1 Background on programmes and interventions

The three existing programmes and their livelihood interventions are described in brief below.

The **CLP** (Chars Livelihood Programme) aims to improve the livelihoods and food security of 1 million extremely poor and vulnerable island *char* dwellers, covering the remote *char* islands of the north-western districts of Bangladesh (see map, Annex 3). The current phase, which began in 2010, is due to end in 2016 (an earlier phase ran 2004–10). The main activities of the CLP include: the construction of homestead plinths to protect household assets from known risks of flooding; provision of sanitary latrines and access to clean drinking water; one-time transfer of productive assets (cows and goats); cash stipends for 18 months; and short-term social protection activities for preventing people from slipping even deeper into poverty. These activities include employment creation during seasonal hunger (*monga*) and emergency grants to withstand the sudden shocks caused by river erosion, tornadoes and domestic fires, for example. The CLP increases awareness and knowledge about a range of social development issues, including health and environment, disaster preparedness, women's empowerment and rights and basic loan and financial management skills. The programme also promotes entrepreneurship and strengthens their market networks in livestock and other areas. CLP is managed by Maxwell Stamp and led by the Ministry of Local Government, Rural Development and Co-operatives (MLGRDC).

The **EEP** (Economic Empowerment of the Poorest, also known as *Shiree*) also aims to support 1 million people in rural and urban areas, to lift themselves out of extreme poverty. It covers a diverse range of geographical areas where extreme poverty is concentrated: including *chars* and basins (*haors*), cyclone prone coastal regions, *monga* affected areas and Chittagong Hill tracts and urban slums. The *modus operandi* in the current phase, which currently runs until 2015, is via the two challenge funds: the Scale Fund provides NGOs opportunities to take large numbers of people out of extreme poverty using tried and tested approaches, while the Innovation fund challenges NGOs to implement innovative approaches to reducing extreme poverty in urban and rural areas. The main activities include: support of livelihoods for the extreme poor; targeting the very poorest and socially excluded groups, including *Adivashis*; and a pro-active programme of lesson learning and research to enhance the understanding of extreme poverty and of the effectiveness of alternative interventions. The programme is managed by Harewelle International and PMTC Bangladesh Ltd, and led by the Rural Development and Cooperatives Division of the MLGRDC.

In agreement with DFID, the evaluation will focus on one of the scale fund projects – the Economic and Social Empowerment of Extreme Poor (ESEP) Project, being implemented by Concern Worldwide in three districts: Sunamgonj, Habiganj (Slyhet Division) and Kishoregon (Dhaka Division) (see map, Annex 3). The project aims to move 22,500 extremely poor households out of poverty primarily through increasing income and assets. Modalities towards these objectives include (1) input support and technology transfer for livelihoods – including new cropping and cropping patterns; livestock; fishing; bamboo working; small businesses and tailoring; (2) capacity building – including the mobilisation of Self Help Groups; facilitating CBOs and capacity building with local government; and (3) support to beneficiaries for innovation; linkage to markets and/or value chains.

The **UPPR** (Urban Partnership for Poverty Reduction) aims to improve the livelihoods of 3 million poor and extremely poor people, living in urban areas. It covers ten corporations and 14 municipalities across the country. The programme runs from 2007–15 and takes a community-centred approach to urban poverty reduction and is implemented by adopting a community contract modality with Community Development Committees (CDC)/clusters/federations, which usually propose their choices to UPPR from a package of various interventions. The main interventions include supporting habitat and settlement improvement (including sanitation) and resources to improve incomes and

assets in the form of funds to help set up businesses. This livelihood component involves income and training options, such as apprenticeships (e.g. mobile repairing, motor mechanics, footwear industries), urban food production (household/community-based vegetable production, poultry and dairy rearing) and support for small businesses.

In addition to the livelihoods support described above, all three programmes will provide the following three nutrition-specific interventions:

- *Household Level Counselling*: Counselling on exclusive breastfeeding, continuous breastfeeding, complementary feeding and hygiene promotion at household level by trained nutrition counsellors on a monthly basis;
- *Micronutrient Supplement*: Five component micronutrients will be given to children aged between 7 and 23 months. Doses will be 120 sachets a year. Iron and folic acid (IFA) tablets: 180 IFA tablets will be given to each pregnant and 180 to each breastfeeding woman per year, while 104 tablets will be given to each adolescent girl a year;
- *De-worming Treatment*: Children 1–5 years of age, adolescent girls, pregnant women after the first trimester of pregnancy, will receive regular de-worming treatment based on WHO and Government of Bangladesh guidelines.

Targeting for the nutrition package will more or less overlap for the CLP and Concern/EEP households (CLP have already held back a small control group); further targeting is being undertaken within UPPR to reach the poorest households in existing communities.

Table 2.1 summarises these components combined by programme.

Table 2.1 Summary of programme interventions and beneficiaries

Programme	Livelihoods Interventions		Direct Nutrition Interventions	
	Intervention and mode of delivery	Existing beneficiaries and selection criteria	Intervention; targets and mode of delivery	Beneficiary HH
CLP	Assets plus stipends, livelihood training, water, sanitation, social development, plinths, cash for work, savings and loans, access to livestock services providers, health services, market development activities.	67,000 extreme poor households and their communities. HH must: – Have been living for at least 6 months on island char – Have no ownership or access to land – Have productive assets worth not more than Tk5,000 – Not own more than two goats/sheep or 10 fowl or one shared cow – Not be receiving cash/asset grants from another programme – Have no regular source of income – Be willing to attend weekly group meetings for 18 months	Nutrition support (behavioural change): – Awareness and counselling on IYCF De-worming for pregnant women after first trimester and for the under fives – Iron and folic acid for pregnant and lactating women and for adolescent girls	66,770 HHS – nearly all livelihood households.
EEP Concern	Input support for livelihoods: cropping;	22,500 extreme poor HH and their communities. HH must have:	– Micronutrient supplementation (MNS) for children	All livelihoods beneficiary

	livestock; fishing; bamboo working; small businesses; tailoring, etc. Capacity building: mobilise self- help groups; facilitate CBOs; skills transfer. Innovation support; market linkage and access to value chains.	– <i>Per capita</i> income <BDT21/day – No access to microfinance – Homestead land: 3 decimal or less; no cultivable land. Supp. criteria include destitution; food insecurity (≤2 meals/day); headed by widowed/divorced/abandoned/ disabled; ethnic minorities; vulnerability to flood/wave.	under two – Establishing nutrition and hygiene groups for adolescents – Training in hygiene and environmental health.	households.
UPPR	Savings and credit, business start- up; settlement improvement funds, social development and protection.	800,000 poor and extremely poor households in urban slums/informal settlements.		Sub- selection of poorest livelihoods beneficiary households.

2.2 Expected impacts

Project documents for the three programmes indicate that the livelihoods interventions are expected to have a wide range of impacts on the overall levels of poverty and vulnerability of beneficiary populations and their communities; livelihoods, income and assets; empowerment (e.g. of women and of otherwise excluded groups); food security, nutrition, health and wellbeing. It is a notable exception that the evaluation is not expected to evaluate impacts at this level. The combined expected impact of the livelihoods and nutrition projects on nutrition outcomes on target beneficiaries are reported in Table 2.2.

Table 2.2 Expected nutrition impacts on target beneficiaries

Target Group	Expected Impacts
Girls <5	3% reduction in stunting
	6% reduction in underweight
	3% reduction in wasting
	15% reduction in anaemia
Boys <5	3% reduction in stunting

	6% reduction in underweight
	3% reduction in wasting
	15% reduction in anaemia
Adolescent girls (10–16 years)	15% reduction in anaemia
	3% reduction in CED
Pregnant and breastfeeding mothers	5% reduction in anaemia

2.3 Wider programming context

Bangladesh is densely served by government, donor and NGO-run programmes and the likelihood of spillover or programme overlap with other programmes is thought to be high for livelihoods programmes, though somewhat lower for nutrition programmes. Other support programmes likely to be operating in the evaluation sample regions have been identified as part of the baseline survey preparation and will be confirmed as part of the baseline survey and reported in the baseline report (see list in Annex 4). This was designed in order to be able to distinguish impacts of the DFID programmes from other causal factors in the quantitative analysis; however this information will also be useful to feed into the evaluation communication and dissemination strategy and potential programmes that may benefit from the knowledge generated from the evaluation. More information on these other programmes will be sought in close consultation with DFID Bangladesh and the implementing partners in order to establish specific linkages and overlaps with other programmes.

3 Evaluation Approach and Methodology

3.1 Evaluation requirements and key specifications

The original TOR listing key evaluation questions and suggested methods are included here for reference, as Annex 1. A number of questions were modified or dropped given the realities of the programme design and available resources for the evaluation. Given these feasibility and programme design modifications, the primary questions still relevant from the original TOR can be summarised as follows (with reference to the original TOR – Annex 1):

- Does the combination of direct and indirect nutrition interventions accelerate reduction of undernutrition in children under two in the three programmes core beneficiary households areas compared with non-beneficiary households in programme areas? (original TOR Q1).
- Do the indirect nutrition interventions improve nutrition outcomes in children under two populations in the three programme areas compared with non-beneficiary households in programme areas? (original TOR Q3).³
- Can direct nutrition interventions be delivered effectively through different livelihood programmes such as (i) Chars Livelihoods Programme (CLP), (ii) Challenge Fund through the Economic Empowerment of the Poorest Programme (EEP) and (iii) the Urban Partnership for Poverty Reduction (UPPR)? (original TOR Q4).
- Which livelihoods intervention (programme) is the most effective in delivering nutrition interventions and why? (original TOR Q5).

The TOR also specified a number of hypotheses⁴ to be tested via the evaluation design; and states that the methodology should include a mixture of methods including qualitative methods; and be based on a robust counterfactual. A qualitative component in particular should enable ‘a better understanding of beneficiaries’ behaviour, attitudes and expectations, as well as explaining conflicting responses among informants and internal contradictions if any’ as well as consider any unintended consequences. It was also therefore assumed that the overall design would take the basis of a combination of ‘rigorous experimental or quasi-experimental methods, as well as qualitative and process evaluation methods’.

The evaluation team has worked with DFID and programme implementers through the feasibility and inception phases⁵ to specify a final mixed methods design to these requirements. This is set out in detail in the remainder of this report.

3.2 Evaluation design, programme theory and key evaluation components

To meet its objectives the design specified here combines a number of different analytic strands and both quantitative and qualitative methodological orientations. In terms of overall classes of impact evaluation design approaches (see, e.g. Stern *et al.* 2012: 24); the current design can be considered as strongly mixed and synthetic in that the final outcome of the evaluation will be a synthesis report combining elements of experimental, statistical, case-based and participatory analytical framings,

³ Resource constraints led to decisions to restrict collecting quantitative information on boys and girls aged 6–24 months, and not to collect information on pregnant and breastfeeding women and adolescent girls; and to drop a midline survey. TOR Q2 was dropped because there are no localities where only the direct nutrition intervention will operate.

⁴ See also Annex 1. A number of hypotheses to test have also been dropped for feasibility/resource issues – e.g. for reasons of cost, the baseline will no longer collect data on anaemia, pregnant women or adolescent girls.

⁵ Frequent meetings and other contact has been taking place between the evaluation team and the programme implementers since a feasibility mission took place in August 2012. Representatives of the three programme teams; DFID; the evaluation team; and other invited stakeholders took part in a two-day workshop in Dhaka in April 2013. The evaluation team has continued to consult regularly with programme implementers.

drawing on a range of qualitative and quantitative methods to infer causality within a strong theory-based framework (White 2009, 2010).

A theory-based framework is elaborated here to demonstrate graphically how the evaluation needs to describe and then rigorously test the programme theory and assumptions on the relationship between the programme activities, its outcomes and impacts and factors external to the programmes being evaluated.

We take, as our starting point, the programme theory of change (ToC), which is set out in Figure 3.1 in a logic model format of inputs, outputs, outcomes and impact.⁶ A quantitative impact evaluation alone would have lent itself well to evaluated selected outcome indicators and overall impacts. However, the mixed methods nature of the original specification also enables us to test various programme assumptions via a number of different evaluation components with different methodological and analytical orientations:

1. The *quantitative impact component* provides primarily quantitative estimates of outcomes and impacts of both direct and indirect interventions that support the testing of the hypotheses via the presence of a counterfactual, as well as providing a rigorous assessment of the programme assumptions between outcomes and impacts;
2. The *exploratory/explanatory component* will address beneficiary selection and interventions targeting, management and delivery and provide estimates of beneficiary coverage at the output level. It will also explore underlying causal processes and mechanisms and provide detailed contextual analysis that will help to explain *how* and *why* the combination of indirect and direct nutrition interventions may have had an impact on child nutrition outcomes within the three livelihood programmes;
3. The *cost effectiveness component* will allow an estimate of the costs of different interventions in terms of their impact on child undernutrition; these estimates can be compared globally with external benchmarking.

The programme theory of change in Figure 3.1 has therefore been modified to indicate how – rather than operating in isolation – these different evaluation components will collectively build the evidence needed to meet the overall evaluation objectives, by:

- a. Verifying that the programme has procured inputs and delivered outputs as planned including the appropriate targeting of beneficiaries;
- b. Checking that *both implicit and explicit* programme assumptions on delivery and beneficiary behaviour change have been met;
- c. Providing quantitative estimates and qualitative explanations of outcomes, impacts and unintended consequences;
- d. Estimating the cost effectiveness of each of the three programme models against delivered benefits.

Combined, these elements also achieve the objective of the overarching theory-based framework of the evaluation design, in moving from a weak to a strong model of programme assumptions⁷; and rigorously testing these assumptions through a mixture of evaluation components and methods. The way in which the different evaluation components will test these assumptions are also set out in the theory of change and are drawn out for clarity in Table 3.1.

⁶ Note, this is based on a draft theory of change provided by DFID as part of the nutrition component programme design and thought to be representative of the three programmes. A theory of change was not a standard DFID requirement at the time of the programme design and so separate programme theories of change do not yet exist. We are using this as a model on which to base the evaluation assumptions.

⁷ See Stern *et al.* 2012: 25 for more on theory-based frameworks and weak/strong assumptions.

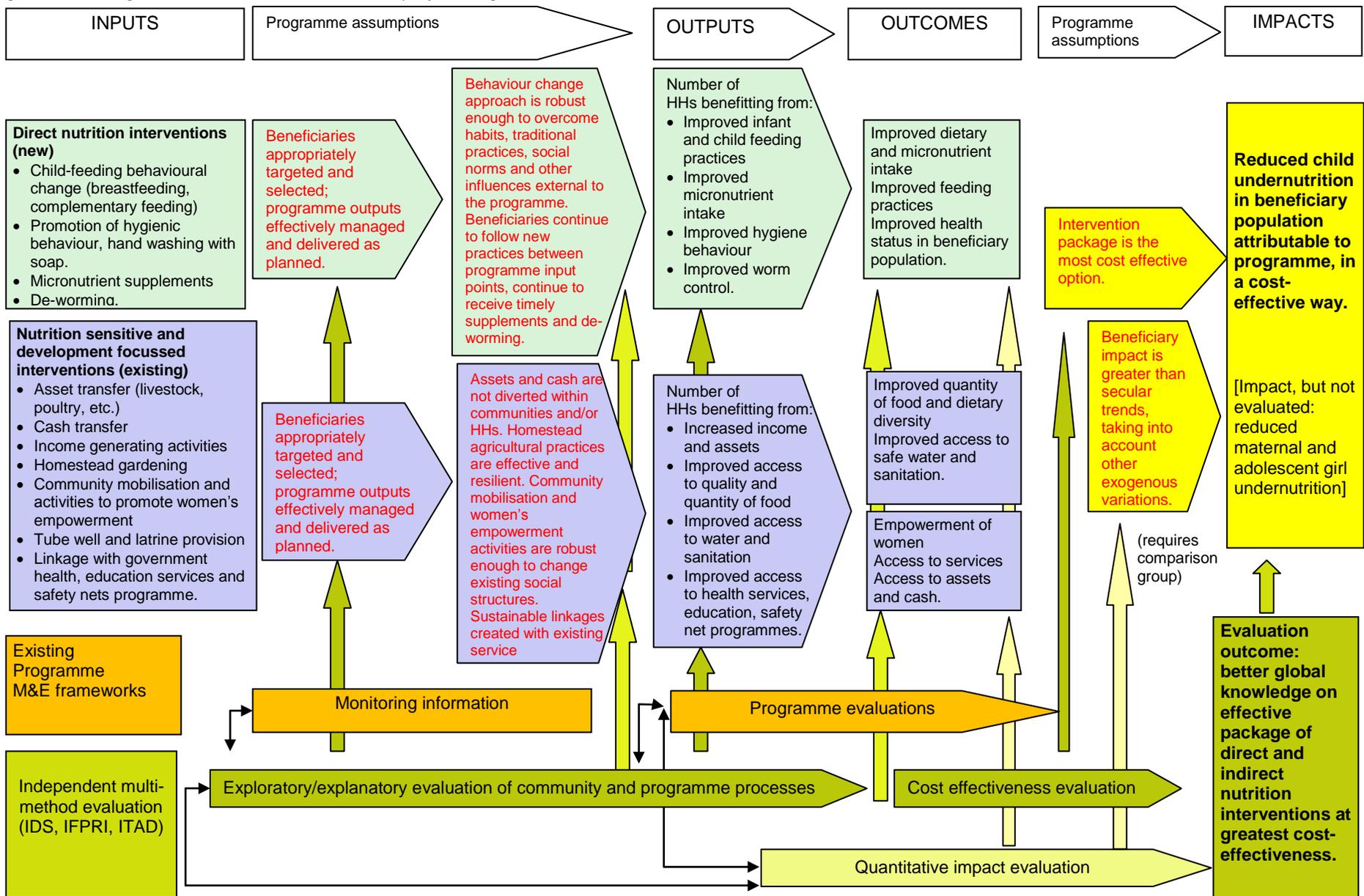
Table 3.1 Programme assumptions to be tested by evaluation components

Programme Assumptions to be Tested	Evaluation Component
<ul style="list-style-type: none"> • Beneficiaries to be appropriately targeted and selected, and programme outputs managed and delivered; • Behavioural change promoted by the programmes to be robust enough to overcome traditional habits, practices and social norms, and that beneficiaries continue to follow new practices between programme input points; 	Exploratory/explanatory
<ul style="list-style-type: none"> • Assets and cash are not diverted within communities and/or households, and that household agricultural practices are effective and resilient; • Community mobilisation and women's empowerment activities are strong enough to change existing social structure; • Sustainable linkages are created with existing service bureaucracies. 	
<ul style="list-style-type: none"> • Intervention package is the most cost effective option. 	
<ul style="list-style-type: none"> • Beneficiary impact is greater than secular trends; taking into account other exogenous variation. 	Quantitative impact

To complete the overall synthetic process, in addition to the primary work carried out via the different evaluation components, a number of secondary sources will be consulted via formative literature reviews carried out as part of the qualitative investigations within the exploratory/explanatory component, and the cost effectiveness components. Although the evaluation team will work independently of the programme teams, the evaluation will also examine the data generated by internal M&E/MIS of the three programmes (see Section 4.9).⁸

⁸All three programmes have integral monitoring and evaluation (M&E) units. CLP has an Innovation, Monitoring and Learning Division, which carries out monitoring and research (and its dissemination) relating to the outcome themes and other topics, as well as supporting performance-related activities. The EEP implements an Extreme Poverty Monitor by employing a Change Monitoring System (CMS) in six different aspects of the work of EEP. UPPR's Research, Evaluation and Learning Unit measures, evaluates and responds to the outcomes of the programme's work.

Figure 3.1 Programme and evaluation theory of change



3.3 Sequencing and strategy for the analytical integration of the evaluation components

The different evaluation components will be integrated and combined throughout the entire evaluation cycle at different levels and in different sequence, as set out in the project timeline (Annex 2 and summary, below). Sections 4–6 below provide more detail on the methodological approach and methods to be employed by each of the evaluation components, including detail on sampling, likely methodological limitations and overlaps with other components. Each component allows for a different perspective and will collect unique information on the impact and outcomes of the interventions – this and the level of technical detail required in each component requires that each component is presented here separately. Table 3.2 clarifies how each of the key evaluation objectives maps to a number of key questions to be answered via the different components and methods. Findings will be brought together finally into one integrated report reflecting the theory-based design and a structure relating objectives to research questions, as set out in Table 3.2.

Table 3.2 Evaluation objectives mapped to questions, components and methods

Evaluation Component	Evaluation Objective	Research Questions	Metrics /Type of Data or Explanation Required	Methods and Source of Data
Quantitative impact	To assess the impact of the combination of direct (specific) and indirect (livelihoods) nutrition interventions in three different DFID programmes on nutritional status of children under two. To compare this with the impact of the existing livelihoods interventions.	<p>What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions (denoting this scenario 'L+N'), relative to receiving a livelihoods intervention only (denoting this scenario 'L only')?</p> <p>What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions ('L+N'), relative to receiving no intervention (denoting this scenario 'C' for comparison)?</p> <p>What is the impact on nutrition outcomes of receiving a livelihoods intervention only ('L only'), relative to receiving no intervention ('C')?</p>	Quantitative estimates of programmes causal impacts on beneficiary outcomes compared with counterfactual of no programme intervention.	<p>Baseline and endline surveys of HHs as repeated cross-section. HHS randomised to receive nutrition component; outcomes analysed via difference in difference approach.</p> <p>Comparison HH selected via quasi-experimental methods (RDD or matching).</p>

<p>Exploratory and explanatory</p>	<p>To explain (any quantifiable) impact, drawing on wider qualitative and quantitative evidence describing programme-specific and wider societal/contextual processes with the potential to impact on programme outcomes.</p>	<p>What are the critical processes and mechanisms in implementation of the programme strategy? Were the processes implemented as planned and to what extent has this affected achievement of outputs?</p> <p>How does the quality of programme delivery relate to more proximate outcomes (care, feeding, livelihoods, etc.) identified in the quantitative survey and how does this explain the impacts detected (or not detected)?</p> <p>What wider interactions between societal, community, family and programme structures might influence intervention uptake and behavioural change?</p> <p>What are the contextual factors that can enhance or hinder the programme uptake? This will include an in-depth examination and testing of the programme assumptions and causal chain processes (described in the ToC) within the context of the study communities.</p>	<p>Qualitative and quantitative data on critical components in programme planning, resourcing (including staffing) and delivery; beneficiary targeting and access.</p> <p>Quantitative data on more intermediate outcomes (e.g. assets, access to services, HH food security; infant and young child feeding practices).</p> <p>Qualitative data on the social networks, relationships, interactions and communication structures within the community.</p> <p>Qualitative data on: – Personal views, perceptions and judgements on the interventions; - Nutritional behaviour patterns and resources; – Context of programmes and interventions and how this can influence interventions; – Family structures and household decision-making processes in relation to the interventions; – Contextual factors and wider community changes and the effect of the interventions on community structures; – Barriers and</p>	<p>Process Mapping Process Diary.</p> <p>Quantitative survey data.</p> <p>Existing programme MIS/M&E data including reporting against logframe.</p> <p>Social mapping In-depth interviews Focus group Discussion Participatory Observation Life history</p> <p>As above</p>
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			facilitators of intervention uptake.	
Cost Effectiveness	To assess the cost effectiveness (value for money analysis) of integrating direct and indirect interventions in the three livelihood programmes and to specify the best model for doing so.	<p>What is the unit cost of changes to child stunting for each of the three programmes for both L only, and L+N? Which nutrition intervention is the most cost effective, and why?</p> <p>How cost effective are these programmes compared with similar programmes in other countries and contexts?</p> <p>What are the main cost categories, and how do they compare to external benchmarks? If possible to assess, what are the main cost drivers that justify relatively high costs?</p> <p>What are the total costs incurred by society and opportunity costs incurred to participate in the programme?</p>	<p>Estimates of changes in child stunting: % change in HAZ (height-for-age Z score):</p> <ol style="list-style-type: none"> 1. How much did it cost to increase HAZ by x% using 'L' only? 2. How much did it cost to increase HAZ by x% using 'L+N'? <p>Conversion of HAZ scores into cost per DALY (Disability Adjusted Life Years) for each intervention. If data permits the evaluation will also attempt to convert Z scores to DALYs using standardised assumptions from WHO and region-specific literature in a model built up from first principles.</p> <p>Actual (not projected) monetary value of direct costs (project inputs, equipment, services, HR, etc.) and indirect costs (office services, security, administrative staff, etc.) per year for each programme (see Annex 5).</p> <p>Documentation of total resource costs incurred in delivery of intervention (used in unit cost analysis) and extra opportunity costs incurred and reported by beneficiaries (estimated by local wages in community if relevant to foregone benefits).</p>	<p>Cost Effectiveness Analysis of detailed financial data on programme expenditure and end-user cost data from quantitative survey.</p> <p>Quantitative survey baseline and endline data; Standardised data assumptions and threshold indicators on cost effective DALYs from WHO; region-specific literature.</p> <p>Disaggregated financial data from all programmes (see Annex 5).</p> <p>External benchmarks from similar programmes; regional literature on cost drivers</p> <p>Opportunity costs tracked in quantitative survey.</p>

		What are the unquantified benefits, direct and indirect of the nutrition interventions?	Qualitative and process data on intervention efficiency; beneficiary perceptions including direct/indirect benefits and costs of intervention; barriers to accessing intervention, etc.	Qualitative and process-related investigations as part of Exploratory/ Explanatory component (in-depth interviews, focus group discussions, detailed life histories, participatory observation, process map and process diary).
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Ongoing communication and collaboration between members of the evaluation team located in different partner organisations will facilitate the prompt combination of emerging findings at critical stages. Alongside the design specification set out here, the following strategy has been put in place to ensure adequate integration at key stages of the evaluation – including preparatory work; instrument design; fieldwork; analysis and reporting. In particular:

- Evaluation and programme partners shared initial thoughts on the evaluation design (with external invitees) in a two-day inception meeting held in Dhaka in April 2013. The meeting included a dedicated session to orientate researchers from diverse disciplines and backgrounds to a mixed methods approach. Initial design of the quantitative survey instrument/selection of modules took place collectively at this inception meeting;
- The initial quantitative baseline survey will inform the sample selection for the *programme focus clusters and the community focus clusters* (see Section 5). This will allow for issues highlighted in the baseline survey (e.g. on specific-contextual factors) to be followed up by more in-depth qualitative explorations;
- Findings and initial hypothesis from the ongoing exploratory/explanatory component will be fed into the development of the quantitative endline survey to allow follow-up at a more representative and generalisable scale;
- At the analysis stage, the different methodologies will be combined and merged using an iterative process whereby, for example contextual factors and insights into underlying causal mechanisms from the exploratory/explanatory component will be integrated with the quantitative estimates on impact;
- The nature of the qualitative investigations in the exploratory/explanatory component might also offer new avenues for the analysis of the quantitative survey and suggest additional strategies for the stratification and disaggregation of data.

In addition, the final team composition and governance and management of the evaluation programme (see Section 7) ensures that:

- The lead organisation (IDS) will take responsibility for both technical coordination and project coordination between the different programme components;
- The lead team includes project directors and a dedicated project manager with quantitative and qualitative research and evaluation experience; and research fellows skilled and experienced in mixed methods;
- IDS and IFPRI have assumed a joint lead on the quantitative evaluation and IDS, BRAC, ITAD and CRNS are in close communication in the development of the range of methods described in the exploratory/explanatory component described in Section 5;

- All evaluation programme partners have contributed to this document and the design of all other components of the evaluation;
- Further efforts are continuing to be made to bring together key evaluation and programme staff on the ground – including via joint field-visits and ongoing project workshops.

3.4 *Outputs and outcomes of the evaluation; external validity and overall limitations*

The agreed outputs of the evaluation will be as follows. Unless otherwise indicated, each of these outputs will summarise available findings at that point in the evaluation from each of the evaluation components and sub-components:

- Inception Meeting and Consultation
- Inception Report
- Baseline Report and Data
- Qualitative Data Process Map and Data (explanatory/exploratory component)
- Process Evaluation Report (explanatory/exploratory component)
- Cost Effectiveness Report and Data
- Final Report of the Evaluation
- Publication of the Final Impact Evaluation Report
- Workshops and Other Communications Activities (see Section 7.4).

Milestones and deadlines for these outputs and the wider timetable for the evaluation are provided in Annex 2 and summarised in Figure 3.2.

Figure 3.2 Planned project timeline

Activities / deliverables	Key Deliverable(s)	Deadlines(s)	J	F	M	A	M	J	J	A	S	O	N	D	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
			2013												2014				2015				2016			
1. Inception phase	Inception Report	Mar-14																								
2. Quantitative Baseline survey	Baseline report	Mar-14																								
3. Qualitative and Process investigations	Process Eval report, Qual data	Feb-15; Dec-15																								
4. Cost Effectiveness (CE) Study	CE report	Mar-16																								
5. Quantitative Endline Survey	Quant endline data	Mar-16																								
6. Final Report and dissemination	Final report	Jun-16																								

As well as informing DFID about the effectiveness of the specific interventions being evaluated, the study is expected to contribute to global knowledge on effective packages of direct and indirect nutrition interventions for vulnerable households at greatest cost effectiveness. This ambition reflects the fact that the evaluation meets a current global gap in our knowledge of whether nutrition-specific and nutrition-sensitive interventions may be combined in a way to have a relatively better impact on beneficiaries than if these interventions are carried out alone (or not at all).

To contribute to this objective, however, the study must have external validity, i.e. it must assess the extent to which causal findings can apply to the population from which our sample is drawn; and the extent to which they apply to other populations in other places. Each of these aspects are considered here in turn.

The evaluation design itself helps ensure external validity of the work with respect to the populations from which the quantitative samples are drawn. The sampling strategy has been designed to collect data from a large number of participants and non-participants (as shown in Section 3.5, there will 1,260 ‘L+N’ households and 1,260 ‘L only’ households sampled per programme) from a wide number of random localities (140 clusters per intervention). The large number of randomly selected clusters minimises the possibility that results are affected by the idiosyncrasies of particular locations, while the large sample sizes means that it is unlikely that the external validity of the results will be affected by the idiosyncrasies of particular households. Assuring external validity becomes more difficult with regard to the other components, it should be noted that the qualitative and process-related

investigations as part of the exploratory/explanatory evaluation components, with much smaller samples drawn from a smaller number of clusters, are intended to reflect on the processes and causal mechanisms likely to be at play in the wider quantitative sample rather than to be considered separately. Their external validity can only be judged qualitatively against the plausibility with which they explain processes picked up in the wider sample; or the extent to which they reflect or critically interrogate themes highlighted within the peer-reviewed social scientific literature on Bangladesh.

External validity in terms of the applicability of these findings to other populations in other places is typically more challenging – a strict (or trite) response would be to say that the extent to which those other populations are similar to those studied here, the greater the external validity of the study. However, the extent of current knowledge on this topic allows us to move beyond such trite observations. A recent article in the *Lancet* (Ruel & Alderman 2013) noted that the evidence base of interventions that combine livelihood promotion with direct nutrition interventions is remarkably thin. This evaluation provides an opportunity to demonstrate first rigorous and quantified ‘proof of concept’ (with the exploratory/explanatory, cost effectiveness process components providing valuable information for governments, donors and implementers in Bangladesh and elsewhere on the opportunities and challenges associated with this type of nutrition sensitive intervention). Second, very little is known about how to address the challenges of undernutrition in urban settings, in Bangladesh or elsewhere in South Asia. The descriptive data we generate can inform understandings of undernutrition in slum conditions found in these urban settings, with again the exploratory/explanatory and cost effectiveness components providing insights into the effectiveness of behavioural change and communications activities in settings where they previously have not been implemented.

Wider limitations beyond the validity issues here are considered in more detail within the methodological discussions that follow. These limitations should be considered on their own methodological terms but also within the wider context of what is made possible by the overarching evaluation design (i.e. no apologies are made for the quantitative element’s inability to consider village level politics interrupting assumed programme mechanisms, as this will be studied in depth by the exploratory/explanatory component).

Major overall limitations mentioned in the following sections alongside their implications for the evaluation, include:

- The design choices made to keep the evaluation within cost or to match actual (rather than theoretically desired) implementation plans (e.g. limiting evaluation target groups to children <2; the introduction of the livelihoods elements before the evaluation programme began);
- The statistical limitations in detecting significant change in the two-year period between baseline and endline beyond those anticipated in determining the statistical power of the calculations (and the small window this allows for detecting nutritional impacts);
- The methodological challenges and limitations of constructing comparison groups based on beneficiary recall of pre-intervention characteristics;
- The tension between qualitative depth and quantitative breadth in sample sizes chosen for the exploratory/explanatory component;
- The difficulties that may be encountered in obtaining the right level of detail from programmes for a rigorous assessment of programme process and cost effectiveness.

A number of these and other methodological limitations are also raised to the level of programme risks and considered alongside other significant programme risks in Section 7.2.

4 Quantitative Component

4.1 Background and intuition

The main quantitative component of the evaluation is intended to provide numerical estimates of the programmes' causal impacts on beneficiaries' nutrition outcomes. IFPRI and IDS are leading on this IE component with in-country fieldwork support from DATA who are conducting the baseline and endline surveys.

In-keeping with the theory-based nature of the overall framework, the key instrument of this component will be a quantitative survey designed to collect data on indicators along the causal chain shown in the theory of change (Figure 3.1). For the purposes of the quantitative discussion in this section – wherein the terms 'outcomes' and 'impacts' have statistical definitions distinct from those intended in the theory of change – alternative terminology is used for clarity. In this section, the 'impacts' in the theory of change (i.e. the effects on nutritional status as measured by improvements in anthropometric Z scores) are referred to instead as 'final outcomes'. The 'outputs' and 'outcomes' in the theory of change (e.g. parents' adoption of appropriate childcare and feeding practices; quantity and quality of children's dietary intake) are referred to instead as 'intermediate outcomes'. The quantitative component studies both 'final outcomes' and 'intermediate outcomes'. The analysis allows moving logically through the impact pathway as currently described, i.e. without improvement in 'intermediate outcomes', it is highly unlikely that improvement in 'final outcomes' will be observed.⁹

The notion of 'impact' in a quantitative evaluation refers to the difference in beneficiary households' observed outcomes after receiving a set of interventions, relative to those same households' counterfactual outcomes in the same time period had they not received the interventions. Drawing on the evaluation questions posed in Section 3, there are three key research questions regarding programme impact that will be answered:

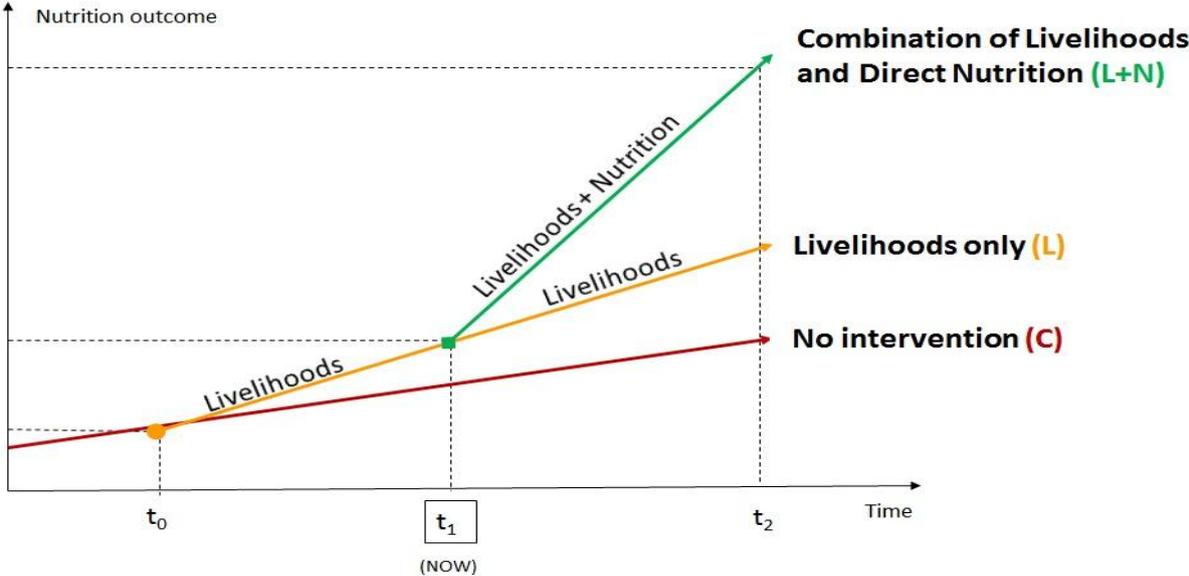
1. What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions (denoting this scenario 'L+N'), relative to receiving a livelihoods intervention only (denoting this scenario 'L only')?
2. What is the impact on nutrition outcomes of receiving a combination of livelihoods and direct nutrition interventions ('L+N'), relative to receiving no intervention (denoting this scenario 'C' for comparison)?
3. What is the impact on nutrition outcomes of receiving a livelihoods intervention only ('L only'), relative to receiving no intervention ('C')?

The three distinct measures of impact can be conceptualised as follows. First, it is necessary to imagine three possible 'paths' for a particular household, depending on whether the household gets no intervention ('C'), livelihoods only ('L only') or livelihoods and direct nutrition ('L+N'). Figure 4.1 shows a visualisation of these possible paths for a given nutrition outcome, with the horizontal axis reflecting time. Consider a path in which through three successive periods (t_0 , t_1 and t_2), the household receives no intervention. The red line ('C') gives an example of this possible path,

⁹ The remainder of this section focusses on the wider methodology for this component and in particular the construction of a rigorous assessment of overall programme impact as the overarching objective. It should be noted, however, if no programme impacts on 'final outcomes' are observed but changes in 'intermediate outcomes' that are attributable to the interventions are observed, then three hypotheses for this will be explored: (1) the changes in 'intermediate outcomes' were not large enough to lead to changes in 'final outcomes' (e.g. while dietary quality increased, the magnitude of this change was too small to improve Z scores); (2) while some 'intermediate outcomes' improved, others did not and this limited the impact of the interventions on 'final outcomes' (e.g. diet intake improved but there was no change in the disease burden and this limited the impact of the interventions studied here on Z scores); and (3) there were other factors not considered in the intervention design that prevented programme impacts on 'intermediate outcomes' from translating into programme impacts on 'final outcomes'.

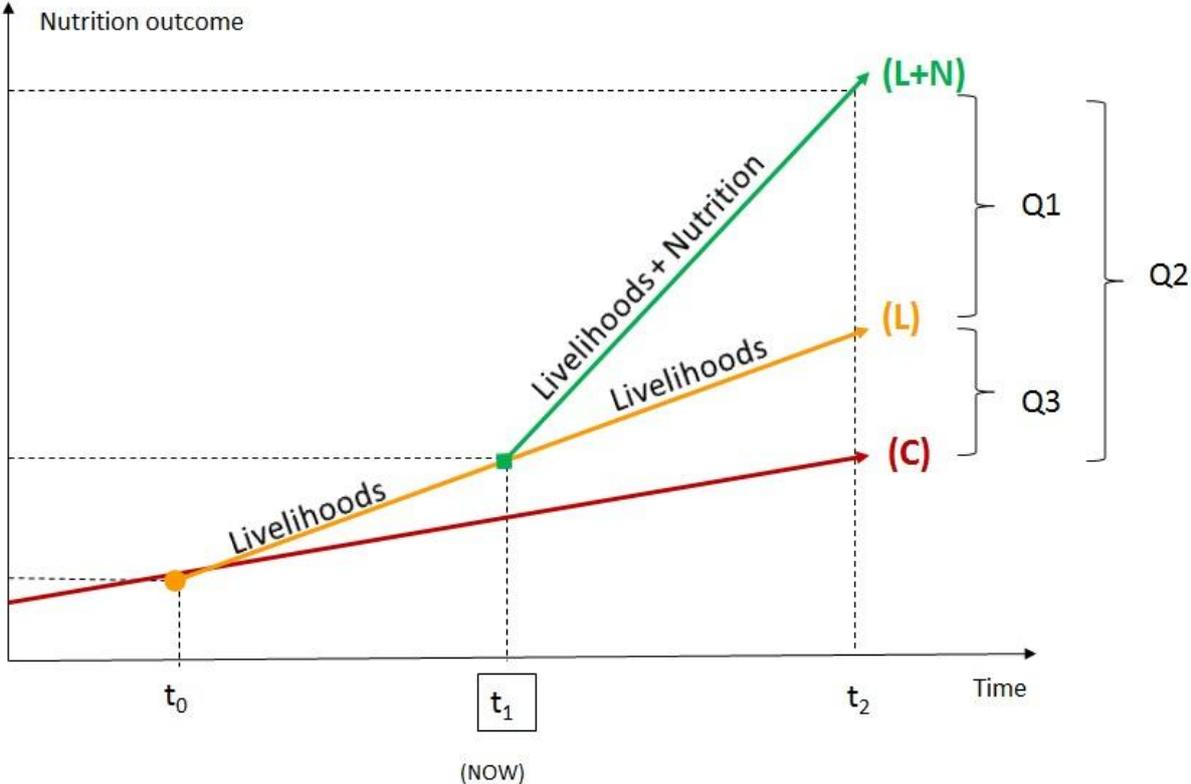
reflecting that the nutrition outcome may slightly increase over time, despite no intervention, for example due to general improvements in hygiene and sanitation. Then, consider an alternate path for the same household, in which until t_0 the household receives no intervention like the ('C') group, but after t_0 and continuing through time t_1 and time t_2 the household receives a livelihoods intervention. The yellow line ('L only') gives an example of this possible path. Finally, consider another alternate path for the same household, in which until t_0 the households receives no intervention like the ('C') and ('L only') groups, after t_0 the household receives a livelihoods intervention as the ('L only') group, but after time t_1 the household receives a combined nutrition and livelihoods intervention. The green line ('L+N') gives an example of this possible path.

Figure 4.1 Schematic of different paths of outcomes, according to interventions received



If it was possible to observe all three possible paths (i.e. 'L+N', 'L only' and 'C') for a given household, it would also be possible to answer all three of the research questions by directly comparing across them. Figure 4.2 shows visualisations of the measures of impact that would correspond to each of the three research questions. The difference between the ('L+N') and ('L only') groups at time t_2 provides the answer to Question 1 – the impact on a nutrition outcome of receiving a combination of livelihoods and direct nutrition interventions ('L+N'), relative to receiving a livelihoods intervention ('L only'). The difference between the ('L+N') and ('C') groups at time t_2 provides the answer to Question 2 – the impact on a nutrition outcome of receiving a combination of livelihoods and direct nutrition interventions ('L+N'), relative to receiving no intervention ('C'). The difference between the ('L only') and ('C') groups at time t_2 provides the answer to Question 3 – the impact on a nutrition outcome of receiving a livelihoods intervention ('L only'), relative to receiving no intervention ('C').

Figure 4.2 Schematic of impacts of interventions



However, the key complication in impact evaluation is all three paths for any household are not observed. For a given household, it is possible to observe only a single one of the three paths, depending on which (if any) interventions it actually does receive. Therefore, in order to develop a measure of counterfactual scenarios for observed households, proxies must be constructed.

Specifically for this evaluation, the challenge for beneficiary households that receive the ‘L+N’ intervention (the green path in the schematic) is to find a set of households that can proxy their situation, had they counterfactually received the ‘L only’ intervention (the yellow path in the schematic) and a set of households that can proxy their situation had they counterfactually received no intervention (‘C,’ the red path in the schematic).

For CLP households in particular, there are significant issues to consider for the comparison group. Purely from the standpoint of evaluation, the ideal situation would have been if CLP were rolled out following a randomised control trial design – that is, if CLP were randomly assigned to a subset of eligible households, such that by design, there remained a subset of non-beneficiary households that nonetheless met all the inclusion criteria and were on average very similar to the beneficiary households. Of course, CLP was not assigned using randomisation (likely due to feasibility on the ground), and so there is not an obvious set of comparable non-beneficiaries. However, without a comparison group, there is no way to answer the research questions posed by DFID on the absolute benefits of either ‘L only’ or ‘L + N’ interventions. Therefore, as is the case in any evaluation where there is no randomised control group, the most feasible option in order to proceed at all with an evaluation is to construct the best possible comparison group of non-randomly selected non-beneficiaries. The Inception Report describes some specific strategies for doing so. These approaches (such as matching methods and use of regression discontinuity design) are considered at the frontier of evaluation methodologies for construction of non-randomised comparison groups. The methods do not assume that comparison group households are on average identical to beneficiary households, but use statistical criteria to find subsets of comparison households and beneficiary households that are in fact very similar and to tease out the impact of the programme using these subsets.

The proposed approach is as follows. The time of the baseline survey in this evaluation, is at time t1 in terms of the schematic. Some households have received no intervention, and some households have received livelihoods interventions. After the baseline survey at t1, some households that already receive the livelihoods intervention will additionally receive the nutrition component.

- **In order to construct a proxy for the ‘L+N’ households in the counterfactual ‘L only’ scenario**, randomisation is used to assign which among the households receiving livelihoods interventions at t1 will start to receive the nutrition component after t1. That is, among the households that already receive the livelihoods intervention, half are randomly assigned to receive the nutrition intervention after t1. The remaining half will continue to receive only the livelihoods intervention until after t2 (the endline survey). The randomisation is crucial here. As can be seen in the schematic, in order for the ‘L only’ group to be a valid group, it must be as similar as possible to the ‘L+N’ group at time t1. If not, any differences observed in endline at time t2 cannot be distinguished between programme impact and pre-existing differences. Random assignment is widely recognised to be the best way to ensure that two groups are nearly identical on average. Through the randomisation, it can be guaranteed that characteristics of the ‘L only’ and ‘L+N’ groups will on average be very similar at time t1, so that the ‘L only’ is indeed a valid proxy for ‘L+N’. Average differences at time t2 can then be interpreted as impacts caused only by the addition of the nutrition benefits. In Section 3.2, further detail is provided on the randomisation.
- **In order to construct a proxy for the ‘L+N’ households in the counterfactual ‘C’ scenario of no intervention**, non-beneficiary households are found that based on recalled information collected at time t1 (the baseline survey) regarding time t0 (the period before any households received the livelihood intervention), were very similar at time t0 to the eventual ‘L’ and ‘L+N’ households. The team’s strategy for sampling potential comparison group households was discussed earlier. For the purposes of evaluation, the sample of comparison group households should not be representative of all non-beneficiary households; rather it should be representative of non-beneficiary households that were very similar before the programme to beneficiary households. These non-beneficiary households will continue to receive no intervention through time t2 (the endline survey). In Section 4.3, further detail is provided on the methodological tools used to create comparability between these non-beneficiary households and beneficiary households.

Concretely, in estimating impacts relevant to all three research questions, the ‘double-difference’ approach will be used. This approach, standard in impact evaluation, calculates the difference between endline outcomes in two groups and subtracts the difference between baseline outcomes in those groups to construct an estimate of programme impact.

4.2 Details on randomisation for assessing relative impacts of ‘L+N’ and ‘L’

As described above, to assess relative impacts of ‘L+N’ and ‘L’, which of the households currently receiving livelihoods interventions will additionally receive the nutrition intervention immediately after the baseline survey will be randomly assigned, as will be those who will receive the nutrition intervention only after the endline survey. In essence, this procedure randomises the phase-in of the nutrition intervention.

There are several benefits to randomising phase-in of the nutrition benefits. First and crucially for the evaluation, it allows for a clean rigorous estimation of the impacts of ‘L+N’ relative to ‘L only’. Second, from a practical standpoint, it allows programme implementers a more feasible implementation schedule of a new programme. Rather than covering the entire livelihoods beneficiary population at once, the phase-in allows for more gradual coverage. It is important to note the phase-in of the nutrition component will be randomised at the level of geographic localities, not at the level of individual households within a locality. That is, within a particular locality, either all households receiving the livelihood intervention will also be receiving the nutrition component or no household receiving the livelihood intervention will be receiving the nutrition component. Although randomising

at the level of a geographic locality rather than at the level of individual households leads to some loss in statistical power, there are important benefits to doing so.

First, giving similar benefits to households within a locality limits social jealousies between households. While potential for social jealousies is limited in any case given the nature of the nutrition component (i.e. provision of counselling rather than provision of food, cash, or other tangible transfers), spatial separation of households receiving different intervention types further avoids it. Second, spatial separation between households receiving the nutrition component and those not receiving the nutrition component, helps to minimise ‘contamination’ to the households not directly receiving it. While it is impossible to completely avoid scope for contamination, avoiding a situation in which households receiving the nutrition component are neighbours with those not receiving it at least helps to minimise the possibility. Finally, related to the point above, phase-in at the locality level helps with feasibility of implementation. If the nutrition component were introduced into all localities at once, implementers would have a larger geographic scope to cover. In focussing efforts on only half of localities prior to the endline, the locality level phase-in allows implementers to manage and refine the programme closely in these areas such that by endline it can be seamlessly expanded to the remaining areas.

The locality level at which randomisation occurs differs by programme, taking into account the extent of programme coverage and context. For both CLP and EEP, which are rural programmes, randomisation occurs at the level of wards (collections of villages). For UPPR, an urban programme, randomisation occurs at the level of programme-defined ‘clusters’.

There were two key considerations in selecting the unit of randomisation for each programme: (1) having sufficient numbers of distinct localities to ensure statistical power, as described in Section 4.5, and (2) minimising the chance of contamination across localities that receive different treatments.

The first consideration implies that the unit of randomisation cannot be too large, since that would lead to only a small number of distinct units over which to randomise. However, the second consideration implies that the unit of randomisation should also not be so small that localities receiving different treatments are geographically very close to each other. Based on the latter point, it was decided that, for the two rural programmes, randomisation should not be at the level of villages, since neighbouring villages are often very close by each other. Instead, it was determined that ‘wards’ (collections of villages) would serve as more appropriate units over which to randomise in rural areas. While contamination across distinct wards was not impossible, it was far less likely than contamination across villages within a ward, since the distances between wards tended to be greater. Based on similar logic, it was determined that in urban areas the unit of randomisation should not be a slum, since neighbouring slums are often very close by each other, but rather collections of slums. Therefore, for both CLP and EEP, which are rural programmes, randomisation occurs at the level of wards. For UPPR, an urban programme, randomisation occurs at the level of programme-defined ‘clusters’ of slums.

Across all three programmes, what is included in the randomisation (and in the study) is only the minimum number of localities necessary for statistical power per calculations described in Section 4.5. All but these minimum numbers of localities (referred to as ‘clusters’ in Section 3.5, per the statistical terminology) have been released before the baseline survey for the nutrition component to start.

As noted above, the relative impacts of ‘L+N’ vs ‘L only’ will be estimated using the double-difference approach. For each key nutrition outcome, the difference at baseline between ‘L+N’ and ‘L only’ groups will be subtracted from the difference at endline between the two groups. While the randomisation helps to ensure that there will be no significant differences on average in each outcome between the two groups at baseline, accounting for any small baseline differences helps to reduce noise and improves the precision of impact estimates.

4.3 Details on construction of the comparison group for assessing absolute impacts

Before describing the methodology for constructing the non-beneficiary comparison group ‘C’, the importance of including this group in the evaluation study is reiterated. While comparing households receiving ‘L+N’ interventions to similar ‘L only’ households tells something about *relative* impacts (i.e. the *difference* between impacts from receiving ‘L+N’ vs ‘L only’), it does not tell anything about the absolute impacts of the interventions. That is, only ‘(Impact of L+N) – (Impact of L only)’ can be understood but not ‘Impact of L+N’ or ‘Impact of L only’.

Therefore, the purpose of collecting information on ‘comparison households’ is to estimate *absolute* impacts of receiving each intervention, relative to receiving no intervention. The ‘comparison households’ serve as a proxy for how intervention households would counterfactually look in the absence of any intervention. If there are changes unrelated to the intervention that affect the entire population, such as weather shocks or price shocks, the situation of the ‘comparison households’ captures those changes, i.e. changes that would have occurred in intervention households irrespective of the intervention. The ‘L+N’ intervention households can be compared to the ‘comparison households’ after the intervention, to learn ‘Impact of L+N’. The ‘L only’ intervention households can be compared to the ‘comparison households’ to learn ‘Impact of L only’. To illustrate why collecting data on ‘comparison households’ and estimating absolute impacts is useful, consider two examples:

1. Suppose that mean height-for-age Z scores are as follows:

Baseline: ‘L+N’ = –2.50, ‘L only’ = –2.50, ‘Comparison’ = –2.50.

Endline: ‘L+N’ = –2.00, ‘L only’ = –2.00, ‘Comparison’ = –2.40.

Recall that to estimate impacts, the double-difference approach is used:

Table 4.1 Calculation of the double-difference estimate of average programme effect

Survey Round	Intervention Group (Group I)	Comparison Group (Group C)	Difference across Groups
Endline	I_1	C_1	$I_1 - C_1$
Baseline	I_0	C_0	$I_0 - C_0$
Difference across time	$I_1 - I_0$	$C_1 - C_0$	Double-difference $(I_1 - C_1) - (I_0 - C_0)$

So, for example, to calculate the absolute impact of ‘L+N’, the difference is taken between ‘L+N’ and ‘Comparison’ in the follow-up (–2.00 – (–2.40)) and subtracted from this the difference in the baseline (–2.50 – (–2.50)). This shows that absolute impact of the ‘L+N’ intervention is a 0.40 improvement in height-for-age Z score. Similarly, the absolute impact of ‘L only’ is also a 0.40 improvement in height-for-age Z score. But only relative impacts were estimated by comparing only ‘L+N’ households and ‘L only’ households, what would be learned is only that the difference in impacts between ‘L+N’ and ‘L only’ is 0. This estimate would provide some information in that it would show the direct nutrition intervention had no additional impact over and above the livelihood intervention. But it would not say anything about either intervention having any impact at all – i.e. the absolute impacts. The absolute impacts would be important for policy implications. Knowing that each intervention causes a

0.40 improvement in mean height-for-age Z scores may to the conclusion that both interventions are quite effective, and 'L only' is more cost effective, since it is less costly for the same absolute impact. With some confidence 'L only' could be recommended. Meanwhile, if the difference between impacts was 0, it would not be known whether either intervention is even effective. There would not be enough information to confidently recommend either.

2. Assume that between the baseline and endline surveys, there is severe flooding and that because of loss of assets, there is greater disease prevalence, poorer quality diets, etc., such that mean height-for-age Z scores deteriorate. Suppose that mean height-for-age Z scores are as follows:

Baseline: 'L+N' = -2.50, 'L only' = -2.50, 'Comparison' = -2.50.

Endline: 'L+N' = -2.60, 'L only' = -2.70, 'Comparison' = -2.80.

The absolute impact of 'L+N' is a 0.20 improvement in height-for-age Z scores, and the absolute impact of 'L only' is a 0.10 improvement in height-for-age Z scores. If relative impacts were estimated by comparing only 'L+N' households and 'L only' households, it could still be learned that the difference in impacts between 'L+N' and 'L only' is 0.10. This estimate would be informative, showing that the direct nutrition intervention has an additional impact over and above the livelihood intervention. But, looking only at baseline and endline information on 'L+N' and 'L only' households, and without any data on the comparison households, there might be the concern that the interventions have somehow *caused* height-for-age Z scores to deteriorate. If that were the case, neither intervention could be confidently recommended. With data on the comparison group, it can be seen that the deterioration in Z scores were caused by some factor outside the intervention (since it also affected the comparison group), and in fact the interventions caused improvements in height-for-age Z scores. Then it could be concluded that both interventions were effective, with 'L+N' causing larger improvements.

The above discussion shows that an estimate is needed of absolute impacts of 'L+N' and 'L' and doing so requires a comparison group of non-beneficiaries. The comparison group should consist of non-beneficiary households that can serve as a proxy for the counterfactual situation of beneficiary households in the absence of any intervention.

Ideally, the comparison group of non-beneficiary households would also be randomly assigned. That is, if the evaluation was being designed prior to the introduction of the livelihood programmes, it would be proposed that among all households eligible to receive each livelihood programme, a fraction would be randomly assigned to not receive the livelihoods intervention until after the endline survey. If this scenario had been possible, there would be a group of non-beneficiaries guaranteed to be very similar to livelihoods beneficiary households prior to the livelihoods intervention and therefore could serve as a credible proxy for the counterfactual situation of beneficiary households in the absence of intervention.

However, the livelihoods interventions began long before the inception phase for this evaluation, and beneficiaries for the livelihood interventions were not randomly assigned. Rather, the livelihood programmes were targeted to particular types of households, such that households who were non-beneficiaries were quite likely different on average from households who were beneficiaries even prior to the livelihoods programme. The implication is that, because the livelihoods programmes were not randomly-assigned in the population, a pool of *all* non-beneficiary households is unlikely to serve as a valid proxy for the eventual 'L+N' and 'L' households. In particular, because the average non-beneficiary was likely richer than the average beneficiary before the livelihoods intervention, the average non-beneficiary's current situation is unlikely to reflect the average beneficiary's hypothetical current situation in the absence of intervention.

Thus, to construct the proxy, the aim is to purposively select only a group of non-beneficiary households that looked very similar to eventual-beneficiary households before any interventions were

in place. These comparison groups will be constructed by assessing similarity in observable pre-intervention characteristics, collected during the baseline survey.

These observable pre-intervention characteristics will ideally include all traits that correlate both with inclusion into the livelihoods intervention and with the household's outcomes conditional on programme receipt. Because these characteristics must reflect the households' situation before the livelihoods interventions were in place for any households, focus would be on near-invariant characteristics (such as ethnicity of household, sex of household head, etc.) and on characteristics from a set reference period 3–4 years ago collected through recall (such as number of household members in that reference period, livelihoods of household members in that reference period, asset holdings in that reference period, etc.). Information will also be collected on characteristics of the household's village for the reference period, in order to ensure that comparison households' community characteristics were also similar.

There are several standard approaches for formally assessing 'similarity' between non-randomly selected beneficiary households and non-beneficiary households in the context of impact evaluation. To explain these methodologies, a concrete example is provided using the CLP. The CLP has seven selection criteria:¹⁰ (i) *char* household is resident for at least six months in a village which has been classified by CLP as an island *char*; (ii) *landless*: absolutely zero decimals of land ownership including homestead land, and having no access to agricultural land including share cropped land or land to be inherited under Bangladesh law. Households renting homestead land are still eligible; (iii) *livestock-less*: selected households may not own more than two goats/sheep, ten fowl and one shared cattle; (iv) *credit-less*: not receiving cash/asset grants from another programme; (v) *asset-less*: have productive assets worth not more than Tk5,000; (vi) *income-less*: have no regular sources of income (basically daily wage labour); and (vii) *participation*: willing to attend weekly group meetings for 18 months, participate in a livelihoods programme and show how the asset will be cared for.

First, consider a household that satisfies criteria (i), (iii), (iv) and (v) but does not satisfy (ii) because it sharecrops 0.25 decimals of land (0.1 ha). In other words, such a household is identical to a household selected for participation in every way except for access to land, and in this dimension, the difference is relatively small.

If such households can be identified, there are two main 'non-experimental' options to choose formally 'similar' non-beneficiary households and estimate absolute impacts: (a) Regression Discontinuity Design (RDD) or (b) matching. The choice between methods depends on the precise nature of the programme's selection criteria.

1. *Regression Discontinuity Design*: RDD takes, as a starting point, the notion that there is a cut-off value that determines selection into the programme (and the CLP would appear to use cut-offs, as discussed above). It would be expected that households just above and just below the cut-off value, pre-programme, would be very similar, except that households just below the cut-off value eventually receive the programme, while those just above do not. Non-beneficiary households just above the cut-off, pre-programme, can then serve as a comparison group for beneficiary households just below the cut-off.¹¹ Thus, using information on these cut-offs (also may be called a 'threshold' or 'discontinuity') and on households just above and below them, RDD allows an estimate of absolute programme impact.

Formally, to understand how RDD works, consider a basic model of the impact of participating in the livelihood intervention:

¹⁰ This is taken from: http://www.clp-bangladesh.org/pdf/selection%20brief_final.pdf

¹¹ This is the approach used in BRAC's programme, Challenging the Frontiers of Poverty Reduction – Targeting the Ultra Poor (CFPR-TUP).

$$(1) \quad Y_i = \alpha + \delta D_i + \beta X_i + \varepsilon_i,$$

where Y_i is the outcome for the i th child (e.g. HAZ), D_i is a dummy variable indicating beneficiary status (participant or non-participant), X_i is a vector of conditioning variables and ε_i is a random disturbance term. The parameter δ measures the impact of the programme. Applying ordinary least squares to (1) in order to estimate δ will generate biased parameter estimates. This occurs because targeting of the programme will lead to correlation between δ and ε_i , which includes unobserved household characteristics. RDD eliminates this bias by exploiting the discontinuity in the eligibility criterion around the proxy means threshold to identify differences in outcomes among households that would have otherwise been similar.

RDD addresses this problem in estimating δ using, as the technique allows modelling by substituting for D_i with an indicator of programme eligibility, P_i , that is a function of household characteristics that determine eligibility, M_i , for the i th household;

$$(2) \quad Y_i = \alpha + \delta P_i(M_i) + \varepsilon_i,$$

where the influence of the conditioning variables, X_i , on Y_i is controlled for by including X_i in the construction of the dependency ratio. When the criterion that a household's dependency ratio must lie equal to or above the programme eligibility threshold (MT) is strictly applied to determine eligibility, P_i is a deterministic function of M_i that is discontinuous at MT ;

$$(3) \quad P_i = \begin{cases} 1 & \text{if } M_i < MT, \\ 0 & \text{otherwise.} \end{cases}$$

2. *Matching*: RDD works well when there are well-defined cut-offs which determine programme selection. However, if it is found that that the cut-offs determining whether a household can participate are less well-defined than first believed, there will be households that share similar observable characteristics on all dimensions of programme selection criteria but differ in terms of programme participation. If so, matching methods can be used to construct a comparison group, 'matching' beneficiary households to non-beneficiary households based on a measure of similarity in all of their relevant observable characteristics. There are several options in the metric for similarity used in matching; commonly-used options include propensity score matching and covariate matching. Once a matched sample of comparison households has been constructed, the impact of the programme is estimated as the average difference in outcomes between beneficiary households and similar comparison group non-beneficiary households from the matched sample.¹²

¹² This is the approach taken in the work IFPRI has done in Ethiopia evaluating the Productive Safety Net Programme.

The proposed methodologies described for identifying a non-beneficiary comparison group are standard and widely-used in impact evaluation of non-randomised programmes. The selection of methodology and the specific sample of non-beneficiaries chosen for construction of a comparison group will depend on programme selection criteria and programme coverage, as described above. Given differences in these characteristics across CLP, EEP and UPPR, the particular method chosen for constructing the comparison group will differ across each of the three programmes. Moreover, the extent to which the comparison groups are in fact statistically comparable to their intervention counterparts in each of the three programmes can only be assessed after the baseline data are analysed. However, the likelihood of finding robust comparability (or in statistical terms, ‘common support’ across observable characteristics) between the comparison group and the intervention groups will be much higher if the comparison localities made available for inclusion in the study are as similar as possible to the intervention localities.

Discussions with programme partners on implementation made clear that it would be necessary to draw comparison households from areas completely outside the programme coverage. Given the nature of the livelihoods programmes being implemented, it is highly likely that even non-beneficiary households in programme areas experience some spillover effects, such that they would not serve as a valid proxy for the case of beneficiary households in the complete absence of a livelihoods programme. For example, CLP’s livelihoods programme includes plinth-raising for beneficiary households, but since the plinth cannot be localised to only one home, the activity also results in plinth-raising for neighbouring non-beneficiary households. All three livelihoods programmes – CLP, EEP and UPPR – also include some components at the village level, such as training or health programmes, such that even households that are not direct beneficiaries but live in the same village or general location would receive some indirect benefits. Thus, a matching approach across beneficiary households in programme areas to non-beneficiary households in similar non-programme areas is the most feasible method for constructing comparison groups.

For the UPPR intervention, UPPR provided us with the list of 20 towns that are sampled for our programme. Using a series of key informant and focus group interviews with programme staff and others knowledgeable about these localities, we constructed a list of slums in each town that are not included in the UPPR programme. Unfortunately, we could not randomly select these slums using PPS for control area, as there is no recent population slum list. For this reason, we purposively selected slum areas to serve as control localities.

EEP control clusters have been selected from six *upazilas* with characteristics similar to those of programme areas. Within these *upazilas*, we selected 70 villages randomly using PPS where the village population (number of households) is the weight.

The greatest challenge in selecting localities for the control areas is with CLP, as there are very few localities with households to match on observable characteristics which have not yet been included in the programme, given the aims of blanket coverage of the CLP programme. The possibility remained to use the localities identified by programme staff as matching targeting criteria until recently but as these communities have been selected for a ‘CLP 2.6 cohort’ and will be formally incorporated into the CLP in April 2015, it is no longer possible for them to serve as control sites. As part of the baseline, other communities in the locality have been surveyed and analysis will be undertaken during the baseline reporting stage to consider whether there are sufficient numbers of households with sufficiently similar characteristics to the intervention households in these areas to serve as a comparison group.

4.4 Repeated cross-section design

The design of the evaluation will rely on a ‘repeated cross-section’ of each of the ‘L+N’, ‘L only’, and ‘C’ groups, for each of the three programmes. In a repeated cross-section, a representative sample is drawn from the target population at baseline, and a new representative sample is re-drawn from the same target population at endline. For this evaluation, the target population is: children under two

years of age. Not only is this group a direct focus of the nutrition intervention (prenatally, through the components focussed on pregnant women and postnatally, through the components focussed on infant and young child feeding, including promotion of breastfeeding), it also has the highest potential for response to the interventions in terms of nutrition outcomes. In particular, the age range includes what is called the ‘window of opportunity’ – the ‘first thousand days’ of life, during which direct and/or indirect interventions have the largest scope for impact on nutritional status.

Under the repeated cross-section design, a representative sample of children under age two will be sampled from ‘L+N’, ‘L only’ and ‘C’ groups for each of the three programmes at baseline, then a new representative sample of children under age two will be sampled from those groups at endline. Using the double-difference estimation approach, differences between groups of 0–2-year-olds at baseline will be subtracted from differences between new groups of 0–2-year-olds at endline, in order to infer programme impact.

In early discussions, a panel design was proposed, whereby the same children sampled at baseline (aged 0–2 years) would then be followed up at endline (then aged 2–4 years). This design may have suited an intervention focussed only on detecting impacts in children already born during the baseline, e.g. micronutrient supplementation during complementary feeding. However, the cross-section design was eventually felt to be a more appropriate design to capture changes in the child outcomes being assessed from conceptions onwards. This design provides a greater likelihood of detecting relative impacts in cross-sections of children who had been exposed to the final package of the intervention, including via the proposed nutritional support for mothers, behavioural change communication around infant feeding practices and micronutrient supplementation.

The remaining components of the nutrition intervention are relevant to children *in utero*, exclusively breastfeeding, or who are starting complementary feeding during the nutrition intervention. This means that a large proportion of a panel sample of children aged 0–2 years at baseline would have minimal or no meaningful exposure to the full package of nutrition activities planned for this intervention. For example, none of the children in the panel would be exposed to the components that reached pregnant women, since all children aged 0–2 years at baseline would already be born before that particular nutrition component had started. Similarly, children in the panel aged two years at baseline would not have meaningful exposure to promotion of exclusive breastfeeding through six months of age since they would have already passed this age before the nutrition interventions started. For these reasons, we used a repeated cross-section design. This allows us to collect data at endline on a sample of children who were exposed to the nutrition intervention components at relevant ages.

4.5 Sample size calculations

The research questions posed in DFID’s original TOR (see Annex 1) address five distinct livelihoods programmes (CLP, three EEP sub-projects and UPPR); four impact groups (girls under five, boys under five, adolescent girls and pregnant/lactating mothers); and several categories of nutrition indicators (including both anaemia and anthropometry, with a focus on stunting). Following extensive discussions with DID staff – noted elsewhere in this report, the revised evaluation design includes three distinct livelihoods programmes (CLP, the EEP/Concern sub-project and UPPR), one impact group (children age 0-24 months) and a focussed set of nutrition indicators (primarily anthropometry, with a focus on continuous Z scores rather than a discrete indicator of stunting). This design implies that samples needed to be collected for each of the nine cells (see Table 4.2).

Table 4.2 Sample groups required for quantitative impact evaluation

Livelihoods Programme	Group	Children 0–24 months
CLP	L + N	
	L only	
	Comparison	

EEP	L + N	
	L only	
	Comparison	
UPPR	L + N	
	L only	
	Comparison	

To work out the size of required samples for each cell, the magnitude of the expected impacts for the impact indicator, the variability of each indicator (as measured by its standard deviation) and the size of the ‘design effect’ or intra-cluster correlation require to be known. The larger the expected impact, the smaller the required sample. Indicators with high variability relative to expected impacts require larger sample sizes. If there is a lot of random variation in the indicator, a large sample is needed to discern programme impact, given this ‘noise’. The design effect arises, as to minimise contamination, facilitate implementation and reduce survey costs, a cluster-based sample would be implemented. Because two random elements sampled within the same cluster may be more similar than two random elements selected between clusters, the information gained by adding more elements within clusters is less than that gained by adding more clusters. This can result in higher standard errors than would be found in a simple random sample.

In order to design the sample, information was provided by programme implementers and was used on coverage areas; calculations of power using various combinations of numbers of clusters and numbers of households sampled per cluster, and estimates of implied survey costs. Data recently collected as part of the Bangladesh Integrated Household Survey (BIHS), augmented by statistics held by UNICEF, were used as the sources of information on the variability of height-for-age Z scores. Statistical power was set at 80 per cent and the significance level at 0.05, with experiments with intra-cluster correlations between 0.00 and 0.10. Calculations assessed the power of detecting impacts on all children, rather than detecting impacts distinctly for boys and for girls (which would require much larger samples than feasible within the budget).

Based on these calculations, it was found that the smallest feasible number of clusters to include in each intervention arm for each programme was 70 clusters, in order to retain sufficient statistical power. Moreover, in order to detect an improvement of 0.25 standard deviations in height-for-age Z scores, information would be required on about 18 children per cluster. This sampling implies collecting information on 1,260 children (= 70 clusters × 18 children per cluster). Over the three treatment arms per programme, and three programmes, the total sample totalled 11,340 children (see Table 4.3).

Thus, following the repeated cross-section design, a sample of 11,340 children (3,780 children per programme) would be measured at the baseline survey and another sample of the same size would be measured at the endline survey. Assuming that the sample consists of roughly equal numbers of boys and girls, the following sample sizes will result.¹³

¹³ The need to include only those households with children aged 6-24 months introduces an additional complication. As part of the preparatory work, listing exercises to identify those households with children in this age range will be needed. This has been incorporated into the costing of the quantitative survey work. Based on rough estimates of the proportion of households in a typical village that contain children in this age range, approximately 20 such households per village are anticipated, so needing 210 clusters/villages for each program. This should not be an issue for the CLP or for the UPPR. It may be an issue for the EEP depending on which sub-component is chosen and the geographical scope of its coverage.

Table 4.3 Sample sizes and distribution by programme

Programme	Girls: 0–24 months	Boys: 0–24 months	Total
CLP			
L only	630	630	1,260
L+N	630	630	1,260
C	630	630	1,260
Sub total	1,890	1,890	3,780
EEP			
L only	630	630	1,260
L+N	630	630	1,260
C	630	630	1,260
Sub total	1,890	1,890	3,780
UPPR			
L only	630	630	1,260
L+N	630	630	1,260
C	630	630	1,260
Sub total	1,890	1,890	3,780
Grand total	5,670	5,670	11,340

4.6 Use of existing data

Prior to conducting the baseline survey, the evaluation team and survey firm conferred with programme implementation partners to determine what information was already available that could be used to aid the evaluation. There were two categories of relevant available information. All three programme implementation partners had detailed information on: (1) the list of sites in which they were currently undertaking livelihoods interventions and (2) the list of all beneficiary households in these sites that were currently receiving the interventions, along with identifying information, such as names, locations, etc. These two lists formed the basis for sampling in the evaluation's baseline survey, as described in Section 4.7.

Each programme had additionally been collecting M&E data on beneficiaries, including a census of each beneficiary household at its time of introduction into the livelihoods programme. However, this information could not be used directly in the evaluation for two reasons:

1. Most of the relevant indicators in the census had become outdated by the time of the baseline survey. Most importantly, the current age breakdown of household members and whether there was currently a child aged 0–24 months in the household could not be ascertained from the census information, since it was collected in an earlier time period. Since the aim of the baseline survey was to identify households with a child currently in the 0–24 month age range, then to

collect detailed information on current nutrition-related indicators for that particular child, all relevant indicators needed to be re-collected and updated during the baseline survey, even if some of the same variables had previously been included in the census.

2. The M&E data were collected primarily for livelihoods beneficiary households, not for non-beneficiary households. Therefore, while the programmes' M&E data provide useful monitoring information on beneficiary households, they do not allow inference on the counterfactual situation for beneficiary households in the absence of intervention and thus do not allow attribution of impact.

In the inception phase, what could be learned from the M&E data in terms of impact was investigated. UPPR's M&E system is quite limited and does not include detailed information on nutrition indicators. The EEP report uses only data on beneficiary households to show that outcomes for beneficiary households increase over time. But it does not appear to use any data on non-beneficiary households, to show that outcomes increase *more* for beneficiary households than for similar non-beneficiary households over the same period of time. It could be the case that some outside factor (not the programme, but, e.g. improving market or weather conditions) was increasing these outcomes for all households over this time period. Thus, these data do not establish the impact of the EEP livelihoods-only intervention on nutritional status, since they cannot distinguish programme impact from secular time trends. The CLP does make reference in its reports to a 'control' group. However, there is only one round of information on this 'control' group, which means that there is no baseline information with which to assess baseline similarity.¹⁴

To summarise, while the impact of the livelihoods-only intervention has *not* been established by these data, the information available from the programmes was critical in designing the sampling for the IE. Moreover, the EEP and CLP reports provide useful descriptive information on nutrition and food security indicators for the beneficiary sample, and efforts were made to collect the evaluation data in such a way that they could be linked to the M&E census data and analysed together.

4.7 Selection of sample households

In order to select a representative sample of households per the sample sizes shown in each of the cells above, a listing exercise was first conducted in each of the 210 sample localities per programme (i.e. 70 'L+N' localities + 70 'L only' localities + 70 'C' localities, where the 'L+N' and 'L only' localities were drawn from the lists of coverage areas provided by programmes). This listing was used to determine the pool of households from which our sample should be drawn. The listing exercise consisted of a very brief census covering broad demographic and socioeconomic characteristics, including numbers and ages of children.

The listing exercise was a census of current livelihoods' beneficiaries in localities covered by the livelihood programmes, for the selection of eventual 'L only' and 'L+N' households. The census could purposively include only current beneficiaries, since as described in Section 4.6, programme partners maintained lists of all livelihood beneficiaries, and therefore the identities of all beneficiaries were already known prior to the baseline survey. This list was then refined to include only those beneficiary households that included at least one child in the relevant age range of 0–24 months, the eligible pool

¹⁴ The reports also show that the control group had the *lowest* maternal anaemia prevalence in Phase 7, suggesting that if the 'control' is really a valid proxy, CLP *increased* maternal anaemia. Other results show that the control group had higher weight-for-age and weight-for-height among children (and lower prevalence of underweight and wasting) than several phases of CLP households, suggesting again that if the 'control' is really a valid proxy, CLP *decreased* children's weight-for-age and weight-for-height. In essence, this shows that the environmental and geographic heterogeneity are such that selecting a few *chars* or villages as a control area is not adequate. This is the reason why the IE will include 70 clusters (villages/or wards) for each of the 'L' only, 'L+N' and 'C' arms. This will also be backed up by information on basic *char* characteristics. All other analyses in the report look only at changes in beneficiary households over time, and as above, do not allow attributing these changes to programme impact rather than secular time trends.

for our sample. From this refined list for each of the 140 localities per programme (= 70 ‘L+N’ localities + 70 ‘L only’ localities), 18 households were then randomly sampled. Overall, as shown in Section 4.5, there were intended to be 1,260 ‘L+N’ households and 1,260 ‘L only’ households sampled per programme.

As described in Section 4.3, the non-programme ‘C’ localities were selected based on discussions with programme partners regarding which sites they did not currently cover nor would cover prior to the completion of the endline survey. To select sample households within each ‘C’ cluster, the listing exercise entailed a census of all households. Since programmes did not have lists of households that did not participate in their interventions, identities of non-beneficiaries were not known prior to the baseline survey. The non-beneficiary household list was therefore developed independently. It was then refined to include (1) only those non-beneficiary households that were very similar along selection criteria for the livelihoods programme and (2) only those beneficiary households that included at least one child in the relevant age range of 0–24 months. From this refined list for each of the 70 ‘C’ localities per programme, 18 households were then randomly sampled. Overall, as shown in Section 4.5, there were intended to be 1,260 ‘C’ households sampled per programme.

4.8 Survey schedule and survey instruments

The now completed baseline survey elicits information on the following components: household demographic characteristics; assets; livelihoods; maternal knowledge; attitudes and practice regarding care behaviours; young child feeding practices; measures of health status and recent illness; and direct measures of anthropometry, with retrospective information collected on some of these domains. Table 4.4 presents a summary of measures collected in the survey. The same survey instrument was administered to the ‘L+N’, ‘L only’ and ‘C’ groups for each programme, so that data can be compared across groups. This feature addresses the gap in the M&E data discussed in Section 4.7. In addition, ‘L+N’ and ‘L only’ households’ identification numbers were carried over from the programmes’ M&E database, so that the data could be linked. It took approximately two hours to field per household. Stakeholders had an opportunity to comment on the design and content of the survey instrument before it was fielded.

The endline survey will be fielded 24 months after the baseline. It will include many of the components elicited in the baseline survey collected in an identical way, such that changes can be detected, although time-invariant characteristics and retrospective information will not need to be collected again. The endline survey will additionally include questions regarding beneficiary households’ experience with the programme, as well as quantitative exploration of issues drawn from the qualitative investigation. It will take approximately two hours to field per household.

There will be seasonal variations in data outcomes when the data are collected and this will be taken into account when planning the time of collection and the interpretation of the results (see also Sections 4.1 and 4.3).

In addition, a short questionnaire collecting information on community-level characteristics was collected at baseline and will be re-administered at endline. The community is defined as the ‘village’ for CLP and EEP and as the ‘slum’ for UPPR. The questionnaire collects information, such as access to infrastructure, disaster proneness, land ownership patterns and some characteristics specific to the context (e.g. related to the *char* for CLP, related to flood protection infrastructure for EEP, related to the slum for UPPR). Information is to be provided by a community leader or other knowledgeable community member, in order to allow matching ‘C’ clusters to similar ‘L+N’ and ‘L only’ clusters, as well as to provide context and suggest explanatory factors for the impact estimates.

Table 4.4 Survey instruments

Category	Measures Collected
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Household demographic characteristics	<ul style="list-style-type: none"> • Number of household members • Each household member's age, sex, marital status, schooling history, main occupation • Employment status and details on economic activities for the past seven days • Access to facilities, economic shocks in past five years, participation in social programmes, transfers and remittances • Non-food expenditure (monthly and annual recall)
Assets	<ul style="list-style-type: none"> • Whether or not household owns each of 86 assets, and whether it was owned five years ago • Quantity, which household member owns it and current value of each asset • Land and water bodies owned or under operation • Housing (ownership, building materials, electricity, details on plinths and floods, details on water and sanitation)
Savings	<ul style="list-style-type: none"> • Whether any adult in the household currently has, or had savings in the past year • Details on each savings account (place saved, primary use, amount, frequency of savings)
Loans	<ul style="list-style-type: none"> • Whether any adult in the household currently has or has ever had any loans • Details on each loan (source, primary use, amount, interest rate)
Livelihoods	<ul style="list-style-type: none"> • Agriculture (crops cultivated, area of land, irrigation, total production)
Food consumption	<ul style="list-style-type: none"> • Food consumed in past 7 days for 321 foods (whether consumed, quantity, source) • Dietary diversity (index child, index child's mother and father, adolescent girl)
Maternal knowledge	<ul style="list-style-type: none"> • Knowledge of index child's mother and oldest adolescent girl regarding breastfeeding, nutrients, illness, diet • Exposure to nutrition information from health workers and media
Attitudes and care behaviours	<ul style="list-style-type: none"> • Prenatal care of index child, delivery, supplements
Young child feeding practices	<ul style="list-style-type: none"> • Details on index child's delivery, breastfeeding, diet
Health status and recent illness	<ul style="list-style-type: none"> • For each household member: injury/illness in past 30 days, medical treatment
Anthropometry	<ul style="list-style-type: none"> • Height and weight of index child's mother • Height and weight of all children under five
Women's status	<ul style="list-style-type: none"> • Work earnings and expenses, mobility, reproductive decisions, domestic violence, financial literacy, control and agency
Community survey	<ul style="list-style-type: none"> • Access to transportation, electricity, health/education facilities

	<ul style="list-style-type: none"> • Disaster proneness • Land ownership patterns • CLP-specific: <i>Char</i> characteristics • EEP-specific: Flood protection infrastructure • UPPR-specific: Slum characteristics
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4.9 Quantitative impact estimation

Formally, estimating double-difference impacts as described in Sections 4.1, 4.2 and 4.3 translates to running the simple ordinary least squares (OLS) regression shown below:

$$Y = \beta_0 + \beta_1 * Treat + \beta_2 * POST + \beta_3 * Treat * POST + \varepsilon$$

For each programme's sample, for any outcome Y , taking $Treat$ as an indicator variable denoting treatment status and $POST$ as an indicator variable denoting the time period at which the outcome is measured (= 1 if endline, = 0 if baseline), the difference-in-difference impact is the estimated β_3 . Estimating β_3 in this regression framework is equivalent to manually calculating the difference-in-difference impact as shown in Table 4.1.

In practical terms:

- To estimate impacts of 'L+N' relative to 'L', the $Treat$ indicator will be defined as 1 for the 'L+N' group and 0 for the 'L' group;
- To estimate impacts of 'L+N' relative to 'C', the $Treat$ indicator will be defined as 1 for the 'L+N' group and 0 for the 'C' group, with appropriate adjustments made to assure the comparability of the 'C' group as described in Section 4.3 (e.g. matching methods);
- To estimate impacts of 'L only' relative to 'C', the $Treat$ indicator will be defined as 1 for the 'L only' group and 0 for the 'C' group, again with appropriate adjustments made to assure the comparability of the 'C' group as described in Section 4.3 (e.g. matching methods).

In all cases, regressions will be run using the statistical software package, Stata. For each regression, the results produced by Stata will include an estimate of the coefficient β_3 , as well as of a 'standard error', indicating the noise in the coefficient estimate. The estimate of β_3 , taken together with its standard error, will indicate both what the magnitude of the estimated impact is and whether the estimated impact is statistically significant.

This methodology applies to estimating impacts on any outcome of interest Y . It can be used to estimate impacts on the 'final outcomes' of interest in the evaluation (children's nutritional status as measured by anthropometric Z scores) or on 'intermediate outcomes' along the causal chain (e.g. parents' knowledge of appropriate childcare and feeding practices; quantity and quality of children's dietary intake). Therefore, the results of the quantitative impact estimation can shed light not only on whether the interventions have an impact on children's nutritional status, but also on why or why not. In particular, as observed in Section 4.1, if there is no impact on 'intermediate outcomes' along the pathway described in the theory of change, it is not surprising if no impact is found on the 'final outcome'.

5 Exploratory/Explanatory Component

5.1 Objectives

The exploratory and explanatory component of the evaluation will examine processes of change, underlying causal processes and mechanisms, and societal, organisational (programme) and community contexts that are required to explain *how, why and under what conditions* the combination of indirect and direct nutrition interventions may have had an impact on child nutrition. This component therefore allows for a detailed exploration of some of the casual pathways and programme assumptions detailed in the theory of change (Figure 3.1, Section 3.2); and will unearth and document as yet unarticulated programme assumptions with the potential to affect programme outcomes. In particular, it will help us to explore the processes and mechanisms explaining the delivery of intermediate outcomes, such as enhanced care practices, improved dietary intake and household food security; and immediate programme outputs, such as total micronutrient supplements distributed.

This component, with a number of sub-components, will be led by IDS and ITAD in partnership with CRNS, Bangladesh and the BRAC Development Institute at BRAC University.

This component will enable the evaluation to meet the second evaluation objective:

To explain this impact [of the nutrition interventions], drawing on wider qualitative and quantitative evidence describing programme specific and wider societal/contextual processes with the potential to impact on programme outcomes

Within this wider objective, the exploratory/explanatory component will have a number of secondary objectives:

- 2.1 To identify the critical processes and mechanisms in the implementation of each programme's strategy, assess whether these processes were implemented as planned, and the extent to which this affected the achievement of outputs.
- 2.2 To map the quality of programme delivery to more intermediate outcomes (care, feeding, livelihoods etc.) identified in the quantitative survey and use this to explain the impacts detected (or not detected).
- 2.3 To investigate interactions between societal, community, family and programme structures and how these might influence intervention uptake and behaviour change.
- 2.4 To identify contextual factors that can enhance or hinder the programme uptake. This will include an in-depth examination and testing of the programme assumptions and causal chain processes within the context of the study communities.

The exploratory/explanatory component will thus contribute to two of the four core evaluation questions:

- Can direct nutrition interventions be delivered effectively through the three different livelihood programmes of CLP, EEP and UPPR?
- Which livelihoods intervention programmes are the most effective in delivering nutrition interventions and why?

5.2 Approach

This component will pursue a mixed methods methodology combining data from the quantitative survey and the programmes' existing MIS/M&E activities with several intensive qualitative case studies of communities and programme processes set within a subset of the quantitative sample. The qualitative investigation will take place in all three programmes and across the different interventions.

Under objective 2.1, the exploratory/explanatory component will focus on the programme implementation as it happens in real time order to determine a number of critical factors to the evaluation success including, for example whether target populations are being reached, beneficiaries are receiving the intended services and staff are adequately qualified. It also assesses the extent to which the programmes are implemented as designed, and the consequences of this, including any assumptions linking programme activities, outputs and outcomes. Data contributing to this objective will be collected via a number of qualitative and quantitative methods and instruments including: desk reviews; staff and beneficiary workshops; process quality measure development and piloting; and participatory process mapping and process diaries.

Under objective 2.2, the exploratory/explanatory component will focus on mapping intermediate outcomes to reported outputs using a combination of: (1) data generated from the quantitative surveys on intermediate outcomes (see Section 4.1 for explanation, and Table 4.4 for categories and related measures to be captured on intermediate and final outcomes); (2) outputs and outcomes measured as part of existing MIS/ongoing programme M&E linked to the programmes' logical framework indicators (see Annex 6 for a summary of the three logframes and associated output, outcome and impact level indicators for each of the three programmes).

Under objective 2.3, the exploratory/explanatory component will include an in-depth exploration of processes and interactions between societal, community, family and other external influences, which may mediate or hinder adoption of the direct nutrition interventions and consequent behaviour change across different beneficiary groups and three livelihood programmes. These processes and structures can also shape beneficiaries' views, judgement and perceptions of the different interventions and specific elements of the interventions. As part of this, the component will also explore gender dynamics and the influence of gender on intra-household bargaining in relation to child health and nutrition at community and household levels. Qualitative investigation (especially in-depth interviews with individuals) will also help to identify sensitive issues such as potential sociocultural barriers to effective individual intervention utilisation. A better understanding of the social processes, institutions and mechanisms behind the observed nutrition outcomes will help test programme assumptions and may account for (at least some of) the variations in intervention impact across the different beneficiary groups within the three programmes.

Under objective 2.4, the exploratory/explanatory component will deepen our understanding of the social, cultural and political contexts and physical environments in which the different programmes are embedded and which may help explain the programme's causal pathway and testing the assumptions linking outputs, outcomes and impacts (as per the ToC). A better understanding of the 'real-world' context of the different programmes is important, as context has been shown to be intrinsically involved in the causal processes that may bring about (or not) the desired impacts of the interventions (Maxwell 2004). The identification of contextual factors that may enhance or hinder the uptake of the interventions is also vital to be able to draw conclusions regarding the sustainability of programme benefits over time and the transferability of the intervention approach to other settings and target populations.

Finally, the investigations undertaken as part of this component will also seek to identify and explain unexpected and unintended impacts (both positive and negative) of the intervention in different local contexts.

5.3 Methodology

5.3.1 Data collection methods

A mixed methods approach will be followed for this component. Quantitative data on impacts and more intermediate outcomes will be collected via the household survey methods described in Section 4. This will be combined with programme data from the programmes existing MIS/M&E activities

(including data reported for the programme logframe indicators) on outputs and outcomes delivered to contribute to objective 2.2 (see Annex 6 for a summary of the three programmes' logical frameworks).

Qualitative data will be collected via a number of well-established qualitative and process evaluation methods to be further piloted and tailored to each programme and community context. This will comprise multiple methods (e.g. in-depth interviews and focus groups, observations, mapping), a range of informants (e.g. beneficiaries, health workers, key informants) and a number of different qualitative study locations (see sampling, below) to gain multiple perspectives into each programme and to achieve a triangulation of qualitative information.

Table 5.1 maps the four sub-objectives of this component with the programme assumptions to be tested and presented in the ToC, the methods, target groups and specific purpose. A brief description of each of the qualitative methods to be employed is given below.

All qualitative research methods will adhere to the strict ethical standards described in Section 7.5, (including OECD DAC Quality standards, IFPRI's and IDS' ethical guidelines). Qualitative data collection will only take place once full and informed consent is obtained from the respondent. Confidentiality and anonymity of participants will be protected at all times and real names of people and locations will be replaced with pseudonyms.

Table 5.1 Outline of exploratory/explanatory methods

Overall Objective: To explain the impact [of the nutrition interventions], drawing on wider qualitative and quantitative evidence describing programme specific and wider societal/contextual processes with the potential to impact on programme outcomes.				
Objectives	Programme assumptions tested	Methods	Groups targeted	Purpose
2.1 To identify the critical processes and mechanisms in implementation of the programme's strategy, assess whether these processes were implemented as planned, and the extent to which this affected the achievement of outputs.	Beneficiaries to be appropriately targeted and selected, and programme outputs managed and delivered.	Process mapping	<ul style="list-style-type: none"> • Frontline programme staff • Supervisory staff • Management • Beneficiaries 	To detail what activities are actually carried out by programmes at point of delivery and how this was implemented via the chain of command. To explain the links between the institutional arrangements of the programme structures, the critical paths between them and the horizontal and vertical linkages of the programme.
		Process diary	<ul style="list-style-type: none"> • Frontline programme staff • Supervisory staff • Programme management 	To capture changes and provide feedback on programme activities and dynamics to help review performance and capture decisions undertaken during the programme, providing a reliable and convenient basis for reporting.
2.2 To map the quality of programme delivery to more intermediate outcomes (care, feeding, livelihoods, etc.) identified in the quantitative survey and use this to explain the impacts detected	Programme outputs lead to desired proximate programme outcomes.	Quantitative survey Existing programme MIS/M&E data including logframe reporting	<ul style="list-style-type: none"> • Beneficiaries • Programme management 	To understand how deviations from planned programme delivery affect the achievement of the range of intermediate (underlying) outcomes needed for the longer-term nutrition impacts which are the focus of the quantitative impact evaluation.

(or not detected).				
2.3 To investigate interactions between societal, community, family and programme structures and how these might influence intervention uptake and behaviour change.	Assets and cash are not diverted within communities and/or households, and that household agricultural practices are effective and resilient.	Social mapping	<ul style="list-style-type: none"> • Community leaders • Key individuals • Male and female community members with different socioeconomic backgrounds 	<p>To explore social networks, relationships and interactions in the community.</p> <p>To explore communication structures within the community.</p>
2.4 To identify contextual factors that can enhance or hinder the programme uptake. This will include an in-depth examination and testing of the programme assumptions and causal chain processes (described in the ToC) within the context of the study communities.	Behavioural change promoted by the programmes to be robust enough to overcome traditional habits, practices and social norms, and that beneficiaries continue to follow new practices between programme input points.	In-depth interviews	<ul style="list-style-type: none"> • Beneficiaries of 'L only' intervention • Beneficiaries of 'L+N' intervention • Non-beneficiaries (female) • Key informants from the communities 	<p>To explore personal views, perceptions and judgements of the interventions and influence on behaviour change.</p> <p>To explore existing nutritional behaviour patterns and resources and in how far they might influence the success or failure of the interventions.</p> <p>To understand the context of programmes and interventions and how and why context can influence the interventions.</p> <p>To understand family structures and household decision-making processes with regards to the interventions.</p>
		Focus group discussion	<ul style="list-style-type: none"> • Beneficiaries of 'L only' intervention • Beneficiaries of 'L+N' intervention • Non-beneficiaries (female) 	<p>To explore perceptions and experiences with the interventions especially with regards to interactions within the community.</p> <p>To explore contextual factors and wider changes within the communities.</p> <p>To explore effect of interventions on existing community structures</p>
		Participatory observation	<ul style="list-style-type: none"> • Livelihood beneficiary HH with children 6–24 months • Livelihood and 	<p>To explore beneficiaries' behaviour in the context of the programmes and the different interventions.</p> <p>To identify existing nutritional behaviour patterns, practices, traditional habits and social norms that may facilitate or hinder the</p>
	Community mobilisation and women's empowerment activities are			

	strong enough to change existing social structure.		nutrition beneficiary HH with children 6–24 months <ul style="list-style-type: none"> • Non-beneficiary HH with children 6–24 months 	uptake of behaviour change messages. To explore human interactions within the family, community and with programme staff in the context of the interventions. To explore and document changes in participants' behaviours over time.
	Sustainable linkages are created with existing service bureaucracies.	Life history	<ul style="list-style-type: none"> • Livelihood beneficiary HH with children 6–24 months • Livelihood and nutrition beneficiary HH with children 6–24 months • Non-beneficiary HH with children 6–24 months 	To understand the beneficiaries' experiences and perceptions of the programmes within a personal, historical, social and economic context and characteristics. To identify barriers and facilitators of intervention uptake.

Process mapping and process diaries The process mapping technique involves holding a group exercise with the village institutions/beneficiary households, and field staff of programme/partners. Process mapping ultimately aims to explain the links between the institutional arrangements of the programme structures, the critical paths between them and the horizontal and vertical linkages of the programme. Diary-type reporting can both capture changes and provide feedback on programme activities and dynamics to help review performance and capture decisions undertaken during the programme, providing a reliable and convenient basis for reporting. The diary method aids the field team to recognise the process linkages when they occur and to think analytically and critically when they do not. Rather than attempting to quantify process changes, the emphasis is on tracking the direction of any process and finding an explanation for that. Field assistants responsible for the process diaries will employ a number of qualitative methods to contribute to the documentation of programme processes: namely participant observation, semi-structured interviews, review of institutional records and focus group discussion.

Participatory social mapping in the communities selected for the in-depth qualitative case studies will be used to explore social networks, relationships and interactions in the community. The findings from mapping will form the starting point for in-depth explorations (via in-depth interviews and focus group discussions) of the interaction between societal, community, family and programme structures (Objective 2.2). It will also help to understand communication structures within the community and how information (e.g. behavioural change messages from the direct nutrition interventions) is shared (or not). This may also uncover gender-specific social support and power structures within the community, which may enable or hinder behaviour change in response to the interventions.

In-depth interviews with beneficiaries will provide rich and contextual insights into their personal views, beliefs, perceptions and judgements of the interventions. It will also allow an insight into contextual factors at individual and household level, including: gender roles and dynamics, intra-household decision-making power in relation to child health, existing resources and behaviour patterns with regards to child nutrition and intra-household nutritional patterns, and how these factors may interact and shape the intervention outcomes. In-depth interviews with key informants in the community (e.g. teachers/health or other government workers, local political representatives, civil society representatives, religious leaders) will provide better understanding of the context of each programme and will highlight needs and problems in the community. They will also provide information on the context-specific nutrition situation within the community.

Focus group discussions with beneficiaries will help to bring out important contextual information and individual perceptions and experiences with the interventions across the programmes in a dynamic group context where people encourage and stimulate each other to consider different views. Group interactions will also facilitate the exploration of individual experiences with the interventions and perceptions around the selection of beneficiaries. Focus group discussion can also provide an important insight into contextual factors and wider changes within the different communities that may have had an effect on child nutrition and may or may not have been triggered by the interventions. Focus group discussion can also explore how the uptake of the interventions within the three programmes may have been influenced by perceived community cohesiveness and solidarity, gender relations and women's access to information and services, strength of community institutions and existing social relations.

Flexible semi-structured topic guides will be developed to guide the in-depth interviews and focus group discussions. Pilot-testing of the guides will take place and the guides will be modified as appropriate.

Participant observation will help identify existing nutritional behaviour patterns, practices, traditional habits and social norms that may facilitate or hinder the uptake of behaviour change messages. Observation will also allow us to collect data on human interactions within the family, community and programme staff that may influence the uptake of behaviour change messages in the context of the intervention within the three different programmes. Participant observations will be used to collect qualitative data and will provide insider views into the study communities.

Repeated observations will also allow us to closely explore processes of change in beneficiaries' behaviours, as well as capture details on unintended positive and negative programme outcomes and impacts. Observation will be used to triangulate the qualitative data collected from in-depth interviews and focus groups.

Detailed life histories of beneficiaries will help to better understand an individual's experiences and perceptions of the programmes and the different interventions embedded within a person's historical, social and economic context and characteristics. Traditional practice, social norms and beliefs around child nutrition and care can be explored in detail. This will allow the identification of potential individual facilitators of and barriers to the effective intervention uptake.

Key questions to be addressed via each of the qualitative methods will be formulated following further consultation with local partners; and following the outputs of a series of literature reviews, which have been commissioned on the social, cultural, economic and agro-ecological characteristics of the areas to be studied (to be summarised in the baseline report). A selection of likely questions we will attempt to answer through the range of qualitative methods are described in Box 5.1.

Box 5.1 Sample evaluation questions to be posed by qualitative methods

- How do households perceive the increase of income as a result of the livelihoods programme (only)? How do households use this additional income (e.g. translating into improved diets)?
- Which livelihoods interventions have been most effective in terms of bringing resources to different family members; how have the interventions strengthened coping strategies and have these varied seasonally?
- How is the sustainability and longer-term impact of the interventions affected by existing community relations and politics; how might they be modified by existing agrarian relations in terms of land ownership and asset transfer issues?
- Have the interventions led to increased empowerment and if so, how has this been shown; has it led to a sustainable improvement in diets?
- What are the beneficiaries' views, opinions and experiences on the additional nutrition component as part of the livelihood strategy?
- What are the underlying barriers and facilitators for the uptake of the direct nutrition interventions as part of the livelihood strategy within the context of the three programmes?
- The issue of trust: To whom do mothers and girls turn to seek advice and approval for behavioural change, and the role of husbands in this process; how far do informal women's networks and organisations play a role in this process?
- Time allocation: How do the behavioural changes proposed by the programme interventions affect (positively or negatively) the allocation of time and resources by women?
- Informal networks: How effective are the programme extension services in the messages and approaches they propose in nurturing informal networks and organisations within a social context?

5.3.2 Sampling and limitations

Data collection for this component will be split between a number of study sites selected for intensive qualitative case studies of either programme or community processes; reflecting the underlying difference in Objectives 2.1, 2.2 and 2.3, 2.4. There is no exact formula to determine adequate sample size for qualitative samples, which requires a trade-off between breadth and depth. The scope of the study, available resources and the requisite number of qualitative sites to cover to allow for an

understanding of underlying pathways and processes of the programmes and interventions were key determinants for our sample sizes.

Objectives 2.1 and 2.2 – programme focus clusters

Objectives 2.1 and 2.2 focus on programme delivery and therefore the sampling methodology is primarily concerned with an unbiased and relatively wide selection of programme sites on which to base the data collection supplementing the existing MIS and quantitative survey data. The wider population of clusters (using the lists provided by the implementing programmes used for the quantitative survey) will be categorised following criteria such as geographical coverage (district, *upazila* and union), proximity of the cluster from a service delivery centre, and whether the cluster is receiving the livelihoods and nutrition or the livelihoods only package of interventions. Then *a proportionate number of clusters will be randomly selected from the stratified clusters*. Further random sampling will take place within each cluster to select individual households – targeting ‘L+N’ beneficiaries/households with children aged 6–24 months.

Up to 15 clusters will be sampled under each programme. Sampling has therefore been based on the distribution pattern of primary sampling units shown in Table 5.2:

Table 5.2 Expected sample size and distribution of programme focus clusters (Objectives 2.1 and 2.2)

Project	L+N	L	Total
CLP	6~8	6~7	12~15
EEP	6~8	6~7	12~15
UPPR	6~8	6~7	12~15
Total	18~24	18~21	36~45

Objectives 2.3 and 2.4 – community focus clusters

Objectives 2.3 and 2.4 are primarily concerned with an in-depth understanding of community processes and context and therefore study communities (community focus clusters) will be selected *purposively* as a sub-set of the quantitative sample of clusters and to reflect the two major intervention groups in the three programme areas (see Table 4.2).¹⁵ To ensure comparability between contextual environments, qualitative communities for each intervention group (livelihood, livelihood and nutrition) and control group will be selected from the same district and *upazila* for each programme. Within each community focus cluster, beneficiaries will be selected strategically using stratified purposeful sampling to illustrate characteristics of different relevant sub-groups and to allow comprehensive understanding of the programme in different settings. Qualitative samples will include different categories of respondents from beneficiaries’ households, e.g. young and old, male and female household members. Interviewing different household members is important to obtain an insight into gender roles and intra-household decision-making in relation to child nutrition and health.

¹⁵ In designing this evaluation component it was discussed whether there would be synergies in the data collection to bring Objectives 2.1–2.4 together in collecting data in the same focus communities. Effectively, with a smaller number, the community focus clusters would become a sub-set of the programme focus clusters, themselves a sub-set of the quantitative survey clusters. Ultimately however, it was decided to separate the two, as not only were different sampling methodologies deemed desirable (stratified random and purposive, respectively), but different teams would be carrying out the separate methods relating to the different methods at different periods of the evaluation and it was felt that choosing a wider set of communities would lessen the burden on the individual communities and programme staff; and would entail a wider set of communities to be subject to the mixed methods investigations outlined here, broadening the reach of this component to up to 50 clusters.

Key informants from the community will be identified and will include leaders, local elites and representatives of key occupations. As the exploratory/explanatory component will involve different periods and methods for qualitative data collection, final sample size will be determined individually based on the aims of each additional qualitative follow-up investigation.

Table 5.3 Expected sample size and distribution of Community Focus Clusters (Objectives 2.3 and 2.4)

Name of Project	Number of Selected Communities		
	Intervention (L)	Intervention (L+N)	Control
CLP	1	1	1
UPPR	1	1	1
EEP	1	1	1

The challenges of the qualitative methods outlined here include a risk of biases, especially as the same teams of qualitative researchers will visit the sites repeatedly. To reduce these biases, we will work with an experienced team of qualitative research from the BRAC Development Institute and CNRS and conduct frequent intensive training and supervision of the field data collection. The generalisability of the findings derived from a small number of qualitative case studies is limited (and many social scientists argue that generalisability is not the purpose of qualitative research). However, plausible transferability or academically rigorous comparison of the inferences that can be drawn from the wider mixed methods analysis to other populations and settings, will be an important aim of this component.

5.3.3 Timetable of data collection

Data collection within this component will occur throughout a large part of the evaluation cycle and sequential to the quantitative survey to investigate underlying causal mechanisms and within the different community and programme contexts. The sequencing of this component will allow it to act as a strengthening, interpretive and explanatory lens throughout the data collection and analysis undertaken for the quantitative impact and cost effectiveness components. Initial literature reviews of programme documentation and the wider context of livelihoods and nutrition in Bangladesh have already been commissioned and will inform the following steps:

The first qualitative data collection in the community focus clusters will closely follow the quantitative baseline survey in year one and aims to strengthen the quantitative baseline by providing in-depth detailed descriptions of contexts and current scenarios within the different intervention groups across the three programmes. Initial qualitative work will also include participatory social mapping to gain a rich insight into existing social interaction and influence structures.

Work will commence in year two on a number of the mixed-methods strands of work focussing on the evaluation of programme processes in the programme focus clusters. Desk methods will include desk reviews of the theory of change and a review of the intervention logic; and a further thorough review of programme documentation, MIS systems and wider ongoing M&E activities. This will be followed by development of the participatory process mapping and process diaries. Programme staff will be involved in participatory mapping workshops and individual interviews focussing on implementation modalities, key/nodal processes; process owners and critical pathways to delivery. Workshops will also be undertaken with both beneficiaries and programme staff to develop participatory measures of process quality from

both programme and beneficiary perspectives. These measures will be piloted and carried out alongside the process diaries.

Ongoing qualitative work in the community focus clusters (implementing the methods described above) will follow an iterative process, whereby qualitative researchers will return repeatedly to the case study sites to explore changes in response to the interventions, as well as potential changes in the communities that may have occurred independent from the interventions. This will allow us to explore contextual factors (including seasonality) in greater depth and how they may interact and influence the intervention uptake and behaviour change.¹⁶ Participant observation will provide further rich insights into beneficiaries' interactions and perceptions of the programmes and various interventions.

Depending on available resources, a small qualitative exploration at the end of the final quantitative survey may be conducted to obtain a deeper description of the observed impact and explore underlying pathways for the impact further. Repeated visits to the same qualitative communities will help to build a strong rapport with the local communities and will enhance the credibility of the qualitative data collected.

5.4 Data analysis

This component will yield a large amount of qualitative and quantitative data collected under the different components and listed in Table 5.1.

Quantitative data derived from the quantitative survey will take place under the quantitative analysis strategy described in Section 4. This will be combined with descriptive and statistical analysis of data available on programme outputs, available through programme MIS, logframe reporting and ongoing M&E.

The mixture of data on programme processes from the programme focus communities will initially be compiled by the team of researchers working in these communities led by CNRS and ITAD. From an initial review of the literature, a number of critical factors relevant to programme delivery, governance and sustainability have been compiled in Table 5.4. These will be used to inform a series of cascading summaries of findings at different geographical scales feeding into the final report, with a report on programme processes compiled for each sample cluster, at the programme level and in an inter-programme comparison. At the programme level, the analysis will map and synthesise critical pathways and describe trends amongst the delivery programme processes, as well as point to potential design weakness (in the context of achieving the intended results), using the cluster level summaries to illustrate particular cases, contexts and trends. Comparative lessons will then be drawn in the inter-programme comparison combining both the quantitative impact findings and the programme process findings described here.

Qualitative textual data collected under this component from the community focus clusters will be analysed using a directed content analysis approach focussed around the main qualitative evaluation questions and guided by the existing programme theory (Patton 2002). Data analysis will start with open coding of several interviews and the development of an initial coding scheme that will guide the coding of the remaining data. The coding scheme will be adjusted and modified as necessary during this process. To increase the rigour of the data analysis, analysis will be carried out independently by different qualitative researchers and results will be combined. Qualitative data analysis software (NVivo) will be used to manage and aggregate coded data.

¹⁶ Bamberger *et al.* (2009) suggest that qualitative exploration can also help to identify 'unobserved' 'context-specific' factors that may have an important (supportive or constraining) effect on the intervention uptake by beneficiaries but might not have been captured in the quantitative surveys.

Qualitative findings will be used to better understand and build potential theories that will help to explain underlying mechanisms of the three interventions in the different programmes and contexts. These will be used to inspect and further develop the programme theory. Qualitative findings will also be integrated with the quantitative findings using an iterative process, whereby qualitative data will help to explain, extend and triangulate the quantitative data on programme impacts (via the quantitative impact component) and delivered outputs (via internal MIS /logframe reporting). Qualitative data may also offer new avenues for the quantitative analysis and suggest additional data disaggregation strategies for the final report.

Different strategies will be employed to enhance the trustworthiness and rigour of qualitative data collected within this component and will be employed throughout the evaluation (see Huberman & Miles 2002; Marshall & Rossman 2011; Shenton 2004). For example, the adoption of well recognised qualitative tools and analysis approaches by a team of experienced qualitative researchers with high familiarity with the contextual environments of Bangladesh will enhance the credibility of the qualitative data. Frequent peer-debriefing sessions between the qualitative researchers during data collection and qualitative data analysis will facilitate reflexivity and broader, less biased data interpretation. Triangulation via the use of different qualitative methods will help to reduce potential systematic bias. This will include the use of different qualitative data sources (e.g. in-depth interviews and focus groups, observations, mapping); different qualitative informant groups (e.g. beneficiaries, health workers, key people); and qualitative study sites. In-depth documentation of the qualitative research methods will further increase the integrity and trustworthiness of the qualitative data.

Table 5.4 Critical analytical factors for analysis of programme processes

Critical Factor	Description
Transparency	An evaluation of processes that provide scope for corruption (e.g. hiding information, ambiguity), such as selection of beneficiary households.
Accountability	This will provide information on the system through which an individual or group or institution is answerable to another individual, group or institution for establishing good governance in a process.
Inclusiveness	Programme inclusiveness implies active participation in the decision-making process. However in reality, often poor women members attend meetings but their opinions are not recorded or explicitly sought after, making their participation passive.
Sustainability	Critical review of the factors leading to the sustainability of outcomes.
Empowerment	Empowerment often addresses members of beneficiary households whose social discrimination processes have excluded them from decision-making processes through, for example discrimination based on disability, race, ethnicity, religion or gender.
Governance	Governance has been defined as the rules of a particular system. It has an important role for proper functioning of a system or intervention and its acceptance by the concerned population, which is its legitimacy.
Communication and coordination	Coordination for achieving a common goal or effect and communicating messages among the target audiences.

Linkage building/networking	Both key for success of the intervention. A social network or linkage is a social structure made of nodes (generally individuals or organisations) that are tied by one or more specific types of interdependency, such as values, visions, ideas, financial exchange, service delivery, friendship, kinship, dislike, conflict or trade.
Capacity building/training/awareness	Capacity building often refers to assistance, which is provided to entities, which have a need to develop a certain skill or competence or for general upgrading of performance ability and knowledge.
Livelihoods development and the nutrition component	Cause–effect relationship among the components of the livelihoods framework will be critically evaluated in the context of nutritional component among the 6–24 months aged children of the beneficiary households.
Information sharing	Sharing of information contributes to enhancing a knowledge base, closely linked with transparency, governance and capacity building. It is envisaged that the programmes would undertake appropriate instruments to share information on direct nutrition interventions, thus the process of the information sharing mechanism will be critically evaluated.
Acceptability and participation	These issues relate to the attitude of beneficiary households in the different programmes.
Learning	The issue is important because it relates to behaviour outside the programme activities, being the extent to which autonomous modifications or adoption have taken place, which institutional avenues of support are sought by stakeholders without programme facilitation and how these may be significant in the post-programme situation. The issues also relate to ‘acceptability and participation’ (see above) because local modifications may reflect local needs and preferences. The analysis of programme processes will pay substantial effort to capture learning of nutrition interventions and will communicate with the concerned stakeholders.

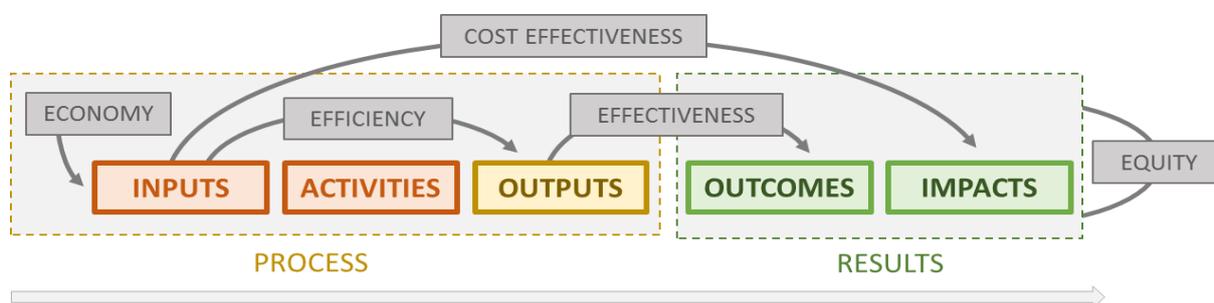
6 Cost Effectiveness Component

6.1 Objective, approach and key questions

The objective of the cost effectiveness component is to understand whether benefits are achieved (improvements in nutritional status based on Z scores) from minimum resource costs. The tools to determine this use follow the standardised DFID VfM framework. The approach to ensuring Value for Money (VfM) is based upon the four 'E's of economy, efficiency, effectiveness and equity (see Figure 6.1):

- **Economy:** Focusses on minimising input costs whilst maintaining quality. Economies of scale¹⁷ are relevant here too – the size of the intervention may result in lower unit costs.
- **Efficiency:** Concentrates on transforming inputs into outputs with maximum efficiency. For example, certain combinations of interventions may have economies of scope¹⁸ – where two or more goals (e.g. nutrition improvement and resilience building) are targeted within the same fixed costs of setting up the platforms. This may increase efficiency gains by delivering the same outputs with a reduced number of inputs.
- **Effectiveness:** Focusses on the relative benefits of the interventions, being measurement of the changes in health and welfare indicators of the beneficiaries.
- **Equity:** Although this fourth 'E' is not always applied in VfM analysis, it is useful to consider whether the right people are being reached in the programmes in terms of needs and vulnerability. This will involve explicitly tracking the types of beneficiaries targeted, in terms of socioeconomic indicators, in order to measure equity of results.

Figure 6.1 The logic chain and the four 'E's of cost effectiveness



Cost effectiveness looks at results, seeking to assess the effectiveness and equity with which the different intervention packages deliver development outcomes and impacts. This will be assessed through a cost effectiveness analysis (CEA), which seeks to estimate unit costs of outcomes so that comparisons can be made with external benchmarks.

6.1.1 Research questions and associated methods, sampling and instruments

The CE component will be led by ITAD and will attempt to answer a particular set of research questions listed below pertaining to cost effectiveness and value for money.

¹⁷ Economies of scale occur when average costs fall as the size of an operation increases, as any fixed costs involved (e.g. the costs of project offices) are spread over a greater number of outputs.

¹⁸ Economies of scope occur when average costs fall as the range of activities are diversified – for example it may be more cost effective for intervention packages to be combined, thereby sharing resources in their delivery and proving cheaper than providing the same services separately.

1. What is the unit cost of changes to child stunting for each of the three programmes for both ‘L only’ and ‘L+N’? Which nutrition intervention is the most cost effective, and why?
2. How cost effective are these programmes compared to similar programmes in other countries and contexts?
3. What are the main cost categories, and how do they compare to external benchmarks? What are the main cost drivers that justify relatively high costs?
4. What are the total costs incurred by society and opportunity costs incurred to participate in the programme?
5. Beyond CEA, what are the underlying processes, perceptions and experiences about the intervention? What are the putative but uncostered benefits of the interventions?

What is the unit cost of changes to child stunting for each of the three programmes for both ‘L only’ and ‘L+N’ interventions? Which nutrition intervention is the most cost effective, and why?

The unit cost analysis will specifically focus on the costs of changes to child stunting tracked between baseline and endline. This will require detailed financial data from the programme expenditure,¹⁹ and end-user cost data from the quantitative survey baseline and endline.

The objective of the unit cost analysis will be to determine:

1. How much did it cost to increase HAZ by x per cent using ‘L only’?
2. How much did it cost to increase HAZ by x per cent using ‘L+N’?

The above metrics will allow the evaluators to compare the three different programmes with each other to see which provide the same benefits with the lowest cost. Thus, it will be possible to conclude which of the three programmes are the most cost effective and thus conclude whether ‘L only’, or a combination of ‘L+N’ is cost effective.

To estimate this, the following formula is used:

(Total economic resource cost²⁰/ x percentage point change in ‘L only’)/No. beneficiaries

and

(Total economic resource cost²¹/ x percentage point change in ‘L+ N’)/No. beneficiaries

How cost effective are these programmes compared to similar programmes in other countries and contexts?

For the purposes of external and global benchmarking, to determine how cost effective these are compared to similar programmes in other countries and contexts, it would be necessary to find sufficiently similar benchmarks. Thus, it would be necessary to find externally valid unit cost data on Z scores. Given that there is unlikely to be a wealth of other programming and data focussing on changes in Z scores, it is useful to convert Z scores into a common denominator – Disability Adjusted Life Years (DALYs) which allows us to compare these interventions with wider external nutrition interventions. It is thus possible to understand, in more depth, the cost effectiveness of these intervention types relative to other nutrition intervention types with the differing combinations of L and N.

¹⁹ See Annex 5

²⁰ i.e. this covers programme cost, opportunity costs and any other costs borne.

²¹ i.e. this covers programme cost, opportunity costs and any other costs borne.

Data permitting, the evaluation will also attempt to convert Z scores to DALYs using standardised assumptions from WHO and region-specific literature. The DALY can be considered as representing one lost year of healthy life due to disease or injury (in general, one of the aims of DFID’s nutrition interventions is to prevent illness and premature death). The people who benefit from these interventions live years of healthy life that would otherwise have been lost. The health outcome of the intervention is the years of healthy life and can be expressed in terms of the number of DALYs averted). The cost-per-DALY metric refers to the cost of averting that year of life lost due to disease or injury. This quantifies all the medical costs, staff costs, overheads and other costs incurred by all members of society to prevent one DALY. It thus provides a convenient metric that allows comparisons across differing health problems, to allow one to determine which diseases are lower-cost to treat. The resulting measure can then be assessed to determine if the intervention is cost effective relative to other ways of improving health. For example, it is known that in the reduction of HIV, interventions that focus on prevention (such as education, counselling, condom use) have a much lower cost per DALY than interventions which treat HIV and AIDS using antiretroviral drugs. Thus, prevention is more cost effective. The DALY has been extensively used by the WHO to quantify the cost effectiveness of different health interventions for leading causes of, and risk factors for, disease.

WHO also provides threshold indications as to cost per DALY figures, which are deemed cost effective or not. They state that a cost per DALY which is less than the Gross National Income (GNI) *per capita* is considered highly cost effective. If it is less than three times the GNI *per capita*, it is considered cost effective, and greater than this, not cost effective. The GNI *per capita* of Bangladesh is \$840 (2012). Therefore, a cost per DALY of less than \$840 is deemed highly cost effective by WHO.

Sensitivities will be taken around the assumptions underlying the conversion methodology to stress test the model. This will provide best case and worst case scenarios with cost per DALY data. This will enable us to see whether the findings (i.e. whether the interventions are cost effective or not) are robust to uncertainty in the assumptions and methodology.

What are the main cost categories? How do they compare to external benchmarks? What are the main cost drivers that justify relatively high costs?

The main cost categories will be the actual monetary value of direct costs and indirect costs per year for the programme. Direct and indirect programme costs will need to be accessed, attributed and analysed. The programme budget holders will be asked to provide this disaggregated information from their financial systems, covering all costs that are necessary for on the ground delivery of the programmes (see Annex 5 for a breakdown of cost categories to be assessed). This will be a comprehensive coverage of costs and will cover commodities, services and HR costs. This data will be collected continually, and presented every 6 months.

Table 6.1 Data on cost categories that will be collected

Direct costs	<p>Commodities</p> <p>Nutrition inputs (iron and folic acid tablets, micronutrients, de-worming tablets, de-worming suspension)</p> <p>Publications and training materials</p> <p>Vehicles and motorcycles</p> <p>Office equipment</p> <p>Mobile phones for CPKs</p> <p>Other equipment</p>
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	<p>Services</p> <p>Transport</p> <p>Training logistics</p> <p>HR</p> <p>Project staff, CPKs, Consultants</p> <p>Other direct costs not borne by the programme (to be specified, e.g. end-user costs)</p>
Indirect costs	<p>Commodities</p> <p>Vehicles</p> <p>Office equipment</p> <p>Services</p> <p>Office (rent, utilities, maintenance, phone bills, audit, legal, insurance, etc.)</p> <p>Security</p> <p>HR</p> <p>Administrative staff</p> <p>Other</p>

Where possible and data permitting, the percentage breakdown of cost categories will be assessed to determine whether or not they are in the right ball park, using external benchmarks from similar programmes. For example, DFID guidance²² states that administrative overheads for NGOs should not exceed 15 per cent. Thus, the administrative overheads will be benchmarked against this figure of 15 per cent. Where cost categories are particularly large and exceed external benchmarks, a cost driver approach will be taken to determine the factors that are driving such costs, and to understand the justification for higher cost thresholds. A typical example of a cost driver is geography and terrain in remote areas that drive transport costs upwards.

Using information on benchmarks, cost drivers and the actual disaggregated cost categories for the nutrition components, it will be possible to conclude on the 'Economy' component of the VfM analysis, in terms of whether costs are minimised (holding a constant quality standard).

What are the total costs incurred by society and opportunity costs incurred to participate in the programme?

The total costs should include costs incurred by society as a whole, as well as direct programme costs. For example, there may be extra opportunity costs incurred by beneficiaries to participate in the nutrition programme. These will be tracked in the quantitative survey (e.g. foregone benefits of other productive activities that they could have been doing. See survey question Module Q1: Health-related

²² Source: Forest and governance programming advice, October 2013.

travel/incidental expenses). Such foregone benefits can be estimated using shadow pricing.²³ The shadow prices will be estimated by local wages in the community if relevant to the foregone benefits.

What are the unquantified benefits, direct and indirect of the nutrition interventions?

Interpreted by itself, CEA will only show fairly narrow results as only Z scores are being tracked. There will be different types of unquantified benefits beyond Z scores that are not tracked in the quantitative surveys, such as changes in haemoglobin levels and anaemia rates, prevalence of diarrhoea or adoption of better infant feeding practices known to improve nutritional status. Using the exploratory/explanatory component findings, the costs of the interventions will be matched to these findings to reach some value judgements and qualitative analysis on value for money beyond CEA.

The exploratory/explanatory component will therefore contribute to the CEA in two main ways:

1. Conceptualise and explain the quantitative Vfm data by exploring underlying processes and beneficiaries' perceptions, experiences and beliefs about the intervention.
2. Explore the putative but uncosted benefits of the interventions.

To meet the above two objectives the exploratory/explanatory component will aim to get a deeper understanding of the following topics relative to the CEA:

- Were the interventions efficient and smooth in their running, in terms of time taken, resources used (as far as these are known)?
- Do beneficiaries believe that the same benefits could have been achieved through other means?
- Are beneficiaries aware of other types of programming that they have experienced, which provide them with these benefits in a better (more efficient) way?
- What barriers (e.g. time, costs) did beneficiaries experience when accessing the intervention?
- What benefits has the household achieved from the programming and what types (uncosted benefits – direct or indirect, behavioural changes and unintended benefits or costs)?

²³ Shadow pricing is a technique for estimating the value of things which have no observable market price, such as the value of time or health. Deriving shadow prices may involve, for example conducting questionnaires in order to ascertain the value that individuals place on certain intangible items.

7 Governance; Risks, Ethics and Communications

7.1 Programme management and reporting

The overall management and coordination of the IE will be the responsibility of IDS, with responsibilities for specific sub-components of the evaluation divided between IDS, IFPRI and ITAD and their in-country partners in Bangladesh, BRAC Development Institute, DATA and CNRS.

IDS has appointed a part-time Programme Manager responsible for leading on the general management and coordination of the evaluation programme activities, ensuring effective internal communication between partners and externally, and reporting to PATH on behalf of all partners on the evaluation's progress on a monthly basis, who in turn report to DFID.

All the evaluation partners have significant experience of managing and/or contributing to these types of complex multi-method multi-partner evaluations. Strong leadership from IDS as well as effective cross team-working and transparency are considered central to the overall management of the evaluation. The core multidisciplinary evaluation team at IDS incorporates Project Directors and a dedicated Programme Manager with extensive programme management, research and evaluation experience, and Research Fellows skilled in quantitative, qualitative and mixed methods. The IDS team can also call on support if needed from the pool of wider institutional expertise, for example to overcome specific technical challenges or apply learning from other similar evaluations. IDS staff will also travel to Bangladesh as necessary, to ensure the smooth implementation of the evaluation.

The teams for each of the sub-components include Bangladeshi and foreign nationals, a mix of evaluation and thematic expertise, as well as a good gender balance. With experienced partners, capacity building has so far been a continual process across the consortium, culminating in the discussions around the inception meeting and the production of this Inception Report. We remain open to further opportunities for mutual learning and partnership-wide capacity-building and the Programme Manager and IDS team hold responsibility for identifying programme-wide capacity needs.

As well as regular reporting via PATH, IDS will maintain contact directly with DFID on operational issues likely to affect programme partners, and on any major modification to the design of the evaluation or its time line.

The evaluation is funded by DFID under the structure of its framework arrangement, 'Maximising the Quality of Scaling up Nutrition' (MQSUN), led by PATH. This framework agreement provides a flexible resource for maximising the technical quality of nutritional programming and reduces DFID's overall transaction costs. It also provides the opportunity to take advantage of external communication opportunities available through existing broader MQSUN communication channels and networks (see Section 7.4).

7.2 Independence, quality control and risk management

The evaluation will adhere to the Quality Standards and Guidelines published by the OECD DAC,²⁴ which include standards around partnership, impartiality, transparency, credibility, independence and ethics. Adherence to these standards will be ensured by DFID's Management Group (see below) and also monitored annually by IDS. All evaluation partners will have the opportunity to contribute to the evaluation's overall outputs, including this Inception Report document and the evaluation's Final Report.

²⁴ See OECD DAC (2010): Quality Standards for Development Evaluation

All members of the evaluation team are considered wholly independent of the interventions being evaluated. Any potential conflicts of interest are expected to be raised openly and dealt with transparently.

IDS is providing the overall quality control function for the evaluation team, however each partner is responsible for their own internal quality control and timely delivery of quality outputs, which are expected to be appropriate in form and content for their intended users (as per agreed contractual deliverables). Quality control at the field level for collecting, handling and protecting data is expected to adhere to OECD standards and it is the responsibility of the lead partner for each evaluation component to build adequate quality control mechanisms into fieldwork design to ensure sufficient data quality and reliability. Such mechanisms include:

- Adequate enumerator/researcher training
- Processes built in to capture enumerator errors
- Random spot checks and verification of information recorded
- Double data entry
- Thorough data cleaning prior to analysis.

All project outputs will be reviewed in turn by the lead member of the partner teams, the IDS Impact Evaluation co-Directors and PATH, before being passed to DFID for final comment and review. Ongoing dialogue and transparency of information between partners will be required throughout the programme to ensure any modifications to the design or approach for any aspects of the evaluation still meet expectations on quality and rigour of results and do not affect the overall validity of the evaluation.

Alongside the performance and capacity risks outlined here, wider risks to the project are being recorded by the Programme Manager in a risk register, which is regularly updated and reviewed by senior members of the management structure described above. Risks for this purpose have been divided into internal (performance/capacity and financial); political and contextual; methodological; ethical and external. A summarised version of the current risk register (given that this is a living document, this must be seen as a snapshot) is included here as Table 7.1. Following standard programme management practice, risks are categorised according to their likelihood and severity of impacts; with ownership and strategies for mitigation and avoidance listed for each risk (for the purposes of summary, likelihood and severity are listed as residual risk *after* current avoidance and mitigation strategies have been put in place; whilst the full register lists risks before and after). Note that severity is rated as impact on achieving *overall* programme objectives (recognising the chance of some risks occurring are inevitable and with a strong design, should not necessarily be catastrophic).

Table 7.1 Risk register – summary version

Risk category	Risk	Summary	Likelihood	Severity	Risk ownership	Mitigation/avoidance strategy and/or current status
Internal	Performance and capacity	Partners fail to or are unable to perform as expected			Programme Directors, PATH	Quality control and risk management (Section 7.2)
	Financial	Failure to budget effectively; financial irregularities			Programme Manager and Programme Directors	IDS; Partner; PATH and DFID financial control procedures

	Communications	Failure to communicate internally			Programme Manager	Internal communications strategy (Section 7.4)
Political/ contextual	Political	National or regional political upheaval prevents collection of data			Programme Directors; on advice from DFID and local partners	Regular advice sought from DFID and local partners. Residual risk remains high for most components. Baseline delayed, but has completed
	Environmental	Flooding; other climatic variations or natural disasters make field sites unreachable			Local partners (for monitoring and reporting)	Baseline carried out post-rainy season; endline in same period. Less of an issue for qual. methodologies as logistics will be simpler
Methodological	Comparison selection	Unable to construct comparison groups			IFPRI	See Section 3.3. Unlikely to be an issue now baseline is complete, so long as programmes do not expand implementation into comparison groups selected
	Statistical power	Sample size of insufficient power to detect impact			IFPRI	See Section 3.6. Only likely to be an issue if impact is much less than expected – wider samples than strictly needed have been specified to allow some leeway
	Counterfactual validity and spillover issues	Programmes not implemented as planned (phasing/ randomisation); 'L+N' intervention effects spillover into 'L only' and 'C' areas			IFPRI	Constant and clear communication with partners on cluster selection for the 'L'; 'L+N' and 'C' groups. Great potential for misunderstanding given the programme and evaluation complexity – we continue to discuss with partners and with DFID. Clusters have been selected to minimise spillover possibility, but some likelihood remains, particularly with closely located clusters in some UPPR (densely populated slum) sites
	Programme staff participation and programme information	Programme staff do not provide required information			Programme Manager, Programme Directors	This has not been an issue so far but could be an issue when PE and CEA components require detailed financial information. Briefings will start with partners several months

						ahead of data requests
	Community participation	Communities refuse to participate in more in-depth qualitative/ PE components			Local partners	This should not be an issue given careful selection of Bangladeshi partners. Under our ethical standards, communities/HH have a right to refuse to participate – in which case alternatives can be sought
Ethical	Beneficiary – direct	Direct risks to beneficiary wellbeing			IDS and IFPRI (via ethics committee/IR B)	See Section 7.5
	Beneficiary – indirect	Indirect risk to beneficiary data			IDS and IFPRI (via ethics committee/IR B)	See Section 7.5
External	Stakeholder communications	Stakeholders fail to accept or reject findings			Programme Manager and Programme Directors	External communications strategy (Section 7.4), role of DFID Management Group (Section 7.3)
	Reputational/ validity	External evaluation, research or nutrition policy community question findings			Programme Directors	External communications strategy (Section 7.4, role of DFID Management Group and external review (Section 7.3); internal quality control

7.3 Wider governance

As Table 7.1 makes clear, whilst individuals are listed as having primary responsibility for individual risks; strategies for mitigation and abatement of these risks also strongly reflect the management and internal/external governance structures of the evaluation programme.

DFID Bangladesh is overseeing the evaluation process and provides secretariat functions. In addition, two formal structures coordinated by DFID will be utilised to uphold the overall quality and independence of the evaluation:

1. **The DFID Management Group**, comprising a representative from DFID Policy Division, Evaluation Division and DFID Bangladesh, is responsible for ensuring the overall credibility and independence of the evaluation. The group combines advisory and executive functions and is responsible for decision-making and providing critical feedback on evaluation outputs at key milestones in the evaluation. The Government of Bangladesh Rural Development and cooperative division and/or the National Nutrition service representative will also be a member of the management board to ensure adequate GoB representation and uptake.
2. An independent external **Specialist Evaluation and Quality Assurance Service (SEQAS)** contracted by DFID to provide specialist technical advice and recommendations on the evaluation design and quality. SEQAS has already provided extensive feedback and

recommendations on this Inception Report and it is expected that a similar review will be conducted at the draft final report stage.

Any contributions and suggestions made from DFID regarding the evaluation design or final products will be considered carefully by the evaluation team and actions taken as needed. However, care will be taken not to jeopardise the independence of the evaluation, which will need to be respected.

DFID's implementing partners have actively participated in the design of the evaluation, most notably through discussions at the Inception Workshop held in April 2013. Subsequently, there have been follow-up discussions with DFID's partners to ensure that they fully understand how the evaluation will be undertaken and the implications of this for project implementation. They will also be consulted on progress on, and results from, the evaluation. However, in order to ensure the integrity and independence of the evaluation work, they will not be active participants in the evaluation process.

7.4 Internal and external communications and information management

Rather than focussing exclusively on dissemination of final outputs, the communication strategy for this evaluation is considered to be a two-way engagement through the process between programme stakeholders, programme partners and other interested parties, stressing the value of conducting the IE and sharing information in a useful and timely manner throughout the course of the evaluation process.

The IDS Evaluation Programme Manager will hold primary responsibility for internal and external communications for the evaluation. Partner organisations contributing jointly to a specific evaluation component are responsible for maintaining close working relationships and direct channels of communications between partners, as well as internal information exchange. For example IDS and IFPRI have assumed joint lead and maintain regular communication on the quantitative evaluation developments, as do IDS, BRAC and ITAD on the exploratory/explanatory component.

A simple web-based file sharing platform (Dropbox) has been set-up to facilitate cross-partner information sharing, and provide a central repository for all key documentation, communications and deliverables relating to the project. Further efforts are continuing to be made to bring together key evaluation and programme staff to improve communication and information sharing on the ground, including via joint field-visits and ongoing project workshops.

The ongoing systematic programme monitoring data being collected by DFID's implementing partners (as referred to in Section 4.8) will, wherever possible, be shared with evaluation partners to inform the design of field activities and triangulate evaluation data collected, though it cannot provide explanation on causal factors behind any results. Similarly, any evaluation data generated that is considered relevant to ongoing programming will be shared as needed with programme staff via DFID. IDS will endeavour to minimise communications to programme teams and DFID to avoid any unnecessary disruption to core implementation activities but will nonetheless ensure regular and informative updates to all those participating in the evaluation in the implementing and evaluation organisations, PATH and DFID, alongside formal reporting.

Whilst openness and transparency in communication and information sharing is promoted across the different evaluation areas, respect for confidentiality of sensitive information will be upheld and mechanisms are in place to ensure that any sensitive information is filed, stored and password-protected appropriately.

The primary users of the evaluation are DFID, its programme implementing partners at all levels and the Government of Bangladesh. However, given that the evaluation will also provide valuable contributions to the wider knowledge base on improving nutritional outcomes in Bangladesh, and potentially shape the design of future policies and interventions implemented in the intervention sites and more widely, DFID expects the findings to be published and disseminated more widely. Secondary users include other stakeholders in the Bangladesh nutrition and development community

and, since the evaluation expects to generate evidence that has wider global significance, global policymakers, practitioners and researchers concerned with nutrition programming.

Resourcing decisions made at the design stage mean that there is no specific budget allocated or personnel responsible within the evaluation for delivery of external dissemination events or communication materials (such as briefing papers, promotional leaflets, etc.) beyond the evaluation outputs themselves. However, DFID Bangladesh has confirmed they have a separate budget of approximately £50,000 allocated for communications activities related to the project and the evaluation team will be discussing with them how these funds can be used effectively to maximise communication and dissemination opportunities.

The evaluation will also be able to draw on existing communication resources as part of the wider MQSUN project (notably, the contract for MQSUN is led by IDS and hosted on the HEART website); existing stakeholder engagements carried out by DFID, IDS and IFPRI in Bangladesh (the latter including the Transform Nutrition RPC, which includes dedicated research uptake resources) and IDS’ wider Knowledge Services. Within these resource constraints, the evaluation team places a strong emphasis on research uptake in achieving the evaluation’s overall objectives and a detailed strategy for external dissemination and presentation of the final results and uptake of results will be developed and agreed with DFID and PATH. This will include the following elements:

- The results will be shared at a dissemination workshop with a variety of programme and partner stakeholders in the target Bangladesh. This is considered a critical accountability mechanism to allow the opportunity for local stakeholders and individuals consulted as part of the study to provide feedback and on the results and recommendations;
- The results of the IE will be submitted to high quality academic journals and be subject to peer review. This relates to final and, if appropriate, interim results. If agreed, results may be released earlier as institutional working papers in any of the partner organisations (subject to internal agreements on publication and data sharing) – and these will also be subject to internal and external peer review as per publication guidelines applicable within each organisation;
- It is also assumed that as per DFID’s 2013 Evaluation Policy and in the spirit of transparency and promoting uptake and follow-up, the evaluation’s final report will be made available on the DFID external website and datasets made available for re-analysis, as deemed appropriate.

Table 7.2 will be developed further as part of the evaluation dissemination strategy but provides an overview of the potential target users at different levels.

Table 7.2 Research uptake – key stakeholders

Level of Engagement	Potential Target Stakeholders	Specific Groups Identified
Community/Regional	Programme target communities, implementing partners, other local NGOs/CBOs working on nutrition, local government authorities, community leaders	CLP, UPPR and EEP beneficiaries and programme staff
National	Government, private sector representatives, national NGOs, universities	Bangladesh nutrition technical working group and sub-groups; National Nutrition Steering Committee; Local Consultative Group, ICDDR,B; SUN focal points/networks; BRAC; other civil society

International	Donors, UN agencies, INGOs, research and practitioner networks	DFID, PATH, SUN network and secretariat; Research institutions; UN SCN; WHO; UNICEF, etc.
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As well as plans for sharing the final evaluation results, there will be ongoing engagement with researchers and the evaluation community on methodological approaches and findings as they emerge from the evaluation, and efforts made where possible and resources permit to contribute to relevant discussions and debates.

7.5 Ethical considerations

The evaluation team is highly experienced in dealing with ethical concerns in difficult contexts, and the IDS has in place well-developed sets of ethical principles, norms and codes of practice, which will be closely followed and monitored throughout the project.

As a guiding principle, the evaluation will be conducted in a professional and ethical manner, with strict respect for principles of integrity, honesty, confidentiality, voluntary participation, impartiality and the avoidance of personal risk. Adherence to these guiding principles will be overseen by IDS in collaboration with IDS' Research Ethics Committee.

The IE will adhere to the appropriate ethical guidelines for development evaluation, including:

1. OECD (2010) DAC Quality Standards for Development Evaluation on ethical standards, which state: *'Evaluation abides by relevant professional and ethical guidelines and codes of conduct for individual evaluators. Evaluation is undertaken with integrity and honesty. Commissioners, evaluation managers and evaluators respect human rights and differences in culture, customs, religious beliefs and practices of all stakeholders. Evaluators are mindful of gender roles, ethnicity, ability, age, sexual orientation, language and other differences when designing and carrying out the evaluation'*.
2. DFID's 'Ethics Principles for Research and Evaluation', which states: *'Research and evaluation should usually be independent of those implementing an intervention or programme under study. Independence is very important for research and evaluation; in fact evaluations in DFID can only be classified as such when they are led independently. Involvement of the stakeholders may be desirable so long as the objectivity of a study is not compromised and DFID is transparent about the roles played. Any potential conflicts of interest that might jeopardise the integrity of the methodology or the outputs of research/evaluation should be disclosed. If researchers/evaluators or other stakeholders feel that undue pressure is being put on them by DFID officials, such that their independence has been breached, this should be reported to the Head of Profession for Evaluation who will take appropriate action'*.

The review and continuing oversight of any extensive research into human subjects performed as part of the quantitative component of the evaluation, has been delegated to the IRB, based at IFPRI (who is leading on this component). Under the IRB Authorisation Agreement to delegate this responsibility to IFPRI, their IRB are committed to meeting the human subjects protection requirements of the HHS regulations for the protection of human subjects and the requirements of PATH's OHRP-approved Federal Wide Assurance (FWA). The designated IRB at IFPRI will notify PATH in a timely manner of any of the following:

1. The IRB suspends or terminates the study and the reasons for the suspension or termination;
2. The IRB finds there are unanticipated problems involving risks to research participants or others;
3. The IRB finds serious or continuing noncompliance in the conduct of the research;

4. The research is audited or investigated by oversight agencies and a summary of the findings.

Local IRB approval has not been necessary, as there is no ethical review mechanism in place for minimal-risk surveys that do not involve collection of blood, urine, stool, saliva or other biological specimens.

The evaluation involves the collection of potentially sensitive data that may affect the privacy of subjects, including children. Data is being collected by trained enumerators on areas including anthropometric indicators for children aged 0–24 months, as well as knowledge and practices of children’s mothers, childcare providers and access to services. Since the livelihood interventions are targeted at very poor households, respondents are likely to be economically and educationally disadvantaged. Based on experience with past surveys in the region, the potential risk to stress or discomfort to participation in the evaluation is deemed minimal, however care will be taken to minimise risk exposure.

Mechanisms that will be set in place to ensure compliance with ethical principles throughout the evaluation include:

- Members of the survey supervision staff will meet with village leaders to describe the overall scope, purpose and duration of the study and seek approval to approach specific households;
- Interviews will only take place when full and informed consent is obtained (through signed consent forms when appropriate or through verbal agreement). The evaluators will describe to participants in the clearest possible terms, the content and purpose of the study, possible harm or discomfort that it may entail and the degree of anonymity and confidentiality that will be provided. Respondents will be able to end participation at any time, and interviewers will be instructed to finish the interview if a respondent becomes unduly distressed. Efforts will be made to conduct interviews privately and at flexible times;
- If, at any stage, any of the evaluators consider that security or emotional comfort of respondents or interviewers may be in question, more sensitive questions will be re-evaluated and interviews may be terminated;
- Anonymity will be ensured in the datasets by changing names and removing personal data from reports prior to data entry. Processing of data will be made using anonymous files. Names and personal details that may lead to the identification of participants will be removed and/or changed to the largest possible extent that will not compromise the integrity of the project;
- Study logs and original hard copy of data forms will be stored in locked facilities in Dhaka;
- All files will be maintained under password-protection at all times;
- Public use data will include no identified individuals.

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Annex 1 – Original Terms of Reference

TERMS OF REFERENCE

Impact Evaluation of a DFID programme to Accelerate Improved Nutrition for the Extreme Poor in Bangladesh

1. INTRODUCTION

1.1. DFID Bangladesh is seeking a supplier to design and implement an independent impact evaluation of DFID's programme: Accelerating Improved Nutrition for the Extreme Poor in Bangladesh.

2. OBJECTIVES

2.1. To assess the impact of both direct (specific) and indirect (livelihoods) nutrition interventions in three different DFID programmes (combined nutrition specific interventions and livelihood supports) on nutrition outcomes: (i) nutritional status of children under two years including anthropometric status (stunting, wasting, underweight) and anaemia, (ii) anaemia in children (between 6-23 months), adolescent girls (between the age group of 10-16 years), pregnant and breastfeeding women (all women under this category regardless of age) and (iii) Chronic Energy Deficiency (CED) as measured by Body Mass Index (BMI) among adolescent girls, pregnant and breastfeeding women (Annex A theory of Change).

2.2. The independent evaluation will also assess the impact of the combined programme on (i) the socioeconomic status of the beneficiaries (ii) whether direct nutrition interventions can be delivered effectively through different livelihood programmes, why and how the interventions succeed or fail and how they could be improved and (iii) the cost effectiveness (value for money analysis) of integrating direct and indirect interventions in the three livelihood programmes. All data collection through this evaluation should be disaggregated by gender, age, disability and ethnic group.

2.3. The evaluation team will determine the exact methodology for the impact evaluation/s, sample sizes and comparison groups for the baseline data collection, midline and endline of the programme evaluation.

3. The Recipient

3.1. The primary users of the evaluation are Government of Bangladesh, DFID and its programme implementing partners at all levels. However, DFID expects the findings to be published and disseminated more widely to the development community and government of Bangladesh

4. The Scope

4.1. The programme will run for three and half years (until the end of December 2015) in the three programmes. The impact evaluation will commence with the baseline survey before the

direct nutrition interventions start. The evaluation will take place from July 2012 to December 2015. The impact evaluation will cover only areas and households that are targeted by DFID's programmes on (i) the Economic Empowerment of the Poorest Programme (EEP) (ii) Chars Livelihoods Programme (CLP), and (iii) the Urban Partnership for Poverty Reduction (UPPR).

4.2. DFID Bangladesh will use Policy Division's Nutrition Global Framework Agreement signed with the PATH led consortium of agencies. PATH led consortium has been selected through OJEU process to provide technical support for DFID country offices on different aspect of Nutrition programming including monitoring and evaluation. PATH will be requested to submit proposals to cover four phases and components of both quantitative and qualitative study. The three phases include:

- Phase 1 – inception phase up to 4 months
- Phase 2 – base line data collection August/September 2012
- Phase 3 – mid term evaluation – early 2014
- Phase 4 – end of the programme evaluation - end of 2015

5. *Programmes Description (see section under Background)*

5.1. **Programme Description of Nutrition Specific Interventions:** In addition to the livelihoods support described above all of the three programmes will provide the following three nutrition specific interventions:

- **Household Level Counselling:** Counselling on exclusive breast feeding, continuous breastfeeding, complementary feeding and hygiene promotion at household level by trained nutrition counsellors on monthly basis.
- **Micronutrient Supplement:** Five components Micronutrients will be given to children aged between 7 to 23 months. Doses will be 120 sachets a year.
- **Iron and Folic Acid (IFA) Tablets:** 180 IFA tablets will be given to each pregnant and 180 for each breastfeeding woman per year while 104 tablets will be given to each adolescent girl a year (detail in treatment regimen).
- **Deworming Treatment:** Children 1-5 years of age, adolescent girls, pregnant women after the first trimester of pregnancy will receive regular deworming treatment based on WHO and Government of Bangladesh guidelines.

6. The Requirements and Team Structure

6.1. The evaluation will draw expertise from the central DFID framework arrangement "Maximising the Quality of Scaling up Nutrition" that was signed with PATH International consortium which includes a range of partners that have extensive and comprehensive nutrition competences and experience. This framework agreement provides a flexible and ready resource for maximising the technical quality of nutritional investments, and reduces DFID's overall transaction costs. This work calls for the following areas of expertise specified under the framework agreement.

- Analytical work which supports nutrition strategy development, programme design, enhanced coordination, national communications and advocacy work and reviews of capacity;
- Operational research to address key evidence gaps;

- Capacity development;
- Technical assistance to provide expert evidence-based guidance on nutrition-specific and nutrition-sensitive interventions;
- Information sharing to ensure lessons learned across DFID and beyond.

6.2. The process for accessing the service will include:

- DFID will provide the TOR;
- PATH will provide feedback/comments within 10 working days;
- DFID will respond to any queries and finalise the TOR in view of the feedback and comments received;
- PATH will provide one or more expressions of interest (EOI) from consortium members – these include more elaboration of the TOR which may include suggestions of different options and how these are implemented, CVs of the team, and estimated cost within 20 days. PATH will make a judgement on VFM and a recommendation on the EOI, while final selection rests with DFID;
- DFID will decide how we want to proceed the procurement of PATH services

6.3. All the interventions through this call down agreement will need to be approved by DFID HQ's Food and Nutrition Security Team in Palace Street as the budget for this framework is held centrally. They will therefore, have a key role in the overall process in relation to this specific input and the bids evaluation.

7. Composition of the evaluation team

7.1.1. The evaluation team skills need to include:

- Internationally recognised experience and expertise in impact evaluation using rigorous methods, including quasi-experimental and experimental methods;
- A technical background in livelihoods, extreme poverty and nutrition – ideally a record of evaluating these programmes;
- Understanding of the nutrition and poverty context in Bangladesh;
- Strong facilitation, coordination and administrative skills;
- Strong project management skills;
- Expertise in performing cost effectiveness analysis; and

In addition to the above, it would be beneficial if the team does have some local presence either directly or through links with local institution/s in Bangladesh.

7.2. Constraints and Dependencies

7.2.1. Baseline data collection will start before the programmes commence providing nutrition interventions. The endline impact evaluation will occur towards the end of 2015.

7.2.2. The impact evaluation team need to work in close collaboration with the three programmes to identify programme areas and beneficiaries of both livelihoods and nutrition interventions.

7.3. Key evaluation questions

7.3.1. The impact evaluation will answer, (but not be limited to) the following questions:

- Does the combination of direct and indirect nutrition interventions accelerate reduction of undernutrition in adolescent girls, pregnant and breastfeeding women and children under two in the three programmes core beneficiary households areas compared with non-beneficiary households in programme areas?
- Does indirect nutrition intervention alone improve nutrition outcomes compared to direct nutrition interventions alone in adolescent girls, pregnant and breastfeeding women and children under two in the three programmes core beneficiary household?
- Does indirect nutrition intervention improve nutrition outcomes in adolescent girls, pregnant and breastfeeding women and children under two populations in the three programme areas compared with non-beneficiary households in programme areas?
- Can direct nutrition interventions be delivered effectively through different livelihood programmes such as (i) Challenge Fund through the Economic Empowerment of the Poorest Programme (EEP) (ii) Chars Livelihoods Programme (CLP), and (iii) the Urban Partnership for Poverty Reduction (UPPR)?
- Which livelihoods interventions (programmes) is the most effective in delivering nutrition interventions and why?

7.3.2. The evaluation must test the following Hypotheses:

- Pregnant women in the treatment group (i.e. beneficiaries covered by the three programmes) will have a higher mean haemoglobin concentration (and concomitant less anaemia) than pregnant women in the control/comparison group.
- Breastfeeding women in the treatment group will be more likely to exclusively breast feed for the first 6 months than lactating women from the control group.
- Nutritional status, as assessed by weight, body mass index and haemoglobin concentration of breastfeeding women at 6 months and 24 months post-partum will be higher in the treatment group than the control group.
- Infant growth (as measured by weight gain and length gain) and nutritional status (as defined by height-for-age, weight-for-age, weight-for-height and haemoglobin concentration) from 6-23 months will be greater, on average, in the treatment group than infants in the control group.
- Child growth and nutritional status between 24-59 months will be greater, on average, in the treatment than in the control group.
- Adolescent girls receiving the direct treatment (intervention group) will have better growth (weight and height gain) and nutritional status (as defined by height-for-age, weight-for-age, weight-for-height, body mass index and haemoglobin concentration) than adolescent girls in the control group.
- All target groups consumed MNS and deworming treatments at the right quality, quantity and frequency as set out in the project intervention.
- Identify any unintended impacts either in the intervention groups or those who are not direct recipients of the programme.

7.3.3. The evaluators are expected to consider possible spill-overs and contamination when designing and implementing the evaluation.

7.3.4. The expected outcome for the impact evaluation is a robust, rigorous evidence base on effectiveness of combining nutrition specific interventions with livelihood programmes and

effective strategies to improve nutritional status of extreme poor in Bangladesh and inform the development of improved policies and programmes.

7.4. Methodology

7.4.1. The supplier is expected to develop a design and approaches as part of the bid which will be refined during the inception phase of the project in consultation with DFID Asia Research and Evaluation Division, Policy Division Food and Nutrition team, DFID Bangladesh and the three programmes. It is expected that mixed-methods will be most appropriate to answer the evaluation questions, including rigorous experimental or quasi-experimental methods, as well as qualitative and process evaluation methods.

7.4.2. The evaluation methodology should include:

- A comprehensive and detailed explanation of the different methodologies used to answer the evaluation questions
- Analytical framework to show how different methods are to be combined
- Power calculations to determine sample sizes
- Final indicators to be studied
- Qualitative and quantitative surveys
- Questionnaires
- Field visits
- Developing robust sampling methodology and a framework for analysing secondary and primary data
- Data validation
- Participation of key stakeholders

7.4.3. The study will include the following components:

- Detailed Evaluation design and framework. Methodology for the evaluation must be chosen in a way that will ensure that subsequent analysis can attribute causality to the programme through the use of a robust counterfactual. The bidders should propose a methodology to address this, but the use of experimental or quasi-experimental designs is expected.
- Sample size. Sample sizes for the data collection should be determined according to the relevant power calculations and to allow for key sub-group analysis.
- Appropriate baseline, midline and endline surveys of the beneficiaries (children under five, adolescent girls, breastfeeding and pregnant women) and relevant comparison groups to track nutritional outcomes and other key indicators. The design should consider how to adjust for factors that may contribute to changes in the programme areas/households.
- Criteria for the selection and assignment of census area. Targeted groups in the beneficiary households of the three programmes, including both urban and rural areas, will be selected.
- Indicators. Suggested indicators are stunting, wasting, underweight and anaemia in children under two, BMI and anaemia in adolescent girls, pregnant and breast feeding women. The socio economic status of the targeted beneficiary population should also be included. Bidders can propose additional indicators.

- Data collection and sources of information. The technical proposal must include details of specific secondary data that will be used, and where primary data will need to be collected. The selected supplier will suggest the most appropriate strategy for data collection for both the quantitative and qualitative components, and be responsible for collecting such data. A clear framework for selecting primary and secondary data and how these are analysed must be proposed.
- Cost of data collection. The cost of all data collection and analysis will be born by the supplier and should be included in the financial proposal.
- Ownership. The evaluation design needs to take into account any government of Bangladesh rules regarding the use of data collected as part of this evaluation.
- The technical proposal should also identify and raise any potential ethical concerns with DFID. The evaluation proposal must conform to DFID's ethical principles (http://DFIDinsight/Other/Departments/EvaluationDepartment/Evaluationstudies/Capacityquality/PUB_031075). It also needs to seek approval from relevant local bodies for conducting the evaluation.
- It is expected that qualitative methods will be used to provide deeper insights into the impact of the selected interventions or programme. In particular, the qualitative research should provide a better understanding of beneficiaries' behaviour, attitudes and expectations, as well as explaining conflicting responses among informants and internal contradictions if any. It is expected that this component will include the use of case studies, focus groups and key informant interviews to examine why an intervention is succeeding or failing to work and how it could be improved or expanded. In addition, a selection of other relevant research issues may be examined (e.g. breast-feeding practices, acceptability of fortified food among mothers and children, etc).

7.4.4. ***Cost- effectiveness of DFID's nutrition support:*** This evaluation is expected to assess whether integrating nutrition specific intervention in existing livelihood programmes are cost effective. The evaluation team are expected to answer the following questions:

- Do (and if so, to what extent) the direct nutrition interventions make the livelihoods programmes more cost effective?
- How does the cost of delivery of direct nutrition interventions through these programmes compare to costs of delivery through the health system?
- Does this delivery system have other benefits (e.g. reaching the poorest more effectively)?

8. Reporting

8.1. The evaluation team will report to the DFID Bangladesh Evaluation Management Committee. PrG will be responsible for managing all contractual issues. The evaluation team will work closely with the three programmes at field level and with the evaluation; management committee led by DFID B. Payment will be according to an agreed schedule of outputs. The percentages will be determined at the time of contract negotiations on the budget.

Output 1

- Work plan – within three weeks of signing the contract

Output 2

- Inception report – within three month of signing the contract, the consultancy firm will present an inception report with a detailed methodology for the evaluation. Some of the methodological issues that should be included in the report are: sample size and design, including relative size of treatment and comparison samples, significance level, power calculations, methodology for identifying the treatment and comparison groups, and an analytical framework bringing together both quantitative and qualitative components.

Output 3

- Report on first (baseline) survey and appropriateness of control group – within 6 months after signing the contract, the consultants will provide a short report (15-20 pages) presenting and analysing key variables in the survey. The report should compare observations from control and treatment groups and assess whether the proposed control group is statistically valid. If this is not valid, recommendations on how to adjust the data collection must be done in order to minimise potential bias.

Output 4

- Report on the midterm report covering all aspect of the impact evaluation questions (qualitative and quantitative). Data collection will commence in July and report is expected in June 2014. This report will present the initial impact evaluation results for the nutritional status of the target groups using the first and second surveys. Sample size must be sufficient to assess differential impacts among sub-groups.

Output 5

- Workshop on midterm results. This should include representatives from all key stakeholders, present the findings of the first phase quantitative and qualitative studies and discuss measures for corrective action if necessary May 2014.

Output 6

- Report on the final evaluation which covers all aspects of the impact evaluation questions (qualitative and quantitative) by December 2015. This report will present final impact results from the quantitative surveys using all 3 rounds of data. Sub-group analysis will also be done. In addition, the results from the qualitative evaluation (beneficiaries and other stakeholders' attitudes, compliance, and other) should be crossed checked with all the surveys to assess the potential impact of other factors on final outcomes.

Output 7

- Publication of the final Impact Evaluation in more than one academic paper and journal on nutrition, livelihoods, etc. by March 2016.

Output 8

- Conduct a workshop with DFID and all key stakeholders in Bangladesh on final results – and prepare workshop proceedings report at end of programme.

8.2. All the reports should include spreadsheets of the underlying primary data that has been collected, information on whether the interventions have had an impact or not, the lessons learned, recommendations, value for money assessment and overall socio economic situation of the target population. There will be open access six months after the evaluation report is submitted and approved.

9. Use of Evaluation findings and results

9.1. The evaluation findings and results will be used by Government of Bangladesh, DFID, implementing partners, NGOs, and the development community.

9.2.PATH consortium are required to propose a dissemination and communication plan as part of the inception report and implement the plan on behalf of DFID. The supplier is encouraged to use the data collected as part of the evaluation to publish academic papers and journals. Data sets will be made available to other researchers for analysis, with due consideration given for the privacy of respondents. The design and protocol for the evaluation will be registered with medical journals in advance of the evaluation.

10. Time Frame

10.1. The call down contract is expected to commence in July 2012 and end by December 2015. An inception report will be within three month. This will be used to inform the implementation phase. All timing will need to be coordinated with the programme implementing entity.

11. DFID coordination

11.1. The supplier will report to DFID Bangladesh, DFID Bangladesh will work closely with Asia Research and Evaluation Division and the Food and Nutrition Security team of policy division for coordinating technical inputs and follow-up implementation at country level.

11.2. Both the livelihoods support and the nutrition component of the three programmes are managed by DFID appointed implementing partners. The supplier will be required to work closely with the three implementing partners throughout the life of the 3.5 year nutrition programme, including identification of beneficiaries and the areas to be covered by each programme.

11.3. DFID will establish an evaluation management committee which include Asia Evaluation and Research Division, the Food and Nutrition team of Policy Division (name), DFID Bangladesh and representatives from the three programmes. The committee will provide guidance in the implementation of the evaluation.

12. Project Management and Logistics

12.1. The supplier (PATH led consortium) will be expected to supply their own logistic requirements including office space and transport.

12.2. The supplier is expected to undertake the evaluation independently, recruiting its own staff for survey design, data collection and analysis, and report production. It will be expected that the same firm will be retained throughout the project period, depending upon satisfactory completion of deliverables and Outputs outlined in Section 7, to ensure consistency of survey execution and to build on historical knowledge. PATH led consortium should comment on how independence can be maintained from the programme implementing entity, given the need for a very close working relationship through the life of this evaluation.

12.3. It is expected that the evaluation should conform to OECD-DAC principles of accuracy and credibility, and to the evaluation principles set out in the UK's 2009 policy on evaluation for international development. Bidders should set out how they will ensure the study is ethically sound and with which relevant ethical protocols it will comply.

12.4. All equipment purchased for the work, collected data and reporting will remain the property of DFID.

12.5. All mandatory requirements in DFID's 'Information Note (copy attached) and requirements for all visiting staff, consultants and suppliers' must be adhered to.

13. BACKGROUND

13.1. In Bangladesh, 41% of children under five years of age are underweight and 87% of children under two years of age are anaemic. The situation is worse in extreme poor households. A recent nutrition survey of extremely poor households found that among children under five years of age, 47% are underweight, over 52% are stunted, and around 90% are anaemic. In addition, over 50% of extreme poor women are undernourished, compared to a national average of 30%. Evidence from the Economic Empowerment of the Poorest Programme (EEP) and Chars Livelihoods Programme (CLP) nutrition survey indicates that nutritional status is improving at very slow rate and in some cases worsening despite increased income and asset level programme beneficiaries.

13.2. DFID has recently approved a programme to integrate nutrition specific interventions that includes household level counselling (on exclusive breastfeeding, complementary feeding and hygiene), micronutrient supplementation, and regular deworming treatment. These interventions will be delivered through three extreme poverty programmes (i) Challenge Fund through the Economic Empowerment of the Poorest Programme (EEP) (ii) Chars Livelihoods Programme (CLP), and (iii) the Urban Partnership for Poverty Reduction (UPPR). It will target children under five years, adolescent girls, pregnant and breast feeding women from core beneficiary households of the three programmes.

13.3. The rationale for integrating nutrition specific intervention in existing programmes are (i) to address both immediate and underlying causes of undernutrition (ii) accelerate improved nutrition in extreme poor households and draw lessons on what works (Theory of change matrix attached for information).

13.4. DFID is seeking a supplier to design and conduct impact evaluation of both nutrition specific interventions and ongoing livelihoods support to core beneficiaries. The proposed evaluation is expected to provide baseline, midline and final evaluation reports.

14. The programmes that provide indirect nutrition interventions are:

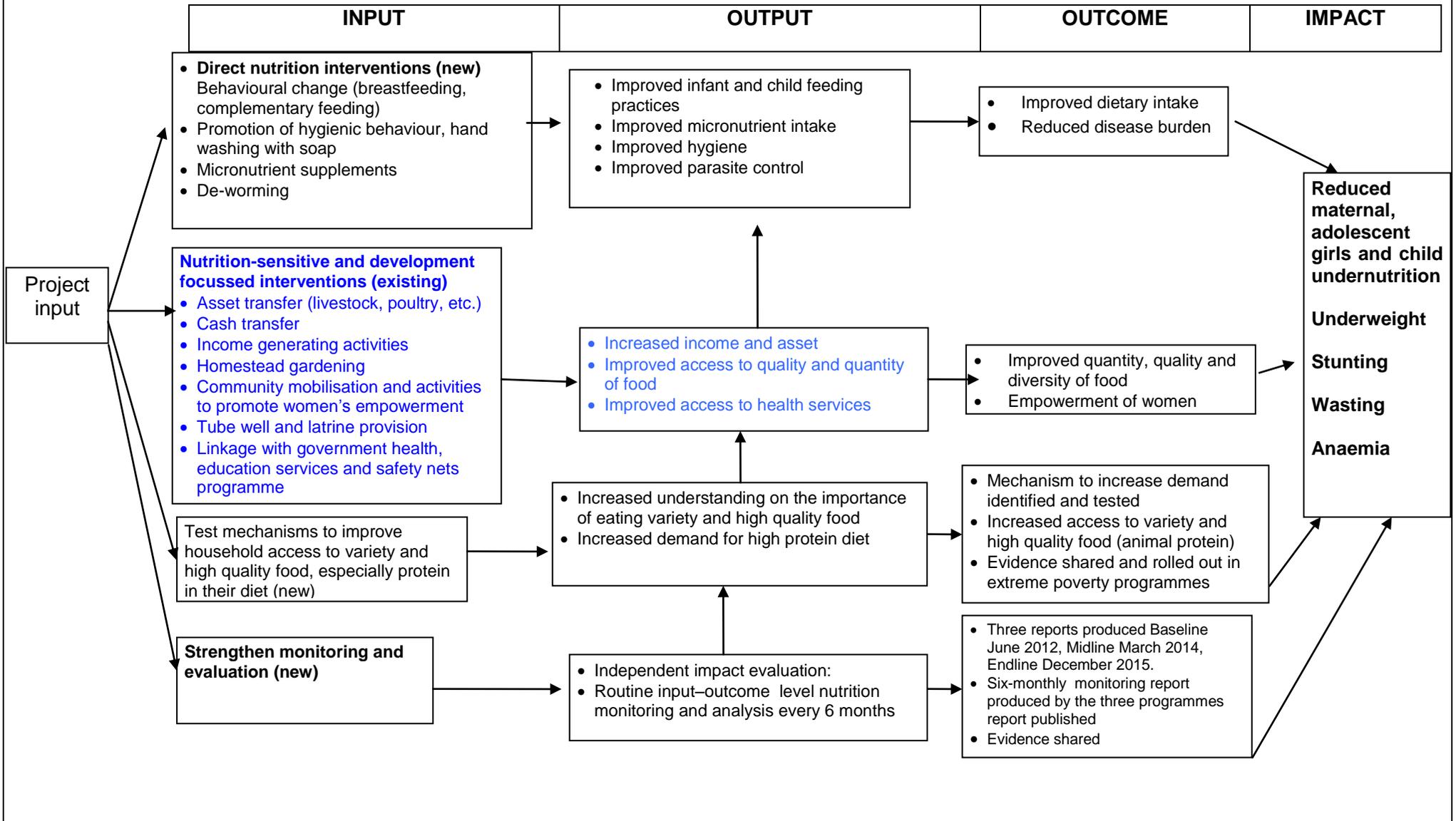
14.1. **Chars Livelihoods Programme (CLP):** The programme aim to improve the livelihoods and food security of 1 million extremely poor and vulnerable island char dwellers; to improve the resilience of char dwellers to the effects of flooding. It covers remote char islands of the north-western districts of Bangladesh. The main activities of the programme include: homestead plinth above the highest known local flood level; provides sanitary latrine and access to clean drinking water; one-time transfer of productive assets (ranging from cows to goats); backed by cash stipends for 18 months; short-term social protection activities for preventing people from slipping even deeper into poverty. These mainly include employment creation during seasonal hunger (monga), and emergency grants to withstand the sudden shocks caused by river erosion, tornadoes, domestic fire etc. It increases awareness and knowledge about range of social development issues including health and environment, disaster preparedness, women empowerment and their rights, basic loan and financial management

skills. It also promotes entrepreneurship and strengthens their market linkages in livestock and other areas. It has also piloted nutrition specific intervention within the programme such as MNS and deworming. For the full report, please visit http://www.clp-bangladesh.org/pdf/survey_report_27_july_2010.pdf. CLP also conducted Cross-sectional analysis of Round 4 and Longitudinal analyses of changes in nutritional status over rounds 1 to 4” carried out in February 2010. For the report of this survey, please visit http://clp-bangladesh.org/pdf/report_on_4_rounds_july_27_2010.pdf. Integrating direct nutrition intervention is expected to commence from October 2012 and to end in September 2015 the entrants of Year-1 will receive services for 3 years, entrants of Year-2 will receive for 2 years while the entrants of Year-3 will receive services for 1 year only (for detail refer the BC roll out plan).

14.2. **Economic Empowerment of the Poor Programme (EEP):** It aims to enable over 1 million people in rural and urban areas lift themselves out of extreme poverty and achieve sustainable livelihoods. It cover geographical areas where extreme poverty is concentrated, including flood prone river islands (chars) and basins (haors); cyclone prone coastal regions; monga (seasonal hunger) affected areas and Chittagong Hill Tracts; also urban slum and street dwellers. The main activities include: challenge fund to support livelihoods for extreme poor; targeting very poorest of extreme poor and socially excluded groups such as Adivashis. It also includes pro-active programme of lesson learning and research to enhance the understanding of extreme poverty and of the effectiveness of alternative interventions. EEP also conducted socio-economic and nutritional status survey in March 2010 and March 2012 (<http://www.shiree.org/content/survey>) report will be available EEP nine Scale Fund NGO partners are responsible for the delivery for individual project delivery and the selection of beneficiaries. 6 Scale Fund partners commenced activities in 2009 involving 82,850 direct beneficiary households, over the 3 years of project period. An additional 92,000 households will be enrolled in the programme by late 2013, during the phase 2 of these six projects. In 2011 EEP also began working with three more scale fund partners 47,000 households. The direct beneficiaries of the nutrition intervention will be a sub set of these 221,850 (82,850, 92,000 and 47,000) households with family members corresponding to the specific target groups. All the eligible target population for the nutrition intervention will be identified by the 9 Scale Fund NGOs and verified by shiree during the implementation phase. Regular updating of the beneficiaries list will be done to track new recipients for nutrition activities (e.g. pregnant women, adolescent girls etc.) (for detail refer the BC roll out plan).

14.3. **Urban Partnership for Poverty Reduction (UPPR):** Aim to improve livelihoods and living conditions of 3 million poor and extremely poor people, especially women and children, living in urban areas. It covers six City Corporations (including Dhaka) and 24 municipalities (“Pourashavas”). The main activities of the programme include: Healthy and secure living environments – created through mobilising communities in partnership with local government, civil society and the private sector. Through Settlement Improvement Funds it is supporting safe water, toilets, safe walk-ways and improved drainage. It provides resources, knowledge and skills to increase the incomes and assets of poor and extremely poor households. For example, the Socio-Economic Fund to provide education and apprenticeships, block grants to set up small businesses particularly for poor youths and women. It also advocate for a more supportive policy environment, delivering benefits to the urban poor – for example new approaches to security of tenure and forced evictions.

Theory of Change: Integrating Direct Nutrition Intervention in Extreme Poverty Programme

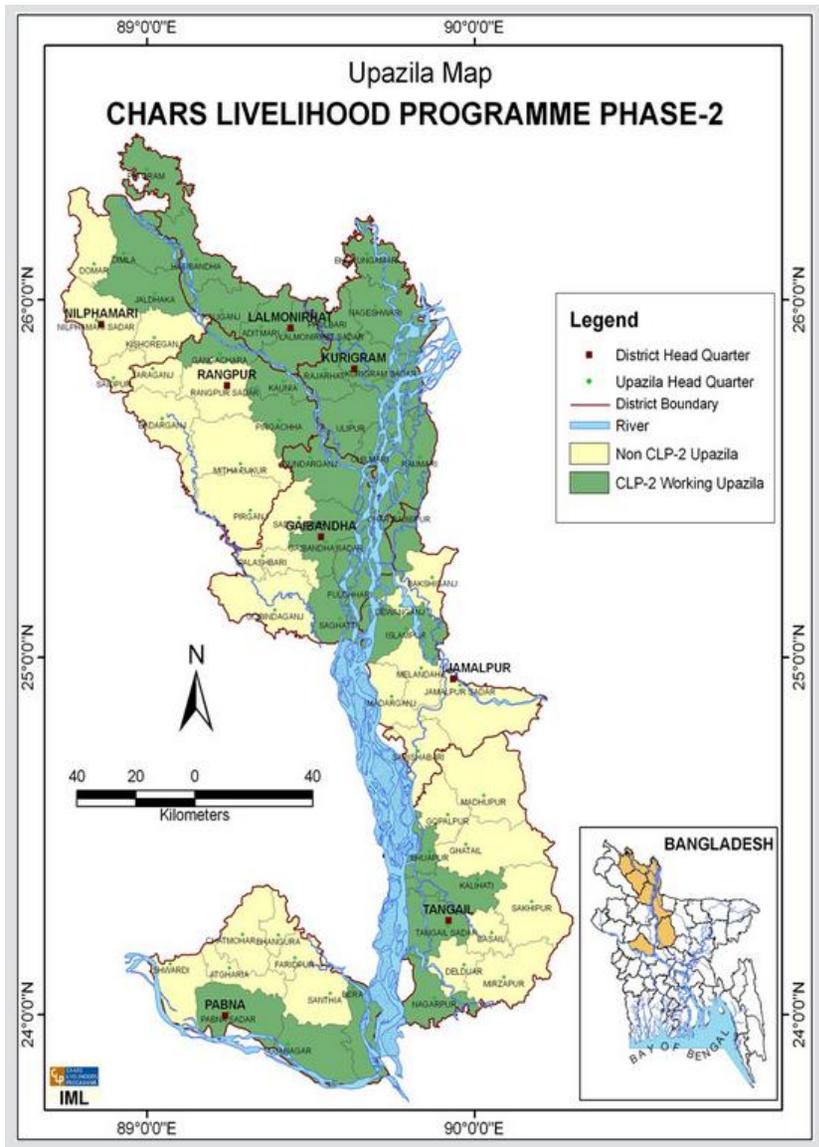


Annex 2 – Project Timeline

Also available as a separate document 'Evaluation timeline revised 17014.xls'

Activities / deliverables	Key Deliverable(s)	D/L	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
			2013												2014				2015				2016				
1. Inception and finalise design																											
Contract approved and finalised	Contract																										
Preliminary technical discussions																											
Finalise sub-contracts	Subcontracts																										
Inception meeting - Dhaka																											
Inception report drafted, submitted for feedback																											
Final Inception report submitted	Inception Report	Mar-14																									
2. Quantitative Baseline survey																											
Design survey instruments																											
IRB Review	Approval																										
GoB approval	Approval																										
Enumerator training/survey instrument pilots																											
Baseline data collection	Survey data																										
Baseline data analysis	Baseline data																										
Baseline report completed	Baseline report	Mar-14																									
3. Exploratory/Explanatory qualitative and process investigations																											
<i>Qualitative sub-components co-lead by IDS /BRAC</i>																											
Fieldwork design, instrument preparation & researcher training																											
Qualitative desk research / reviews	Literature & programme reviews																										
QE village level social/ context mapping																											
Focus village interviews, FGDs, life histories & participant obs																											
Qualitative contributions to baseline report (desk reviews)	Qual data for baseline report	Mar-14																									
Qualitative contributions to final report	Qual data for final report	Dec-15																									
<i>Process-related sub-components lead by ITAD</i>																											
Programme / process mapping with implementers	Qual data/ process map																										
Beneficiary workshops	Qual data																										
Quality measure development and piloting																											
Village level assessment module	Process data																										
Process Evaluation report	PE report	Feb-15																									
4. Cost Effectiveness (CE) study																											
Cost data collection																											
Cost effectiveness expenditure data analysis																											
Cost effectiveness quant data analysis and report completion	CE report	Mar-16																									
5. Quantitative Endline Survey																											
Endline instruments preparation / pilot / training	Instruments confirmed																										
Endline surveys	Survey data																										
Endline data analysis																											
Quant contribution for final report	Quant endline data	Mar-16																									
6. Final Report and dissemination																											
Final report preparation and delivery	Final report	Jun-16																									
Dissemination events held																											

Annex 3 – Map of programmes districts for CLP and EEP/Concern



Map on left indicates coverage of CLP programme in north-west Bangladesh; Map on right indicates location of Concern ESEP districts Sunamgonj, Habiganj and Kishoregon



Annex 4 – List of social and other programmes likely to be operating in programme areas to be assessed by quantitative survey (taken from survey schedule)

Ananda School
Stipend for Primary Students
School Feeding Program
Stipend for Dropout Students
Stipend for Secondary and Higher Secondary/Female Student
Stipend for Poor Boys in Secondary School
Stipend for Disabled Students
Fundamental Education for Urban Working Children
Female Stipend for Degree (Pass) and Equivalent Level Project
Old Age Allowance
Allowances for Distressed Cultural Personalities/Activists
Allowances for beneficiaries in Ctg. Hill Tract area
Allowances for the Widowed, Deserted and Destitute Women
Allowances for the Financially Insolvent Disabled
Maternity Allowance Program for Poor Lactating Mothers
Maternal Health Voucher Scheme
Allowances for Urban Low-income Lactating Mothers
Honorarium for Insolvent Freedom Fighters
Honorarium and Medical Allowance for Injured Freedom Fighters
Fund for the Welfare of Acid Burnt and Disabled
Universal Pension Insurance Scheme
Gratuitous Relief (Cash)
Gratuitous Relief (GR) – Food
General Relief Activities
Cash for Work
Food for Work (FFW)
Test Relief (TR) Food
Open Market Sales (OMS)
Vulnerable Group Development (VGD)
VGD-UP (8 District on Monga Area)
Vulnerable Group Feeding (VGF)
Food Assistance in CTG-Hill Tracts Area
Special fund for Employment Generation for Hard-core Poor in SIDR Area
Employment Generation Program for the Ultra Poor (formerly 100 days Employment Scheme)
Rural Employment Opportunities for Protection of Public Property (REOPA)
Rural Employment and Rural Maintenance Program (RERMP)
Enhancing Resilience to Disasters and the Effects of Climate Change (ER)
Shouhardo Program (CARE)
TUP (BRAC)
Rehabilitation and Creation of Alternative Employment for People Engaged in Begging
Program on upliftment of Harijan, Dalit, Bade, Transgender and Members of the Oppressed Sections of the Society
Community Nutrition Program
Improving Maternal and Child Nutrition (IMCN)
One Household One Farm
Agriculture Rehabilitation

Fund for assistance to Small Farmers and Poultry Farms
Accommodation (Poverty Alleviation and Rehabilitation) Project (Chief Advisors Office)
Housing Support
Gucchagram
Ashrayan-2 Project
Char Development and Settlement Project
Construction of Residence for Landless and Poor Freedom Fighters

Annex 5 – Cost categories for cost effectiveness data collection

	2012		2013		2014		2015	
	Covered by project	Covered by overarching programme and attributed accordingly to the project	Covered by project	Covered by overarching programme and attributed accordingly to the project	Covered by project	Covered by overarching programme and attributed accordingly to the project	Covered by project	Covered by overarching programme and attributed accordingly to the project
Direct Costs £								
Commodities								
Nutrition inputs (iron and folic acid tablets, micronutrients, deworming tablets, deworming suspension)								
Vehicles and motorcycles								
Publications and training materials								
Office equipment								
Mobile Phones for CPKs								
Other equipment								
Services								
Transport								
Training logistics								
HR								
Project staff								
CPKs								
Consultants								
Other direct costs not borne by the programme								
To be specified, e.g. end user costs								
TOTAL Direct Costs								
Indirect Costs £								
Commodities								
Vehicles								
Office equipment								
Services								
Office (rent, utilities, maintenance, phone bills, audit, legal, insurance etc.)								
Security								
HR								
Administrative staff FTE								
DFID staff time FTE								
FTEs of volunteers								
Other indirect costs not borne by the programme								
To be specified, e.g. government premises used								
TOTAL Indirect Costs								

Annex 6 – Summary of logical frameworks for each programme being evaluated²⁵

Programme Logframe Impact, Outcome and Output Definitions	Programme Logframe Indicator definitions (Impact, Outcome, Output Level)	Programme Logframe Targets (Per Indicator)
Chars Livelihood Programme (CLP) 2		
<p><u>Impact level:</u> Halve extreme poverty and reduce hunger in rural areas of Bangladesh by 2015/16.</p> <p><u>Outcome level:</u> Improve the livelihoods, incomes and food security of at least 1 million extremely poor and vulnerable females, children and males living on remote isolated riverine char islands of North-Western Bangladesh</p> <p><u>Output level:</u> Output 1: Reduced environmental and economic risks for families and communities</p> <p>Output 2: Improved family assets</p>	<p><u>Impact level:</u> Indicator 1: Extreme Poverty Rate – Rural Indicator 2: Proportion of undernourished population (MDG goal 1, target 2, indicator 1) Indicator 3: Prevalence of severely underweight children under 5 years (MDG goal 1, target 3, Indicator 2)</p> <p><u>Outcome level:</u> Indicator 1: No. of households meeting CLP graduation criteria Indicator 2: Extent of measurable and sustained changes in household income and expenditure Indicator 3: Level of food security, including nutrition, particularly for females and under five (U5) children Indicator 4: Level of measured change in household livelihood assets Indicator 5: Number of business group households (core and non-core) with increased profit from livestock/livestock products</p> <p><u>Output level:</u> Indicator 1.1: Number of households raised on plinths 60 cm above highest recorded flood Indicator 1.2: Number of persons accessing improved water source and new/ improved sanitation facilities Indicator 1.3: Number of Infrastructure Employment Project (IEP) person days during the lean season (September–December)</p> <p>Indicator 2.1: Number of households receiving productive assets</p>	<p>(targets for Jan 2016)</p> <p><u>Impact level:</u> No target specified. At baseline: 22% extreme poverty rate; 31% households food insecure 30% U5 children severely underweight so anticipate target 11% extreme poverty rate; 15.5% food insecure and 15% underweight</p> <p><u>Outcome level:</u> 1: 56,950 households graduate 2: 85% targeted households (228,000 people) p.c. income, expenditure and savings do not drop in real terms 3: In Cohort 2.1: 39.8% of children U5 are underweight, 50.4% stunted, 48% anaemic; 37.3% of non-pregnant females aged 15–49 with low BMI; 49.3% non-pregnant females aged 15–49 anaemic 4: 85% of all households with productive assets doubled in value benefiting 227,800 people and better able to manage risk. 85% of CPHH receiving raised plinth continue to reside there 85% of CPHH receiving sanitary latrine 5: 8,125 households with increased profit from business groups</p> <p><u>Output level:</u> 1.1: 68,500 households on raised plinths, benefiting 274,000 people (137,000 males/137,000 females) 1.2: 116,000 hhs with access to a sanitary latrine benefiting 464,000 people; 55,000 Hhs access to improved water source benefiting 220,000 1.3: 1,750,000 person days of IEP worked (at least 15% for women)</p>

²⁵ See Chars Livelihoods Programme 2 'Logical Framework 114175', <http://devtracker.dfid.gov.uk/projects/GB-1-114175/documents/> (accessed 9 January 2014); Economic Empowerment of the Poorest 'Logical Framework 107402', <http://devtracker.dfid.gov.uk/projects/GB-1-107402/documents/> (accessed 9 January 2014); Urban Partnership for Poverty Reduction 'UPPR Logframe 4002289' version 8 April 2013, unpublished.

<p>(physical, productive, political and social)</p> <p>Output 3: Market systems offering greater opportunities and benefits and increased access to poor char communities</p> <p>Output 4: Enhanced status of females and girls</p> <p>Output 5: Best practice is monitored and communicated at all levels, leading towards improvement in local delivery of national safety net and food security policy to the chars</p>	<p>Indicator 2.2: Number of core participants (CPs) enrolled in social development (groups)</p> <p>Indicator 2.3: Number of Hhs receiving homestead gardening inputs and advice</p> <p>Indicator 2.4: Number of Village Development Committees (VDC) established and operational</p> <p>Indicator 3.1: Producer business groups and livestock centres formed around common business interests</p> <p>Indicator 3.2: Improved knowledge in husbandry, processing and product-handling among farmers and other market actors</p> <p>Indicator 4.1: Increase in % of females and girls expressing self-confidence</p> <p>Indicator 4.2: Number of adolescent groups and couples oriented on issues such as violence against females and girls and other illegal practices</p> <p>Indicator 5.1: Monitoring, evaluation (M&E) and communication leads to learning and knowledge of best practice amongst stakeholders</p> <p>Indicator 5.2: Number of different organisations approached to provide or facilitate public rights, services and resources to chars</p>	<p>2.1: 67,000 CPHHs have received productive/IGAs benefiting 268,000 people (134,000 males/134,000 females)</p> <p>2.2: 67,000 CPs are enrolled in a SD group</p> <p>2.3: 67,000HHs received homestead garden inputs and complete all training</p> <p>2.4: 350 VDCs formed and operational</p> <p>3.1: 325 business groups and 108 char livestock centres established</p> <p>3.2: 6,125 households completing enhanced husbandry training; 2,620 service providers improved business knowledge</p> <p>4.1: 10% increase in proportion of CPs completing CLP cycle reporting selected household decisions are made jointly.</p> <p>4.2: 700 adolescent groups have been formed; 44,016 couples have received orientation</p> <p>5.1: A 10-year time-series dataset on household poverty and graduation; 1 overall impact evaluation; 50 evidence-based studies on website</p> <p>5.2: Seven organisations approached across public, private and civic sectors</p>
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Urban Partnership for Poverty Reduction (UPPR) Programme

<p><u>Impact level:</u> Urban poverty in Bangladesh reduced</p> <p><u>Outcome level:</u> Livelihoods and living conditions of 3 million poor and extreme poor people living in urban areas, especially women and children, sustainably improved</p> <p><u>Output level:</u> Output 1: Urban poor communities</p>	<p><u>Impact level:</u> Indicator 1: Proportion of population below the national poverty line Indicator 2: Achievement in reaching MDG goal 7 target 11, a significant improvement in the lives of at least 100 million slum dwellers by 2020</p> <p><u>Outcome level:</u> Indicator 1: % of beneficiary households (HH) multi-dimensionally poor by Multi-Dimensional Poverty Index Indicator 2: % poor settlements in CDCs reporting at least 10% improvement in water and sanitation and infrastructure conditions Indicator 3: % empowered women by participatory empowerment scorecard Indicator 4: Key policy instruments influenced:</p> <p><u>Output level:</u> Indicator 1.1: Number of HH in supported low-income settlements</p>	<p><u>Impact level</u> (target August 2014) 1: 16% (from 21.3% Dec 2010) 2: N/a (70.8% in 2005)</p> <p><u>Outcome level:</u> 1: 38.1% 2: 60% 3: 60% 4: Key policy instruments influenced</p> <p><u>Output level:</u> 1.1: 700,000 HH</p>
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<p>mobilised to form representative and inclusive groups and prepare community action plans</p>	<p>socially mobilised into primary groups (PGs) Indicator 1.2: % decision-making positions in community structures held by extreme poor and poor females and females from vulnerable and socially excluded households Indicator 1.3: % of CDCs with first Community Action Plan and Repeat Community Action Plan</p>	<p>1.2: 85% from extreme poor and poor, 10% from vulnerable and socially excluded 1.3: 90%</p>
<p>Output 2: Poor urban communities have healthy and secure living environments</p>	<p>Indicator 2.1: Number of beneficiary households in supported low-income settlements to benefit from: (1) water facilities, (2) latrines, (3) Drainage and footpath facilities Indicator 2.2: % HH members in CDCs with access to improved water source Indicator 2.3: % HH members in CDCs with access to improved latrines</p>	<p>2.1: 195,433 (water supply); 173,119 (latrine); 400,225 (drain and footpath) 2.2: 70% 2.3: 70%</p>
<p>Output 3: Urban poor and extremely poor people acquire the resources, knowledge and skills to increase their income and assets</p>	<p>Indicator 3.1: Number of beneficiaries receiving: – skills development training (apprenticeships) – small enterprise block grant Indicator 3.2: % of beneficiaries who found employment six months after receiving: – skills development training – small enterprise block grant Indicator 3.3: Number of children supported towards achieving PSC and SSC Indicator 3.4: % of beneficiaries in supported low-income settlements receiving: – Iron and folic acid (IFA) – De-worming tablet (DT) – De-worming suspension (DS) Indicator 3.5: Number and % of primary group households saving and having access to credit through savings and credit groups Indicator 3.6: % of SEF community contracts completed within 12 months of commencement</p>	<p>3.1: 64,897 (training); 115,921 (grant) 3.2: 60% 3.3: 95,883 3.4: 85% (IFA, DT and DS) 3.5: 262,500 HH; 50% 3.6: 80%</p>
<p>Output 4: Pro-poor urban policies and partnerships supported at the national and local levels</p>	<p>Indicator 4.1: Number of programme towns where low-income settlements are officially recognised by Municipal and Pourashava Mayors through signing the Settlement Map Indicator 4.2: Number of press and television reports covering urban poverty issues in UPPR low-income settlements Indicator 4.3: Number of town-led partnerships and linkages established</p>	<p>4.1: 22 4.2: 240 4.3: 135</p>
<p>Output 5: Effective project management systems established and operational</p>	<p>Indicator 5.1: Proportion of SIF budget delivered (in GBP) Indicator 5.2: Proportion of SEF budget delivered (in GBP) Indicator 5.3: % of project human resource positions staffed at HQ and town levels Indicator 5.4: % of female staff at HQ and town levels</p>	<p>5.1: £667,589 5.2: £310,000 5.3: 90% 5.4: 25%</p>

Economic Empowerment of the Poorest (EEP) Programme

<p><u>Impact level:</u> Government of Bangladesh MDG targets 1 and 2 on income poverty reduction and hunger achieved by 2015.</p> <p><u>Outcome level:</u> Targeted extreme poor people lift themselves out of extreme poverty</p> <p><u>Output level:</u> Output 1: Proven approaches to improving the livelihoods of the extreme poor taken to scale. (Scale Fund)</p> <p>Output 2: Innovative approaches to improve the livelihoods of the extreme poor tested, evaluated and successes ready for scaling up</p> <p>Output 3: Increasing consistency in the understanding, sharing and application of approaches to addressing extreme poverty</p> <p>Output 4: Policy and practice at local and national levels shows increasing recognition of the needs of extreme poor</p>	<p><u>Impact level:</u> Indicator 1: The proportion of people living in extreme poverty in line with MDG targets. Indicator 2: The prevalence of underweight children under 5 years (6–59 months) of age</p> <p><u>Outcome level:</u> Indicator 1: Number of people graduated from extreme poverty*</p> <p><u>Output level:</u> Indicator 1.1: Extreme poor direct beneficiary households (people) selected and verified for Scale Fund activities (cum.) Indicator 1.2: Extreme poor direct beneficiary households (people) that received first phase of livelihood support (cash transfer or asset transfer and training) for Scale Fund activities (cum.) Indicator 1.3: Extreme poor direct beneficiary households (people) that have received second intervention for Scale Fund activities (cum.) based on snapshot monitoring data Indicator 1.4: Value of direct transfers in NGO fund disbursements</p> <p>Indicator 2.1: Extreme poor households (people) selected for Innovation Fund activities Indicator 2.2: Extreme poor households (people) that have received first phase of livelihood support (asset transfer, cash transfer, training) for Innovation Fund activities Indicator 2.3: Innovation fund lesson learning reports produced Indicator 2.4: Innovations that progress to scale (via any funding route)</p> <p>Indicator 3.1: Level of cross portfolio lesson learning activity Indicator 3.2: Wider research and sharing activities Indicator 3.3: Number of research publications</p> <p>Indicator 4.1: Advocacy campaigns Indicator 4.2: Private sector actors involved with EEP partners Indicator 4.3: Extreme poor have access to the range of GoB safety nets</p>	<p><u>Impact level:</u> (target 2016 – ext) <10.9% below lower poverty line Less than 33% children underweight</p> <p><u>Outcome level:</u> 75% of BHH who complete project cycles in 2016 + previous graduates demonstrate graduation from extreme poverty = 223,320 BHH, 819,584 people</p> <p><u>Output level:</u> 1.1: 269,850 (990,349) 1.2: 269,850 (990,349) 1.3: 14,666 (53,826) 1.4: 56%</p> <p>2.1: 38,963 (142,994) 2.2: 38,963 (142,994) 2.3: 100% of projects at end of cycle 2.4: Four</p> <p>3.1: At least 9 (cum.) Lesson learning events undertaken involving scale and innovation fund partners 3.2: Future of EPRG learning forum as sustainable mechanism resolved. 3.3: At least 16 working papers and/or policy briefs published via website</p> <p>4.1: At least 8 national and 8 local advocacy events/campaigns 4.2: At least 9 private sector agencies partnering <i>shiree</i> NGOs 4.3: 75% report having no access to SSNs</p>
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<p>Output 5: Direct nutrition support provided to 2.8 million* extreme poor mothers, children, adolescent girls and family members, for better nutrition</p>	<p>Indicator 5.1: Percentage of targeted beneficiaries receiving monthly household visits by nutrition counsellors (disaggregated by pregnant and breastfeeding women; mothers of <6 months children and 6–23 months) Indicator 5.2: Percentage of targeted beneficiaries receiving either Iron and folic acid tablets or multiple micronutrient supplements Indicator 5.3: Innovation for increasing access to high quality diet and diversity for the extreme poor tested, evaluated and lessons shared</p>	<p>5.1: 90% mothers ($n=69,750$) (+ $n=675$ from extension) 90% <2-year-old children ($n=45,000$) (+ $n= 5,513$ from extension) 5.2: 85% pregnant and breastfeeding women receiving IFA ($n=59,288$) (+ $n=638$ from extension) 85% adolescent girls receiving IFA ($n=81,951$) (+ $n=6,800$ from extension) 85% children 6–23 months old receiving MNS ($n=35,859$) (+ $n=3,931$ from extension) 5.3: At least two innovations that increased access to household high quality diet and diversity tested and evidence shared</p>
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