Monitoring Report 2019

of

The Bangladesh Second Country Investment Plan

Contributing to SDG Implementation

May 2019

Food Planning and Monitoring Unit (FPMU)

Ministry of Food

Government of the People's Republic of Bangladesh

Bangladesh Second Country Investment Plan

Nutrition-Sensitive Food Systems

(CIP2 2016-2020)

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Ministry of Food

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Foreword

Amidst impressive achievements in food self-sufficiency and marked declines in child undernutrition especially in the last decade, the Government of Bangladesh is committed to ensuring food and nutrition security for its people, especially the vulnerable groups of mothers and young children, through a comprehensive approach to nutrition sensitive food systems. To this effect, the Government is developing a Bangladesh Food and Nutrition Security (FNS) Policy based on the Second Country Investment Plan on Nutrition-Sensitive Food Systems (CIP2, 2016-2020) which articulates a multi-billion-dollar portfolio that is consistent with the Seventh Five Year Plan, Vision 2021 and the Sustainable Development Goals (SDGs).

This report is the first in the annual series that monitors progress against the CIP2 results framework. The preparation of the report was led and facilitated by the Food Planning and Monitoring Unit (FPMU) of the Ministry of Food, in collaboration with 19 partner ministries and divisions, with technical assistance from the Food and Agriculture Organization of the United Nations (FAO) and financial support of the United States Agency for International Development (USAID) and the European Union (EU). The Monitoring Report 2019 shows that food and nutrition security for national well-being is a top priority at the highest level of the Government and amongst Development Partners. With the available resources for interventions having grown substantially, the challenge is to ensure effective delivery of programmes in line with the increased resources. As of June 2018, the CIP2 budget stood at 14 billion USD, of which 8.9 billion USD was financed. The Government and Development Partners covered 68% (6.1 billion USD) and 32% (2.8 billion USD) of the financed budget, respectively which increased by 3.1 billion USD since June 2016.

Child underweight declined from 41% in 2007 to 22% in 2018, and stunting reduced by a third from 54.6% in 1997 to 31.8% in 2018. While this improvement is in line with the SDGs and national targets, it remains a public health concern, with slower progress in the reduction of population undernourishment. Households are gradually changing their diets with a larger share of calories coming from vegetables, fruits and animal-products. Complementary feeding is showing improvement, while women's diets remain inadequate. Encouraging developments in food production diversification, steady growth in rice production, remarkable progress in aquaculture, and recent progress in livestock production are noted. With a continued decline in poverty, efforts to expand food grain storage capacity are well underway. The Bangladesh Food Safety Authority is actively coordinating the Food Safety Act implementation. Nutrition is being mainstreamed across key sectors and synergy with the National Plan of Action for Nutrition guided by the Bangladesh National Nutrition Council is being established. FNS lessons from the National Social Protection Strategy implementation are seen to be useful in policy uptake.

I am confident that this report will stimulate informed decision-making and improve the access to and consumption of safe and nutritious diets for better nutrition outcomes in Bangladesh.

Dhaka, 26 May 2019

(Sadhan Chandra Majumder)
Minister, Ministry of Food

Table of Contents

Acronyms

7FYP	Seventh Five Year Plan
ADB	Asian Development Bank
ADP	Annual Development Programme
AIGAs	Alternative Income Generating Activities
AIN	Aquaculture for Income and Nutrition
AMR	Antimicrobial Resistance
APA	Annual Performance Agreement
ASF	Animal Source Foods
ASP	Adaptive Social Protection
AVC	Agricultural Value Chain
AWD	Alternate Wetting and Drying
BAB	Bangladesh Accreditation Board
BADC	Bangladesh Agricultural Development Corporation
BAPA	Bangladesh Agro-Processors' Association
BARC	Bangladesh Agricultural Research Council
BARI	Bangladesh Agricultural Research Institute
BBF	Bangladesh Breastfeeding Foundation
BBS	Bangladesh Bureau of Statistics
BCC	Behaviour Change Communication
BCR	Benefit/cost ratio
BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi Taka
BEZA	Bangladesh Economic Zone Authority
BFD	Bangladesh Forest Department
BFRI	Bangladesh Fisheries Research Institute
BFSA	Bangladesh Food Safety Authority
BFSLN	Bangladesh Food Safety Laboratory Network
BFoRI	Bangladesh Forest Research Institute
BINA	Bangladesh Institute of Nuclear Agriculture
BIRDEM	Bangladesh Institute of Research and Rehabilitation for Diabetes, Endocrine and Metabolic Disorders
BIRTAN	Bangladesh Institute of Research and Training on Applied Nutrition
BJRI	Bangladesh Jute Research Institute
BLRI	Bangladesh Livestock Research Institute
BMDA	Barind Multipurpose Development Authority
BNNC	Bangladesh National Nutrition Council
BRRI	Bangladesh Rice Research Institute
BSCIC	Bangladesh Small and Cottage Industries Corporation
BSRI	Bangladesh Sugar-crop Research Institute
BSTI	Bangladesh Standards and Testing Institution
CARS	Centre for Advanced Research in Sciences
CBA	Cost-Benefit Analysis
CDAIS	Capacity Development for Agricultural Innovation Systems
CGR	Compound Growth Rate
CIP	Country Investment Plan
CIP1	First Country Investment Plan
CIP2	Second Country Investment Plan
DAE	Department of Agricultural Extension
DALY	Disability Adjusted Life Year
DAM	Department of Agricultural Marketing
DANIDA	Danish International Development Agency
DDM	Department of Disaster Management
DEI	Dietary Energy Intake
DFP	Deep Fertiliser Placement
DSS	Department of Social Services
DG	Director-General
DGF	Directorate General of Food
DGHS	Directorate General of Health Services
DLS	Department of Livestock Services
DoF	Department of Fisheries
DP	Development Partner
DPE	Directorate of Primary Education
DPHE	Department of Public Health Engineering
EBF	Exclusive Breastfeeding
EFCC	Environment, Forestry and Climate Change
ERD	Economic Relations Division
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FBDGs	Food Based Dietary Guidelines
FFP	Food Friendly Programme for the Ultra-Poor
FIACs	Farmers Information and Advice Centres FLW Food Loss and Waste
FNS	Food and Nutrition Security

FPMC	Food Planning and Monitoring Committee
FPMU	Food Planning and Monitoring Unit
FPWG	Food Policy Working Group
FSN	Food Security and Nutrition
FSNIS	Food Security and Nutrition Information System
FSNSP	Food Security Nutritional Surveillance Project
FYP	Five Year Plan
G2P	Government-to-Person
GAFSP	Global Agriculture and Food Security Programme
GAIN	Global Alliance for Improved Nutrition
GAP	Good Agricultural Practices
GED	General Economics Division
GED-CD	General Economics Division- Cabinet Division
GFDRR	The Global Facility for Disaster Reduction and Recovery
GHG	Green House Gas
GHP	Good Hygienic Practices
GIEWS	Global Information and Early Warning System on Food and Agriculture
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GM	Genetically Modified
GMP	Good Manufacturing Practices
GoB	Government of Bangladesh
GR	Gratuitous Relief
HACCP	Hazard Analysis and Critical Control Points
HIES	Household Income and Expenditure Survey
HNPSIP	Health, Nutrition, Population Sector Investment Plan
IAPP	Integrated Agriculture Productivity Project
IFPA	Indicator of Food Price Anomalies
ICN2	Second International Conference on Nutrition
ICT	Information and communication technology
ICVGD	Investment Component for Vulnerable Group Development
IFAD	International Fund for Agriculture Development
IFC	International Finance Corporation
IFPA	Indicator of Food Price Anomalies
IFRC	International Federation of Red Cross and Red Crescent Societies
IFPRI	International Food Policy Research Institute
IMED	Implementation Monitoring and Evaluation Division
INFS	Institute of Nutrition and Food Science
IPHN	Institute of Public Health and Nutrition
IRRI	International Rice Research Institute
IYCF	Infant and Young Child Feeding
LANSA	Leveraging Agriculture for Nutrition in South Asia
LCG	Local Consultative Group
LCG	ARDFS Local Consultative Group on Agriculture, Rural Development and Food Security
LGD	Local Government Division, Ministry of Local Government, Rural Development and Co-operatives
LGED	Local Government Engineering Department
LICT	Leveraging ICT for Growth, Employment and Governance
LoA	Letter of Agreement
LSP	Local Service Providers
MAD	Minimum Acceptable Diet
MDD	Minimum Dietary Diversity
MDD-W	Minimum Dietary Diversity for Women
MDG	Millennium Development Goal
MISM	Management Information System and Monitoring
MMT	Million Metric Tons
MoDMR	Ministry of Disaster Management and Relief
MoEd	Ministry of Education
MoF	Ministry of Finance
MoFood	Ministry of Food
MoFL	Ministry of Fisheries and Livestock
MoHFW	Ministry of Health and Family Welfare
MoI	Ministry of Industries
MoLGRDC	Ministry of Local Government, Rural Development and Cooperatives
MoP	Muriate of Potash
MoPME	Ministry of Primary and Mass Education
MoSW	Ministry of Social Welfare
MoU	Memorandum of Understanding
MoWCA	Ministry of Women and Children Affairs
MoWR	Ministry of Water Resources
MFSP	Modern Food Storage Facilities Project
MSMEs	Micro, Small and Medium Enterprises
MUCH	Meeting the Undernutrition Challenge

NAP	National Agricultural Policy
NATP II	National Agriculture Technology Project – phase II
NARS	National Agricultural Research System
NC	National Committee
NCDs	Non-Communicable diseases
NFNSP	National Food and Nutrition Security Policy
NFP	National Food Policy
NFSMAC	National Food Safety Management Advisory Council
NGOs	Non-Governmental Organizations
NIPN	National Information Platform for Nutrition
NIPU	Nutrition Information and Planning Unit
NPAN2	Second National Plan of Action for Nutrition
NNC	National Nutrition Council
NNP	National Nutrition Policy
NNS	National Nutrition Services
NSA	Nutrition-Sensitive Agriculture
NSDS	National Strategy for the Development of Statistics
NSPCMD	National Strategy on Prevention and Control of Micronutrient Deficiencies
NSVC	Nutrition-Sensitive Value Chain
NSS	National Statistical System
NSSS	National Social Security Strategy
NWRD	National Water Resources Database
OFSP	Orange Fleshed Sweet Potato
OMS	Open Market Sales
OPM	Oxford Policy Management
PE	Public Expenditure
PFDS	Public Food Distribution System
PKSF	Palli Karma-Sahayak Foundation
PMO	Prime Minister's Office
PoA	Plan of Action
PPP	Public Private Partnership
PPRC	Power and Participation Research Centre
RMG	Ready-made garment
R&D	Research and Development
SAARC	South Asian Association of Regional Cooperation
SBCC	Social and Behaviour Change Communication
SDG	Sustainable Development Goal
SEZ	Special Economic Zones
SID	Statistics and Informatics Division
SIS	Small Indigenous Species
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SOFI	State of Food Insecurity in the World
SPF	Specific Pathogen Free
SRDI	Soil Resource Development Institute
SSN	Social Safety Net
SSNP	Social Safety Net Programmes
SUN	Scaling Up Nutrition
SWAPNO	Strengthening Women's Ability for Productive New Opportunities
TA	Technical Assistance
TAT	Technical Assistance Team
TCP	Technical Cooperation Programme
TMRI	Transfer Modality Research Initiative
TR	Test Relief
TSP	Triple Superphosphate
TT	Thematic Team
TWG	Technical Working Group
UCBP	Universal Child Benefit Programme
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USG	Urea Super Granules
VAM	Vulnerability Analysis and Mapping
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
VNR	Bangladesh Voluntary National Review
VRA	Vulnerability Risk Assessment
WARPO	Water Resources Planning Organization
WASH	Water, Sanitation and Hygiene
WB	World Bank
WDB	Water Development Board
WFP	World Food Programme
WHO	World Health Organization
WUE	Water Use Efficiency

Executive Summary

The Monitoring Report 2019 (MR19) presents the achievements of the Bangladesh Second Country Investment Plan – Nutrition-Sensitive Food Systems (CIP2, 2016-2020), two years into its implementation, as of June 30th 2018. The CIP2 aims to improve the effectiveness and efficiency of food and nutrition security sectoral and cross-sectoral resource mobilisation and to prioritise nutrition-weighted financing. It is in alignment with the SDGs and other international initiatives such as the ICN2 Framework for Action, the UN Decade of Action on Nutrition and the SUN movement and is fully coherent with the national priorities as set in the Bangladesh Seventh Five Year Plan (2016-2020).

1.1.1. Progress towards the CIP2 Goal

Progress in reducing undernourishment needs to be accelerated

The FAO estimates on prevalence of undernourishment in Bangladesh show a decline between 2015 and 2017, from 15.8% in 2015 to 15.1% in 2016 followed by a slight increase to 15.2% in 2017. This overall reduction has been slow – just 0.6 percentage points in a three-year period- and needs to be accelerated to achieve the 5% target.

Improvements in child undernutrition but significant child stunting while regional and socio-economic disparities persist

Child stunting at the national level has experienced a remarkable decline: from 60% in the mid-90s to 31% in 2018. If the current decreasing trend is maintained, the World Health Assembly target will be met earlier than 2025. However, stunting levels remain very high, making them a public health concern, with young children being the most vulnerable. Meanwhile, regional and socio-economic disparities persist. Wasting, an important component of child undernutrition, has shown some improvement, from 14 % in 2014 to 8% in 2018, which means that the 8% NPAN2 target has already been met and which puts the WHO target of less than 5% by 2025 within reach.

Agricultural productivity growth observed over the last decade decelerated after 2015

Agricultural value added per worker, a measure for agricultural productivity and a proxy for SDG 2.3.1, almost doubled over the period 2005 - 2017 compared to that of the period 1990 – 2004. However, a slow-down was observed in the pace of growth over the MR19 reference period (2015 - 2017). The intensification of input use, the diffusion of improved rice varieties and increased cropping intensity are some of the factors that contributed to the upward trend and enabled the attainment of rice self-sufficiency. However, land scarcity, overuse of fertilisers and yield gaps associated with the negative effects of climate change exacerbate the challenge of maintaining rice production growth while accelerating diversification in production. Sustainable intensification, through Climate Smart Agriculture for instance, is a key driver for increasing productivity and efficiency in the use of resources against the degrading natural resource base.

1.1.2. Progress towards the CIP2 Outcomes

The drive towards diversification in production remains sluggish

The assessment of proxy indicators for the Pillar I on *Primary production* shows that agricultural GDP growth picked up after the drop experienced in 2012/13, reaching 4% in 2017/18. Livestock and fishery sectors combined generated about 40% of agricultural value added over the reference period, a slow trend towards diversification when compared to the 36% observed in 2007/08. The rice value added in total food value slightly increased in the reference period and still stood at 33.8% in 2017/18. This suggests that while diversification is happening, albeit slowly, it has not yet translated into a substantial reduction of value addition from rice along with more value addition and transformation

activities in sectors such as livestock and non-cereal crops. Meanwhile, the dependency on rice imports increased between 2015/16 and 2017/18, due to all-time high private rice imports in 2017/18, triggered by the 2017 flash floods in a context of long-term stability in rice self-sufficiency. Over the reference period, the gender wage gap in agriculture narrowed to 26.4% in 2016/17, a clear improvement from previous values.

Against this backdrop, the promotion of more inclusive nutrition-driven agricultural diversification (e.g. bio-fortified crops, improved varieties of oilseeds and maize, small indigenous species of fish and small livestock) needs to be accelerated while continuing to improve productivity of cereals. Private sector involvement is essential to fully exploit the potential of livestock - especially eggs and dairy - and high value crop production and transformation. Concurrently, forests must be preserved for the environmental protection, climate change mitigation and ecosystem services they provide.

Agricultural real wage rates fell in a context of stable inflation due to volatile rice prices in the wake of flash floods

The proxy indicators for the Pillar II on *Market & value addition* describe an overall stable level of inflation over the reference period, in a context of falling agricultural real rice wages rate due to a steep increase in rice prices. The Indicator of Food Price Anomalies (IFPA) which measures volatility by identifying abnormal price monthly changes, signals an atypically high price in 2016/17, probably due to the negative impact of flash floods on production levels, consequent harvest losses and supply tightness associated with reduced imports. The following year witnessed a normalisation of this price.

Efforts are needed to accelerate a nutrition-sensitive value chain approach in order to extend the shelf life of produce, conserve its nutrients and enhance its nutrition content through appropriate technologies in transformation, storage, and distribution. It is essential to link this with micro, small and medium enterprises. In this context, the retention of a larger share of value addition by farmers through on-farm activities (e.g. sorting, cleaning, packaging and grading of produce) needs to be encouraged. Strengthening smallholders' access to information, skills, inputs and technologies is paramount to achieve nutrition-sensitive post-harvest transformation and value addition.

Dietary diversity is progressing among women and children, but high prevalence of micronutrient deficiencies persists

The assessment of the Pillar III on *Diversified consumption* notes a decline in the national consumption of cereals which in 2016 was just four percentage points above the CIP2 target of 60% cereal energy intake by 2020. Alongside, there has been an increase in the consumption of non-cereal foods, notably: vegetables, spices, fish and meat. The consumption of lentils, milk and fruit, however, remains low, with implications for the diversity and nutrient adequacy of diets. Marked progress is registered in exclusive breastfeeding rates in the first six months of life. Also, the proportion of children aged 6-23 months that consume a minimum acceptable diet significantly rose to just over a third in 2016/17 from 23% in 2014. Consumption of adequately iodised salt (≥ 15 parts per million) is not yet universal in Bangladesh. The prevalence of anaemia among women of reproductive age remains high, at 39.9% in 2016, and has shown little improvement in recent years. Although recent data on the Minimum Dietary Diversity for women is not yet available, previous trends suggest that Bangladesh is not on track to achieve its target.

In light of this situation, interventions to improve dietary diversification for nutrient adequacy among women of reproductive age, especially adolescent girls and young children are needed. In line with the National Strategy on Prevention and Micronutrient Deficiencies (2015-2024), the consumption of micronutrient-rich foods including fortified foods must be encouraged and monitored in order to inform policy and programmatic changes. While continuing to address undernutrition and micronutrient deficiencies, prevention and control of overweight and obesity through the promotion of healthy diets and lifestyle should not be overlooked.

The poverty reduction rate has decelerated, and many are still in need of social protection

While poverty continues to decline, the pace of this fall, especially that of extreme poverty, decelerated after 2010, failing to reflect a strong economic growth. Substantial numbers of people remain poor and susceptible to undernourishment and malnutrition, stressing the need for the interventions proposed under Pillar IV on *Enhanced access to social protection and safety nets and increase resilience*.

A more inclusive economic growth is needed while ensuring that the most vulnerable are shielded from the effects of poverty. Threats to the agricultural sector caused by climate change need to be counteracted by strengthening rural non-farm enterprises. This and other measures that take into account geographical differences and the different types of vulnerability are needed to help vulnerable populations become more resilient. Intrahousehold inequalities in food and resource allocation need to be addressed, as well as inequality across the population which is on the rise.

Adequate institutional arrangements are in place to monitor the CIP2

Pillar V on *Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security* demonstrates that high-level FNS focal points have been successfully established across core ministries and are engaged in policy monitoring through regular meetings. High-level FNS policy reports were thus regularly produced over the reference period.

In light of the complexity of foods systems and of the approaches adopted to conceptualise them, the technical abilities of the Government focal points across sectors involved in the monitoring of the CIP2 must continue to be developed. Attention should also be given to sub-national level actors involved. The Food Planning and Monitoring Unit (FPMU) which, in addition to a technical contribution provides operational support to the monitoring process and acts as secretariat to the various instances involved, needs to further reinforce its ability to better coordinate, plan, communicate and lead. Given the on-going process and long-term undertaking that capacity strengthening is, it needs to be institutionalised rather than be project-based. The success of the CIP2 also depends on the continued engagement of the wide range of FNS stakeholders in the monitoring process and more generally on collaboration between them to ensure better coordination amongst Government and inter-governmental mechanisms to exploit synergies and avoid duplication.

The *Primary production and Market & value chain* pillars account for the largest part of the CIP2

As of 30th June 2018, the CIP2 budget totalled 14 billion USD, or 9 billion USD when prioritising project budgets according to their role in achieving positive nutritional outcomes. *Primary production* (Pillar I) is the largest area of investment, channelling about 5.6 billion USD or 75% of this amount when nutrition-weighted (4.2 billion USD). This is followed by *Market & value chain* (Pillar II) with 5.4 billion USD, or 50% of this amount, once nutrition-weighted. *Social protection* (Pillar IV) accounts for 2.4 billion USD or 68% of this (1.6 billion USD when nutrition-weighted). The *Diversified consumption* area of investment (Pillar IV) has a total budget of 0.35 million USD (0.31 if nutrition-weighted) and the *Cross-cutting issues* (Pillar V), 0.30 billion USD (0.18 billion if nutrition-weighted). Two programmes - *Improved access to markets, facilities and information* (Programme II.2) and *Improved access quality management of crop agricultural inputs, including water and land* (Programme I.2)- alone, cover 60% of the total budget. While some areas of the CIP2, by virtue of the nature of the investments involved (infrastructure for example), constitute a much larger share of the total budget, it is important that the Government of Bangladesh (GoB) and Development Partners (DPs) do not lose sight of the importance of interventions under other areas of investment (such as Pillars III and IV). Programmes such as the one on *Food waste and losses* (V.2.) remain to be populated with projects.

To account for the return on investment in the different CIP2 pillars, five impact assessments have been conducted on five specific sub-programmes. The analyses pointed to the potential of the nutrition-sensitive interventions to be leveraged as entry points for nutrition-specific programmes and

to be integrated across multiple sectors, in order to impact the improvement of diets and nutrition. However, cost-benefit analyses - while able to quantify the impact of interventions in terms of economic returns – do underestimate many of the actual benefits of the interventions and should not be taken as the only instrument to assess topmost priorities of a certain CIP2 programmes.

Mobilisation of resources, especially for DPs, needs to be accelerated

Total mobilised CIP2 resources increased by 1.6 billion USD (+22%) to 8.9 billion USD in 2017/18 compared to an increase of 25% in 2016/17, the first year of the CIP2. When applying the nutrition weights, the increase in the financed budget was of 24% in both years. These rates are lower than the yearly average of 33% observed during the CIP1 due to the low increase in DPs' resource mobilisation (an annual average 13% since the start of the CIP2). The GoB was responsible for 68% of the financed part and the DPs for 32% in both the total and nutrition-weighted budgets. As of 30th June 2018, 38% of the financed budget was allocated to *Market & value chain*, 31% to *Primary production*, 26% to *Social Protection*, and 3% and 2% respectively to Pillar III and V. These percentages change to 30%, 36%, 27%, 5% and 2%, respectively, when applying nutrition weights.

Pipeline projects almost entirely concentrate on *Primary production* and *Market & value chains*

Concerningly, the share of pipeline projects almost entirely fell under *Primary production* (56%) and *Market & value chain* (39%), with just 2% going to *Social Protection* (against 26% of the financed budget). While it is important that the commitments made in these areas are translated into actual financed budget, attention must be brought to the need for the GoB and DPs to also prioritise the other areas of investment of the CIP2 without which many of the challenges faced by Bangladesh with regards to FNS will not be tackled.

The rate of delivery needs to be improved

As of 30th June 2018, the cumulative delivery amounted to 3.1 (1.9 nutrition-weighted) billion USD which corresponds to 35% (34% nutrition-weighted) of the total financed budget. The delivery in the *Social Protection* area of investment was particularly low, at 23%, while the highest was that of Pillar II and V, albeit not surpassing 43%. These figures vary little when applying nutrition weights. Delivery in the first year has slowed down compared to the second year except for *Diversified Consumption* (Pillar III) and *Cross-cutting* (Pillar V). Yearly delivery needs to be accelerated during the third year of implementation in order to compensate for this current trend. To this effect, Government agencies and DPs need to focus on developing the disbursement capacities of implementing agencies.

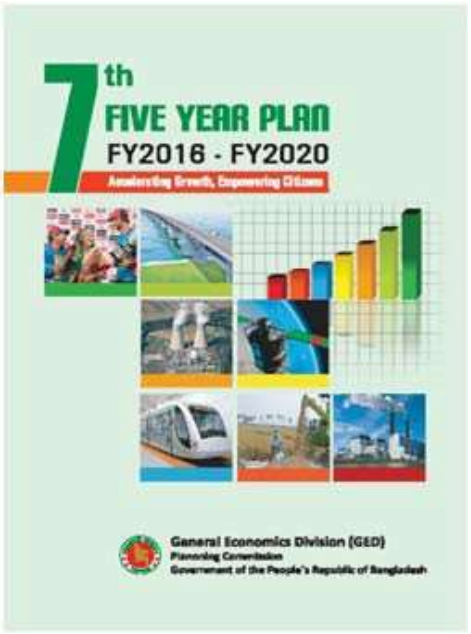
1. Introduction

Nutrition-sensitive investments: context and evolving needs

Bangladesh has registered commendable socio-economic progress in the past decades and graduated to the status of lower middle-income country in 2015, with the objective of becoming a middle-income country by 2021. In approaching this goal, the country is witnessing a remarkable transformation in its economic sectors, including in agriculture, towards a more diversified and high value production, with rising incomes leading to a more dynamic domestic food demand. In this context, a number of interlinked challenges need to be addressed: food safety, preservation of biodiversity, adaptation to climate change, and increased agricultural productivity to meet the rising demand. At the same time, investments to intensify agricultural diversification, increase value addition and create a conducive environment for private sector involvement are needed, while also ensuring that the most vulnerable are not left behind.

The Bangladesh Second Country Investment Plan – Nutrition-Sensitive Food Systems (CIP2, 2016-2020) is a tool that can help to mobilise resources and prioritise nutrition-sensitive financing, increase effectiveness of fund allocation and ensure alignment of sectoral and cross-sectoral food and nutrition security (FNS) related programmes. This document aligns with the Sustainable Development Goals (SDGs) as well as other international initiatives such as the ICN2 Framework for Action, the UN Decade of Action on Nutrition and the Scaling up Nutrition (SUN) movement, and is coherent with the national priorities as set in the Bangladesh Seventh Five Year Plan (7FYP, 2016-2020) (Figure 1). The CIP2's overarching goal is *to achieve improved security and nutrition for all at all times by making food systems*[1] *nutrition-sensitive and sustainable*. Its strategic objective is to *ensure availability, affordability and nutritional quality of foods; that all people have access to a variety of safe and nutritious foods; and knowledge to be able to make healthy diet choices*. Officially launched on October 10th 2018, the CIP2 is operationalised through yearly monitoring cycles. The Monitoring Report 2019 (MR 19) represents its first yearly monitoring output and aims tracks progress in FNS results, investments achieved, financial execution and commitments against targets as articulated in the CIP2 as of June 30th 2018. It is a joint effort of 19 ministries/divisions' agencies led by the Ministry of Food's Food Planning and Monitoring Unit (FPMU) and comprises 13 programmes and 39 sub-programmes (Figure 2) under five pillars:

Figure 1 – 7th Five Year Plan



Source: Food Planning Monitoring Unit (FPMU), Ministry of Food, Bangladesh

I. Diversified and sustainable agriculture, fisheries and livestock for healthy diets
II. Efficient and nutrition-sensitive post-harvest transformation and value addition
III. Improved dietary diversity, consumption and utilisation
IV. Enhanced access to social protection and safety nets and increased resilience
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security

[1] According to FAO: "*a food system encompasses all the stages of keeping us fed: growing, harvesting, packing, processing, transforming, marketing, consuming and disposing of food*".

About this report

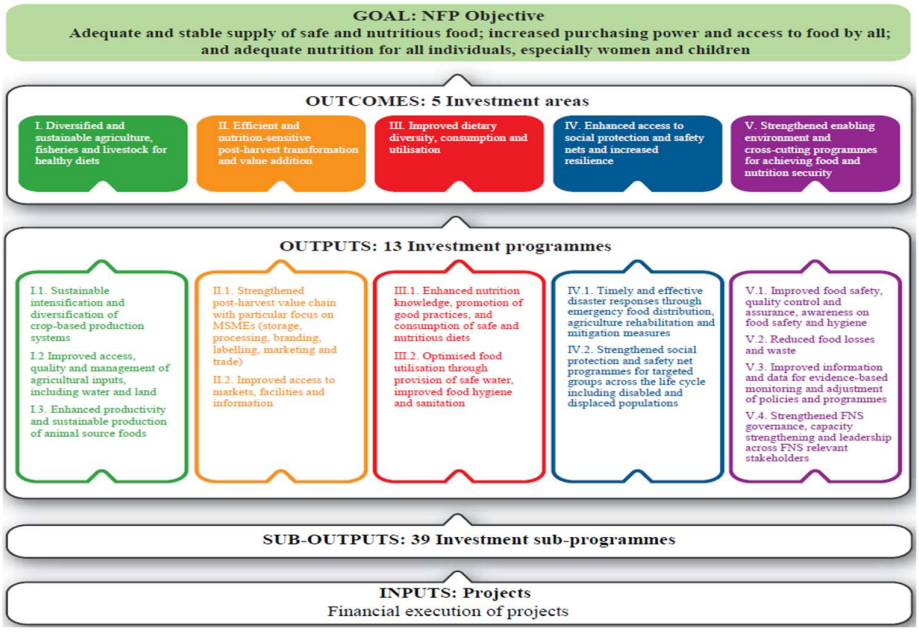
The next section discusses the CIP2 approach to monitoring by presenting the results framework. Chapter 3 assesses progress at goal and outcome levels. Chapter 4 to 8 monitor each of the 13 CIP2 programmes clustered by pillar and Chapter 9 discusses the CIP2 financing. The last chapter provides an overall assessment of progress and recommendations based on the analysis carried out. Annexes present the monitoring indicators, the composition of the Thematic Teams (TTs), the budgets of ministries involved in FNS and a number of tables describing the financial composition of the CIP2, including the complete database of projects financed and planned under the CIP2, as of 30th June 2018.

2. Approach to monitoring[2]

The MR 19 follows the CIP2 results framework (Figure 2) which describes the different levels of desirable changes - from sub-outputs, outputs up to outcomes and goal level – generated by a change in condition through projects' execution (inputs):

- Impact/Outcome level: five expected outcomes correspond to the five areas of investment of the CIP2. At this level, changes in conditions that are not under the direct control of implementing agencies are monitored.
- Output level: outputs refer to mid-term development results that the 13 CIP2 programmes seek to achieve. Expected outputs represent change in conditions created by specific interventions and are under the direct control of implementing agencies.
- Input level: each of the 13 CIP2 programmes and 39 sub-programmes comprise a number of specific projects. At input level, the MR19 tracks financed (ongoing and completed) projects and financial requirements whose funding has yet to be identified (pipeline projects)[3].

Figure 2 – CIP2 Results Framework



Source: Food Planning Monitoring Unit (FPMU), Ministry of Food, Bangladesh

[2] More information on the methodological approach and the detailed process are provided in the CIP2 document.

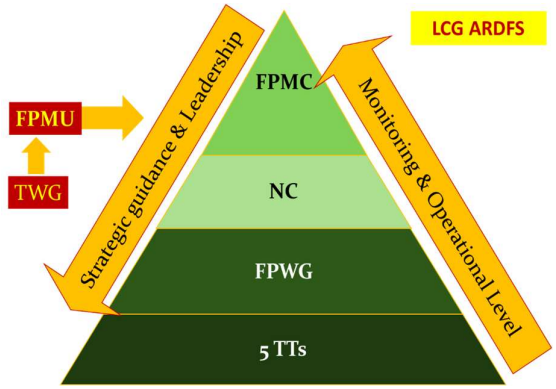
[3] In order to assess the impact of a specific investment programme, an analysis of the cost-effectiveness (through cost-benefit analysis) of five selected nutrition-sensitive CIP2 sub-programmes/specific projects (i.e. interventions). See Section 9.3.

The monitoring process consists in the validation and refinement of the indicators, the collection of annual updates on indicators both at results' and input level, followed by the analysis of changes observed. The source information is published documents as well as primary sources, i.e. data directly obtained from Government agencies, development partners and relevant projects' managers.

Institutional arrangements for the monitoring: a unified framework for CIP2 and SDGs

The institutional arrangement for the monitoring process utilises Government of Bangladesh (GoB) institutional structures for FNS coordination including the monitoring of the Second National Plan of Action for Nutrition (NPAN2, 2016-2025), the formulation of the upcoming NFNSP, and the monitoring of FNS-related Sustainable Development Goals (SDGs). It is anchored in the Annual Development Programme (ADP) in relation to input (i.e. financial allocation) monitoring. The institutional setting operates on a multiple level mechanism depicted in Figure 3. It consists of a unified framework including five Thematic Teams (TTs) - one for each investment area (see Annex 1 for details)- that carry out the monitoring activities; Technical Working Groups (TWGs)[4], the Food Policy Working Group (FPWG)[5], and the National Committee (NC)[6], all under the authority of the Food Planning and Monitoring Committee (FPMC)[7] and with technical, operational and secretarial support from the Food Planning and Monitoring Unit (FPMU). The Local Consultative Group on Agriculture, Rural Development and Food Security (LCG ARDFS) participates in the CIP2 Annual Review Meetings and is a venue for dialogue between the GoB and DPs.

Figure 3 - Institutional arrangements for coordination and monitoring



Source: Food Planning Monitoring Unit (FPMU), Ministry of Food, Bangladesh

Monitoring Results

The results framework of the CIP2 is the final result of a series of consultations between TWGs, FPMU, civil society organisations, the private sector and other stakeholders. SMART indicators[8] are presented at goal (Chapter 3), outcome (Chapter 3) and output (Chapter 4-7) level. When appropriate, SDGs and 7FYP indicators have been included to ensure alignment to the related frameworks. In addition, relevant CIP1/NFP PoA indicators have been kept to retain a degree of continuity between the CIP1

[4] In addition to the CIP1 institutional setup, five **TWGs** - focal points from each relevant GoB sector, have been established by FPMU in partnership with 13 ministries. These TWGs assisted FPMU in developing the CIP2.

[5] The **FPWG** performs the task of coordination and collaboration at both technical and operational level. A particularly important role is played by the Ministry of Finance and the Implementation Monitoring and Evaluation Division (IMED) and the Economic Relations Division (ERD) to provide feedback on CIP2 financial matters.

[6] The **NC,** chaired by the Food Minister, comprises the secretaries of key ministries and divisions, heads of universities/research institutions, DPs, private sector and other non-governmental organizations (NGOs). The NC oversees the CIP2 implementation and monitoring processes.

[7] The Cabinet-level **FPMC** delivers strategic guidance on FNS issues and establishes a high-level commitment to inter-sectoral collaboration. It provides leadership and oversight in the formulation of food policy strategic documents developed by the institutions it oversees. It also relies on the technical support provided by these same instances which provide feedback based on their monitoring activities.

[8] SMART indicators are: *Specific* (Who? What? When? Where? Why? Which?); *Measurable* (Metrics and Milestones? How much? What Percentage?); *Achievable* (Do you have the skills and tools to accomplish this objective?); *Relevant* (Does it fit with overall organizational Objectives?); *Timebound* (Intermediate and final deadline).

and CIP2 monitoring processes. The total number of result indicators in CIP2 is 115, out of which nine are not yet available (mostly SDGs indicators). In some cases, alternative proxy indicators have been provided with the expectation that the original indicators will become available for future monitoring exercises. Annex 2 provides details of the indicators listed in the CIP2 and the ones used in this monitoring report, including proxies. In addition to the indicators for which data are not yet available, some adjustments have been made to adapt to the available data or to finetune the indicator. One important modification has been to remove indicators pertaining to the Allowance for the Financially Insolvent Disabled, the Old Age Allowance/Pension, and VGD social safety nets which are not in the Government's ADP budget and do not therefore fall under the purview of the CIP2. The indicator "Distribution of foodgrain through PFDS" has been added in spite of most of the Public Food Distribution System (PFDS) channels falling under the Government's recurrent budget, because the storage required and its management necessitates investments that are covered by the CIP2.

Monitoring at input level: a nutrition-sensitive budget[9]

In line with the CIP1, cost and financing requirements of the CIP2 are analysed within the areas of investment, programmes and sub-programmes and estimated based on: (i) an assessment of projects' total cost, financed budget and expenditure as reported in the ADP book of IMED and other GoB reporting frameworks; (ii) additional funds required to achieve CIP2 results. In order to finetune the content of each programme and subprogramme and to make the CIP2 nutrition-sensitive, two novel approaches have been adopted compared to the CIP1:

Apportionment: Projects' contents were examined since in some cases, their various components may belong to more than one CIP2 subprogramme. Thus, when appropriate, different project components were apportioned to different subprogrammes of the CIP2. In some cases, some project components were not relevant to the CIP2 and therefore not included.

Prioritisation (nutrition weightage): Projects have been prioritised based on the extent to which they have a role in achieving positive nutritional outcomes, with weights associated to their potential impact as advocated by the SUN initiative. Thus, there are three tiers of projects:

- *Nutrition-sensitive:* Such projects incorporate nutrition objectives and address critical underlying determinants of undernutrition. Nutrition-sensitive approaches include agriculture, clean water and sanitation, food safety, food waste and losses, education and employment, healthcare, support for resilience and women's empowerment. [Assigned weight: 75%].
- *Nutrition-sensitive+*: These are likely to have a more direct impact on nutritional outcomes (e.g. promotion of dietary guidelines linked with national non-communicable diseases (NCDs) strategies and related nutrition services). They have the potential to be leveraged to serve as delivery platforms for nutrition-specific interventions. [*Assigned weight: 100%]*.
- *Nutrition-supportive*: They create an enabling environment for nutrition-sensitive/specific projects to take place. While not usually considered in nutrition budgets, these interventions are crucial to achieve positive nutritional outcomes: for instance, the construction of infrastructure which allows access to markets or capacity strengthening to implement FNS-related policies. Such interventions are often sector-wide in nature which justifies not including their full cost under the CIP2. [*Assigned weight: 50%]*.

[9] Details of the methodological approach to the input level monitoring are presented in Chapter 9.

These methods of apportionment and prioritisation implied a substantive amount of work in collecting and understanding projects' contents through electronically available sources or liaising with implementing agencies and managers. This new approach will require that the TT members and DPs become familiarised with it in for future monitoring cycles to allow a smoother process.

CIP2 timeframe

The CIP2 baseline is set as of 30th June 2016. Each monitoring yearly cycle is based on information as of the previous years' 30th of June:

- CIP2 (baseline) includes relevant ongoing projects as of 30th June 2016;
- MR 18 reviewed projects to be implemented between 1st July 2016 and 30th June 2020, using data as of 30th June 2017[10];
- MR 19 reviews projects to be implemented between 1st July 2017 and 30th June 2020, using data as of 30th June 2018;
- MR 20 will review projects to be implemented between 1st July 2018 and 30th June 2020, using data as of 30th June 2019;
- MR 21 will review projects to be implemented between 1st July 2019 and 30th June 2020, using data as of 30th June 2020.

[10] The MR 2018 was generated by using FY16/17 data based on CIP1 as the CIP2 was not yet officially approved.

3. Progress towards CIP2 goal and outcomes

3.1 CIP2 goal

The CIP2 provides a strategic approach towards addressing hunger and malnutrition and achieving the Sustainable Development Goals (SDGs). The overarching goal of the CIP2 is to achieve improved food security and nutrition for all at all times by making food systems nutrition-sensitive and sustainable. Nutrition-sensitive food systems encompass interconnected issues ranging from food production, food access and distribution to food utilisation, nutrition and the health status of individuals. The GoB recognises that addressing hunger and malnutrition should not only be a goal in itself but a means to achieve other developmental goals. Thus, improving nutrition contributes directly to increased labour productivity which in turn fosters faster economic growth, and indirectly to improved life expectancy, by reducing disease and mortality. Enhanced school performance, cognitive development, as well as reduction in healthcare-related costs are other positive outcomes. The achievement of nutritional wellbeing requires an overall improvement across the lifespan, particularly in the first 1,000 days of life, with a focus on the most vulnerable groups such as mothers and young children. Additionally, it requires a reduction in overnutrition and related conditions of overweight, obesity and non-communicable diseases, which are on the rise.

Having embraced the global agenda set by the UN's post-2015 SDGs, Bangladesh endeavours to eradicate poverty in all its dimensions (SDG-1) and aims at ending hunger, achieving food security and improved nutrition and promoting sustainable agriculture (SDG-2: Zero Hunger). It also acknowledges the need for nutrition-specific and nutrition-sensitive actions across the food system to achieve other SDGs. Thus, the CIP2 sets forth 13 priority nutrition-sensitive investment programmes for each stage of the food chain, "from production to plate", as well as emerging challenges to the food systems.

Progress towards CIP2 goals is measured by four nutrition-relevant indicators (undernourishment (SDG 2.1.1) , child stunting (SDG 2.2.1), child wasting (SDG 2.2.2) and food insecurity (SDG 2.1.2)) and three economic and environment-related indicators (productivity of labour (SDG 2.3.1), income of small-scale food producers (SDG 2.3.2), and area under productive and sustainable agriculture (SDG 2.4.1)). These are consistent with the SDG framework and other national development targets, such as those of the Seventh Five Year Plan (7FYP). The Prevalence of Undernourishment (PoU) and Food Insecurity Experience Scale (FIES) are two indicators used for monitoring progress in hunger reduction under the SDGs, while child undernutrition, reflected through stunting and wasting, is used for monitoring progress in nutrition. The volume of production per unit labour, average income of small-scale producers, and area under productive and sustainable agriculture are currently Tier II indicators[11] and are thus not yet regularly collected in Bangladesh. As the volume of production per unit of labour aims at measuring labour productivity, the agricultural value added per worker is used here as a proxy.

The PoU estimates are based on average national dietary energy supply, minimum dietary energy requirements for an average individual, and a measure of the distribution of food within the country. The PoU in terms of dietary energy supply declined between 2015 and 2017, from 15.8% in 2015 to 15.1% in 2016, followed by a slight increase to 15.2% in 2017. While hunger levels have continued to decline in Bangladesh, the rate of reduction has slowed down. These trends are symptomatic of structural factors adversely affecting the agricultural sector, including the impact of climate and weather-related extreme events. As per the '*Bangladesh Voluntary National Review (VNR), 2017*' on

[11] The Inter-agency and Expert Group on Sustainable Development Goal Indicators defines a Tier II indicator as one that is conceptually clear, has an internationally established methodology and standards are available, but for which data are not regularly produced and have therefore not been included in Table 1.

SDGs published by the General Economics Division (GED), the target for this indicator is less than 10%[12] (Table 1).

Table 1 - CIP2 goal and 7FYP indicators relating to food and nutrition security[13]

CIP2 goal proxy indicators	2015/16 Baseline	2016/17	2017/18	Target 2020	Source
SDG Indicator 2.1.1: Prevalence of Undernourishment (PoU)	15.8%	15.1%	15.2%	<5% by 2030 (FAO) 🔴	FAO, SOFI
SDG Indicator 2.2.1: Prevalence of stunting (height for age <-2 s.d. from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	36.1% (2014)	…*	31.0% (2018)**	25% by 2020 (7FYP) 🟡	BDHS
SDG Indicator 2.2.2: Prevalence of wasting among children under 5 years of age (<-2 SD of weight for height)	14% (2014)	…*	8% (2018)**	<8% by 2025 (NPAN2) 🟢	BDHS
Agricultural value addition per worker (USD) – Proxy of SDG 2.3.1[14]***	888.6 (2015)	931.0 (2016)	990.7 (2017)	Increase over time (FAO) 🟡	World Bank, FAO

not applicable; **provisional data; * proxy*

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴 .

SDG 2.2 calls for an end to "all forms of malnutrition" by 2030. Malnutrition covers a broad spectrum ranging from severe undernutrition, micronutrient deficiency to overweight and obesity. It affects the population throughout the lifecycle, from conception through childhood and into adolescence, adulthood and older age. Undernutrition can be acute – resulting from an immediate crisis in food access, inadequate nutrient intake and/or infection – or chronic, with cumulative deleterious effects over long periods. At the other end of the spectrum, overweight and obesity are attributed to an excessive intake of energy, and/or limited energy expenditure resulting in increased body weight and fat accumulation, which increases the risk of diet-related non-communicable diseases (NCDs) and other health conditions.

Bangladesh is experiencing a multiple burden of malnutrition, where various forms of malnutrition coexist within the same community, same household or even in the same person. The prevalence of undernutrition[15] dramatically reduced among Bangladeshi women in the last 10 years, but nearly one-fourth of women remain underweight and one-fifth stunted. Additionally, nearly half of the women are suffering from different micronutrient deficiencies. Concurrent to this immense burden of undernutrition is the presence of overweight or obesity among nearly half of the adult women[16]. To track progress on ending malnutrition, two nutrition indicators (stunting and wasting) are measured in the CIP2. They form part of the national SDG monitoring framework and of the seven indicators and targets for 2025 agreed by the 2012 World Health Assembly (Table 2).

[12] General Economic Division, Planning Commission, Government of Bangladesh (2017) "*Bangladesh Voluntary National Review (VNR), 2017 – Eradicating poverty and promoting prosperity in a changing world*", June 2017.

[13] In the proxy indicators' tables missing values are either due to not availability of data ('not applicable') or to impossibility to obtain the data because of the frequency in which data source is produced ('not available', or NA).

[14] SDG 2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size.

[15] Including micronutrient malnutrition.

[16] Hasan M., Sutradhar I., Shahabuddin A.S.M., Sarker M. (2017) "*Double Burden of Malnutrition among Bangladeshi Women: A Literature Review*" Cureus, December 9.

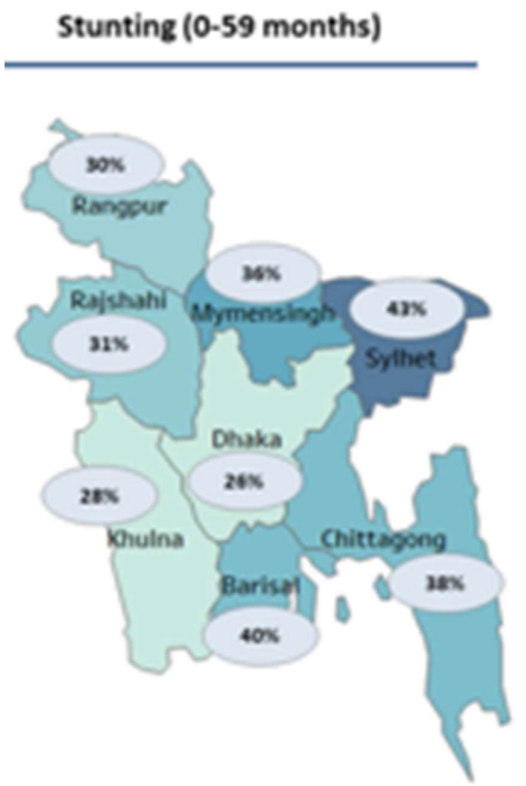
Table 2 - World Health Assembly targets

Stunting	40% reduction in the number of children under five years who are stunted
Anaemia	50 % reduction of anaemia in women of reproductive age (14 -49 years)
Low Birth Weight	30% reduction in LBW
Childhood overweight	No increase in childhood overweight
Breastfeeding	Increase in the rate of exclusive breast feeding in the first six months up to at least 50%
Wasting	Reduce and maintain childhood wasting to less than at least 5%
NCD Targets	
Adult obesity	Halt the rise in obesity

Source: WHO, 2014, FAO, 2018, NNP, 2015

Stunting is the outcome of long-term nutritional deprivation with children failing to reach their full genetic potential for height, therefore resulting in being too short for their age with implications for physical and cognitive impairment. It is the cumulative effect of chronic food deprivation, repeated infections and inadequate childcare and feeding practices, as well as poor hygiene and sanitation in addition to poor maternal nutrition during uterine life. Early stunting also increases a child's risk of being overweight and of developing NCDs during adolescence and adulthood[17]. While child stunting at the national level has shown remarkable decline, from a 60% prevalence in the mid-90s to 31% in 2018, level remains very high and of public health concern, with young children being the most vulnerable. Marked disparities exist across socioeconomic groups, between urban and rural areas, and across regions. Sylhet, Barishal, Chattogram, Mymensingh, Rajshahi and Rangpur districts have very high levels of stunting: over 30% (Figure 4). Policies and interventions therefore need to be targeted to specific groups and to geographic areas given the diversity in risk factors, and environmental and related cross-sectional issues. Several factors can influence the prevalence of child stunting starting from economic growth and governance systems, to food security status, women's empowerment and access to affordable nutrient-dense foods at household level.[18]

Figure 4 – Stunting prevalence by district



Source: BDHS 2017-18 (pre-findings)

Wasting contributes to a high share of child undernutrition in Bangladesh with current estimates however showing some decline from 14 % in 2014 to 8% in 2018, a medium prevalence of public health significance according to WHO classification. Household poverty has been associated with wasting, with seasonality also being a factor. Further analyses in other parts of South Asia suggest

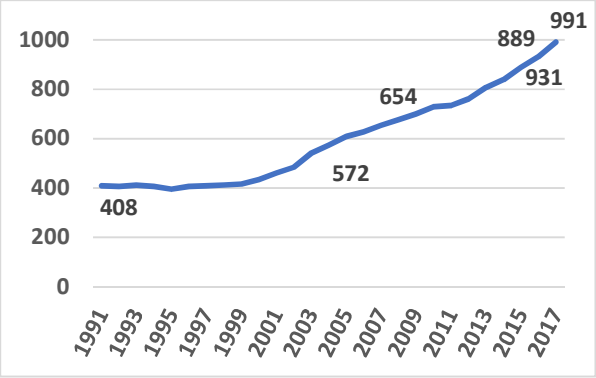
[17] Victoria C.G., Adair L., Fall C., Hallal P.C., Martorell R., Richter L., Sachdev H.S. (2008) "*Maternal and child undernutrition: consequences for adult health and human capital*" Lancet.

[18] Aguayo V.M., and Menon P. (2016) "*Stop stunting: improving child feeding, women's nutrition and household sanitation in South Asia"*, Maternal Child and Nutrition, May 12.

that preconception (adolescence), pregnancy and early postpartum, constitute important windows of opportunity for tackling child wasting.

Agriculture growth, diversifying the rural economy and enabling the supply of low-cost food are essential to achieving FNS. Agricultural value added per worker (in constant 2010 USD/year), a measure for agricultural productivity, increased from 889 USD/year in 2015 up to 991 USD/year in 2017. Agricultural productivity (Figure 5) almost doubled over the period 2005 - 2017 compared to that of the period 1990 - 2004, with a recent slow-down in the pace of growth over the MR19 reference period (2015 - 2017). The intensification of input use, the diffusion of improved rice varieties and increased cropping intensity are some of the factors that contributed to this trend and enabled the attainment of rice self-sufficiency. However, land scarcity, overuse of fertilisers, yield gaps associated with negative effects of climate change exacerbate the challenge of maintaining rice production growth as well as of accelerating crop and non-crop production diversification. Sustainable intensification, for instance through Climate Smart Agriculture, is a key driver for increasing productivity and efficiency in the use of resources against the degrading natural resource base. Linkages between agricultural productivity and nutrition, with a focus on promoting the role of women in agriculture and in value chain development need to be strengthened. A shift in production from rice to higher economic and nutritional value crops will significantly enhance the diversity of production and supplies, help improve diets and contribute to further reducing malnutrition. It will also trigger faster income growth and create more and better on-farm and non-farm jobs, especially for women and youth. Nutrition-related outcomes, such as dietary diversity and women's empowerment, need to be measured explicitly when evaluating the impact of agricultural production systems and food and nutrition security policy initiatives.

Figure 5 - Agricultural value added per worker (constant USD/year)



Source: World Bank, FAO

3.2 Progress towards Outcome I: Diversified and sustainable agriculture, fisheries and livestock for healthy diets

Outcome I of the CIP2 discusses how agricultural interventions in crop, horticulture, fisheries and livestock productions can sustainably improve nutritional outcomes through healthy diets. It is structured in three programmes on crop production, agricultural inputs, and animal sourced foods which unfold into 11 related sub-programmes (Table 3).

3.2.1 Assessment of progress towards achieving Outcome I

Table 3 – Outcome I: Selected performance indicators

CIP2 Outcome proxy indicators	2015/16 Baseline	2016/17	2017/18	Target 2020	Source
Rice import dependency (import/availability)	2.3%	2%	3.6%	0% 🟡	FPMU/ MISM, BBS
Agricultural sector GDP growth rate (%) a) Crop and horticulture b) Fisheries c) Livestock	 a) 0.9% b) 6.1% c) 3.2%	 a) 1.0% b) 6.2% c) 3.3%	 a) 3.1% b) 6.4% c) 3.4%	 a) 1.5% b) 6.5% c) 4% by 2021 🟡	BBS, DAE, DLS, DoF, BFD
Share of rice value added in total food value added in current price	33.8%	32.3%	33.5%	Decrease over time 🟡	BBS
Wage differential between males and females in agriculture	33%	26.4%	NA	Decrease over time 🟡	BBS

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴.

Rice import dependency increased due to all-time high rice imports in 2017/18

The dependency on rice imports increased over the reference period, from 2.3% in 2015/16 (CIP2 baseline) to 3.6% in 2017/18, on a three-year moving average basis. Over the reference period and since 2013/14, rice imports have been dominated by private actors. Private imports reached more than 3 MMT in 2017/18 and the highest quantity ever imported in the wake of the 2017 flash floods which were responsible for a fall in rice production. The import process was facilitated by GoB through measures such as the provision of finance and credit facilities and reduced customs duties over the period July-December 2017[19].

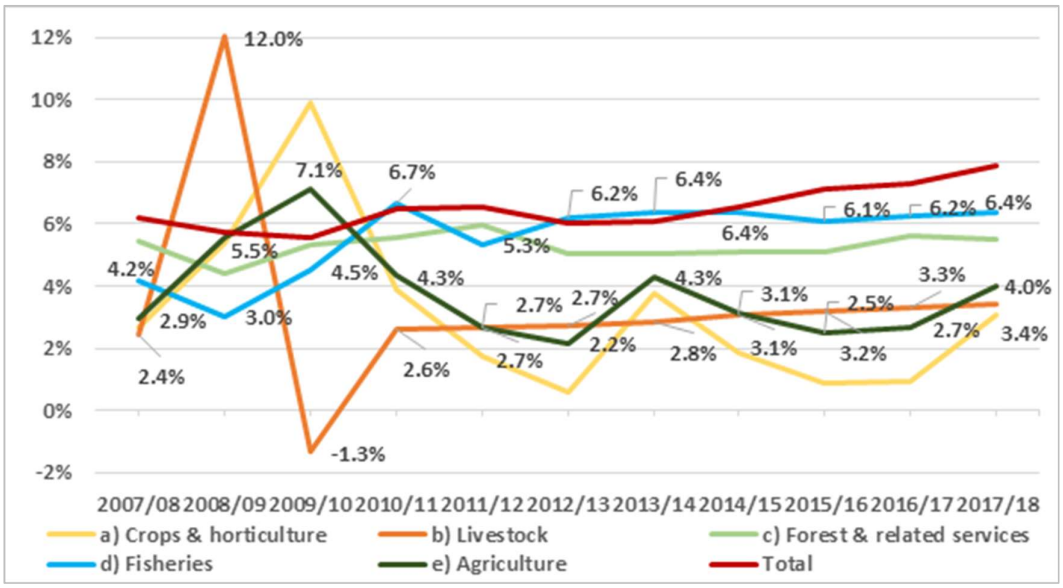
Agricultural GPD accelerated in recent years driven by sustained growth of fisheries and livestock

Agricultural GDP growth[20] improved over the reference period. Having increased from 2.9% in 2007/08 with a peak of 7.1% in 2009/10 and then gradually declining down to 2.2% in 2012/13, by the CIP2 baseline (2015/16), it stood at 2.5%, reaching 4% by 2017/18. This positive change was driven by a sustained growth in fisheries which has consistently stood above 6% since 2010/11 (except for 2011/12). This is the only agricultural sub-sector that has managed, mostly, to keep up with the pace of national GDP growth. The livestock sector grew around 3% and above the average of overall growth in agriculture, thanks to increased livestock production especially in poultry and meat production (Programme I.3). The crop and horticulture sub-sectors saw a marginal growth in 2015/16 and 2016/17 followed by a more encouraging 3% in 2017/18. The forestry sub-sector experienced a sustained growth above 5% except in 2008/09 (Figure 6).

[19] FAO (2017), "*Rice Market Monitor*", Volume XX Issue No. 3, October 2017.

[20] This excludes forestry but includes fisheries.

Figure 6 - Agricultural GDP growth by subsector



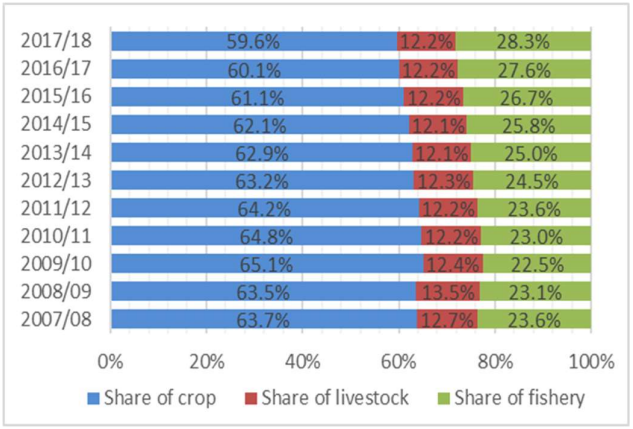
Source: Bangladesh Bureau of Statistics (BBS)

** e) = a) + b) - c) + d)*

Diversification in production has mainly occurred thanks to fisheries and livestock productivity which need to be further enhanced

The livestock and fishery sectors combined generated around 40% of agricultural value added in 2015/16, 2016/17 and 2017/18. This figure compares to 36% in 2007/08. The reduction in the share of value added from crops and livestock over this 11-year period, 4.2 and 0.6 percentage points respectively, has been entirely compensated by fisheries, which rose by 4.9 percentage points (Figure 7). So, while there has been a steady move towards agricultural diversification mostly thanks to the fisheries sector, it has been slow and needs to speed up. In particular, diversification towards livestock and non-cereal high value and micronutrient rich crops need to be sustained especially in meat production and processing.

Figure 7 – Share of subsectors in agricultural GDP



Source: Bangladesh Bureau of Statistics (BBS)

The share of rice in total food value added remains stable

The rice value added in total food value slightly increased to 33.8% in 2017/18 from 32.3% in 2016/17, slightly higher than the 2015/16 value of 33.5% (Table 3). This compares with 39.8% in 2007/08. The trend suggests that while diversification - albeit slow - is happening, it has not yet translated into a substantial reduction in rice value addition and consequent greater value addition from livestock and non-cereal crops.

The gender wage gap in agriculture has shrunk

The gender wage gap in agriculture dropped to 26.4% in 2016/17 from 33% in 2015/16 and from 48% in 2007/08[21]. The *Labour Force Survey 2016-17* points to a persisting gender wage gap which is more pronounced in some sectors such as agriculture. Indeed, the *ILO Global Wage Report 2018/19*, using an alternative methodology that yields more accurate results, calculates a 'factor weighted gender pay gap' of 2.2% for Bangladesh using monthly earnings[22] which compares to an average of 21.4% for low-middle income countries[23]. Further improvements to the gender gap can be accelerated by increasing the minimum wage and introducing collective wage agreements and promoting skill development programmes in agriculture that target women. A measurement of the motherhood gap, which is not readily available, would likely raise important issues affecting women in the agricultural sector when compared to the fatherhood gap[24].

3.2.2 Issues and policy challenges

Accelerate nutrition-focused agricultural diversification while continue improving the productivity of cereals

Growing evidence shows that agricultural diversification is a key driver of diversification in consumption and improved nutritional outcomes. Using data from the 2000 and 2011 BBS Household Income and Expenditure Survey (HIES), the Leveraging Agriculture for Nutrition in South Asia (LANSA) research programme demonstrated positive impacts of agricultural diversification on dietary diversity, food consumption and nutritional outcomes in Bangladesh[25]. Other factors positively correlated to dietary diversity include household income, land ownership and productivity, the degree of education and gender of household heads, and infrastructural development. While confirming a positive correlation between diversification in crop production and diets, it is found that women's empowerment is positively correlated to caloric availability and dietary diversity at household and individual levels[26, 27]. Agricultural diversification can moreover support farmers' livelihood by giving greater attention to high value crops, and contribute to maintaining crop genetic diversity by, for instance, increasing the focus on more sustainable crops, on neglected and underutilised species, and on genetic seeds/ plant banks at national, regional and international levels. The genetic diversity of seeds, cultivated plants and farmed animals is key to ensure a sustainable, nutrition-sensitive agriculture. Meanwhile, improving the productivity of cereals by bridging yield gaps and using inputs more efficiently -using Fertiliser Deep Placement for example- and by investing in post-harvest modern technologies, remains crucial.

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[21] In the CIP2 the gender wage gap is computed as a 'male premium', i.e. (male wage – female wage/female wage). It differs from the ILO gender wage gap, i.e. female wage/male wage.

[22] Wages or earnings received by dependent workers (employees) as opposed to self-employed. Here it is reported on a monthly basis because it is the most frequent type of payment and more frequently available type of data.

[23] ILO (2018) "*Global Wage Report 2018/19 – What lies behind gender pay gap*", Geneva 2018.

[24] The ILO Global wage report shows a recurrent situation where the fatherhood gap is negative, while the motherhood gap positive. In other words, fatherhood is associated with a wage premium, while women once they become mothers earn less than when they have no children.

[25] Hossain, M., Jimi, N.A. and Islam, M.A. (2016) *"Does Agriculture Promote Diet Diversity? A Bangladesh Study*", LANSA Working Series, Volume 2016 No 11, BRAC, December 2016.

[26] Sraboni E., Malapit H.J., Quisumbing A.R., Ahmed A.U. (2014) "*Women's Empowerment in Agriculture: What Role for Food Security in Bangladesh?*", World Development Vol. 61, September 2014.

[27] De Pinto, A., G. Seymour, and E. Bryan. 2019. "*Women's empowerment as an effective way to increase resilience to climate change*" [*PowerPoint Presentation*]. Presented at the Gender, Climate Change, and Nutrition Integration Initiative (GCAN) Dissemination Seminar in Dhaka, Bangladesh on May 7, 2019.

Sustain agroforestry for environmental protection, climate change mitigation and sustainable agriculture intensification

Forest coverage is now less than 11% in Bangladesh according to FAO. Yet forestry remains a crucial sector through the provisioning of ecosystem services such as timber, bamboo, honey, fruits, and other primary forest products. This amounted to 90.5 billion BDT in 2007/08 and 195.5 billion BDT in 2017/18, an underestimation as it does not include ecosystem services such as fuelwood, recreation, water or protection. The increase over the last decade is explained by the sustained demand for timber and recent afforestation activities, such as the expansion of plantations, including mangroves. Population and economic growth increasingly put forest resources under pressure, although they are critical in removing carbon dioxide from the atmosphere, in preserving soil and in mitigating climate change effects and risks. It is therefore essential to sustainably and effectively manage trees and forests: this requires an updated national forest monitoring and assessment[28].

To this effect the *Strengthening National Forest Inventory and Satellite Land Monitoring System in support of REDD+*[29] project which builds essential institutional and technical capacities for regular forest resources monitoring. Project achievements so far include the production of a national land cover map, national estimates of the status of tree and forest resources, the valuation of provisioning ecosystem services, estimation of aboveground volumes of tree biomass, forest boundary digitisation. The National Forest Inventory Unit has furthermore designed, prepared and submitted a National Land Coverage Classification System and data sharing policy of the Bangladesh Forest Department. Further work is expected to be carried out following the approval by the World Bank in October 2018 of a 175 million USD project for Sustainable Forests and Livelihoods which aims to improve the forest cover through a collaborative forest management approach involving local communities. The project will support the next inventory cycle and will plant 79,000 ha of forest, including a coastal green belt. This should contribute to increase climate change resilience (Programme IV.1).

Strengthen the engagement of the private sector to achieve a sustainable and innovative agriculture

To accelerate diversification and value addition in agriculture, private sector involvement is essential to fully exploit the potential of livestock and crop production and transformation. For instance, the International Finance Corporation (IFC) collaborates with seed companies such as Energypac Agro-G Ltd., Supreme Seed, ACI Ltd., and Lal Teer Ltd., seed growers, dealers and retailers and the GoB in order to sustain innovation and promote sustainable practices and technologies, such as stress tolerant varieties. While these diverse actors may have different strategic objectives, they all engage in promoting farming sustainable practices, including production, distribution and adoption of stress-tolerant and high yielding seed varieties, often including rural women living in remote areas to produce seeds. The 2018 National Agricultural Policy (NAP) suggests that the adoption of nanotechnology in agriculture (with private sector involvement) is key to sustain expected sectoral growth under current and future constraints such as climate change and resource overexploitation, by reducing natural resource and fertiliser utilisation thereby increasing food safety.

[28] FAO (2015) "*Global Forest Resources Assessment*".

[29] REDD+ refers to conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks.

3.3 Progress towards Outcome II: Efficient and nutrition-sensitive post-harvest transformation and value addition

Outcome II of the CIP2 focuses on Nutrition-Sensitive Value Chains thereby analysing post-harvest transformation and value addition as key components in providing nutrition-sensitive foods to consumers while ensuring adequate value addition is obtained by producers. This second Pillar of the CIP2 includes two programmes: strengthened post-harvest value chain with a focus on Micro, Small and Medium Enterprises (MSMEs), and improved access to market facilities and information, with a total of six sub-programmes.

3.3.1 Assessment of progress towards achieving Outcome II

Table 4 - Outcome II: Selected performance indicators

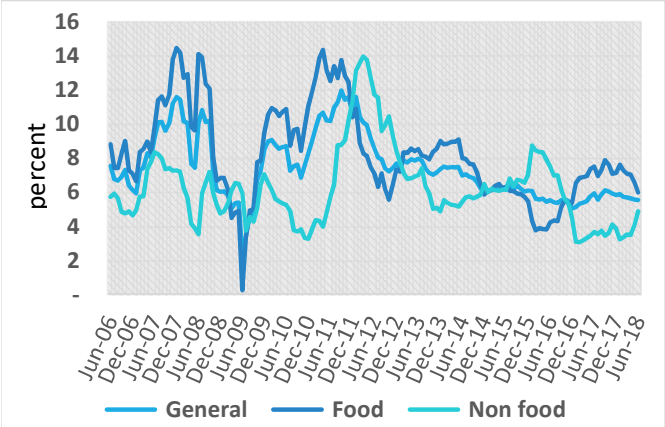
CIP2 outcome proxy indicators	2015/16 Baseline	2016/17	2017/18	Target 2020	Source
Average annual CPI inflation rate	5.9%	5.4%	5.8%	5.5% by 2020 🟡	Bangladesh Bank; National Account Statistics, BBS
Change in agricultural real wage rate of male agricultural labourers	7.6%	5.3%	-0.2%	7.2% (per capita real GDP growth rate + 0.5)[30] 🔴	Bangladesh Bank/DAM/ BBS
SDG 2.c.1: Changes in Indicator of Food Price Anomalies (IFPA for rice)[31]	-1.1	2.1	0.3	Stable 0.5 s.d. of mean 🟡	FAO

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴.

Consumer Price Index remained substantially stable

The Consumer Price Index -a measure of change in the price of a commodities' basket over a base year- remained stable over the MR19 reference period (2015/16 – 2017/18). It increased marginally to 5.8% in 2017/18 from 5.4% in 2016/17, and was only slightly lower than 5.9% in 2015/16 (Table 4). Overall, its level was slightly higher than the GoB target of 5.5% by 2020. Over the last decade, both food and non-food inflation has been highly volatile. The upsurge in general inflation between 2007/08 and 2010/11 was mainly driven by food inflation, pushed by the international food price crisis which also hit the Bangladeshi market. In 2017/18, food inflation was higher than non-food inflation. However, while food inflation declined from 7.5% to 5.9% over the reference period, non-food inflation increased from 3.1% to 4.8% (Figure 8).

Figure 8 - General, food and non-food inflation



Source: Bangladesh Bureau of Statistics (BBS)

[30] According to the 7FYP (page 48), the GDP growth rate is projected at 8% in 2020. Factoring in the population growth rate (1.34%), the target is computed as: 8 - 1.34 + 0.5 = 7.16%.

[31] Calculations based on FAO-GIEWS methodology.

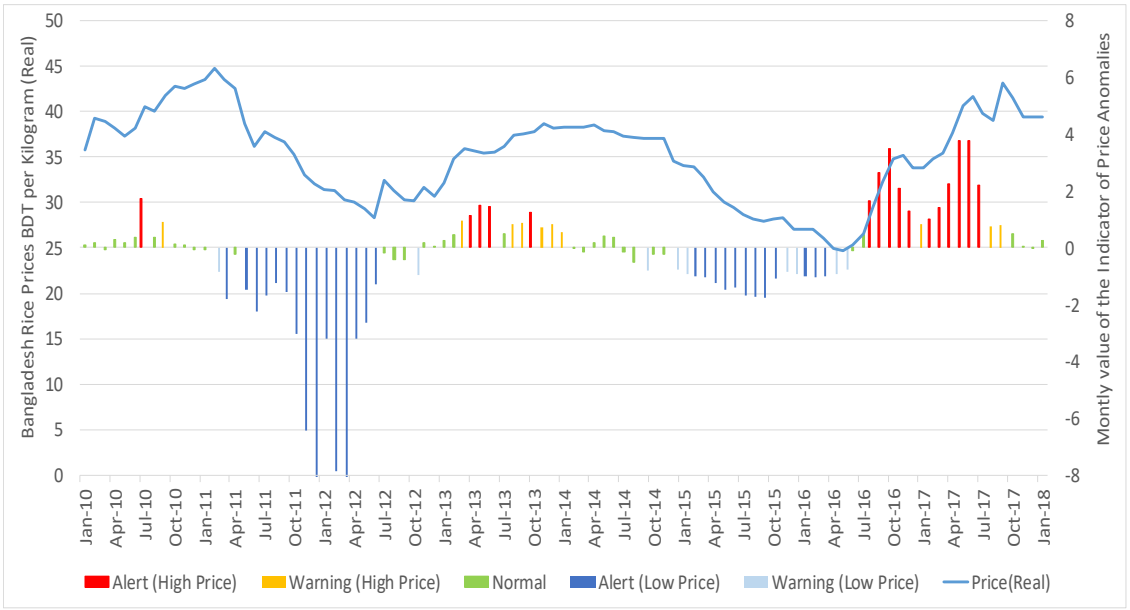
The agricultural wage rate decreased

The agricultural wage rate is an indicator that measures purchasing power in terms of rice. It is the ratio between general wage index and average wholesale rice price. Using a 3-year moving average, this measure decreased from a record high 7.6% in 2015/16 to 5.3% in 2016/17 and to -0.2% in 2017/18 (Table 4). The average change over the reference period (4.2%) is aligned with that of the last decade (4.6%). This was mainly driven by the steep increase in rice prices in 2017/18 which was around 2.4 times higher than the increase in the general wage index (with base in 2010/11). This resulted in a reduced access to staple food in the aftermath of the flash floods but was smoothed by a significant quantity of private rice imports (over 3 MMT) facilitated by the GoB, particularly during the second half of 2017 (see Outcome I).

The rice price stabilised after the 2017 flash floods

The Indicator of Food Price Anomalies (IFPA) measures volatility (SDG 2.c.1) by identifying abnormal price monthly changes, on both yearly and quarterly bases, with both seasonality and inflation effects factored out[32]. The methodology developed by the FAO Global Information and Early Warning System (GIEWS) on Food and Agriculture was applied to the real monthly price of rice (in BDT/Kg) to calculate the IFPA for rice. In 2017/18, the IFPA for rice was 0.3, reflecting a normal price (Table 4).

Figure 9 - The Indicator of Food Price Anomalies (IFPA) for rice in Bangladesh



Source: BBS data and Baquedano F.G. (2015) "Developing an indicator of price anomalies as an early warning tool: A compound growth approach", FAO Rome.

However, in 2016/17, the indicator value of 2.1 signalled a high price alert, probably due to the flash floods, consequent harvest loss and supply tightness associated with reduced imports[33]. This compares with a low price in 2015/16 and a normal price in 2010/11 (Figure 9). The trend in the real market price of rice (blue line) fluctuated over the last few years ranging from 25 BDT/Kg (January 2011) to 45 BDT/kg (June 2016). The colour bars in **Error! Reference source not found.** show the monthly values of the IFPA: red and yellow illustrate respectively alert levels and warnings of high

[32] More details on the IFPA can be found on the FAO Food Price Monitoring Analysis website.

[33] GIEWS (2017) "*Update: Bangladesh Severe floods*", 3 October.

prices, while blue and green correspond to low and normal prices, respectively. Anomalies (high prices) occurred mainly over 2017 and more moderately over 2013. The rice price became stable after the 2017 flash flood and over the first quarter of 2018.

3.3.2 Issues and policy challenges

Enhancement and conservation of nutrients in post-harvest storage, transformation and distribution

A nutrition-sensitive value chain approach aims at leveraging economic profitability for improved nutritional outcomes by leading to specific interventions throughout the food systems from supply to demand side. Post-harvest transformation and distribution interventions include safe storage, processing and preservation technologies, labour-saving technologies, fortification as well as cold chain and distribution mechanisms[34]. Over the last few years, the GoB established many large storage capacity silos[35]. However, small-scale private storage facilities for non-cereal crops need to be developed to store produce after harvest, thereby reducing farmers' vulnerability to price fluctuations. For instance, the Cold Chain Bangladesh Alliance initiative by Golden Harvest aims at establishing the first integrated cold chain to reduce post-harvest losses and deliver high-value agricultural products – i.e. high-value vegetables, poultry and dairy - to markets[36]. By June 2015, 19 cold storage facilities were established in five districts, 6,950 freezers for retail outfits, and 30 refrigerated trucks to keep food safe. This initiative could be scaled up and extended to fresh fish or milk that in cold storage can last up to 15 days[37].

Measures to increase profitability for farmers and MSMEs

A possible way to promote value addition for farmers is by increasing profitability and adding value on-farm for farmers and off-farm for MSMEs. This can be done either by: (i) *seizing value* from the value chain from producing crops to producing foods, i.e., by getting involved in processing, distribution and direct marketing (e.g. on-farm stores, farmers' markets); or by (ii) *creating value* by producing new products perceived as such by consumers, for instance, by obtaining safety quality certifications and labelling/branding in a certain way (e.g. organic, environmentally friendly). USAID has implemented several agricultural value chain (AVC) initiatives for the agricultural market in Bangladesh where small-scale producers are engaged in the production, processing and marketing of their own products. They have supported *35 companies* and this has led to increases in rural incomes, support of rural employment and more export sales. As a result of such *AVC initiatives*, many mango growers are now distributing their produce through two enterprises thereby ensuring a sustainable supply of safe mangoes through a local supermarket and a local e-commerce platform which allowed to sell 500 MT of graded premium quality mangoes. The CARE Bangladesh *Strengthening Dairy Value Chain* project – in partnership with Aarong and Milk Vita – has also supported 52,000 milk-producing households. Indeed, every day, Bangladesh produces 18 million MT of milk of which only 7% is sold by milk processing companies and the rest locally, through the informal market.

Strengthening smallholders' access to information, skills, inputs and nutrition-sensitive technologies

Farmers need to be able to adopt risk-taking behaviour, learn new skills and have access to inputs and new technologies if they are to develop their venture sustainably. Forming associations, consortia,

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[34] De la Peña I., Garrett J., Gelli A. (2018) "*Nutrition-sensitive value chain from a smallholder perspective – A framework for project design*", 30 IFAD Research Series, Rome, September.

[35] On scaling up modern food storage facilities for grains, particularly in disaster prone areas, see Programme IV.1.

[36] USAID (2015) "USAID's Asset Amplify Local Partner Investment", Cold Chain Bangladesh Alliance (CCBA) under the Local Private Sector Partnership.

[37] *Ibid.*

limited liability companies, and cooperatives can help farmers share both resources (e.g. machineries, financing, extension support services, applied research) and risks. Accordingly, the *FAO-EU Capacity Development for Agricultural Innovation Systems (CDAIS)* project launched in 2015 aims to improve farmers' organisational capacity (more specifically: to set up cooperatives for poultry producers in Gazipur district) to strengthen market linkages and improve efficiency and leadership and strategic approaches. It is also working to set up stakeholders' platforms (e.g. for mango producers in Chapainawabganj district and pineapple producers in Bandarban district), cold storage and processing plants (e.g. for tomato producers in Jashore district and fish producers in Mymensingh). These types of intervention can be scaled up and coupled with more specific capacity development interventions such as: good post-harvest handling practices and quality management, learning technologies, technical guidance, training and adoption of modern crop varieties, smart packaging, transporting technologies, e-commerce platform, contract farming system, good agricultural practices, and nutrition-sensitive value chain management, and financial literacy[38].

[38] FAO (2014) "Farmers' Organizations in Bangladesh: A Mapping and Capacity Assessment", Bangladesh Integrated Agricultural Productivity Project Technical Assistance Component, FAO, Rome.

3.4 Progress towards Outcome III: Improved diversity, consumption and utilisation

CIP2 Outcome III seeks to improve diets by promoting the consumption of nutritious, safe and diverse foods for a healthy life, as a result of intensive evidence-based Behaviour Change Communication (BCC). It also includes the integration of Water, Sanitation and Hygiene (WASH) interventions to prevent food borne diseases that can affect food utilisation and nutrient absorption by the human body. Outcome III encompasses two programmes namely (1) Enhanced nutrition knowledge, promotion of good practices and consumption of safe and nutritious diets and (2) Optimised food utilisation through provision of safe water, improved food hygiene and sanitation with six associated sub-programmes. The progress on Outcome III is presented in Table 5. While nutrition is a cross-cutting issue which is integrated across all Pillars of CIP2, it is important to especially link Pillar III and Pillar I during the CIP2 implementation, as dietary diversification is highly influenced by production diversification towards increased availability of nutritious foods. Likewise, linkages should be built between Pillar III and Pillar V to ensure safe foods are available for consumption.

3.4.1 Assessment of progress towards achieving Outcome III

Table 5 - Outcome III: Selected performance indicators

CIP2 outcome proxy indicators	2015/16 Baseline	2016/17	2017/18	Target 2020	Source
National dietary energy intake (DEI) from cereals	70% (HIES 2010)	64% (HIES, 2016)	…*	60% 🟡	FAO, WHO, BBS
Proportion of children receiving minimum acceptable diet at 6-23 months of age	23% (2014)	…*	34% Annual Programme Review (2018)**	More than 40% by 2025 (NPAN2) 🟡	BDHS
Proportion of households consuming adequate iodised salt containing at least 15 ppm	50.5% (National Salt Iodisation Survey, Bangladesh 2015)	…*	…*	90% by 2025 (NPAN2) 🟡	BDHS, NMSS
Prevalence of anaemia among women of reproductive age (15-49)	39.7% (2014)[39]	39.9% (2016)[43]	Not available	Less than 25% by 2025 (NPAN2) 🔴	BDHS
Minimum dietary diversity for women (using Minimum Dietary Diversity for Women (MDD-W)	46% (5 out of 9 food groups, 2015)***	…*	Not yet available from National Food Consumption Survey	75% by 2030 🔴	FAO, INFS, BBS

not applicable, **provisional, * Women Dietary Diversity Score*

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴 .

Intake from non-cereal has increased while cereal consumption has decreased

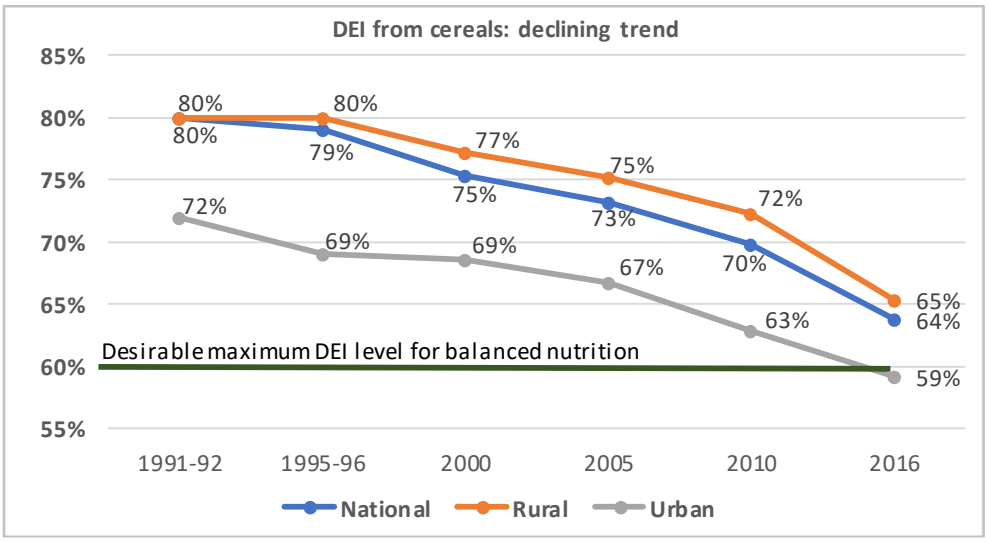
Dietary diversity is essential to improve the nutrient adequacy of diets for better health. Rice remains the main cereal consumed in Bangladesh although its intake has fallen from 464 g in 1995/96 to 367 g in 2016 and exhibits a falling trend set to reach desirable norms. The BBS HIES reports that the national consumption of cereals[40] has decreased to 64%[41] of daily energy intake per capita in 2016, from 70% in 2010, which is close to the target of 60% to be reached by the end of the CIP2. While urban areas have already reached the recommended figure, rural populations still consume 65% (Figure 9). This is a commendable achievement, considering that cereal intake was 80% in 1991/92.

[39] WHO, Global Health Observatory Data Repository/World Health Statistics.

[40] It is important when assessing cereal intake to also consider maize intake as it is used in other foods such as confectionery/bakery items.

[41] This includes only rice and wheat.

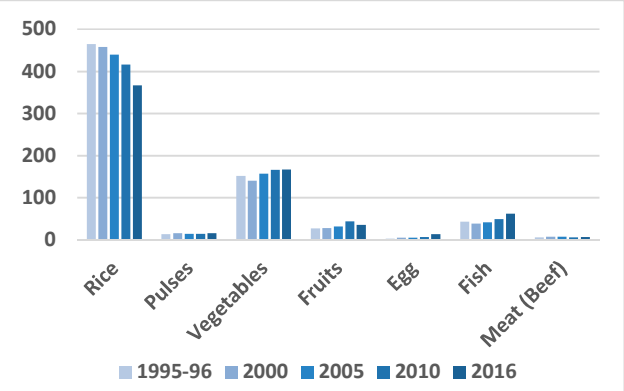
Figure 10 - Trend in cereals intake at national, rural and urban level



Source: HIES and Estimation from Meeting the Undernutrition Challenge (MUCH) project

At the same time, the consumption of nutrient-dense[42] foods notably meat, fish and eggs rose slightly from 1995/96 to 2016 (Figure 11), although regional disparities persist. Consuming nutrient-dense foods helps in closing the nutrient gap in the diet, especially during important life stages where nutrient needs increase (such as childhood, adolescence, pregnancy and lactation) or in people with special nutrient needs (during illnesses and convalescence). While consumption of pulses, vegetables and fruits appears to be steady from 1995/96 to 2016, fish consumption has increased by almost a third from 43.8 g to 62.6 g. This is attributed to an overall increase in fish production and the enhanced promotion of fish consumption. Egg consumption has also increased from a low level of 3.2 g/capita/day in 1995/96 to 13.6 g in 2016, still below the recommended amount of 30-40 g (one egg)/day. Beef consumption has slightly increased from 6.6 g/capita/day in 1995/96 to 7.5 in 2016. The intake of fruits and vegetables, as per the preliminary report of HIES 2016, is 203 g, around half of the WHO/FAO recommendation of 400 g/day.

Figure 11 - Trend in consumption of some major food items (g/capita/day)



Source: HIES 1995-96, 2000, 2005, 2010, 2016

The comparison of the consumption data with the Desirable Dietary Pattern of Bangladesh[43] points to a significant gap for major food items, especially fruits and vegetables, animal source foods (especially milk and eggs) and pulses (Table 6). The supply and affordability of nutrient-dense foods need to be enhanced in order to bridge the nutrient gap that prevails. In this regard, nutrient density and diet quality are policy issues that need urgent attention.

[42] Nutrient density is defined as the amount of different nutrients per 100 kcal of preparation.

[43] Nahar, Quamrun, *et al.* (2013) "*Desirable Dietary Pattern for Bangladesh*" *Final Research Results.*

So, while the data show some evidence of improvement in dietary diversity, the quantity and nutrient adequacy of the food consumed need to be enhanced. Measures adopted must take into account the fact that diversification of food intake is associated with socioeconomic factors, with poorer households eating less diverse foods although income growth does not automatically translate into a healthier diet intake. Contextual drivers that shape food systems, influence food choices, preferences and consumption behaviour need to be considered. Dietary guidelines and nutrition education programmes need to be integrated at every step of the food chain to inform and influence food demand and consumption at various levels.

Table 6 - Gaps between desirable and current intake of major food groups

Food groups	Desirable intake (g/capita/day)	Intake in 2016 (g/capita/day)	Gap (g/capita/day)
Cereals	**400**	**409**	**(9)***
Potato	**100**	**65**	**35**
Vegetables	**300**	**167**	**133**
Pulses	**50**	**16**	**34**
Edible oils	**30**	**28**	**2**
Animal source foods	**260**	**129**	**131**
Condiments and spices	**20**	**75**	**(55)**
Fruits	**100**	**36**	**64**
Sugar/ gur	**20**	**7**	**13**

Source: Desirable Dietary Patterns for Bangladesh and HIES 2016

** '()' means surplus*

Target for minimum acceptable diet for children aged 6-23 months is on track

The Minimum Acceptable Diet (MAD) for children 6-23 months old is an indicator developed by WHO in 2007 and is used for assessing infant and young child feeding (IYCF) practices. The MAD is a composite indicator composed of the Minimum Dietary Diversity (MDD) and the Minimum Meal Frequency. The proportion of children aged 6-23 months receiving a MAD is reported to have significantly increased by 11 percentage points over three years (up to 34% in 2017/18), with Bangladesh set to achieve the NPAN2 target of 40% by 2025. Since poor IYCF, especially low diversification and nutrient inadequacy in complementary feeding, is one of the main factors in child stunting, the national target might need to be increased to further improve child growth outcomes. In particular, the quality, quantity, diversity and safety of complementary foods need to be enhanced through the promotion of complementary feeding guidelines and improved recipes using the National Nutrition Services (NNS) and related IYCF programs.

While iodised salt is largely consumed, access to adequately iodised salt remains a problem

The consumption of adequately iodised salt (defined as fortified with at least 15 parts per millions (ppm)) is essential to combat iodine deficiency disorders which are highly prevalent in Bangladesh. Yet, the proportion of households consuming adequately iodised salt was far from universal in 2015: 50.5% of the population against 90% as per international recommendations. While more recent estimates of consumption of adequately iodised salt are not available, data from the Bangladesh Small and Cottage Industries Corporation (BSCIC) points to 81% of the population consuming iodised salt (enriched with at least 5 ppm) in 2017/18, which does not reach international recommendations. Quality assurance at production level, along with routine chemical analysis in the laboratory and in markets are essential to assess the adequacy of iodine in salt. Nutrition messaging for appropriate cooking and storage practices in the usage of iodised salt is also important. Actions to further promote the consumption of adequately iodised salt need to be scaled-up.

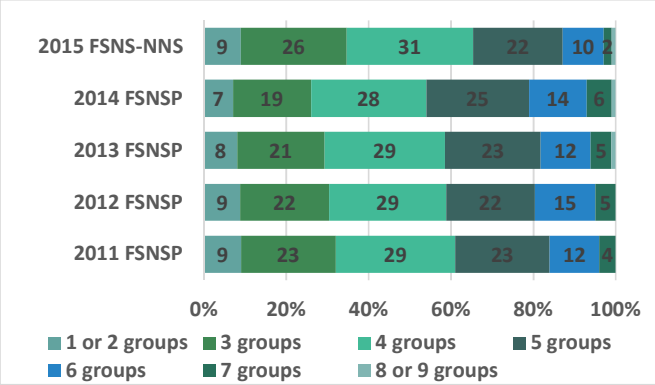
The prevalence of anaemia among women of reproductive age (15-49 years) remains high

Anaemia among women of reproductive age refers to the combined prevalence in both non-pregnant women with haemoglobin levels below 12 g/dL and pregnant women with levels below 11 g/dL. It increases vulnerability to illnesses, results in poor learning performance and affects productivity. During pregnancy, severe anaemia can increase the risk of maternal mortality, premature delivery, and can cause low birth weight and increased neonatal mortality. The prevalence of anaemia among women of reproductive age remains high and has not shown any improvement with a rate of 39.7% in 2014 and 39.9% in 2016. If this trend persists, it is unlikely that the NPAN2 target of reduction to less than 25% by 2025 will be met.

Dietary diversity among women of reproductive age is inadequate

The minimum dietary diversity for women is assessed using their dietary diversity score which is a proxy of micronutrient adequacy in their diet. About 46% women had a minimum dietary score in 2015 which means that they consumed items from five food groups out of nine in 2015. Since 2016, a new indicator called Minimum Dietary Diversity for Women (MDD-W) is in use[44]. CIP2 has a target of 75% of MDD-W by 2030. Although current data on MDD-W is not yet available, previous trends suggest that Bangladesh is not on track to achieve its dietary diversification target. From 2011 to 2014, the percentage of women achieving minimum dietary diversity has remained constant at around 29%, and from 2014 to 2015 it has increased to 31% (Figure 12). Scaling up the use of dietary guidelines for improved food diversity is essential to achieve the objective.

Figure 12 - Trend in women's dietary diversity score



Source: State of Food Security & Nutrition in Bangladesh Reports

3.4.2 Issues and policy challenges

Promoting interventions to improve dietary diversification and nutrient adequacy

Women in reproductive age are particularly vulnerable to malnutrition due to their physiological needs during pregnancy, lactation and menstruation. Within this group, adolescent girls undergo rapid physiological changes, resulting in increasing nutritional needs that are to be covered by a diversified, safe and nutritionally adequate diet. According to the 2014 BHDS, more than half of adolescent girls and women consumed adequately diversified diets, only a small improvement compared to the 2011 BDHS results. This slow trend is expected to have continued thereafter. While adolescent girls were more likely than boys to have inadequate intake of iron (64% of girls versus 42% of boys), boys were more likely to have inadequate intakes of zinc (40% of boys compared to 32% of girls)[45]. Consumption of nutrient-dense foods needs to be encouraged and the intake of energy-dense and nutrient poor foods must be reduced as per national requirements. Targeted programmes must be implemented to especially improve the diets of adolescent girls.

[44] In MDD-W, the number of food groups has been increased to 10.

[45] Leroy J. L., Ruel M., Sununtnasuk, C., and Ahmed, A.U. 2018. Understanding the determinants of adolescent nutrition in Bangladesh. Annals of the New York Academy of Sciences.

Improving consumption of fortified food and its monitoring

Fortification of staple foods with essential micronutrients is a cost-effective intervention that contributes to significantly reduce micronutrient deficiencies in vulnerable groups - especially in countries experiencing high levels of micronutrient deficiencies - together with other important interventions such as micronutrient supplementation and promotion of dietary diversification. This has been prioritised in the National Strategy on Prevention and Control of Micronutrient Deficiencies (NSPCMD 2015-2024). To this end, various initiatives have been implemented including rice fortification, salt iodisation and edible oil fortification. While these foods have been selected considering their potential to reach a large share of the population, their consumption is not yet universal. It is therefore important to accelerate the efforts, especially to improve consumption of adequately fortified salt, considering that Bangladesh has accepted universal salt iodisation as a key strategy to ensure adequate iodine nutrition since 1989.

There is no system to regularly assess the consumption of these fortified foods at household level. Strengthening the existing monitoring system, in line with the NSPCMD, is fundamental to track the consumption of adequately fortified foods in order to inform policy and programmes. It is also important to regularly assess the distribution of key micronutrient deficiencies such as iodine, vitamin A and zinc across regions and population groups to inform policy update. To this purpose, a National Micronutrient Survey and a specific National Iodine Deficiency Disorders Survey are indispensable.

Addressing the multiple burden of malnutrition

While continuing to address undernutrition and micronutrient deficiencies, more emphasis is needed on prevention and control of overweight and obesity, through the promotion of healthy diets and lifestyle. The legal environment must be strengthened, and the private sector incentivised to ensure that unhealthy diets are not promoted, with attention to children and adolescents. Practice of regular physical activity based on WHO recommendations[46] must be further encouraged.

[46] WHO (2010) *"Global recommendations on physical activity for health",* World Health Organisation*,* Geneva*.*

3.5 Progress towards Outcome IV: Enhanced access to social protection and safety nets and increase resilience

Outcome IV of the CIP2 covers interventions that are to improve and expand access to social protection and safety nets for vulnerable groups in order to protect their food security during and after disasters. It includes two programmes: one on timely and effective disaster preparedness and responses through emergency food distribution and steps towards agricultural sector rehabilitation and mitigation measures, with three associated sub-programmes; and one on strengthened social protection and safety net programmes for targeted groups across the life cycle including disabled and displaced population, with also three associated sub-programmes (Table 7).

3.5.1 Assessment of progress towards Outcome IV

Table 7 - Outcome IV: Selected performance indicators

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Targets 2020	sources
Proportion of population living below national poverty line, differentiated by urban and rural (SDG 1.2.1)	National: 24.3% Rural: 26.4% Urban: 18.9%[47]	National: 23.1% *	National: 21.8% *	7FYP: National 18.6% by 2020 🟡	HIES reports, BBS, GED
Proportion of population under national extreme poverty line (a) Rural and (b) Urban	National: 12.9% Rural: 14.9% Urban: 7.6%	National 12.1%	National 11.3%	National 8% by 2020 🟡	HIES reports, BBS, GED

**provisional*

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴 .

Poverty continued to decline, but at a slower pace

The poverty headcount index for 2016 was 24.3%: the MDG target of halving the population living below the poverty line from 58% to 29% had been achieved by 2012. More recent measures show that if the declining trend observed since 2010 in the incidence of poverty continues at the same pace (the red dashed lines on Figure 13), notwithstanding any major drawback, the SDG 1 Target 1.2. of reducing at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions by 2030, will be achieved in Bangladesh. In fact, the 9.7% and 3.0% poverty index targets using the national upper and lower poverty lines, respectively, are likely to be reached before 2030.

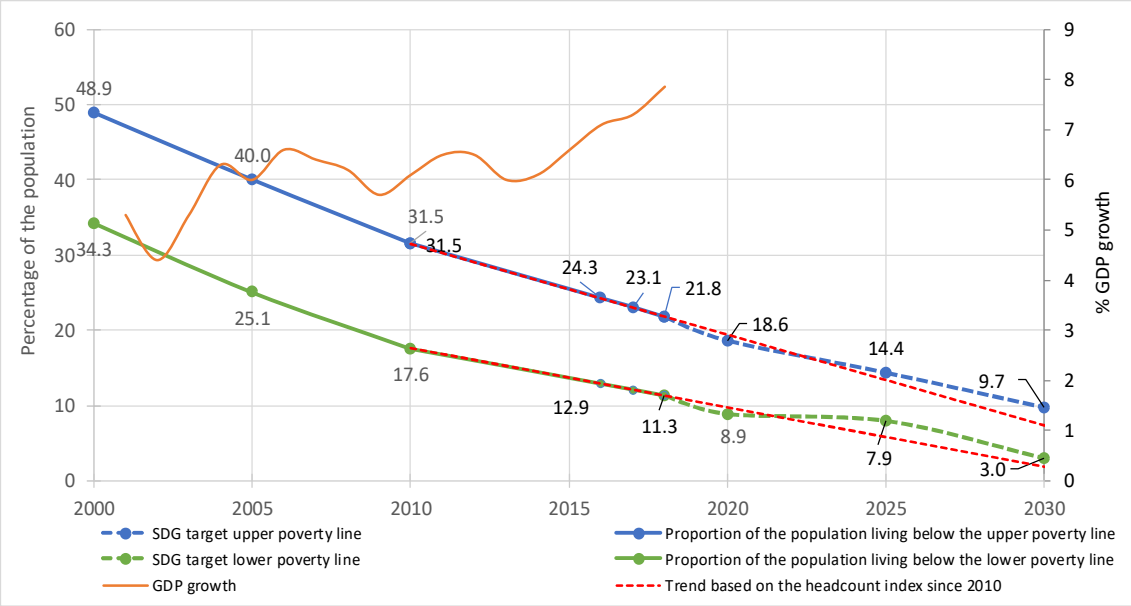
In 2018, the World Bank[48] warned against factors that could potentially affect the speed of poverty decline such as the slump observed in export earnings from the ready-made garment (RMG) sector in 2016/17 with the slowest growth in the previous 15 years: 0.2%. However, following improvements in workplace safety compliance, RMG picked up again with an 8.8% growth in 2017/18. The decline in remittances was also mentioned as a threat based in the slump observed in 2016/17. However, the 2017/18 amount received was the second highest ever after 2014/15 at almost 15 billion USD. One factor that is unlikely to resolve swiftly and may keep poverty statistics higher than would have been expected based on previous years, is the influx of Rohingya people who, since August 2017, have crossed into Bangladesh and are now accounting for over a million.

[47] Specific data with urban/rural disaggregation will only be available in next HIES (2020-21).

[48] World Bank (2018) *"Bangladesh development update: building on resilience"* Washington, D.C.: World Bank Group.

While poverty has declined, the pace of this fall, especially that of extreme poverty, decelerated after 2010 (Figure 13). Since, then, the rate of decline has been rather steady both for moderate and extreme poverty but has not reflected the strong and rising economic growth as illustrated by the GDP growth curve. Indeed, the elasticity of poverty reduction to growth has fallen from 0.35 to 0.23 between 2010 and 2016[49]. Between 2005 and 2016, poverty reduction was mainly driven by growth in labour income which itself grew thanks for higher agricultural incomes driven by real wage growth in agriculture[50]. Yet since 2015/16, growth in agricultural wages is slowing down, albeit slightly.

Figure 13 - Poverty prevalence, SDG targets for 2020, 2025, 2030 and GDP growth



Source: BBS and SDG targets and Bangladesh Bank

Despite encouraging results with regards to the attainment of SDG 1, it has been suggested that if poverty were estimated using income rather than consumption expenditure, poverty rates would be higher[51]. There are also claims that intrahousehold disaggregation of resource distribution would unveil important differences in individual poverty levels. For example, looking at dietary requirements, a study has shown that in adequately nourished households, in fact, 55% of boys and 47% of girls are undernourished[52]. Geographical differences in poverty are also important. Urban poverty -although no recent estimates are available- has always been much lower than rural poverty. Conversely, stunting rates are higher in urban areas. In 2010, poverty in the ten poorest districts of Bangladesh ranged from 42% to 70% compared to an average poverty rate of 24.3%. In contrast, only 2.6% of the population of Narayanganj was poor. There is evidence to suggest that the East-West divide in poverty which seemed to subside between 2005 and 2010 may have intensified thereafter[53]. Indeed, once again, in 2016, the Eastern Divisions (Chattogram, Dhaka and Sylhet) experienced marked poverty declines while the Western ones (Barishal, Khulna and Rajshahi) saw limited progress (Figure 14).

[49] *Ibid.*

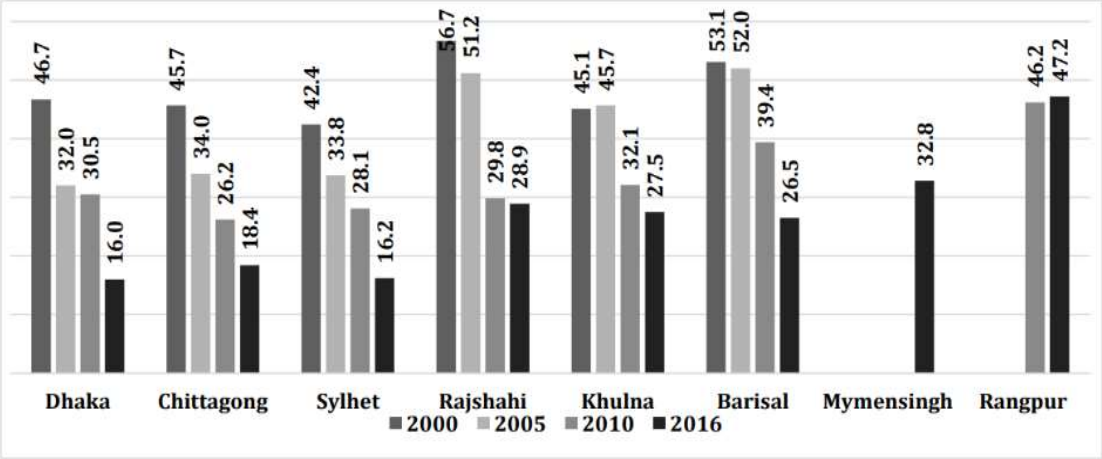
[50] World Bank (2016) '*Agriculture Growth Reduces Poverty in Bangladesh*' Feature Story.

[51] See Professor Mahmud's comment in '*Poverty line needs to be redefined: experts*' Daily Star 25/10/18.

[52] D'Souza, A. and Tandon, S. (2016) '*Intra-Household Nutritional Inequities in Rural Bangladesh*' Annual Meeting, July 31-August 2, Boston, Massachusetts 235832, Agricultural and Applied Economics Association.

[53] CPD (2018) '*State of the Bangladesh Economy in FY2017-18 - First Reading Independent Review of Bangladesh's Development*'.

Figure 14 - Poverty Rates in different division using the upper poverty line[1]



Source: BBS

3.5.2 Issues and policy challenges

Substantial numbers of vulnerable people who are susceptible to undernourishment and malnutrition

Notwithstanding the improvements observed, in terms of absolute numbers, there are still substantial amounts of vulnerable people that fall under the poverty line (close to 35 million) and extreme poverty line (close to 18 million), reiterating the need for significant safety nets and a strong social protection system. With regards to FNS, extreme poverty and hunger are often closely related and identify vicious cycles, whereby on the one hand hunger and a dire nutritional status affect the ability of individuals and households to access food through purchase or production; and on the other, hunger and undernourishment cause learning difficulties, poor health, and lower productivity and earnings thus aggravating the problem across generations[54]. This calls for safety nets and protection particularly adapted to these highly vulnerable groups with a strong emphasis on protecting individuals' food security.

Intrahousehold inequalities in food and resource allocation that need to be addressed

With regards to gauging intrahousehold allocation of resources and food, although challenging, its importance is obvious given the substantial differentials among household members which can leave some demographics vulnerable. Thus, measures to tackle poverty may not be sufficient in reaching poor individuals, and in particular, poor women, adolescent girls, young children, and the elderly. Yet targeting individuals is likely to be costly.

Regional differences in the degree and type of vulnerabilities

Disparities in poverty reduction rates across the country are such that it is difficult to ignore them given their potential consequences. Higher poverty rates are often associated with higher incidence of natural disasters most of which can be linked to climate change. Such disasters exacerbate poverty and poverty accentuates the effects of disasters on people. Rajshahi, one of the poorest districts, is now plagued with drought, a relatively new phenomenon. Khulna and Barishal suffer from the effects of climate change on coastal areas which includes land erosion, water salinity and deadly cyclones

[54] O Campos, A.P., Villani, C. Davis, B. and Takagi, M. (2017) '*Ending extreme poverty in rural areas- Sustaining livelihoods to leave no one behind',* FAO, Rome.

such as SIDR in 2007 and Aila in 2009. More recently, in 2017 cyclone Mora affected the south east, causing 478,000 evacuations, and tropical storm Roanu in 2016 led to 496,000 displacements. Displacements due to floods are also counted in the hundred thousands[55]. Repeated loss of belongings and livelihoods often translates in migration to the cities in conditions devoid of access to basic needs. On the one hand, increasing urbanisation exacerbates urban poverty, while on the other, disaster-prone rural areas lose the human resources needed for agriculture. This dire picture emphasises the need to reinforce measures that minimise the effects of climate change and associated disasters, but also actions to increase the resilience and copying abilities of households to prevent excessive migration to cities.

The need for a more inclusive economic growth in a context of worsening inequalities

Inequality across the population is on the rise. The consumption-based Gini coefficient[56] slightly increased from 32.1% in 2010 to 32.4% in 2016 but the share of income of the lowest 5% households dropped by 0.6 percentage points to 0.23% while that of the top 5% households rose by 3.3 percentage points to 27.9%, giving a sense of stark differences in the extremes of the income distribution[57]. A wealth-based Gini coefficient computed for 2010 showed stark inequalities, at 74%[58]. This is only likely to have worsened over time. Geographical (see above) and income inequalities need to be addressed not only to succeed in achieving SDG 1, but also to avert crises, conflict and social tensions. Thus, economic growth has not resulted in commensurate poverty reduction in all regions and among all groups: a more inclusive growth needs to be promoted while ensuring the most vulnerable are protected from the effects of poverty. Signs of waning agricultural wages must not be ignored given the importance of daily wage agriculture labour for poorer households. Agricultural growth has become less equal and less poverty-reducing with each percentage point of agricultural growth delivering less poverty reduction among agricultural households[59]. With the effects of climate change, substantial numbers of agricultural workers from coastal Bangladesh are likely to move further inland to seek work thus pushing agricultural labour wages down[60]. More generally, climate change threats to agriculture need to be counteracted by strengthening rural non-farm enterprises to help vulnerable populations become more resilient.

[55] For details, see the Internal Displacement Monitoring Centre Bangladesh website page.

[56] A Gini coefficient of 100% means one person owns all the wealth of the economy while 0% means perfect equality.

[57] CPD (2018) "*State of the Bangladesh Economy in FY2017-18 - First Reading Independent Review of Bangladesh's Development".*

[58] Bhattacharya D., Khan T.I., Khan S.S., Sinha M.M., Fuad S.M., Biswas S., Muzib A. (2017) "*Quest for Inclusive Transformation of Bangladesh: Who Not to Be Left Behind*". Dhaka: Centre for Policy Dialogue (CPD) and Citizen's Platform for SDGs, Bangladesh.

[59] World Bank (2018) *Op. cit.*

[60] Chen, J. and Mueller, V. (2018) "*Coastal climate change, soil salinity and human migration in Bangladesh*" Nature Climate Change.

3.6 Progress towards Outcome V: Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security

Outcome V of the CIP2 comprises, on the one hand, programmes that are to create an enabling environment for other CIP2 pillars to be successfully accomplished; and on the other, programmes that cut across the four other pillars but that have been singled out in order to ensure they are given adequate attention. Thus, it comprises four programmes: the first deals with improved food safety, quality control and assurance and awareness on food safety and hygiene; the second with the issue of reduced food losses and waste; the third with the need for improved information and data for evidence-based monitoring and adjustment of policies and programmes; and the final one with the need for strengthened FNS governance, capacity strengthening and leadership across FNS relevant stakeholders.

3.6.1 Assessment of progress towards achieving Outcome V

Table 8 - Outcome V: Selected performance indicators

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Targets 2020	sources
GoB financial commitments to CIP2 (billion USD)	3.6 (30 June 2016)	4.8 (30 June 2017)	6.1 (30 June 2018)	9.03[61] 🟡	CIP2 Monitoring Report
Establishment of high-level FNS focal points across core ministries	TT:4 TWG: 8	TT:4 TWG: 8	TT:5 TWG: 5	5 functioning teams 🟡	FPMU
Process of establishment of FNS focal points engaged in policy monitoring is ongoing through regular TT and TWG meetings	32 (8 groups met 4 times)	10 local consultations involving TWG & TT	30 (5 groups met 6 times)	30 interactions 🟡	FPMU
Annual high-level FNS policy reports produced	1	1	2	1 🟡	BNNC, CIP2, SUN annual reports

The colour indicator shows the progress achieved: target reached 🟢; on track 🟡; off track 🔴.

GoB financial commitments to CIP2 rose

The GoB financial commitments to the CIP2 rose by 33% to 4.8 billion USD in 2016/17 - the first year of the CIP2 implementation, and by 27%, up to 6.1 billion USD the following year. Reaching the target of 9.03 billion USD by the end of CIP2 is feasible if the rate of growth of GoB financial commitments continues its current trend.

High-level FNS focal points were established across core ministries and engaged in policy monitoring

Thematic Teams (TTs) were established following the approval of the 2006 National Food Policy. One of their roles is to monitor progress towards the objectives of the NFP Plan of Action, the CIP1 and now the CIP2, and to promote effective coordination among ministries, divisions, agencies, stakeholders in the implementation of inclusive investment actions for ensuring nutrition-sensitive food systems. In addition to the institutional setup in place for the CIP1, eight TWGs which include focal points from each relevant Government were established in early 2016 to assist he FPMU in developing the CIP2. These were very active in the first six months of 2016 with a total of 32 meetings

[61] GoB financial commitments were multiplied by 2.5 between the (revised) baseline and the end of CIP1 (from 2.2 to 5.52 billion USD): this rate has been applied here to obtain a target for the change in GoB financial commitments over the CIP2.

taking place to help define the main structure and contents of the CIP2. In 2016/17, 10 consultations took place across the country involving TWGs and TTs across five divisions of the country including farmers, local leaders and villagers, local Government officials from FNS-relevant ministries at district and upazilla levels, NGOs and academic faculty members. This process was essential in ensuring that stakeholders' views are reflected in the CIP2 and in building ownership, making it a country-led programme. In January 2018, the GoB approved the proposal made in the CIP2 to harmonise the number of TTs and TWGs with the number of pillars of the CIP2, i.e. five. Since then, the groups have been very active and met towards the preparation of the first CIP2 monitoring report, once again upholding the objective for these groups of having regular meetings and interactions. By active engagement in the monitoring activities, effective communication is ensured between stakeholders which can help towards mobilising additional resources to fill resources gaps.

High-level FNS policy reports were regularly produced

As during the CIP1, the CIP2 foresees the production of an annual high-level FNS policy report and this has indeed been the case so far. In 2017/18, the last report monitoring the first CIP was produced concurrently with the production of the new CIP, the CIP2. The GoB will now monitor this document on an annual basis until 2021. This exercise is crucial because as well as monitoring the degree of completion and implementation of financial objectives of the CIP2, it allows to take stock of the FNS situation of the country once a year. Because of the breadth of the five pillars of the CIP2, it brings together a rare wealth of information thus providing a very comprehensive picture of the FNS situation and its evolution. The process whereby these reports are compiled and prepared in itself is crucial in that it brings together the many FNS-related ministries and agencies and reiterates the need for coordinated nutrition-sensitive actions in order to attain FNS. In addition to the annual monitoring reports, mid-term programme reviews of the CIP2 will also need to be carried as planned in the CIP2.

3.6.2 Issues and policy challenges

Institutionalised rather than project-based capacity strengthening

FPMU plays a fundamental role in coordinating the participatory process and production of the yearly CIP2 monitoring reports, and thus in helping to mainstream nutrition-sensitive interventions. It is therefore paramount that its capacities continue to be developed. Technical abilities are required to analyse the changes at outcome and output level under each of the CIP2 pillar as well as the evolution of the CIP2 budget whereby projects come to completion, new projects begin, and others appear in the pipeline. But the operational and secretarial support that the FPMU provides to the instances involved in the production and monitoring of the CIP2 (FPWGs, NC, FPMC) also requires skills that that encompass the ability to coordinate, plan, communicate and lead, among others. As for the TTs and TWGs, their technical capacities are also required to ensure a well-functioning M&E system. This is especially important for officials from ministries not traditionally associated with food and nutrition, who need to be trained on the contents of the CIP2 and understand the importance and their role in implementing it. The complexity of food systems and the approaches taken to conceptualise them also entail a continuous training of those involved to ensure they are kept up to date with current developments. These needs justify the need for programme V.4. (Improved FNS governance, capacity strengthening and leadership across FNS relevant stakeholders) which is essential to create the enabling environment required to realise the CIP2. Given the on-going process and long-term undertaking that capacity strengthening is, it needs to be institutionalised rather than project-based.

Translate the strong political commitment into the effective implementation of the CIP2

The success of the CIP2 depends on the continued engagement of the wide range of stakeholders in FNS. The participation of the various GoB agencies involved in food system initiatives in the CIP2 development and monitoring has been mentioned but there are other important actors, such as the development partners, the private sector or civil society groups. Their contribution is crucial in order

to fully understand how the investments and results planned in the CIP2 remain relevant, especially as the country continues to progress towards attaining its middle-income status. Their participation is needed to ensure ownership of the document, learning, adequate resource mobilisation and sustainability of the results it achieves. Because of their pivotal road in funding part of the CIP2, development partners can contribute to a more accurate monitoring process by providing timely information on ongoing and planned investments. Evidence gathered on the programmes and projects funded, what works and what does not, should also be shared in order adjust and reorient the investment plan, as required.

Strengthening the potential of partnership beyond public institutions

Efforts are needed to strengthen partnerships with non-Government actors and ensure better coordination amongst Government and inter-governmental mechanisms to exploit synergies and avoid duplication of work in the areas of FNS programming, enhancing people's right to food and food safety related governance, programming and implementation processes. All stakeholders, including the private sector, Civil Society Mechanisms (such as the Civil Society Alliance for SUN, Right to Food Networks, Food Safety Networks) and representatives of all relevant ministries, agencies, research institutions, academia and media must be involved in the process of development of regulatory documents (e.g., law, rules, regulations, directives and standard operative procedures) and strategy documents (policy, plan of action, investment plan and projects) through their participation at different stages including field-level consultations with potential beneficiaries, stakeholders and implementors. Measures are also needed to foster closer linkages, exchange resources and expertise, as well as enable regular flow of information and data amongst the FNS governance mechanisms (e.g. FPMC, BNNC, NFSMAC, NSSS-SC and their respective secretariats namely FPMU, NNC, BFSA, GED-CD)[62]. This can be done through their participation in policy dialogue, workshops, consultations, technical symposia, monitoring exercises and trainings, capacity enhancement courses and related activities. The involvement of the private sector needs to be intensified notably through associations such as the Federation of Bangladesh Chambers of Commerce and Industry, the Metropolitan Chamber of Commerce & Industry, and Dhaka Chamber of Commerce & Industry.

[62] FPMC: Food Planning Monitoring Committee; BNNC: Bangladesh National Nutrition Council; NFSMAC: National Food Safety Management Advisory Council; NSSS-SC: Steering Committee for the National Social Security Strategy; NNC: National Nutrition Council; BFSA: Bangladesh Food Safety Authority; GED-CD: General Economics Division and Cabinet Division.

4. Progress towards Outputs for Outcome I

4.1 Programme I.1. Sustainable and diversified agriculture through integrated research & extension

In a context of steadily increasing population, scarce arable land and erratic weather patterns, Programme I.1 covers crop-based high value, diversified and nutritious food production coupled with intensified cereals' production in an environmentally sustainable way. It consists of three sub-programmes on: research and technology development for nutrition-sensitive agriculture; development of technologies for climate change adaptation; and nutrition-sensitive extension programmes.

4.1.1 Progress towards achievements

Table 9 - Progress towards achievement of Programme 1.1

CIP2 output proxy indicators	Commodity / Item	2015/16 Baseline	2016/17	2017/18	Source
Annual change in major crops' production	Rice	0.0%	-2.6%	7.3%	BBS (Statistical Yearbook)
	Wheat	0.0%	-2.7%	0.0%	
	Maize	7.6%	23.7%	8.7%	
	Potato	2.4%	7.8%	0.1%	
	Pulses	-0.2%	2.3%	0.7%	
	Brinjal	5.5%	6.9%	1.7%	
	Pumpkin	4.5%	1.3%	2.9%	
	Beans	5.4%	6.9%	-1.9%	
	Lal Shak	3.0%	4.0%	10.0%	
	Edible Oilseeds	1.8%	1.2%	-1.4%	
	Banana	2.6%	1.1%	0.4%	
	Guava	3.8%	7.0%	5.3%	
	Mango	14.1%	10.9%	-9.5%	
	Pineapple	1.6%	5.5%	-1.6%	
	Jackfruit	-2.8%	1.8%	2.4%	
	Tomatoes	-11.1%	5.6%	-0.9%	
	Carrots	10.8%	4.0%	14.5%	
	Lemon	-5.5%	6.0%	-3.0%	
	Sweet potato	1.7%	1.3%	-6.0%	
Number of improved new varieties released	Rice	10	6	11	BRRI, BINA, MoA
	Wheat	0	3	1	BARI & BINA, MoA
	Maize	2	2	1	
	Potato	10	6	2	
	Pulses	6	5	4	
	Vegetables	7	8	5	
	Edible Oilseeds	2	1	2	
	Fruits	1	5	4	
% of agriculture budget allocated to agricultural research		4.2%	6.34%	6.41%	NARS
Direct gender budgeting as % of MoA budget		3.90%	4.98%	0.73%	MoF
Production of seeds tolerant (MT)	Drought	1,623	3,504	2,649	MoA APA Indicator 2.5
	Submergence	7,730	12,110	12,624	
	Salinity	7,524	6,792	6,177	
Number of farmers trained on sustainable agriculture practices by DAE		1,577,000	1,545,000	1,630,000	DAE, MOA
Number of institutions delivering nutrition training across core ministries		5	5	5	BIRTAN, IPHN, BIRDEM, BARC, DAE

The production of rice and maize increased while there was no clear trend for fruits and vegetable

The production of vegetables and fruits showed mixed results over the reference period (2015/16 – 2017/18). In the latter year, the annual growth of rice and wheat bounced back to 7.3% and 0% respectively, from -2.6% and -2.7% registered a year earlier (Table 9). Conversely, the growth of other crops except pumpkin, *lal shak*, carrot and jackfruit slowed down in 2017/18, quite acutely for maize, potato and *brinjal* (15, 7.7, and 5.2 percentage points, respectively), less so for pulses, banana, and guava (1.6, 0.7 and 1.7 percentage points, respectively).

In 2016/17, the yearly production growth of rice, wheat, pumpkin, mango, oilseeds, banana and sweet potato moderately slowed down while it accelerated especially for maize but also for potato, pulses, *brinjal*, beans, *lal shak*, guava, pineapple, jackfruit, tomatoes and lemon. Wheat production declined due to several consecutive shorter winters and was in part replaced by maize due to a sustained intermediate demand and higher profitability by farmers[63]. Considering the diverse usage of potato as a cereal substitute, its production should be sustained. Over the 11-year period 2007/08-2017/18, the production growth rates of all crops, except banana and pineapple, accelerated (Table 10)[64]. The production growth rate of maize was particularly high at 11%. The production growth of all vegetables, and mango and guava among the fruits was positive. Since 2015/16, the production of *brinjal*, *lal shak*, pineapple, banana and mango has risen significantly, while that of rice has decelerated. These vegetables and fruits are a good source of micronutrients such as vitamin A and C, folic acid and potassium.

Table 10 – Average crop production growth rates

Crops	2007/08-2017/18 (%)	2015/16-2017/18
Rice	2.33*	-0.062*
Wheat	7.04*	-0.196
Maize	10.96*	0.289
Potato	6.18*	-0.098
Pulses	8.22*	-0.01
Brinjal	3.46*	0.135*
Pumpkin	3.98*	0.065
Beans	4.71*	0.079
Lal shak	2.22*	0.102*
Edible oil	5.65*	0.006
Banana	-1.69*	0.099*
Guava	4.50*	-0.031
Mango	3.46*	0.096*
Pineapple	-2.18*	0.118
Jackfruit	0.70	0.028

**Significant at 10% level*

Table 11 – Average crop area growth rates

Crops	2007/08-2017/18(%)	2015/16-17/18
Rice	0.70*	-0.038
Wheat	1.21	-0.051
Maize	10.19*	0.065
Oilseeds	2.94*	0.025
Spices	4.39*	0.058
Pulses	7.79*	-0.119
Potato	2.12*	-0.016
Sugarcane	-3.15*	-0.026
Fruits	-1.78*	0.149*
Vegetables	0.70	-0.018
Jute	8.22*	-0.222

**Significant at 10% level*

Over the period 2007/08 – 2017/18, the acreage of maize, jute, pulses, and spices increased more than that of oilseeds, potato. The rice area rose marginally while the area dedicated to vegetables remained largely unchanged (Table 11). Since 2015/16, the crop area of fruits increased significantly, while that of all other crops remained constant.

[63] Asaduzzaman, EAM. (2019) "*Wheat farming losing out to maize*" The Daily Star, 11 May 2019.

[64] Table 11 and 12 present average values of two series: 1. 2007/08 – 2017/18 based on the compound growth rate (CGR) of production/area; and 2. 2015/16 – 2017/18 based on a dummy variable.

The release of new rice, wheat, fruits and vegetables varieties accelerated

A total of 27 rice varieties was released over the reference period: 10, 6 and 11 in 2015/16, 2016/17 and 2017/18, respectively (Table 9). Out of the total, 22 were released by Bangladesh Rice Research Institute (BRRI) and five from the Bangladesh Institute of Nuclear Agriculture (BINA). Varieties released by BRRI are: drought- tolerant (BRRI *dhan* 70, 71, 72, 73), salinity-tolerant (74), zinc-enriched (75, 76, 77, 78), salinity and submergence-tolerant (79), submergence-tolerant (80, 81, 82, 83), drought- tolerant (84, 85, 86, 87, 88, and 89) and BRRI Hybrid *dhan* 5 and 6. Moreover, BINA's released varieties are drought-tolerant (*binadhan* 17, 18, 19), zinc and iron-enriched (20) and drought-tolerant (21). As of 30 June 2018, BRRI released 88 inbred and six hybrid rice varieties, while BINA released 19 inbred varieties.

Between 2015/16 and 2017/18, the Bangladesh Agricultural Research Institute (BARI) developed 61 new varieties: 4 of wheat, 5 of maize, 18 of potato, 8 of pulses, 2 of oilseeds, 15 of vegetables (Box 1), and 9 of fruits. BINA released 17 new varieties of which, 1 of wheat, 7 of pulses, 3 of oilseeds, 5 of vegetables and 1 of fruits. Research activities for wheat, vegetables and fruits intensified in 2016/17 with 16 new varieties released, against eight in 2015/16 and 10 in 2017/18. Fewer new varieties of crops were then released between 2016/17 and 2017/18, except for rice for which 12 new varieties were developed in 2017/18, compared to 6 in 2016/17.

Box 1 - Orange Fleshed Sweet Potato (OFSP) as a bio-fortification initiative in Bangladesh

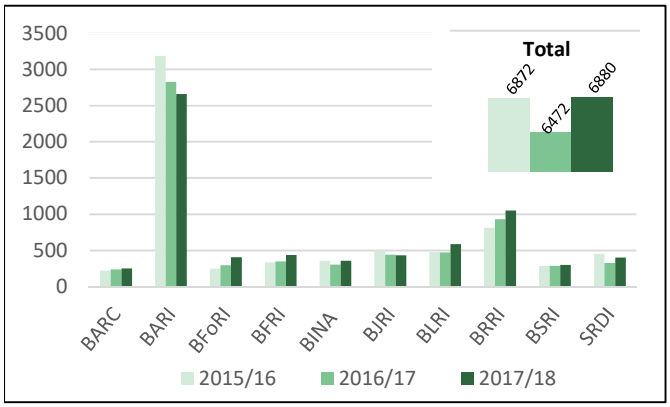
This study assessed the OFSP value chain as a fortified food initiative in Bangladesh. Children and parents showed interest in using different types of bio-fortified products such as OFSP. Parents were more concerned about diets, nutrition and improvement of their children's health than about fortification. Rural mothers from the community benefited economically by growing OFSP in their garden. Nutritional awareness was created among the community. Engaging rural women at every step of the value chain and introducing OFSP in urban supermarkets were among the innovative approaches used. The study identified a need for storage and processing infrastructure for OFSP in order to make it profitable for producers to cultivate it. Another important conclusion was the need to strengthen rural-urban market linkages. A major demand of quality OFSP seeds in the market was observed but fair prices were not obtained for the product. Overall, some positive impacts on value chain development, women's empowerment, school attendance, children's health and nutritional awareness were observed.

Source: M.A.U. Kabir, M.S. Islam (2018) (LANSA/ International Potato Center/ USAID

The share of agricultural budget allocated to research increased but is still low

The budget going to agricultural research as a share of the total agriculture budget grew over the reference period: from 4.2% in 2015/16 to 6.3% in 2016/17 up to 6.4% in 2017/18. Figure 15 shows that the 2016/17 annual budget of the different National Agricultural Research System (NARS) institutes increased for BARC (+10%), BFoRI (+20%), BRRI (+15%) and BFRI (+4%), while it decreased for BARI (-11%), BINA (-15%), BJRI (-12%), BSRI (-3%) and SRDI (-28%). However, in 2017/18, budgets were up for all institutes

Figure 15 - NARS institutions' annual budget (million BDT)



Source: Ministry of Agriculture (MoA), Bangladesh

except BARI and BJRI, especially for BFoRI (+37%), BFRI (+26%), BLRI (+24%), SRDI (+23%) BINA (+17%), and BRRI (+12%)[65].

The share of the gender budget in the total MoA budget dropped significantly

While Bangladesh has made remarkable progress in improving women's physical visibility and geographical mobility, education, economic participation, and political and social empowerment[66], gender-based disparities and discrimination persist. After showing a positive trend from 2010/11 to 2015/16 with a 3.7 percentage point increase, the direct gender budget share registered a further 1.1 percentage point rise in 2016/17 but dropped sharply in 2017/18 by 4.3 percentage points, down to 0.7% of the total MoA budget. This is low compared to other sectors but also given the importance of women in agriculture. It is thus essential that the GoB commitment to tackle gender inequalities and opportunities is translated into adequate financing in this sector.

The production of stress-tolerant seeds dropped slightly after a sharp rise a year ago

As one of the countries worse affected by climate change, Bangladesh increasingly relies on the cultivation of stress-tolerant varieties for the production of food. Adoption of stress-tolerant rice varieties is low among marginal farmers due to their risk-aversion and preference for traditional varieties with assured yields rather than new ones[67]. Production of stress-tolerant seeds rose by 33% to 22,406 MT in 2016/17 from the previous year but went on to decline by 4% in 2017/18. In 2017/18, the production of drought-tolerant and salt-tolerant seeds contracted by 24% and 9%, respectively while the number of submergence-tolerant seeds produced increased by 4% year-on-year.

More farmers were trained on sustainable agricultural practices

In Bangladesh, GoB agencies, NGOs, commercial traders and input suppliers provide extension support services. The Department of Agricultural Extension (DAE) is the largest provider of extension services with over 14,000 field-level extension workers, each supporting between 900 and 2,000 rural households[68]. DAE trained 1.63 million farmers in 2017/18 up from 1.55 million in 2016/17 and 1.58 million in 2015/16. In 2017/18, 0.74 million farmers received training on modern varieties and technologies[69].

Stable number of institutions delivering nutrition training

Since the CIP2 baseline (2015/16), the five institutions delivering nutrition-related training remain unchanged and are: the Bangladesh Institute on Research and Training on Applied Nutrition (BIRTAN), the Bangladesh Agricultural Research Council (BARC) and Department of Agricultural Extension (DAE), under the Ministry of Agriculture; and the Institute of Public Health Nutrition (IPHN) and the Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM), under the Ministry of Health and Family Welfare.

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[65] BARC: Bangladesh Agricultural Research Council; BARI: Bangladesh Agricultural Research Institute; BFoRI: Bangladesh Forest Research Institute; BFRI: Bangladesh Fisheries Research Institute; BINA: Bangladesh Institute of Nuclear Agriculture; BJRI: Bangladesh Jute Research Institute; BLRI: Bangladesh Livestock Research Institute; BRRI: Bangladesh Rice Research Institute; BSRI: Bangladesh Sugar-crop Research Institute; SRDI: Soil Resource Development Institute.

[66] Siddique K. (2013) "*A Case Study of Gender Responsive Budgeting in Bangladesh*", Research Report, Commonwealth Secretariat.

[67] Ahmed A.U., Hernandez R., Naher F. (2016) "*Adoption of Stress-Tolerant Rice Varieties in Bangladesh".* In: Gatzweiler F. and von Braun J. (eds) Technological and Institutional Innovations for Marginalized Smallholders in Agricultural Development.

[68] Miah, H. (2015) "*Agriculture Sector Development Strategy: Background Paper for Preparation of the 7th Five Year Plan",* Bangladesh: Food and Agriculture Organization.

[69] DAE (2018) *Annual Report 2017/18*.

4.1.2 Policy development, programmes and initiatives underway

Programme I.1 of the CIP2 channels 922 million USD which represented 7% of the total CIP2 budget in 2017/18, of which 476 million USD (52%) was financed (i.e. ongoing or completed projects) as of 30th June 2018. The Programme I.1 budget has increased by 20% from 766.2 million USD at baseline. The largest part of the already financed budget,65%, is from the GoB while the remaining 35% is from DPs. This proportion is reversed for the financial gap with 74% of pipeline projects from DPs and 26% from the GoB. When nutrition-weighted are applied to the different projects, the budget for this programme accounts for 692 million USD, or 75% of the non-weighted budget. This reflects the fact that all the projects under this programme are nutrition-sensitive and therefore carry a 75% weight (see Section 1. Approach to monitoring).

Increase in crop intensification in favour of non-cereal crops through GoB provision of appropriate packages of seed-fertiliser-irrigation technologies as well as credit support

Despite achieving self-sufficiency in rice production, ensuring food and nutrition security for all remains one of the main challenges for Bangladesh. In this context, the GoB has been implementing programmes to promote crop intensification of non-cereal high-value crops, fruits and vegetables, potatoes, oilseeds, pulses and spices through provision of appropriate packages of seed-fertiliser-irrigation technologies as well as credit support. For instance, under a project titled *Production, storage and distribution of quality seeds of pulse, oil and onion at farmers' level*, DAE produced and distributed improved seeds of pulses, oils, and onion. In 2017/18, the outputs produced under the project include the training of 19,560 farmers and 1,560 sub-assistant agricultural officers, 2,393 field-day visits, a regional workshop and about 19,000 displays for pulses, oilseeds, and onion arranged at farmers' level. Other DAE relevant activities in 2017/18 included the countrywide sale from different horticulture centres of saplings and grafts of fruits (2.6 million), vegetables (2.5 million), and spices (275 thousand)[70].

Strengthening agriculture, nutrition and gender linkages

Investments in agriculture, nutrition and gender can leverage agricultural development for improving nutrition and integrating pathways to women's empowerment. The *Agriculture, Nutrition and Gender Linkages (ANGeL)* project set out to evaluate the impact of three types of interventions, namely agricultural production, nutrition knowledge, gender sensitisation. In its baseline survey, it sampled 3,125 participating households and 875 control households across 16 rural districts of Bangladesh from November 2015 to January 2016. It. Targeted trainings of households, from July 2016 to December 2017, pointed to an increase in nutrition knowledge, which was greater among women especially when agriculture and nutrition or agriculture, nutrition and gender were combined. This increased knowledge led to improved household and children's dietary diversity[71].

Yield gaps and constraints quantified for cereals

By minimising yield gaps, essential gains in productivity can be reached without expanding the use of other essential resources, such as water and land. Table 12 presents yield gaps for cereals in Bangladesh under different agronomic situations and cropping seasons, with the highest gaps concentrated on the crops with the highest potential yields: irrigated boro rice and irrigated rabi maize, have respectively 11.7 t/ha and 11.4 t/ha yield potential and 5.85 t/ha and 5.2 t/ha yield gap, respectively[72].Adoption of BRRI recommended management practices has shown to improve rice

[70] *Ibid.*

[71] ANGeL (2018) "*Agriculture, Nutrition and Gender Linkages*", Outcome Brochure, 2018.

[72] Timsina J., Wolf J., Guilpart N., van Bussel L.G.J., Grassini P., van Hart J., Hossain A., Rashid I., Islam S., van Ittersum M.K. (2018) "*Can Bangladesh produce enough cereals to meet future demand?*", ScienceDirect, Agricultural Systems 163.

yields up to 62% from about 27%[73]. A massive and effective programme for wider demonstration, refinement, and dissemination of BRRI recommended practices may thus be adopted to improve the productivity and profitability of rice farming.

Table 12 - Potential, actual yield and yield gaps for cereals in Bangladesh

Mean Yield levels(ton/ha)	Maize		Wheat		Rice		
	Irrigated, rabi	Rainfed, kharif-1/rabi	Irrigated	Rainfed	Irrigated, boro	Rainfed, aman	Rainfed, aus
Yield potential	11.4	8.0	5.5	3.0	11.7	6.5	7.8
Actual yield	6.2	4.5	2.8	1.8	5.85	3.4	2.9
Yield gap	5.2	3.5	2.7	1.2	5.85	3.1	4.9

Source: Timsina J. et al. (2018)

Research-extension linkages enhanced to improve productivity

The *National Agriculture Technology Project – phase II (NATP II, 2015-2021)* provided financing to 190 competitive research grants and 22 programme-based research grants. In addition, NATP II supported DAE in forming 15,270 and reshaping 11,880 previously established Common Interest Groups. It also established 1,621 Farmers Information and Advice Centres (FIACs). The International Rice Research Institute (IRRI) and Advanced Chemical Industries Ltd. (ACI) jointly started in 2015 a 6.5 million USD, five-year collaboration co-financed by USAID. This private public partnership (PPP) aims at achieving productivity increases through the adoption of cutting-edge breeding techniques coupled with the rapid dissemination of the new rice varieties developed.

Benchmarking of greenhouse gas emissions from different cropping patterns for climate change mitigation

Bangladesh's greenhouse gas (GHG) emissions grew by 59% from 1990 to 2012 with an average annual change of 2%. Agriculture, the leading contributor to GHG emissions, contributes 39% of the country's total emissions. It is reported that fertiliser and irrigated water are key contributors to GHG emissions. Jute-rice-fallow, wheat-mungbean-rice, maize-fallow-rice, wheat-rice-rice and potato-maize-rice patterns produce relatively lower GHG emissions indicating that adoption of these patterns could be an option for mitigation of GHG emissions in Bangladesh. Integrated soil-crop-water management practices could also reduce agriculture GHG emission by 17-40%. Adaptation measures such as the adoption of potato-Boro-T. Aman and mustard-Boro-T. Aman cropping patterns and short duration rice varieties, alternate wetting and drying and balanced fertilisation will be needed to reduce methane emissions and to meet the demand for healthy food while reducing the environmental impact of producing it[74].

4.1.3 Needs for further actions under this programme include

Accelerate the dissemination of high yielding, high value, nutrition-dense, stress-tolerant varieties considering private sector involvement notably through Public Private Partnerships

In order to improve productivity, it is essential to associate the development of cutting-edge genetic research and breeding techniques with a rapid deployment of the varieties. To make this process more

[73] Quais, M.K., Dewan M.R., Khatum A., Sultana H. (2015) "*Rice Yield Gap Minimization in Central Bangladesh: Using and Adapting Existing Technologies"*, Open Access Library Journal, Vol 2 No 7, July 2015.

[74] Haque, M.M., Biswas, J. C., Maniruzzaman, M., Choudhury, A. K., Naher, U. A., Hossain, M.B., Akhter, S., Ahmed, F. and Kalra, N. (2017) "*Greenhouse gas emissions from selected cropping patterns and adaptation strategies in Bangladesh*", Int. J. Dev. Research.

efficient and effective, private sector involvement is required. To ensure this, synergies among research centres at national, regional and global level are essential to generate economies of scope from the capital invested in agricultural research. For instance, the "*IRRI-ACI PPP for rice breeding and seed in Bangladesh*" has the objective of introducing higher yields, high quality, nutrition dense, stress-tolerant varieties and improved sustainability of rice via technological transfer. This collaboration is a good example of how PPPs could work effectively at national, regional and international level. There are risks associated with PPPs however, which include the potential misuse of public funds, inequitable provision of the service and the limited coverage of farmers' needs[75]. The effectiveness of investments in research could benefit from the creation of a centralised database recording ongoing research. This would also help to prevent duplication.

Continue research on reducing yield gaps

In line with the NAP (2018), given the existing land physical constraints, and with the objectives of agricultural diversification and of sustaining staple foods' productivity, it is essential to reduce yield gaps and accelerate the dissemination of high-yielding and improved varieties. Despite the technologies developed and their dissemination by extension agencies, yield gaps for different crops of Bangladesh still range between 19% and about 64% of the potential yield[76]. It is, therefore, essential to continue research on identifying constraints to minimise the yield gaps under different agro-ecological zones in order to increase crop production to feed the growing population of the country.

Implement regulatory requirements to scale up fortification

There is high commitment to food fortification at the highest level of Government, and a strong public and private-sector partnership is emerging. Fortification of specific commodities (salt, oil and rice) is currently being implemented to deliver micronutrients to a large proportion of the vulnerable population who would stand to benefit most from additional micronutrients. In particular, universal salt iodisation is implemented on a large scale while soybean and palm oils which are fortified with vitamin A (15-30 ppm) are also reaching over 80% of the population. Micronutrient fortified rice or *pushti chaal* (with five micronutrients) is distributed to targeted populations through the national *Food Friendly Programme*. Future policy actions will need to include an assessment of current actual additional vitamin A intake estimates, based on the results of an oil sample retinol analysis.

Promote farmers' need based extension service with the involvement of private sector and NGOs

Historically, Bangladesh's agricultural extension and advisory services were focused on rice production, but were later expanded to other areas. Presently, many private agencies and NGOs along with public agencies are providing agricultural extension services in a dynamic pluralistic system. However, there is need to coordinate these services, scale them up and make them sustainable to better reach farmers, especially women. Interest in pluralistic concepts of extension involving a variety of service providers has evolved from the poor performance of public agricultural extension systems in developing countries. Although private-sector participation can overcome some of the deficiencies of public extension systems, challenges endure, including the misuse of public funds, insufficient accountability to farmers, inequitable provision of services, inadequate quality, and limited coverage of the wide range of farmers' needs[77]. Therefore, while involvement of private sector and NGOs in extension service must be promoted, it should under adequate guidance of the public sector.

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[75] Feder, G. R. Birner, J.R. Anderson (2011) '*The private sector's role in agricultural extension systems: potential and limitations*', Journal of Agribusiness in Developing and Emerging Economies.

[76] Rahman Khan, A. S. M., M.M. Anwar, S. Akter, M.Z. Haider Prodhan, M.H. Mondal (2013) '*Identification of factors influencing yield gaps in mustard, potato and rice in some selected areas of Bangladesh and strategies to minimise the gaps*', Bangladesh Journal of Agricultural Resource, June.

[77] Feder G. *et.al.* (2011), *Op. cit.*

Encourage the involvement of private actors in biotechnological research and innovation adoption

Research on high yielding, improved and Genetically Modified (GM) varieties needs to continue because of their demonstrated potential in terms of reduced use of inputs (low input/ high output combination) as in the case of GM Bt Brinjal. Box 2 shows that incentivising bio-technological application helps to reduce pesticides' use and improve incomes. PPP initiatives need to be supported to ensure private investors' involvement in technology-driven research initiatives - such as hydroponic and aero-phonic agriculture - which are essential for the future of agriculture in Bangladesh. These initiatives need to be coupled with improved management (e.g. contract farming) and organisational (e.g. farmers' organisations) practices.

Box 2 - Higher income from Bt Brinjal

An IFPRI impact assessment study on the cultivation of Bt brinjal in four northern districts found encouraging results. Bt brinjal farmers significantly reduced the number of applications and amount of pesticide sprayed with a consequent reduction in their production costs, compared to control farmers. Fruit and shoot borer was nearly inexistent among Bt plants thanks to their resistance to this type of infestation, whereas conventional brinjal plants continued being affected by this moth. Yields were also higher than for conventional brinjal, driven by larger harvests and less crop loss to pests and diseases. Bt Brinjal farmers were less likely than conventional brinjal farmers to report symptoms associated with pesticide poisoning. They were also less likely to seek medical care or spend money on medical treatment. Consequently, BT Brinjal farmers' income surpassed that of traditional farmers.

Source: Ahmed, A.U., et.al. (2019), "Impacts of Bt brinjal (eggplant)

4.2 Programme I.2. Improved access, quality and management of crop agricultural inputs, including water and land

In a context of steadily increasing demand for agricultural produce, pressure on natural resources, scarce arable land and negative effects of climate change, Programme I.2 examines the use of more sustainable and efficient of productive inputs including land and water. It consists of four sub-programmes on: quality inputs (seed, fertilisers and pesticides); land fertility and land rights; surface water; and saline water intrusion.

4.2.1 Progress towards achievements

Table 13 - Progress towards achievement of Programme I.2

CIP2 output proxy indicators	Commodity /Item	2015/16 Baseline	2016/17	2017/18	Source
Annual change in improved rice, wheat and maize seeds production		-0.3%	15.6%	10.1%	MoA
Improved seeds supply (BADC, DAE & private companies) as % of agronomic requirements	Rice	41.5%	57.2%	60%	MoA
	Wheat	58.2%	37.5%	38%	
	Maize	27.1%	92.2%	95%	
	Potato	7.7%	11.8%	13%	
	Pulses	10.9%	6.5%	7.1%	
	Vegetables	50.7%	83.1%	85.05%	
	Edible Oilseeds	13.4%	15.5%	16.15%	
Number of soil samples analysed at upazilla and union levels		17,200	18,200	18,500	
Increased arable land under surface irrigation coverage (thousand ha)		54.9	55.3	55.6	MoA
Direct gender budgeting as % of MoWR budget (revised)		17.3%	22.7%	4.9%	MoF
Supply as % of estimated requirements	Urea	81.8%	94.6%	91.4%	MoA
	MoP	96.9%	97.6%	107.1%	
	TSP	100.7%	98.7%	124.3%	
Agricultural credit disbursement in billion BDT		176.46	209.99	213.94	Bangladesh Bank
Number of samples of fish feed tested for quality assurance		2,000	1,074	1,085	MoFL
Area of land affected by salinisation (hectare)		1,056,260 (2009)	NA	NA	SRDI
Area of land under organic farming under DAE initiative (hectare)		…*	90	120	DAE
Water-use efficiency (USD/m^3) – Proxy for SDG 6.4.1		…*	3.0 (2017)**	…*	UNWater
SDG 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		…*	4%	…*	AQUASTAT

**not applicable, **proxy indicator for SDG 6.4.1*[78]

The trend in the production and supply of cereal seeds was mixed

The annual change in availability of improved cereal seeds (rice, wheat and maize) – a key element to boost production and productivity – bounced back in 2016/17 to 15.6% up from -0.3% a year earlier, due to the higher production/supply for rice (25%) and maize (127%) in 2016/17. However, in 2017/18, the annual change slowed down to 10.1% due to a lower growth of rice and maize seed production.

The seed supply to agronomic requirements increased except for wheat and pulses

The supply of improved rice seeds as a share of agronomic requirements rose to 60% in 2017/18 from 57% in 2016/17 and 42% in 2015/16. Wheat seed supplies, on the other hand, dropped sharply by 20 percentage points in 2016/17 with a marginal increase in 2017/18, which is consistent with the decline

[78] SDG 5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure. SDG 5.a.1 (a) and (b) are not available.

in wheat production (Programme I.1). A notable change was observed in the seed supply of maize which soared from 27% in 2015/16 to 92% in 2016/17 and 95% in 2017/18. Over the reference period, the seed supply improved for all non-cereal crops - except pulses. Potato, vegetables and edible oil increased up to 13%, 85% and 16% of their agronomic requirements in 2017/18, up from 7.7%, 15.7% and 13%, respectively in 2015/16. Pulse seed supplies declined by 4.4 percentage points in 2016/17 with a small 0.6 percentage point increase in the following year (Table 13). Since 2007/08, the seed supply of all crops under review - except wheat – improved.

Soil testing increased, albeit slowly

Bangladesh, though a small country, has a wide variety of soil types. The use of chemical fertilisers is increasing steadily but they are often not applied in balanced proportion. As a result, organic matter in soils is low (around 1%) and declining sharply. This demands judicious management of soil after proper testing in order to preserve and restore its fertility, thereby optimising production and soil nutrients. Soil sample analysis aims to: determine soil composition, nutrient levels and characteristics (e.g. pH level); protect the soil from contamination due to runoff or excessive use of fertilisers; and support the diagnosis of plants' disease. This ultimately helps to optimise crop production and enhance nutrient returns. The number of soil samples analysed at *upazilla* and union levels increased year-on-year by 6% and 2% to 18,200 and 18,500 in 2016/17 and 2017/18 respectively, from 17,200 in 2015/16.

Arable land under surface irrigation expanded at a faster pace

The expansion of surface irrigation schemes is a necessary condition to reduce the depletion of groundwater resource. Yet, the annual increase of arable land under surface irrigation coverage decreased from 54.9 thousand hectares in 2015/16 up to 55.3 in 2016/17 and 55.6 thousand hectares in 2017/18. To increase surface water irrigation, the Bangladesh Agricultural Development Corporation (BADC) constructed three rubber dams, re-excavated 1,598 km of canals, established 1,970 km surface and buried irrigation channels and installed 999 low lift pumps from 2014/15 to 2016/17. In addition, over the same period, the Barind Multipurpose Development Authority (BMDA) constructed 1,768 km of buried pipelines, re-excavated 540.5 km of canals, restored 156 derelict ponds, excavated 62 dug wells, constructed one rubber dam and 83 submerged weirs across the canal to conserve surface water. It is essential that new infrastructures are coupled with adequate management practices and measures to make the use of water more efficient.

Water use efficiency was low, especially for agriculture

Change in water use efficiency (WUE) is an economic indicator measuring how heavily a national economy relies on water resources for its development. The WUE for Bangladesh was a low 3.0 USD/m^3 in 2015, which ranked Bangladesh 55th out of 86 countries. No data are available thereafter. Agriculture is by far the largest user of water resources (88%) followed by services (10%) and industry (2%). The WUE in agriculture registered a 0.4 USD/m^3 which is low although better than India for example (0.3) or Pakistan (0.2), while industry and services performed much better at 38.6 USD/m^3 and 17.8 USD/m^3, respectively[79]. According to FAO[80], reducing food losses and waste (see Programme V.2.) could improve water use efficiency in agriculture.

[79] UN WATER (2018) "*Progress on Water-use Efficiency – Piloting the monitoring methodology and initial findings for SDG indicator 6.4.1*".

[80] FAO (2011) "*Global Food Losses and Food Waste – Extent, Cause sand Prevention*".

Water stress levels are low

The SDG 6.4.2 (Level of water stress: freshwater withdrawal as a proportion of available freshwater resources[81]) is an environmental indicator that monitors the physical availability of freshwater. The indicator was at 4% in 2017, which is low compared to global average of 13% and the water stress threshold of 25%.

Direct gender budgeting as a share of the Ministry of Water Resources' budget varied over time

Direct gender budgeting in the total budget of the Ministry of Water Resources (MoWR) registered a mixed trend over the reference period. It moved from 17.3% in 2015/16 up to 22.7% in 2016/17 but shrank to 4.89% thereafter. This compares to the increased revised budget of MoWR of 61.12 billion BDT in 2017/18 up 61% compared to 2015/16.

The supply of Urea, MoP and TSP significantly improved

The supply of key fertilisers against requirements increased over the reference period with minor fluctuations. Urea supply reached 91.4% in 2017/18 down from 94.6% in 2016/17 and up from 81.8% in 2015/16; Muriate of potash (MoP) supply increased to 107.1% in 2017/18 up from 97.6% in 2016/17 and 96.9% in 2015/16. Triple Superphosphate (TSP) supply rose up to 124.35% from 98.7% in 2016/17 and from 100.7% in 2015/16 (Table 13).

Agricultural credit disbursement accelerated and exceeded the target

Agricultural credit disbursement grew steadily up to 213.9 billion BDT in 2017/18, up 2% from 2016/17 which was itself 19% higher than the 2015/16 figure. A decade earlier, the amount disbursed was 85.9 billion BDT (2007/08). These amounts were 7.6%, 19.7% and 4.9% higher than the targets set by the Bangladesh Bank in 2015/16, 2016/17 and 2017/18, respectively. In 2017/18, 3.96 million farmers availed agricultural credit of which 40% were women. However, female borrowers received only 29.5% of the total agricultural credit disbursement and on average 40,000 BDT each, compared to 89,650 BDT on average for their male counterparts[82]. About 0.3 billion BDT was disbursed among about 8,339 farmers living in the less developed areas such as *haors, chars*, etc. The decision of the BB in September 2018 to reduce the lending rate by one percentage point to 8% on farm loans is expected to have a further positive impact on total credit disbursement.

The numbers of samples of fish feed tested for quality assurance declined

The number of samples of fish feed tested for quality assurance almost halved during the reference period, from 2,000 in 2015/16 to 1,074 in 2016/17 and slightly up to 1,085 in 2017/18. This is a worrying signal due to the importance of feed sampling to ensure quality of animal feed against, for example, heavy metal contamination (see Programme V.1.).

Organic farming picked up but remains low

Currently, the country's agriculture heavily depends on chemical fertilisers and pesticides, causing a serious threat to food safety (see Programme V.1.). Moreover, the cost of production has increased manifold and yields are falling. In this context, organic agriculture appears a suitable production system to ensure a better and safer environment, without compromising yields. To encourage organic agriculture, the GoB approved the National Organic Agriculture Policy (2016) with a provision of forming a certification body. The expansion of organic farming is very slow in Bangladesh, mainly due to a historical focus on productivity and a lack of technical knowledge, organic inputs, legislation for organic production and a certification agency. There is also the challenge of marketing higher priced organic vegetables and the lower levels of agronomic productivity. Currently, around 12,000 farmers

[81] Available freshwater resources equal total water resources after subtracting environmental flow requirements.

[82] Bangladesh Bank (2018) *Press Release- Agricultural and Rural Credit Policy Program for the FY 2018-2019.*

produce organic crops, livestock and fish on around 7,000 hectares of land which represented only 0.2% of the country's total farmland[83]. However, the area of land under organic farming initiated by DAE expanded modestly from 90 hectares in 2016/17 to 120 hectares in 2017/18.

Land salinisation continues to expand

The impact of salinity is considered one of the most serious threats to the environment with its potential negative impacts on food security, agriculture, fisheries, human health, biodiversity, water, and other natural resources. An SRDI survey revealed that total saline area increased to about 1.056 and 1.021 million hectares in 2009 and 2000 respectively from 0.833 million hectares in 1973[84] but more recent data are not available.

4.2.2 Policy development, programmes and initiatives underway

Programme I.2 channels 3,622 million USD which represents alone 26% of the total CIP2 budget in 2017/18. It is the second largest programme. Out of the total, 1,566 million USD (43%) was already financed as of 30th June 2018. The largest part of the financed budget (78%) is from GoB while the remaining 22% is from DPs. This proportion is reversed for the financial gap with 69% of the pipeline projects from DPs and the rest GoB. The largest sub-programme (81% of this programme's budget) is the I.2.1 *Enhance availability and efficient use of affordable and quality inputs (seeds, fertilisers, pesticides) and credit for safe and diversified crops.* The nutrition-weighted budget accounts for 2,717 million USD, or 75% of the Programme's I.2 budget which reflects the fact that all the projects under this programme are nutrition-sensitive.

Boosting access to quality seeds, in particular for maize, vegetables and potatoes

To ensure sustainable supply of quality seed, the acceleration of seed production, import, storage and marketing of seed is needed. In this regard, implementation of the Seed Act (January 2018) through the formulation of rules and an actionable strategic plan is needed. Government agencies[85], NGOs and private companies have started producing, importing, storing and marketing quality seeds of hybrid rice, maize and vegetables on a limited scale - especially the private sector for the two latter[86]. The private sector dominates the supply of hybrid seeds as it meets over 90% of the demand, with a market growth of 10-11% annually, up from 4-5% a decade ago[87]. The supply of seeds by BADC, DAE and the private sector rose for all types crops – except wheat and oilseeds - since 2015/16 (Table 14). In 2016/17, the year-on-year increase was the highest for maize (127%),

Table 14 - Supply of formal seeds for selected crops ('000 MT)

Year	2015/16	2016/17	2017/18	Change 15/16-16/17	Change 16/17-17/18
Rice	125.54	157.15	171.68	25.2%	9.24%
Potato	52.59	108.65	112.65	106.6%	3.67%
Wheat	30.40	20.11	23.60	-33.8%	17.36%
Maize	2.64	6.00	6.51	127.3%	8.50%
Pulses	3.23	2.79	3.73	-13.5%	33.54%
Oilseeds	2.62	2.38	2.20	-9.1%	-7.60%
Vegetables	1.08	1.88	1.93	73.9%	2.34%
Total	218.11	298.98	322.30	37.1%	7.80%

Source: Seed Division, MoA

[83] Palma, P. (2017) "*Choice organic",* The Daily Star, 5 June.

[84] Soil Resource Development Institute (2010) 'Saline soils of Bangladesh' SRMAF Project, Ministry of Agriculture.

[85] GoB agencies control the variety development of the five notified crops namely rice, wheat, potato, jute and sugarcane.

[86] Iqbal, K. and K.A. Toufique (2016) '*Formal vs. Informal Seeds: Adoption and Productivity Differences*', Bangladesh Development Studies.

[87] Sakib, N. (2018) '*Private seed sector steadies growth*', The Financial Express, 6 May.

followed by potato (107%) and vegetables (74%). However, in 2017/18, the annual growth largely slowed down, except for pulses, wheat and oilseeds.

Seed distribution by public sector year-on-year increased by 18%, 34% and 18% for wheat, pulses and potato, respectively, while it decreased for oilseeds (-8%), vegetable (-12%) and jute (-66%) in 2017/18. However, public maize seed supply increased to 10 MT in 2017/18 from null in 2016/17. In case of the private sector, seed supply of maize, vegetables and jute rose by 8%, 3% and 20%, respectively but it decelerated by 7% for wheat and 1% for potato during the same period. The private sector supplied no pulses and oilseeds, over the same period. Overall, while the public sector concentrated on wheat (53%), pulses (11%) and oilseeds (16%) seed distribution, the private sector focused on maize (97%) and vegetables (81%) and jute (89%). The lion's share of total seed requirements for pulses, oilseeds and potato, and a significant portion for wheat are being supplied by the farmers themselves, while the private sector mainly provides seed for maize, vegetables and jute (Table 15).

Table 15 - Contribution of different actors to non-rice seed production in 2017/18

Crops	Seed requirement (MT)	Seed distribution				Contribution to:				
		Public (MT)	Private (MT)	Change (%) from 2016/17		Total requirement (%)			Total supply (%)	
				Public	Private	Public	Private	Self	Public	Private
Wheat	43,938	23,477	125	18	-7	53.43	0.28	46.28	99.47	0.53
Maize	6,705	10	6,500	-	8	0.15	96.94	2.91	0	100
Pulses	35,448	3,731	0	34	-	10.53	0.00	89.47	100	
Oilseeds	13,481	2,202	0	-8	-	16.33	0.00	83.67	100	0.00
Vegetables	2,291	73	1,854	-12	3	3.19	80.93	15.89	3.79	96.21
Potato	861,175	31,246	81,400	18	-1	3.63	9.45	86.92	27.74	72.26
Jute	6,066	262	5,400	-66	20	4.32	89.02	6.66	4.63	95.37

Source: Seed Division, MoA

Upscaling irrigation infrastructure development

Regarding the development of irrigation infrastructure, during 2017/18, BADC re-excavated 351 km of canals; constructed two rubber dams and two hydraulic elevated dams; set up 240 km underground and 3.7 km surface irrigation pipelines, 27 solar energy operated pumps; provided electricity to 269 pumps; constructed six dug wells and five water control structure. Besides, BADC initiated a programme to create a database on underground water resources and irrigation equipment used to be published yearly.

Ongoing mechanisation programmes mostly for trashing and tillage

Farm labour shortages, shrinking land, degradation of natural resources and vulnerability to climate change are among the many issues currently faced by agriculture in Bangladesh. Farm mechanisation is key to cope with these challenges by reducing the amount of labour and time needed, and by cutting production losses and costs. To this end, DAE has been implementing a project entitled *Enhancement of Crop Production through Farm Mechanisation* since 2009 with the aim to enhance cropping intensity and reduce post-harvest losses, by, among other measures, offering a 25% subsidy on the purchase of agricultural machineries such as power tillers, tractors, power threshers and combine harvesters. This subsidy was further increased to 50% and up to 70% for *haor* areas and the Southern coastal areas for the purchase of agriculture machinery, with the objective of expanding mechanised

seeding, transplanting and harvesting[88]. So far 2,284 million BDT have been provided as financial assistance to expand agricultural mechanisation.

4.2.3 Needs for further actions under this programme include

Promote private sector involvement in production, multiplication and distribution of seeds

To continue promoting the private sector's participation is paramount in order to ensure farmers' access to quality seeds. R&D investment aimed at developing new crop varieties is critical to increase the supply of quality seeds by the private sector. This process should be market-led rather than variety-oriented. Yet in Bangladesh, except for hybrid rice, policies creating an environment to attract private sector R&D investments are lacking. Accordingly, the adoption of climate-resilient (drought, salinity, submergence) and nutrient-enriched (e.g. biofortified rice varieties, such as zinc rice) seed varieties should be facilitated as their demand is expected to increase. In addition, the removal of restrictions for private access to germplasm from the public sector and to the seed market - for instance by lifting subsidies on seed supply - may help to create the needed enabling environment[89].

Redesign agricultural systems for sustainable intensification by stimulating water efficiency and reducing fertiliser wastage

Deep fertiliser placement (DFP) and alternate wetting and drying (AWD) are techniques that can increase the productivity and efficiency of inputs. Used by one million farmers in Bangladesh on a two million hectare area, DFP adoption has demonstrated a positive impact on rice productivity (with increased average yields of 18% compared to traditional fertiliser usage), and the reduction of time and labour spent on dispensing fertiliser. Deep placement of nitrogen coupled with AWD increased rice yields compared to continuous flood irrigation and to the maximum yield from urea super granule (USG) applied with poultry manure. It is therefore important that the constraints to popularising DFP and AWD are removed[90]. For example, farmers generally pay a flat seasonal charge per acre or a share of harvest as water charge to the water pump's owner. They have therefore no incentive to boost their water use efficiency by using AWD. In such context, the introduction of volumetric-based charges for irrigation water would need to be introduced.

Promote an integrated soil fertility management approach

Integrated soil fertility management can be achieved through the use of grain legumes, organic fertiliser and chemical fertilisers. While some empirical evidence suggests that the productivity of organic agriculture tends to be lower than the conventional one[91], other studies show that bridging the gap between the yields of organic and of conventional farming is just a matter of time[92]. Integrated management of inorganic and organic sources is therefore crucial for sustainable soil fertility management and to achieve food security. The application of nutrients in a balanced proportion of organic and inorganic sources (50:50 or 25:75) can lead to further improvements in soil health and soil fertility and productivity[93]. Before undertaking the promotion of organic materials and fertilisers and to better guide farmers, field experiments must be conducted to determine the soils and

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[88] Gurung, T.R., *et.al.* (eds.) (2017) "*Mechanization for Sustainable Agricultural Intensification in SAARC Region*" SAARC Agriculture Centre, Dhaka, Bangladesh.

[89] Kolady D.E. and Awal M.A. (2018) "*Seed industry and seed policy reforms in Bangladesh: impacts and implications*", International Food and Agribusiness Management Review.

[90] Das, S. *et.al.* (2015) "*Effect of deep placement of nitrogen fertilizers on rice yield and N use efficiency under water regimes*", SAARC Journal of Agriculture.

[91] Savage S. (2015) "*The Organic Yield Gap – An independent analysis comparing the 2014 USDA Organic Survey data with USDA-NASS statistics for total crop production. Farming: A New Analysis and Its Big Implications*".

[92] Schrama M., de Haan J.J., Kroonen M., Verstegen H., Van der Putten W.H. (2018) "*Crop yield gap and stability in organic and conventional farming*", Agriculture, Ecosystem and Environment.

[93] Timsina, J. (2018) "*Can Organic Sources of Nutrients Increase Crop Yields to Meet Global Food Demand?*" Agronomy.

environmental conditions needed to improve the effectiveness of organic farming. A similar approach to the one adopted by the Evergreen Agriculture Partnership in Africa may be considered: this advanced form of agroforestry system helps to improve on-farm soil fertility, increase crop yields while also providing fodder to livestock and fuel wood to smallholding farmers. It helps to meet food demand in a sustainable way[94]. Intercropping with the inclusion of fodder could also support soil health and cater to the increasing demand for animal feed.

Accelerate farm mechanisation (especially for seeding and harvesting)

The pace of farm mechanisation gathered speed in recent years, particularly for tillage and threshing operations, driven by significant labour shortages during peak planting and harvesting times. However, there is still tremendous scope for introducing machineries in particularly for seeding, transplanting and harvesting operations. In particular, combine harvesters may be introduced by providing soft loan in *haor* areas so that the farmers can harvest their crops before the arrival of flash floods. To further develop agricultural mechanisation there is need to: update the 'National Agricultural Mechanisation Policy'; develop local service providers (LSPs) for agricultural machinery services; support access to soft and flexible credit facilities; strengthen the capacity of farmers, LSPs, mechanics and technicians through the establishment of central and local training institutes; and establish agricultural machinery testing centres[95]. This could contribute to creating rural off-farm job opportunities - such as local manufacturing of spare parts, servicing, repair and renting of agricultural machinery - which could in turn reverse the ongoing exodus from rural areas. As non-farm employment contributes to breaking persistent poverty and prevents households from falling into poverty[96], policies and programmes to support non-farm employment need to be promoted.

Promote sustainable management of water resource for irrigation

The challenges posed by climate change and growing economic development require that the quantity and quality of water resources in Bangladesh be managed by sustainable development policies[97]. The NAP 2018 suggests that the following steps be taken for irrigation and water management: use pipelines instead of irrigation canals; increase irrigation efficiency; prioritise the use of surface water for irrigation and use sustainable water saving technologies; balance the use of surface and underground water; prepare an irrigation management zone plan; use water balance models; make regular forecasts of water related information; form water management organisations; collect and store rain water; construct irrigation pipes, sustainable irrigation infrastructure and water wells; introduce pre-paid meters for the use of underground water; increase the coverage of supplementary irrigation; deploy initiatives to use industry-used water for irrigation after it has been recycled; re-excavate canals, marshes, ponds and other water bodies; encourage the use of solar energy for irrigation; construct rubber dams; provide electricity at an affordable price for irrigation; encourage joint ownership for irrigation equipment and provide necessary agricultural credit. Moreover, arsenic contamination needs to be addressed urgently through a comprehensive water management plan. Indeed, the consumption of arsenic contaminated foods poses a health risk in affected regions but also through imported food crops from arsenic to non-arsenic affected areas[98].

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[94] *Ibid.*

[95] Gurung *et al.* (2017) *Op.cit*.

[96] Ahmed, A.U. and S. Tauseef. (2018) "*Climbing up the ladder and watching out for the fall: Poverty dynamics in rural Bangladesh*", IFPRI Discussion Paper 1791. Washington, DC: IFPRI.

[97] Khalequzzaman, M. (2016) "*Sustainable development of water resources in Bangladesh in the context of planetary boundaries and environmental performance index*".

[98] M. K. Ahmed, N. Shaheen, M.S. Islam, M.H. Al-Mamun, S. Islam, M.M. Islam, G.K. Kundu, L. Bhattacharjee (2016) "*A comprehensive assessment of arsenic in commonly consumed foodstuffs to evaluate the potential health risk in Bangladesh*" Science of the Total Environment.

4.3 Programme I.3. Enhanced productivity and sustainable production of animal source foods

Programme I.3 aims at improving the availability of animal source foods (ASF) to meet needs while considering sustainability, by boosting ASF production (meat, fish, milk and eggs) through the development of profitable value chains and the promotion of responsible and sustainable livestock and fisheries. ASF – which are rich in quality proteins and essential micronutrients - contribute to dietary diversity and nutrient adequacy for good nutrition and health.

4.3.1 Progress towards achievements

Table 16 - Progress towards achievement of Programme I.3

CIP2 output proxy indicators	Item	2015/16 Baseline	2016/17	2017/18	Source
Percentage of areas protected	Coastal areas	1.2% (2013/14)	NA	NA	DoF, MoFL
	Marine areas	0.00% (2013/14)	5.4%	NA	DoF, MoFL
Percentage of wetland and natural sanctuaries maintained		1.7% (2014-15)	NA	NA	MoFL
Annual change in quantity of fish production		5.2%	6.7%	3.5%	DoF, MoFL
Fishery exports value as % of total export value		2%	1.5%	1.4%	DoF
Fishery exports value of which shrimp share in %		84%	85.9%	81.8%	DoF
GDP from fishery sector as % of agriculture GDP (excluding forest), at constant prices 2005/06		26.7%	27.6%	28.3%	BBS
Production of	Eggs (million)	11,912	14,933	15,520	MoFL, BBS
	Milk (million MT)	7.27	9.28	9.41	MoFL, BBS
	Meat (million MT)	6.15	7.15	7.26	MoFL, BBS
GDP from livestock sector as % of agriculture GDP (excluding forest), at constant prices 2005/06		12.17%	12.25%	12.18%	BBS
Growth rate of livestock GDP		3.2%	3.3%	3.4%	DLS
Number of doses of vaccines produced (million)		236.39	253.73	246.26	DLS
Annual change in artificial insemination		6.3%	6.2%	4.9%	DLS, MoFL
Number of farmers (in thousands) trained by	DoF	136.66	178.71	200.47	MoFL
	DLS	1,270	1,440	190	
Direct gender budgeting as % of MoFL budget (revised)		12.37%	12.67%	13.17%	MoFinance
Number of commercial registered farm	Poultry	80,421	81,263	22,089	MoFL, BBS
	Livestock	66,080	66,269	22,411	MoFL, BBS
	Fish and shrimp	NA	NA	216,651 (as of Dec-18)	MoFL, BBS
Number of ponds		2,167,103	2,240,719	2,477,883	Fisheries Statistical Report

Only a small section of coastal and marine areas is protected

The coastal and marine areas of Bangladesh present various opportunities to reduce the vulnerability and poverty of local communities and to significantly contribute to the development of the country. These zones hold a diversity of natural resources, including fisheries and shrimp, forests, salt and minerals. However, there are currently major threats to coastal and marine ecosystems notably due to overfishing, pollution, the fast growth of coastal populations and the rapid environmental change associated with climate change. Protecting these areas is important to maintain the biodiversity and preserve natural resources, while supporting the livelihoods of local communities. Bangladesh is making progress in protecting its coastal and marine areas, with 5.4% of its marine territory protected in 2016/17 compared to no protected areas at all in 2013/14 but efforts need to be stepped up.

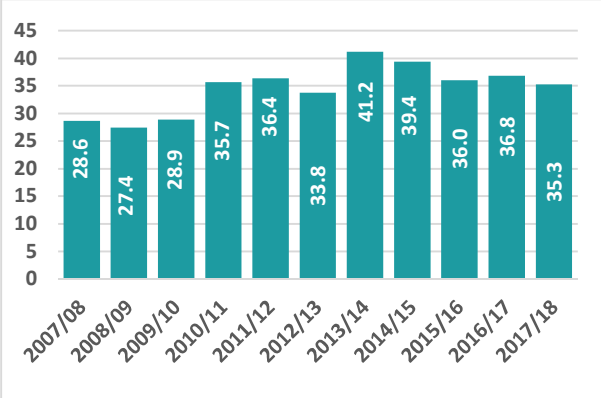
Fish production is growing steadily

The fisheries sector contributes significantly to food security in Bangladesh as almost 60% of animal protein intake comes from fish. Fish production increased consistently every year, reaching 4.3 million metric tons (MMT) in 2017/18 up from 3.9 MMT in 2015/16 and from 2.6 MMT in 2007/08. Over the reference period (2015/16 - 2017/18), the annual fish production growth averaged 5.1% which is similar to the 5.3% average growth over the 10-year period. The country has achieved self-sufficiency in fish production, by crossing the target of 4.05 MMT in 2016/17[99]. Fish culture ('inland close water') is the main sub-sector, representing 56% of total production, of which 79% is pond aquaculture. Fish capture ('inland open water') follows, at 28% of the total. Marine production only represents 15% of the total and is mainly composed of artisanal capture (85%). Aquaculture expansion has been driven by an increase in the number of fishponds from 2,167,103 in 2014/15 to 2,477,883 in 2017/18. The production of *hilsa*, the national fish of Bangladesh, has shown a fast increase (+25.7%) compared to the growth of shrimp/prawn production (+5.2%) over the same period. The production of non-farmed fish (especially small or bony fish) - richer in micronutrients, especially iron and zinc, compared to farmed species[100] - is low which could explain the decline in micronutrient intake from fish observed over the years[101].

The share of total fisheries' exports slightly decreased

The share of fishery products in total exports decreased over the reference period, a continuation of the trend observed since 2007/08. It reduced from 2% in 2015/16 to 1.5% in 2016/17 down to 1.4% in 2017/18 (Table 14). Figure 16 shows that export earnings from shrimp gradually decreased to 35.3 billion BDT after reaching 41.2 billion BDT in 2013/14 from 33.8 billion BDT in 2012/13. The negative trend is partially due to falling international prices and competitive pressure on international markets. In particular, the price of *vannamei* shrimp (grown in most Asian countries and some Latin American countries) is about 1 USD/kg cheaper than the *black tiger* variety. The falling international price of shrimp is contributing to making the domestic market more appealing for farmers, and this may end up have a positive impact on domestic availability and consumption.

Figure 16 - Shrimp export (billion BDT)



Source: Fishery Statistical Yearbook (2017-18)

The contribution of the fisheries sector to agricultural GDP increased

In line with increased fish production, the share of fisheries sector in agricultural GDP increased from 26.7% in 2015/16 to 27.6% in 2016/17. The trend continued from 2016/17 to 2017/18, reaching 28.3% in 2017/18. Reasons behind this positive picture may be due to the growing domestic demand and continued development of fish-rice cultivation and pond inland aquaculture. While fisheries play a significant role in the Bangladesh economy and is essential for FNS, its contribution to agricultural GDP

[99] Government of Bangladesh (2017) "*Yearbook of Fisheries Statistics of Bangladesh 2016-17*", Department of Fisheries.

[100] Bogard J.R., Marks G.C., Mamun A., Thilsted S.H. (2016) *"Non-farmed fish contribute to greater micronutrient intakes than farmed fish: results from an intra-household survey in rural Bangladesh*" Public Health Nutrition.

[101] Bogard, J., S. Farook, G.C. Marks, J. Waid, B. Belton, M. Ali, K. Toufique, A. Mamun, S.H. Thilsted (2017) "*Higher fish but lower micronutrient intakes: Temporal changes in fish consumption from capture fisheries and aquaculture in Bangladesh*".

is still lower than that of the crop sub-sector. This may be explained by a less developed fisheries value chain.

The production of meat, milk and eggs increased, but it remains insufficient to cover domestic demand for milk and eggs

Livestock production increased between 2015/16 and 2017/18. In 2015/16, the production of milk, meat and egg were respectively 7.28 MMT, 6.15 MMT and 11.91 billion. In 2016/17 they respectively increased by 27.6 percentage points for milk, 16.3 percentage points for meat and 25.4 percentage points for eggs. From 2016/17 to 2017/18, the increase was only 1.3 percentage points for milk, 1.5 for meat and 3.9 for egg. Despite the overall growth, production does not yet cover demand, except for meat production which has a surplus of 46,000 MT (Table 17).

Table 17: Demand, production, availability and deficit of milk, meat and eggs in 2017/18

Products	Demand	Production	Gap	Availability
Milk	15.03 MMT (250 ml/day/head)	9.41 MMT	5.62 MMT	158.19 (ml/day/head)
Meat	7.21 MMT (120 gm/day/head)	7.26 MMT	**Surplus** 46,000 MT	122.10 (gm/day/head)
Egg	17.13 billion (104 unit/year/head)	15.52 billion	1,609 million	95.27 (unit/year/head)
**Estimated population of the country: 164.7 million as of 1st July, 2018 (P) Source: BBS*				

Source: Directorate of Livestock Services (DLS)

Availability has not translated in meeting the nutrient requirements at household and individual levels, with milk and egg intake being far below the recommendations (see Outcome III). This may be explained by a rise in the total ruminant population of 1.4% (driven by cattle and goat) and poultry population of 5.4% (driven by chicken) over the reference period. The poultry sub-sector continues to drive the overall livestock production increase.

The livestock GDP growth rate increased, albeit slowly

The livestock GDP growth rate experienced a slight increase over the reference period: from 3.2% in 2015/16, to 3.3% in 2016/17 and 3.4% in 2017/18. This growth could be attributed to the efforts made in value chain development, especially in the poultry sector and milk production.

The contribution of livestock to agricultural GDP was stable but far below that of crop and fisheries

Over the reference period, the livestock share in total GDP remained at 12.2%, in line with the 12.4% obtained on an 11-year average basis. This compares with the crop and fisheries shares of agriculture GDP, 59.6% and 29.3% respectively in 2017/18.

The production of vaccines for livestock and poultry increased

In 2017/18, vaccines' production rose to 246.26 million doses for 17 diseases of cattle and poultry, from 236.39 million doses in 2015/16. This satisfactory trend demonstrates an improvement in private sector involvement in production of vaccines. However, the affordability of these vaccines for farmers, especially small-scale farmers, is an issue that needs to be addressed.

Artificial insemination continues, but at a slower rate

Artificial insemination programmes are currently underway throughout the country in order to improve local breed and production. There are over 3,998 artificial insemination centres in the country. Artificial inseminations slightly declined to 6.2% in 2016/17 and 4.9% in 2017/18 from 6.3% in 2015/16. However, over the same period, semen production, artificially inseminated cows and production of cross breed calves respectively increased to 4.29 million doses, 3.85 million, 1.23 million in 2017/18 from 4.15 million doses, 3.45 million and 1.19 million in 2015/16. Forty-five candidate bulls

have been produced in 2017/18 for artificial insemination. For cattle development, semen of beef breed *brahma* has been imported from the USA and, 23,780 *brahma* calves have been produced[102] up to 2017/18.

Large number of farmers were trained by the Ministry of Fisheries and Livestock

The Ministry of Fisheries and Livestock implemented several trainings on good production practices, reaching more than three million farmers over the reference period. In 2017/18, the number of fish farmers trained rose to 200.5 thousand from 178.7 thousand in 2016/17, while it declined sharply for livestock farmers -by 87% during the same period. Thus, more farmers involved in livestock received training than in the fisheries sector. Farmers need frequent training and support from the extension services to improve their practices. This will result in increased production. Farmers practicing fisheries/aquaculture should also receive sufficient training.

A lower budget was allocated to gender by the Ministry of Fisheries and Livestock

The budget allocated for direct interventions targeting women is still low compared to the total budget of the Ministry (13.17% in 2017/18), and the direct budget is increasing slowly every year (only 0.8 percentage points' increase in three years). Women are very important in fish value chain development, especially in processing, and require more investment.

The number of registered farms dropped sharply

Under the Animal Diseases Control Act 2005, every farm with above a certain number of birds/animal -apart from Government and family farms- needs to be registered from Director General of DLS or his/her authorised veterinary officer, paying a fixed amount of fee. This must be renewed on a yearly basis. The number of poultry and livestock farms registered in 2017/18 dropped sharply year-on-year by 73% and 66% respectively after the Government in 2017 raised the minimum number of birds/ animals for which no registration is required and introduced online registration. Currently, the minimum number of birds/animals for which no registration is required is: 9 for cows, 19 for goats or sheep and 1000 for broiler or layer or ducks. For fish farms, over 0.2 million farms were registered up to December 2018.

4.3.2 Policy development, programmes and initiatives underway

Programme I.3 channels 1,065 million USD which represents 8% of the total CIP2 budget in 2017/18, out of which, 696.3 million USD (66%) was already financed as of 30th June 2018. The largest share of financed budget (78%) is from GoB while the remaining 22% is from DPs. The shares for the financial gap from GoB and DPs are 58% and 42%, respectively. The nutrition-weighted budget accounts for 799 million USD, or 75% of the Programme's I.3 budget which shows that all the projects in this programme are considered to be nutrition-sensitive (rather than nutrition-sensitive + or nutrition-supportive).

4.3.3 Fisheries sector

Enhancing coastal and marine fisheries

The country is currently promoting coastal and marine fisheries through the *Bangladesh Sustainable Coastal and marine Fisheries project* implemented from 2013 to 2018. This project funded by the World Bank seeks to improve the coastal and marine fisheries production and its contribution to the economy and poverty reduction, while ensuring a better management of coastal and marine areas for sustainability. Another initiative - *Enhanced Coastal Fisheries in Bangladesh (ECOFISH-BD)* funded by

[102] MoFLS (2018) '*Annual report*' 2017/2018.

USAID and implemented by WorldFish - aims to support small-scale artisanal catch fisheries on sustainable *hilsa* production.

Boosting small nutrient-rich fish production

Small fish represents an opportunity to improve protein intake and micronutrient adequacy in vulnerable populations. Local small fish such as *mola*, *darkina* and *dhela* can be eaten whole (which include the bones) and are thus very rich in highly bioavailable micronutrients in large amounts (such as vitamin A, iron, zinc and calcium). They also contain high quality animal protein and essential fats**.** Increasing the quantity and frequency of small fish consumption therefore has a positive impact on nutrition. IFAD have supported from 2015 to 2018 the production of small fish through the project *Managing Aquatic Agricultural Systems to Improve Nutrition and Livelihoods in Bangladesh*. These initiatives need to be scaled-up.

Improving aquaculture productivity, income of fish farmers and nutrition-related behaviour

Aquaculture is recognised as the strongest sub-sector driving the robust development of fishery and a key provider of livelihood and food and nutrition security for a large majority of the rural population in Bangladesh. In order to further strengthen aquaculture sector's performance, the *Feed the Future Bangladesh Aquaculture and Nutrition Activity (2018-23)* is being implemented. This 24.5 million USD USAID project aims to achieve inclusive aquaculture growth for increased productivity, strengthened market systems and increased awareness and adoption of nutrition-related behaviour – with specific focus on women and youth. Continued improvement in aquaculture is a key element to support diversification into high value and nutrient-dense commodity such as fish. The project builds on the successes of the USAID-funded *Aquaculture for Income and Nutrition (AIN)* project which ended in December 2016. AIN sought to boost aquaculture production by developing hatcheries and nurseries, disseminating improved fish and shrimp seed, enhancing farm management skills of smallholders, promoting new technologies, market linkages, policy reform and capacity building. The project reached 800,000 households (55% of which were women-headed) and its major achievements included: increased fish consumption; BCC interventions on balanced diets (e.g. small indigenous whole fish with orange sweet potato) for mothers and small children; and increased availability of shrimp post-larvae and dissemination of carp's seed. Notably, AIN found that unless hatcheries' production capacity increased, the national demand for seed (currently at 500 million post-larvae/year and on an increasing trend) would not be met.

Prioritisation of the ocean economy as a source of growth in spite of environmental limitations

The Government has prioritised the use of blue spaces as a key source of growth. Indeed, a recent effort to quantify the contribution of the ocean economy[103] estimated it at 6.2 billion USD or about 3% in gross value added in 2015. The national ocean economy includes tourism and recreation (25%), marine capture fish and aquaculture (22%), transport (22%), and offshore gas and oil extraction (19%). Employment data available estimate that marine fisheries capture and aquaculture employ (full-time or part-time) over 1.3 million people. An estimated six million people are employed in sea salt production and ship breaking, and up to 30 million people depend on the ocean economy directly or indirectly. Yet, the ocean ecosystems are threatened by at least three human-driven factors, in a context of rising climate vulnerability: increasing fishing capacity; coastal development (driven by increasing coastal populations); and pollution (from pesticide residues, high-nutrient inputs from

[103] According to the World Bank, the ocean economy represents the ocean-based industry activities and assets, goods and services of marine ecosystems.

untreated sewage and release of pollutants from ship-breaking operations); in a context of raising climate vulnerability[104].

Livestock sector

Strengthening partnership and concertation for dairy sector development

The National Dairy Development Forum was revitalised in 2018 and has established its executive committee. The latter is composed of representatives from ministries and public agencies, non-state actors, research, private sector and development partners. The Forum is an opportunity to discuss challenges hindering the development of the dairy sector, mutualise the efforts of all stakeholders and strengthen PPPs. Besides, a dairy development policy has been drafted for the development of dairy sector[105].

Improving livestock productivity for better livelihoods, improved diets and nutrition

Livestock is an important sector which provides livelihoods for a large share of the population, especially in rural areas. It is also a fundamental sector for nutrition, as it ensures availability of animal source foods rich in high quality proteins and high-quality micronutrients. Therefore, more efforts need to be made to improve the performance of the livestock sector, through support to small-scale farmers who are an important share of the livestock farmers. They need more assistance to improve their performance and have access to profitable markets. To address these challenges, two important projects are being implemented, namely the Feed the Future's *Bangladesh Livestock Production for Improved Nutrition* project and the 500 million USD World Bank-funded *Livestock Development Project (2018-23).* Both projects seek to raise livestock productivity so as to improve household food security and nutrition. In addition to this, the World Bank project intends to improve the nutrition of school-aged children through consumption of milk.

4.3.4 Needs for further actions under this programme include

Fisheries sector

Update the National Fisheries Policy 1998

The Policy is outdated and needs to integrate new developments and challenges pertinent to the fisheries sector such as climate change, sustainable management of coastal and marine areas, involvement of the private sector and the SDGs.

Facilitate investment in sustainable production of nutrient-dense fish

In order to sustainably improve the availability of nutrient-dense fish, it is imperative to intensify investments in marine fisheries and promote the production of freshwater small indigenous species such as *mola* and other bony fish. This could be done through support to research development for breeding of nutrient-rich fish species and strengthening of PPPs for modern marine capture through solutions that are adapted to local communities. Profitable value chain development of nutrient-dense fish is also an important investment. While the increased availability of nutrient-dense fish is expected to have a positive impact on nutrition through improved consumption, it will also contribute to strengthening the livelihoods of fishing communities, especially the poorest.

[104] P.G. Patil, J. Virdin, C.S. Colgan, M.G. Hussain, P.Failler, T. Vegh (2018) "*Toward a Blue Economy: A Pathway for Sustainable Growth in Bangladesh*", Washington DC – The World Bank Group.

[105] Department of Livestock Services (2016) "*Dairy Policy – Final First Draft*".

Adopt a "blue economy approach" to exploit the ocean ecosystem sustainably

The "blue economy" is defined by the World Bank[106] as the range of economic sectors and related policies that together determine whether the use of oceanic resources is sustainable. This concept seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while ensuring environmental sustainability of the oceans and coastal areas. With this approach in mind, the different sub-sectors of the blue economy need to be assessed and prioritised. It is likely that traditional sectors such as capture fisheries and aquaculture will continue playing a prominent role. Overexploitation of coastal waters as result of growing trawl capacity and operations will need to be addressed. Moreover, the potential of new ocean industries - such as marine culture of seaweed and other algae, mussels, oysters, marine pearl, sea cucumbers, and sea urchins - needs to be assessed.

Livestock sector

Update the National Poultry Development Policy 2008

This Policy also needs to integrate new developments and challenges in the poultry sector, including support to artificial insemination, improvement of animal health and access to veterinary services, support to research development for animal breeding. The development of quality inputs such as feeds, drugs by the private sector and their easy access to farmers must be promoted, as well as support given to dairy sector development and egg production.

Scale-up initiatives on sustainable production in livestock sector

Interventions that have shown to be cost-effective and to generate maximum impacts should be scaled-up. Emphasis should be put on i) research development for productivity improvement; ii) support to extension services for dissemination of technologies and capacity building of small-scale farmers on sustainable livestock practices, including climate-smart ones; iii) support to the private sector on quality production of inputs and implementation of mechanisms to guarantee the access by the farmers to the inputs and iv) enhancing development of profitable value chains of meat, milk and egg.

[106] World Bank (2017) "*The Potential of the Blue Economy : Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries*".

5. Progress towards Outputs for Outcome II

5.1 Programme II.1. Strengthened post-harvest value chain with particular focus on MSMEs

Programme II.1 aims to strengthen the post-harvest value chain emphasising the role of MSMEs. It includes storage, processing, branding, labelling, marketing and trade of agricultural commodities and food value chain. The overall objective is to develop food value chains contributing to better access to nutritious food and increased rural incomes through the creation of employment. It includes three sub-programmes: (II.1.1.) Develop skills and strengthen capacity to process and supply safe and nutrient-rich foods with an emphasis on quality standards and nutrient labelling information; (II.1.2.) Adopt appropriate technology and strengthen infrastructure to allow quality improvement, value addition and fortification of foods; and (II.1.3.) Mobilise and promote producer and marketing groups for improved market access and bargaining power, especially for women and smallholders.

5.1.1 Assessment of progress

Table 18 - Progress towards achievement of Programme II.1

CIP2 output proxy indicators	Commodity /Item	2015/16 Baseline	2016/17	2017/18	Source
Quantum index of medium and large-scale manufacturing industry for food[107]		385.1	410.4	501.2	BBS Statistical Yearbook
Difference between farmgate and retail price of selected goods	**Coarse rice**	10%	5.80%	8%	DAM, MoA
	Lentil	55.2%	70.6%	18%	DAM, MoA
	Onion	23.6%	24.1%	22%	DAM, MoA
	Brinjal	51.7%	44.6%	48%	DAM, MoA
	Potato	29.1%	31.4%	32%	DAM, MoA
	Green chili	105%	52%	153%	DAM, MoA
Food and beverages exported in million BDT		69,020	80,712	93,584	BBS Statistical Yearbook/ Bangladesh Bank
Coverage of agro-business entrepreneurship training by the Ministry of Agriculture and the Ministry of Industries (BSCIC)		7,620	11,271	12,199	MoA, MoInd

Production of medium and large-scale manufacturing industries for manufacturing food increased

The quantum index of medium and food large-scale manufacturing industry describes the evolution of production trends for both private and public industries: in 2017/18, it rose to 501.2 from 410.4 in 2016/17 and 385.1 in 2015/16. Transcom Beverages Ltd., Square Food & Beverage Ltd., Acme Food & Beverage Co., Akij Food and Beverage Ltd., Partex Beverage Ltd. and PRAN Foods Ltd. are the major food and beverage producers in Bangladesh. According to the active members' database of Bangladesh Agro-Processors' Association (BAPA), there are 235 food manufacturers in Bangladesh and almost all of them also export processed food abroad[108].

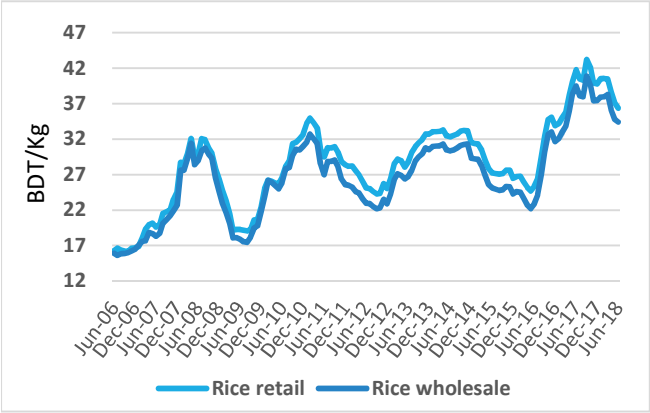
[107] The quantum index of medium and large-scale manufacturing industry for food is a proxy variable for the indicators - number of large establishments for manufacturing food and number of medium, small and micro establishments manufacturing food. It is calculated based on the total production for manufacturing food from the selected medium and large manufacturing industries from both the private and public sector.

[108] BAPA (2019) "*List of active members of BAPA*".

The difference between farm gate and retail prices decreased except for potato and green chili

Over the reference period, the difference between farm gate and retail nominal prices increased for all crops except potatoes and green chilis (Table 18). In particular, a declining trend was observed for lentils and onions since 2010/11. This decline was drastic for the price of lentils (52.6 percentage points) from 2016/17 to 2017/18 and was probably due to the impact on the domestic market of the persisting fall in the international price. This price difference for coarse rice was almost consistently below 8% over the last decade - except 2015/16, when it peaked at 10%. It decreased thereafter to 5.8% in 2016/17 and rebounded to 8% in 2017/18. This is probably explained by the three episodes of massive floods during 2017. Both retail and wholesale rice prices experienced price hikes in the wake of 2007/08 and during the 2010/11 global food price crises; and during 2016/2017 due to the flash floods (Figure 17). Thereafter, the trend moderately declined. The average difference between retail and wholesale rice prices since 2015 is 2.27 BDT/kg. The prolonged period of bad weather and the disruption to the transportation system such as with *hartals* and road blockades, contributed to the divergence between retail and wholesale prices.

Figure 17 - Retail and wholesale rice price (nominal)

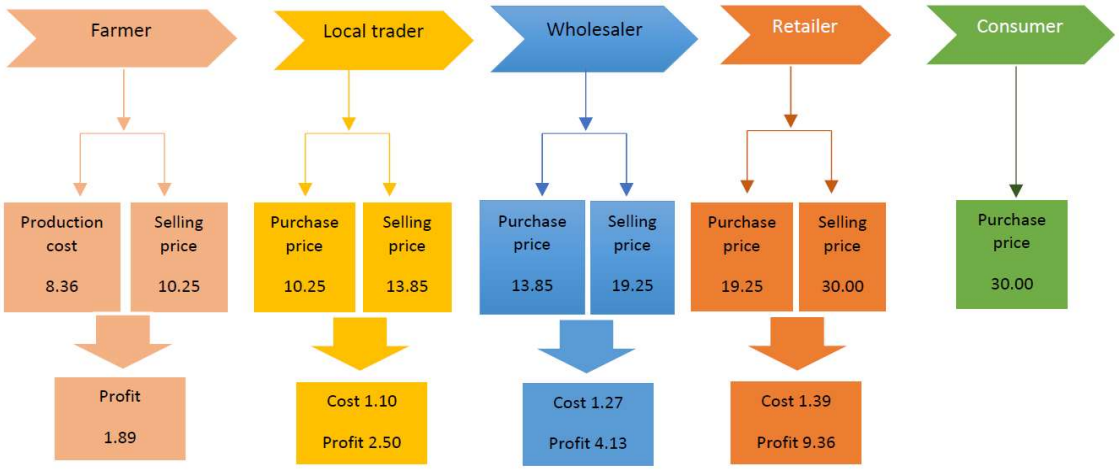


Source: Department of Agriculture Marketing (DAM)

Error! Reference source not found. shows the profit along the value chain for brinjal and differences in profits of the different value chain actors. The cost of production for brinjal is 8.36 BDT/kg while the selling price to consumers is 30.00 BDT/kg, which accounts for an overall profit of 21.64 BDT/kg over this value chain. Profits are the highest for retailers (9.36 BDT/kg) followed by wholesalers (4.13 BDT/kg). They are the lowest for local traders (2.5 BDT/kg) and farmers (1.89 BDT/kg).

Exports of food and beverages increased

Figure 18 - Brinjal value chain: actors and related-profits (BDT/Kg)



Source: Department of Agriculture Marketing (DAM)

Food and beverage exports of 59,168 million BDT in 2010/11 increased to 69,020 million BDT in 2015/16. In the last few years, exports of food and beverage increased consistently, reaching 93,584 million BDT in 2017/18[109]. In 2017/18, the main export items were fish, crustacean and other aquatic products which constitute almost 45% of total food and beverage exports and almost 1.2% of the total export value of the country. The category "preparation of cereals, flour, starch" was the second largest, which constitute almost 18% of the total export of food and beverage and almost 0.75% of the country's total exports. The third largest exported food group in 2017/18, "preparations of vegetable fruits, nuts, etc.", represented almost 9% of the food and beverage export value. The GoB plans to further increase agro-processing exports to 2 billion USD by 2021 by creating a conducive environment of agro-processing exporters[110].

Agro-business entrepreneurship training and capacity building was scaled up

Over the reference period, the Ministry of Agriculture and the Ministry of Industries (BSCIC) scaled up their coverage of agro-business entrepreneurship training and capacity building for farmers and business entrepreneurs. The total number of training provided by these two institutes was 7,620 in 2015/16, 11,271 in 2016/17, and 12,199 in 2017/18. During 2015/16 and 2016/17, MoA provided 1,350 trainings and 750 trainings, respectively. Similarly, BSCIC provided 6,270 trainings in 2015/16 and 10,521 trainings in 2016/17. MoA and BSCIC increased the number of training to 1,000 and 11,199 respectively during 2017/18.

5.1.2 Policy development, programmes and initiatives underway

Programme II.1 of the CIP2 channels 519 million USD which represents 4% of the total CIP2 budget in 2017/18, out of which, 114 million USD (22%) was already financed as of 30th June 2018. The largest share of financed budget (72%) is from GoB while the remaining 28% is from DPs. The shares for the financial gap from GoB and DPs are 33% and 67%, respectively. With 305.5 million USD (59%), the largest sub-programme is II.1.2 *Adopt appropriate technology and strengthen infrastructure to allow quality improvement, value addition and fortification of foods*. The nutrition-weighted budget accounts for 259.5 million USD, or 50% of the Programme's II.1 budget.

Vertical and horizontal integration of food value chain actors improving

Both vertical integration (contract arrangement among farmers, processors and buyers) and horizontal integration (among actors in the same value chain segment such as farmers through co-operatives) of food value chain actors are improving throughout the country. Farmers have increased their profits through contract farming compared to traditional farming[111]. Contract farming arrangements took place for fruits (e.g. mango), poultry, potato and other commodities. An example of vertical integration is the USAID *Agriculture Value Chain (AVC)* project which links contract farmers with input sellers and local large traders in order to create opportunities for large scale sales. Partex Agro, NAAFCO, and Ispahani have invested significantly in restructuring their distribution channels to a customer and growth -oriented retail market, driven by farmers' evolving needs[112]. The FAO-EU *CDAIS* (see section on Outcome II) and the *Global Agriculture and Food Security Programme (GAFSP)* provide good examples of horizontal integration through demand-led and recipient-owned initiatives.

Implementing quality standards and labelling initiatives with the release of new BFSA regulations

The Bangladesh Food Safety Authority (BFSA) has formulated guidelines for the quality standard and labelling in 2017/18 which include: Food Safety (Contaminants, Toxins and Harmful Residues)

[109] BBS *Monthly Release of Foreign Trade Statistics (FTS)*.

[110] The Daily Star (2018) "*Export of agro-processed foods to hit $1b by 2021*", The Daily Star, 26 October.

[111] Kumar A., Roy D., Tripathi G., Joshi P. K., Adhikari R. P. (2016) "*Can Contract Farming Increase Farmers' Income and Enhance Adoption of Food Safety Practices?*" IFPRI Discussion Paper 01524.

[112] USAID (2018) "*Feed the Future Bangladesh Agricultural Value Chains Project - Systemic Change CLA Case Study*", July.

Regulations 2017, Food Safety (Labeling) Regulations 2017, Use of Food Additives Regulations 2017, Food Sample collection and testing and analysis Regulations 2017, Food Safety (Food Hygiene) Regulations 2018. The GoB has appointed a sanitary inspector to each upazilla to ensure quality and safety of food processing, distributing and retailing. An *FAO project* established the Bangladesh Food Safety Laboratory Network which comprises more than 20 food analysis laboratories for food safety testing.

Small-scale milk and fish, fruit and vegetable value chains under development

There are many examples of small-scale milk and fish, fruit and vegetable value chain developments in Bangladesh over the past few years. For milk producers, the upper value chain management is critical due to storage and chilling facilities. Cooperatives and large agro-food processing companies are taking advantage of the large-scale production of processed milk. Bangladesh Milk Producers' Cooperative Union Ltd. (Milk Vita), the BRAC Dairy and Food Project (Aarong), Pran Dairy Ltd, Akij Dairy, and Rangpur Dairy are the major milk processors in the country with Milk Vita having the largest market share followed by Aarong and Pran[113]. Fish value chains are being developed in Mymensingh district under CDAIS (see section on Outcome II)[114]. Many small-scale value chain developments have already been initiated over the past few years, including mobile technology and *e-commerce platforms*.

5.1.3 Needs for further actions under this programme include

Incentivise the production and processing of affordable nutrient-rich commodities by MSMEs

Micro, Small and Medium Enterprises (MSMEs) need to be incentivised to produce and process nutrient-rich commodities through vertical and horizontal integration through the food value chain. Different types of incentive mechanisms could be initiated for the production and processing of nutrient-rich food both the private sector and public sector involvement such as certification, guaranteed price, crop insurance, post-harvest treatments, improved packaging, low-interest loan (e.g. GAFSP) which need to be sustained and integrated with other ongoing initiatives. In addition, innovative technology for processing and preservation such as the nano-food could be explored. The nano-food market increased to 30.4 billion USD in 2015 and may have a great potential in support of the improvement of nutrition content, foods' functionality and water treatment for contaminant removal which could be beneficial for MSMEs and final consumers[115].

Strengthen cold-chain systems to reduce wastage and quality/quantity loss

Inappropriate packaging and lack of cold storage facilities contribute to high post-harvest losses in fruits and vegetables, which range from 23 to 45%[116] (see Programme V.2.). The private sector dominates in the post-harvest value chain management, in particular with regards to the establishment of cold storage facilities. For example, Atel, BRAC, Wilson, Aman group, Khan Bahadur group, Golden Harvest are investors in the cold storage sector[117]. A regulatory framework and technical assistance are needed to ensure that cold storage companies can offer adapted services to their customers. For milk, fish, vegetable and fruits, adequate cold chain systems can help to reduce wastage and quality/quantity loss in the post-harvest management.

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[113] Mandate G.K., Mandal M.A.S., Rahman M.S. (2009) "*Production and Marketing of Milk in Some Selected Areas of Serajgonj District*", Bangladesh Journal of Agricultural Economics.

[114] Wadud S.F. and Rahman M.M. (2017) "*From Green to Silver – CDAIS Stories of Changes, Bangladesh*", December.

[115] Nahid A. (2017) "*Prospects of Nanotechnology in Bangladesh Perspective*", in Chemical Engineering and Processing.

[116] FAO (2017) "*Policy measures for managing quality and reducing post-harvest losses in fresh produce supply chains in South Asian Countries*".

[117] DAM (2018) "*Annual Report 2017-18*" Department of Agricultural Marketing, Government of Bangladesh.

Promote development of agro-processing to boost exports

Export earnings of agro-processing companies are rising according to current estimates of the Export Promotion Bureau. BAPA reported an increase in export earnings of processed agro-products from 500 million USD to 635 million USD over 2017/18. Bangladesh exports a variety of agro-processed food to around 30 countries and has enormous potential to scale up these exports, especially in countries with a large Bengali diaspora and for products such as spices, juice and snacks[118]. In this context, the GoB must continue supporting exports with tax exemptions and cash incentives (20% subsidy) to agro-processors. This should be integrated within an holistic approach to the food value chain development, for instance by ensuring continued provision of credit and strengthening food storage capacity (e.g. with initiatives such as *GAFSP*); by providing vocational education and training (such as what is being done with *CDAIS*); by ensuring food quality and compliance to Codex verified products' approval scheme, Hazard Analysis and Critical Control Point (HACCP) and food safety standards of importing countries, especially for food value chains with a competitive advantage on foreign markets.

Strengthen institutional and individual capacity development to support post-harvest systems

A necessary condition to address quality management, safety assurance and loss reduction in fruit and vegetable supply chains is to strengthen individual capacity of agents working along the supply chain. This includes incorporating post-harvest modules (e.g. *CDAIS*) within vocational training programmes. It is moreover important to involve MSMEs engaged in producing post-harvest technologies for local markets. Linking up with regional networks for information and technology exchange on post-harvest system development within the SAARC region would also help to learn from others' experiences.

5.2 Programme II.2. Improved physical access to markets, facilities and information

Programme 2.2 of the CIP2 aims to improve the physical access to market, facilities and information. It consists of three sub-programmes: (II.2.1.) Improve market infrastructures, physical access to market facilities, (II.2.2.) Strengthen private sector participation and private-public partnerships, and (II.2.3.) Scale-up information dissemination including the establishment ICT facilities.

5.2.1 Assessment of progress

Table 19 - Progress towards achievement of Programme II.2

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
Upazilla and union road network in good and fair condition	33% (2014)	49%	47%	LGED
Number of growth centres, rural markets, women market centres, and Union Parishad Complexes developed by LGED and DAM	356	385	367	LGED, DAM
Capacity of cold storage available (in thousand MT)	4,000	7,000	10,000	BBS Statistical Yearbook
Number of Digital Centres across the country at national and sub-national levels	5,286 (2016)	5,286 (2017)	5,312 (2018)	Ministry of ICTs
Number of food, market and infrastructure PPP contracts awarded (2015) by the PPP authority	2 (2015)	0	0	Annual Report 2015/16, Public Private Partnership Authority, Prime Minister's Office

Upazilla and union road networks improved over the reference period

The share of upazilla and union road networks in good and fair condition improved from 33% in the baseline year to 47% in 2017/18 slightly down from 49% in 2016/17. During 2017/18, the Local

[118] Katalyst (2016) "*Study on the Roles and Opportunities for Private Sector in Agro-food Processing Industry of Bangladesh".*

Government and Engineering Department (LGED) re-constructed 500 kilometres of upazilla roads costing 132.6 million USD, 1,200 km of union roads costing by 140.9 million USD, and 3,600 km village roads, costing 374.6 million USD, and 12,093 km concrete road, costing 303.7 million USD[119]. Moreover, LGED repaired and constructed a total of 35,937-meter of bridges for a total cost of about 198.2 million USD which also connects the road networks for transportation of food.

DAM and LGED continued developing growth centres and rural markets

The development of new growth centres, rural markets, women market centres and Union Parishad complexes led by LGED and the Department of Agriculture Marketing (DAM) slightly slowed down over the reference period. The number of new establishments declined to 367 in 2017/18 down from 385 in 2016/17 and compares to 356 in 2015/16. Quality maintenance of growth centres which is not reflected in these numbers is also an essential parameter to ensure that perishable food products are kept in good condition.

Cold storage capacity steadily increased

In 2017/18, the total cold storage capacity increased to 10 MMT from 7 MMT in 2016/17 and 4 MMT in 2015/16. Atel, BRAC, Wilson, Aman group, Khan Bahadur group, Golden Harvest are among the private sector investors involved in cold storage development in recent years. Cold storage powered by solar energy is a recent innovative initiative among farmers from both on-grid and off-grid areas which can be scaled up. A successful pilot project in this area was by *IDCOL* establishing R&D grants in Jhenaidah[120].

More Digital Centres appeared across the country

The number of digital centres at national and sub-national levels increased over the reference period: from 5,286 in 2016/17 to 5,312 in 2017/18 (Table 19). Although these types of centres are not new, knowledge of their existence is not widespread. It is therefore essential to boost the promotion of such centres and facilitate their use by farmers.

There were no new PPP contracts on food, market and infrastructure

Since 2015 when two food, market and infrastructure PPP contracts were awarded, no additional contracts have been awarded by the PPP authority in this field.

5.2.2 Policy development, programmes and initiatives underway

Programme II.2 channels 4,844 million USD which represents 35% of the total CIP2 budget in 2017/18 and is the largest programme in CIP2. The budget of programme II.2 almost entirely (98%) goes under the sub-programme *Improve market infrastructures, physical access to market facilities*. Out of the programme's total budget, 3,257 million USD (67%) was already financed as of 30th June 2018. The largest share of financed budget (85%) is from GoB while the remaining 15% is from DPs. The financial gap amounts to 1,589 million USD shared between GoB (73%) and DPs (27%). The nutrition-weighted budget accounts for 2,422 million USD, or 50% of Programme II.2's budget.

Expansion of transport infrastructure

Since the start of the CIP2, the GoB has continued supporting the reconstruction and expansion of roads, bridges and culverts. For instance, the World Bank financed 515 million USD in 2018 to improve coastal and marine fisheries, forest management and rural roads. This included a 100 million USD additional financing to the *Second Rural Transport Improvement Project* to support rural road

[119] LGED (2018) "*LGED Annual Report 2018*" Ministry of Local Government, Rural Development and Co-operatives, GoB.

[120] Islam, M. (2017) "*Analysis of dairy value chain and mapping of potential Solar Chiller Sites in North and South regions of Bangladesh*".

rehabilitation particularly after the 2017 heavy rains and consequent flash floods, and with an emphasis on climate-resilient planning, technical design, implementation and roads' maintenance. This followed the *First Rural Infrastructure Improvement Project* which improved and repaired over 5,000 km rural roads thereby ensuring people access to food markets, hospitals and schools.

Networking of value chain actors for better information sharing and market opportunities

Networking and knowledge exchange among value chain actors remains limited. This leaves room for strengthening networking opportunities for the various actors involved in the value chain in a single platform. For instance, the "ifarmer" is such a crowd-farming platform which provides financial services and networks to farmers by connecting them to sponsors. *Farmers' Hubs Agri-Marketing Enterprise (FHAME*) is also a one-stop service platform for smallholder farmers to ensure a more sustainable agriculture and a more effective and efficient value chain.

5.2.3 Needs for further actions under this programme include

Establish Special Economic Zones for agriculture to support high value crop processing

A possible option to facilitate a holistic set-up of high value crop processing could be to establish special economic zones (SEZ) for agriculture. Characterised by geographically defined areas and in line with the territorial business approach cited in the 7FYP, SEZ for agriculture may offer conducive incentives (e.g. simplified financial regulation and procedures) and a conducive business environment (purpose-built facilities, physical proximity of value chain actors along the chain) to set up agro-processing businesses. The Bangladesh Economic Zone Authority (BEZA) has begun proceedings to establish SEZ with a strong food processing component in Natore[121], Bogura and Nilphamari. BEZA and the Bangladesh High Tech Park Authority – tasked with overseeing the set-up of SEZ – need to expedite the establishment of SEZ with agricultural vocation.

Support development of facilities and infrastructure for storage and processing

Lack of cold storage facilities contributes to post-harvest losses both in cereals and fruits, and vegetables (see Programme II.1)**[122]**.The development of small and medium scale storage and processing facilities should be promoted for selected horticultural crops. Scalable initiatives in AVC exist and should be supported for further development of the value chain. Fish landing centres play a vital role in ensuring quality fish processing and the quick and smooth disposal of fresh fish. Such centres and logistic facilities are therefore essential to ensure value addition.

Improve market information system, pricing and early warning

A central market information system, pricing and early warning information (see Programme IV.1) should be available through easily accessible means. Market stakeholders need pricing information to ensure that they take informed decision. The DAM daily rice and atta price monitoring system for Dhaka city should be extended to other crops and markets and made accessible to local farmers retailer and processors.

[121] BEZA(2018) "*Pre-feasibility Study Report Natore Economic Zone. Infrastructure Investment Facilitation Company".*

6. Progress towards Outputs for Outcome III

6.1 Programme III.1 Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets

Programme III.1 aims to improve nutrition knowledge, food safety practices and consumption of safe and nutritious diets. While an emphasis is given to enhance dietary diversity towards prevention and control of micronutrient deficiencies, stunting and wasting, addressing the emerging concern of NCDs merits urgent attention. Promotion of healthy diet, lifestyle and increased physical activity are key strategies to prevent non-communicable diseases (NCDs). Three priority interventions are accordingly identified under: III.1.1) scaling up nutrition training and behaviour change communication (BCC); III.1.2) promotion of dietary guidelines linked with NCD strategies and related nutrition services; and III.1.3) research, development and promotion of knowledge-based tools on nutrient-dense recipes with local foods using Food Composition Tables (FCTs) for Bangladesh. It focuses on nutrition education of communities, extension workers, teachers and school-age children, youth and adolescents. Moreover, it aims to sensitise women through BCC strategies on importance of diversified and balanced diet which includes animal source foods, nutrition in first 1,000 days, infant and young child feeding practices (IYCF), safe food handling, preparation and storage and dissemination of nutrition education tools like food plates or mugs. It also includes sensitisation of children through school vegetable garden and cooking demonstrations in curriculum.

6.1.1 Progress towards achievements

Table 20 - Progress towards achievement of Programme III.1

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
Proportion of children under 6 months who are exclusively breastfed (%)	55.3% (2014)	…*	65% (2017, preliminary findings)	BDHS
Share of total dietary energy supply for consumption from cereal	78% (2013)	NA	NA	FBS FAO, BBS
Share of total dietary energy supply for consumption from non-cereal	22%	NA	NA	FBS FAO, BBS
Direct gender budgeting as % of MoFood budget	4.3%	5.9	31.8	Ministry of Finance Budget
Poor households raising home gardening and backyard poultry in selected vulnerable districts	49% (2014/15)	NA	NA	BBS
Prevalence of diabetic cases	4% (2010)	NA	6.4%	MOHFW (Health Bulletins 2016 and 2018)
Number of mass media activities for nutritional behaviour	1,000	1,000	NA	Health Bulletin 2011, DG Health Services
Number of institutions promoting dietary guidelines	3 (BIRDEM, IPHN, FPMU)	9	9	BIRDEM/IPHN/FPMU /BIRTAN

**not applicable*

Exclusive breastfeeding progressed

The World Health Organization recommends Exclusive Breastfeeding (EBF) for the first six-months of life. WHO defines EBF as the act to feed the baby with only breastmilk without any additional food or drink, not even water during the first six months. Breastmilk provides all the energy and nutrients that an infant needs to achieve optimal growth, development and health in early stage. Bangladesh Demographic and Health Survey (BDHS) showed remarkable increase in EBF rate from 55.7% in 2014

to 65% in 2017 (9.7 percentage points increase in a period of three years) (Table 20). This notable progress implies that Bangladesh has already achieved the target set by the Health, Nutrition, Population Sector Investment Plan (HNPSIP 2016-2021) of 65% EBF by 2021 and is getting closer to achieving NPAN2 target of 70% by 2025.

The share of total dietary energy supply from cereals declined marginally

The share of total dietary energy supply (DES)[123] for consumption from cereals decreased only slightly in the period 2006-2008 to 2013-2015 from 78.7% to 76.3%. Current data on DES is not yet available but previous trends suggest similar scenario during MR 2019 focus period, despite improved diversification of the food supply. 2013 FBS estimates show a per capita availability of dietary energy from carbohydrate (CHO) at 84.5%, protein at 5.4% and fat at 6.9%. The WHO/FAO normative recommendations for energy intake ranges from CHO, protein and fat, are 55 to 75%, 10 to 15% and 15 to 30%, respectively. It is apparent that the DES in Bangladesh are heavily favoured towards predominantly cereal-based dietary patterns. It is important to frequently monitor the share of total DES from cereals, which provides an indication of availability of cereals and can be used as proxy of cereals consumption and dietary diversity.

A remarkable increase was observed in direct gender budgeting within the Ministry of Food

Gender responsive budgeting is necessary for the Government to track expenses that have a direct impact on women's empowerment and gender equity. This also holds ministries accountable on their efforts to prioritise gender issues in their policy and programmatic work, in line with the National Women Development Policy 2011. Prioritising women's development and gender-responsive budgeting has been well-reflected. Unlike previous fiscal years, the direct budget allocated to gender issues within the Ministry of Food drastically increased from 4.3% in 2015/16 to 31.8% in 2017/18. This increase by 27.5 percentage points in two years is commendable and needs to be accelerated.

The promotion of home gardens and backyard poultry continued among poor households

Backyard poultry and home gardens provide a double opportunity to poor households. While they offer direct access to nutrient-dense foods for better diet diversification and quality, especially for women of reproductive age and children under-five years, they can also serve as income-generating activities. In Bangladesh, initiatives are being implemented to promote home-gardening and backyard poultry in vulnerable households. One of them is the Government's "*Amar Bari Amar Khamar*" (My house my farm) programme which provided support to 1.28 million vulnerable households[124], of which about one third were engaged with home gardening and backyard poultry.

Prevalence of diabetes increased

Bangladesh is one of the top ten countries in the world with a high-burden of diabetes[125]. About 3% of all deaths across all ages are accountable to this disease[126]. Similar to global and regional trends, an increase in the prevalence of diabetes is noted in Bangladesh, from 4% in CIP2 baseline to 6.4% in 2018. This is far from the target of 0% by 2025 set in the Multisectoral Action Plan for Prevention and

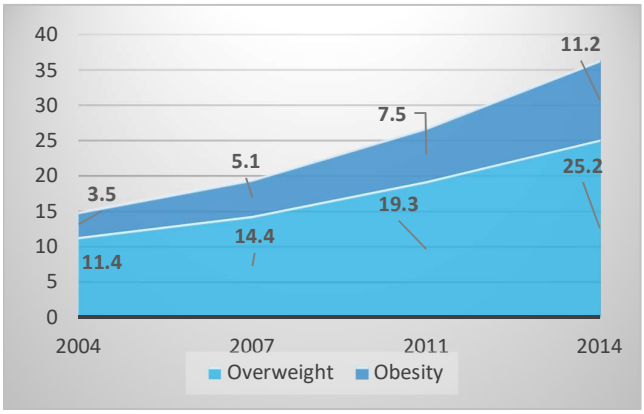
[123] DES is calculated for a three-year average.

[124] As of April 2019.

[125] IDF (2013) "*Diabetes atlas Sixth Edition: International Diabetes Federation*".

[126] World Health Organization (2018) "*Noncommunicable Diseases (NCD) Country Profiles, Bangladesh*".

Figure 19 - Prevalence of overweight and obesity among women in reproductive age (%)



Source: BDHS 2004, 2007, 2011 and 2014

Control of Non-communicable Diseases 2018–2025. The country is experiencing a steady increase in overweight and obesity prevalence among adults - especially among women in reproductive age (Figure 19)- which are contributory factors of diabetes and other diet-related non-communicable diseases.

The number of nutrition-related mass media activities remained constant

Mass-media activities have the potential to reach numerous targeted beneficiaries. Media such as national and local television channels and radios are useful to disseminate simple but powerful messages. The number of mass-media activities broadcasting nutrition messages have remained constant since 2015/16, which is commendable. However, it is important to institutionalise the organisation of these mass-media activities for sustainability and to assess their impact on behavioural change and nutrition outcomes.

An increased number of institutions are promoting the Food Based Dietary Guidelines for Bangladesh

The Food Based Dietary Guidelines (FBDGs) have been revised and published in 2013 to serve as an important nutrition education tool. They contain general dietary guidelines and nutrition messages developed through formative research. Five thousand copies of FBDGs have been produced and to date, 4,700 have been distributed and used by various Government institutions and development partners (Table 21).

Table 21: Status of dissemination of the FDBGs from 2015/16 to 2017/18

Target Institutions	Purpose	Numbers reached	Coverage
BIRDEM (Hospital & Research)	Research & training of practitioners	3,500	National, sub-national
BIRTAN, MoA	Short training courses, advocacy meetings, symposia, workshops	150	National, sub-national
BARI (Research, MoA)	Research, training, nutrition education	40	National
BARC (Research)	Research, training, nutrition education	10	National
INFS (Academia)	Research, training, nutrition education	300	National
BAU (Academia)	Research, training, nutrition education	100	National
BBF (NGO)	Research, training, nutrition education	200	National
BRAC	Training, nutrition education	30	National, sub-national
FAO (UN)	National & international days or week (i.e. World Food day, World Egg day, National Fish week, World Health day, National Nutrition week, Nutrition Olympiad, World breastfeeding week); Training/workshops	200	National
DAE (MoA)	Extension officials use in their training programmes	100	National, sub-national
Other Stakeholders	Training, nutrition education	370	National, sub-national
Total		**5,000**	

The use of FBDGs increased from three institutions in 2015/16 to nine in 2017/18. Amidst this positive trend and considering the number of institutions working on food and nutrition security, there is need for accelerating the use of FBDGs at central, subnational and community levels. Other tools such as the "Healthy Food Plate" and the "Bangladesh MDD-W Healthy Mug" (Figure 20 and 21 respectively) have been developed as outputs of the FBDGs, with collaborative support from a range of stakeholders. The USAID-funded *SHIKHA project* reviewed the Desirable Dietary Pattern developed by BIRDEM/FPMU/FAO and the baseline findings on nutrition and dietary practices of pregnant women in Bangladesh to conceptualise the food plate. The national Food Composition Table 2013 served as a key source of reference to calculate the nutrient content of the foods used. Key ministries, training institutions, the *Meeting the Undernutrition Challenge (MUCH)* and other nutrition programmes are using the tools for training and for wider dissemination to enhance nutrition awareness and improve diets.

Figure 20 – Healthy Food Plate

Source: FAO Bangladesh

Figure 21 - Bangladesh MDD-W Healthy Mug

Source: MUCH (FAO, Bangladesh)

6.1.2 Policy development, programmes and initiatives underway

At a total budget of 205 million USD, programme III.1 represents a mere 1.5% of the total budget, 74% of which is already financed (either for ongoing projects or projects already completed in the life of the CIP2) and the rest in the pipeline. To some extent, this may reflect the fact that the types of interventions to enhance nutrition knowledge, promote good practices and consumption of safe and nutritious diets will be less costly than interventions that require the building of infrastructure for example. But this should not conceal the fact that much more attention is needed in this area. The GoB and DPs have already financed comparable amounts with a 56% and 44% share, respectively. Only 18% of the 52.7 million USD in the pipeline is by the GoB.

Launching of the Multisectoral Action Plan for Prevention and Control of Non communicable Diseases (2018-25)

In May 2018 a Multisectoral Action Plan for Prevention and Control of Non communicable Diseases (2018-2025) with a three-year operational plan was adopted in alignment with the 7FYP and the 4th Health, Nutrition and Population Strategic Investment Plan (HNPSIP). This action plan prioritised the promotion of healthy diets high in fruits and vegetables and low intake of saturated fats/trans-fats, free sugars and salt through dissemination of dietary guidelines, mass media campaign and school nutrition education.

Revision of the 2015 National Dietary Guidelines

Dietary guidelines for Bangladesh are an essential tool for large scale behaviour change campaigns. Dietary guidelines promote the concept of healthy diet and lifestyle throughout the lifecycle. They highlight the need to include a variety of food groups to achieve nutritionally-adequate diets and point to the adequate intake of foods with recommended portion sizes for an optimal health. The process of revision of the national dietary guidelines formulated 2015 has started in 2018 and will be completed in 2019. The updated version will include with age-specific and disease-specific dietary guidelines. The Ministry of Food plans to widely disseminate these revised dietary guidelines in 2019.

Development of Dietary Guidelines for garment sector workers

Garment workers constitute an important share of the country's workforce. Existing data shows that they are affected by malnutrition, especially female workers[127,128]. Lack of nutrition awareness and insufficient nutrition knowledge are some of the factors associated with malnutrition in this group. To improve the situation, the Dietary Guidelines document is being developed using the National Food-Based Dietary Guidelines and taking into consideration the nutritional needs of the workers. This is to serve as a nutrition education tool. The Guidelines are expected to be launched in 2019. This initiative was launched by the Ministry of Labour and Employment and is supported by Global Alliance for Improved Nutrition (GAIN) and the Institute of Nutrition and Food Science (INFS) of the University of Dhaka.

Promotion of nutrition through national nutrition events

Bangladesh has been celebrating a *National Nutrition Week* every year to sensitise the population on what adequate nutrition is and why it is important and to showcase best practices. Activities as well mass-media campaigns are organised to reach out to the general population. The *Nutrition Olympiad* which was celebrated as part of the Nutrition Week this year, is a national event organised since 2017 to sensitise youth and adolescents to the concept of healthy diets for better nutrition and health. More than 600 adolescents attend this occasion. Other important national events include the *World Food Day*, the *World Breastfeeding Week* and the *National Food Safety Day*.

The GoB, in collaboration with FAO through *MUCH*, has also been organising annual Technical Symposia on nutrition since 2016. While the 2016 Symposium focused on Nutrition-Sensitive Agriculture, 2017 and 2018 ones covered Nutrition-Sensitive Social Protection and Nutrition-Sensitive WASH respectively. The 2018 Symposium was coupled with a Technical Consultation on ICN2 follow-up jointly organised with WHO, where ministries showcased their achievements in implementing the recommendations of ICN2 Framework for Action. These national events are high-level opportunities to promote nutrition and share best practices.

6.1.3 Needs for further actions under this programme include

Integrate nutrition Behaviour Change Communication into nutrition-sensitive programming

The *Agriculture, Nutrition, and Gender Linkages (ANGeL)* project integrated agricultural production with Nutrition Behaviour Change Communication (NBCC) and gender sensitisation[129]. This research found that this integrated approach improved the household diet quality and child dietary diversity. Evidence from IFPRI-WFP's *Transfer Modality Research Initiative (TMRI)* also showed that: integration of nutrition BCC with social protection improved the infant and young child nutrition (IYCN) knowledge

[127] Khatun T., Alamin, A., Saleh,F., Hossain, M., Hoque, A. and Ali, L. (2013) "*Anemia among garment factory workers in Bangladesh*", Middle-East Journal of Scientific Research.

[128] Riaduzzaman M. (2017) "*Health and Nutritional Status of Female Garment Workers in Bangladesh: A Critical Analysis",* International Journal of Research.

[129] IFPRI (2018) "*Agriculture, Nutrition, and Gender Linkages (ANGeL). Dhaka, Bangladesh*".

in rural Bangladesh[130]; combining cash transfer with nutrition BCC reduced childhood stunting by three times the national average and contributed to reduced intimate partner violence[131]. It is important that coordination among sectors that undertake nutrition education is strengthened, and that the messages disseminated are also harmonised. To understand the factors that determine food habits and choices, a national study on "drivers of food choices" is required.

Promote consumption of underutilised traditional foods

Traditional and indigenous food resources contribute to the diversity in food systems in developing countries. These foods which include minor cereals, special maize varieties, oilseeds, indigenous fish species, local fruits, vegetables and seeds are now underutilised, despite having a much higher nutrient content than globally known species or varieties commonly produced and consumed[132]. They are also less damaging to the environment and are culturally acceptable. Unfortunately, due to the urbanisation and transformation of eating habits towards increasing consumption of imported and processed foods, they are minimally consumed. Traditional foods should be promoted by preserving genetic species, highlighting their importance in the current production systems, and exploiting opportunities to enhance their production and consumption through production technologies, nutrition education and value chain development.

Integrate practical nutrition education activities in schools, including school gardening

The school is the natural environment for education and can help shape the child's eating patterns and attitudes. Promoting nutrition education in schools is an opportunity to have profound changes in children which can also trickle down to households and communities. Though nutrition has been integrated into existing school curricula (under the subject "General Sciences"), practical activities have yet to be included through school gardening and cooking demonstrations for example. School gardening provides children with basic knowledge on agriculture while promoting healthy diets and fostering good food habits. Cooking demonstrations can provide practical nutrition knowledge to disseminate principles of nutrient conservation and food safety in food handling and preparation. Expansion of school feeding programmes should cover secondary schools to reach adolescents.

Harness the potential of new ICTs to promote nutrition

New Information and Communication Technology (ICT), which includes internet-based social media platforms, can be used to disseminate nutrition education messages and dietary diversity materials to reach a wider range of population, including adolescents. Smartphones applications for promoting healthy diet and nutrition could also be developed in collaboration with nutritionists and dietitians, considering the increasing number of people that possess smartphones.

6.2 Programme III.2 - Optimised food utilisation through provision of safe water, improved food hygiene and sanitation

With increased availability and accessibility of food, it is important to ensure adequate food utilisation for optimum food digestion and nutrient absorption and use by the human body. This Programme intends to scale-up access to WASH facilities, improve hand washing practices and also food preparation, handling and services practices to avoid food contamination and occurrence of diseases that can prevent adequate nutrient absorption.

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[130] Hoddinott J., Ahmed A., Karachiwalla N.I., Roy S. (2016) "*Adolescent girls' infant and young child nutrition knowledge levels and sources differ among rural and urban samples in Bangladesh*", Maternal & Child Nutrition.

[131] Roy S., Hidrobo M., Hoddinott J.F. and Ahmed A.U. (2018) "*Transfers, behavior change communication, and intimate partner violence: Post-program evidence from rural Bangladesh*". The Review of Economics and Statistics.

[132] FAO (2014) "*Promotion of underutilized indigenous food resources for food security and nutrition in Asia and the Pacific*" FAO Regional Office for Asia and the Pacific, Bangkok.

6.2.1 Progress towards achievements

Table 22 - Outputs indicators and progress for Programme III.2

CIP2 output proxy indicators		2015/16 Baseline	2016/17	2017/18	Source
Percentage of urban and rural population with access to safe drinking water [SDG6.1.1][133]	Urban	99.1%	…*	98.7%	DPHE
	Rural	97.0%	…*	97.3%	DPHE
Percentage of urban and rural population with access to sanitary latrines [SDG 6.2.1][134]	Urban	56.7%	…*	55.8%	DPHE
	Rural	31.0%	…*	32.3%	DPHE
Number of children ≤5 years admitted in upazilla health complexes, at district-level secondary hospitals and in medical college hospitals for diarrhea and gastroenteritis of infectious origin	National	148,078 (2015)	464,740[135] (2016)	…*	DGHS, Health Bulletin

** not applicable*

Access to safe drinking water is almost universal

Access to potable water is almost universal in Bangladesh, both at urban and rural areas (respectively 98.7% and 97.3% in 2017/18). The majority of the population uses tube-well: 94% in rural areas versus 71% in urban. Access to tap water is still low, especially in rural areas: 3.3% against 27.4% in urban areas[136]. The country is on track to achieve the target of 100% access to safe drinking water by 2021, as defined in the HNPSIP 2016-2021 (Table 22).

No progress was made in access to sanitary latrines, especially in rural areas

There is an unchanged situation in the share of population using sanitary latrines in urban and rural areas. The percentage of the population with access to sanitary latrines is still low, especially in rural areas. If the trend continues, it will be difficult to achieve the national target of 100% by 2021 set in the HNPSIP 2016-2021.

Large number of under-five year children were admitted in health facilities for diarrheal diseases

The World Health Organization (WHO) estimates that half of the cases of child undernutrition are due to repeated diarrhoea and intestinal infections caused by poor sanitation and hygiene conditions or lack of safe water[137]. There are no available data on the number of children admitted in primary, secondary and tertiary health centres for diarrhoeal and gastroenteritis of infectious origin in 2017/18. However, there is a significant number of under-five children (464,740) admitted in 2016 in primary, secondary and tertiary health centres for diarrhoea, that could be, among others, a consequence of infectious diseases affecting the gastrointestinal tract. This represents 68% of total under-five children admitted for various diseases or conditions.

[133] SDG indicator 6.1.1: Proportion of population using safely managed drinking water services.

[134] SDG indicator 6.2.1: Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water.

[135] Number of children ≤5 years admitted in upazilla health complexes, district-level secondary hospitals and medical college hospitals for diarrheal diseases (proxy of the CIP2 indicator).

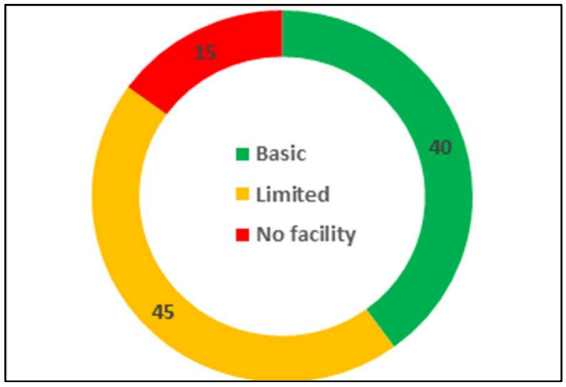
[136] BBS (2018) "*Report on Bangladesh Sample Vital Statistics 2017*".

[137] WHO (2008) "*Safer water, better health: Costs, benefits and sustainability of interventions to protect and promote health*".

Appropriate handwashing was not scaled-up

Adequate handwashing with soap and clean water is a cost-effective intervention that can help reduce food contamination and malnutrition. Households that have a handwashing facility with soap and water available on their premises are considered to meet the criteria for a basic hygiene facility (SDG targets 1.4 and 6.2). The two other categories are those with limited access (availability of a handwashing facility on premises without soap and water) and no facility (no handwashing facility on premises)[138]. In Bangladesh, the proportion of the population with access to basic handwashing facilities is only 40% in 2017 (Figure 22).

Figure 22 - Population with access to handwashing facilities (%)



Source: WHO/UNICEF Joint Monitoring Programme database.

6.2.2 Policy development, programmes and initiatives underway

Like the other programme under this CIP2 Pillar, the Programme on *Optimised food utilisation through the provision of safe water and improved hygiene and sanitation* accounts for only 1% of the entire CIP2 budget at 140.6 million USD only. Of this, the pipeline is practically nil which means neither the GoB nor the DPs have any plans to intervene in this area in the near future. Out of the already financed budget (either for ongoing projects or projects already completed in the life of the CIP2), the share of the DPs is only of 29%. While interventions in this area are less costly explaining in part the relatively low budget allocated to it, it is also clear that its importance for ensuring Bangladesh's FNS needs to be stressed and actions taken urgently.

Improving access to WASH in rural areas

Funded by the World Bank, the *Bangladesh Rural Water Supply and Sanitation Project* implemented from 2012 to 2017 aimed to improve access to WASH facilities for rural populations. On completion of the project in December 2017, 1,480 thousand people had been provided with access to improved water sources against 924 thousand targeted beneficiaries, and 247.5 thousand had access to hygienic latrines against 225 thousand targeted.[139]

Improving access to WASH in urban slums

Though commendable achievements were recorded in urban areas, access to WASH for populations living in slums remains a challenge. To overcome this situation, the GoB has initiated various interventions, such as the *WASH for Urban Poor Project* implemented from 2018 to 2022, funded by the Embassy of Sweden and implemented by WaterAid. The project targets a total of 450 thousand poor people living in urban slums in three cities – Dhaka, Chattogram and Khulna – and three municipalities – Saidpur, Sakhipur and Paikgachha. While these projects which are implemented with support from DPs demonstrated positive results, it is key that the GoB develop a sustained programme that will be institutionalised within the Ministry of Local Government, Rural Development & Co-operatives (MoLGRDC) and will cover both rural areas and urban slums.

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[138] Households that have a facility but lack water or soap are classified as having a limited facility and are distinguished from households that have no facility at all. In some cultures, ash, soil, sand or other materials are used as handwashing agents, but these are less effective than soap and are therefore counted as limited handwashing facilities.

[139] World Bank (2018) "*Bangladesh - Rural Water Supply and Sanitation Project",* Washington, D.C.: World Bank Group.

6.2.3 Needs for further actions under this programme include

Promote Public-Private-Partnerships in WASH sector

The private sector can play a significant role in improving access to WASH, including establishing handwashing facilities, especially in urban slums, public places, rural areas and public schools, through the development of affordable and user-friendly technologies. Promotion of local entrepreneurship to deliver WASH-related services could be promoted. The GoB should facilitate the involvement of the private sector through the provision of incentives.

Scale-up SBCC interventions on improved hygiene practices, especially hand washing

More social and behaviour change communication (SBCC) interventions are needed to improve handwashing practices. This includes mass-media campaigns - through local television channels or radio, also using new technologies of communication and information such as the internet - as well as community interventions (one-to-one counselling). These SBCC interventions should be systematically included in the package of services to improve access to WASH, including in schools, public spaces, rural areas and urban slums.

Integrate nutrition in WASH interventions

WASH programmes are often implemented in areas that are vulnerable to malnutrition. They should therefore be designed to target households with malnourished children and women of reproductive age or those at high risk of malnutrition. These programmes can serve as a key platform for enhancing the delivery of essential nutrition interventions. Collaboration between Nutrition and WASH sectors is important to ensure alignment for better outcomes. This would involve undertaking a joint situation analysis, identifying beneficiaries and a minimum package of interventions, as well as defining joint monitoring arrangements.

7. Progress towards Outputs for Outcome IV

7.1 Programme IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, agriculture rehabilitation and mitigation measures

This programme aims to ensure that systems are in place to protect vulnerable groups' food and nutrition security during and after disasters. It consists of three subprogrammes: 1) to increase the resilience of agricultural systems, including the production of disaster resilient nutritious crops especially by vulnerable populations; 2) to ensure social and economic access to food for the poorest sections of the population in times of crisis and in areas most affected by disaster; and 3) to scale-up modern food storage facilities for an improved Public Food Distribution System particularly in disaster prone areas.

7.1.1 Progress towards achievements

Table 23 - Programme IV.1: Outputs indicators and progress against baseline

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
No. of usable cyclone shelters	3,768 (2014)	3,868	3,868	DDM/LGED
Number of rural communities with disaster resilient habitats and communities' assets	7,334 (2013)	7,834	7,934	DDM
Direct gender budgeting as % of MoDMR budget	45.8%	23.1%	34.7%	Ministry of Finance
Distribution of foodgrain through PFDS (thousand MT)	1,216	1,216	1,102	FPMU
Effective grain storage capacity at close of fiscal year (thousand MT)	1,870	1,876	1,877	ITDS, Food Directorate
Average use of effective GoB foodgrain storage capacity	75%	44%	52%	MISM, Food Directorate
Actual closing stocks as % of budget target	52%	80%	64%	National Budget, FPMU Stock Flow Table
Environment CIP: Early warning information enhanced through Regional and Global Initiatives (MoUs and LoAs)	4	5	5	FAO/MoEFC

The number of cyclone shelters built remained constant

The number of LGED usable cyclone shelters in 2017/18 - 3,868 - are still some way away from the 7FYP target of 4,447 for 2018 and have shown no sign of increasing either. Such measures are paramount in a country where a severe tropical cyclone happens every three years on average, where about 25% of the land mass is inundated with flood waters every year and severe flooding occurs every four to five years, covering 60% of the land mass[140]. Overcrowded facilities with limited adjustments made for woman's needs such as separate toilets or private spaces for nursing mothers have been observed[141]. This can prevent some women from wanting to use these shelters.

The number of rural communities with disaster resilient habitats and communities' assets grew

The number of rural communities with disaster resilient habitats and assets is gradually increasing: from 7,334 in 2014 to 7,934 in 2017/18. The construction of elevated wells for example are preventing water from becoming contaminated during flooding.

[140] World Bank (2018) "*Brief: Bangladesh Disaster Risk and Climate Resilience Program".*

[141] Arefin Chowdhury M.M., Jahan M., Jisan M.A., Kabir R., Haq M.I., Hossain M.J. (2015) "*A Study of cyclone shelters in the coastal Bangladesh: an assessment from gender perspective*" Paper presented at the International Conference on Gender, Diversity and Development.

The Ministry of Disaster Management and Relief's gender budget was low and fluctuating

While the beneficiaries included in the safety nets under this ministry are often selected on the basis of gender or are at least women are given priority, the direct gender budget percentage in its total budget fluctuates from year to year at 23.1% in 2016/17 and 34.7% in 2017/18. This is quite some way from past figures that stood well over 40%. The Directorate of Disaster Management (DDM) appreciates the importance of focusing on women and continues to sensitise its staff with, for example, a guidebook developed in 2009 on 'Practicing Gender & Social Inclusion in Disaster Risk Reduction'[142]. But further sensitisation is needed to the necessity of putting women at the heart of disaster preparedness and response.

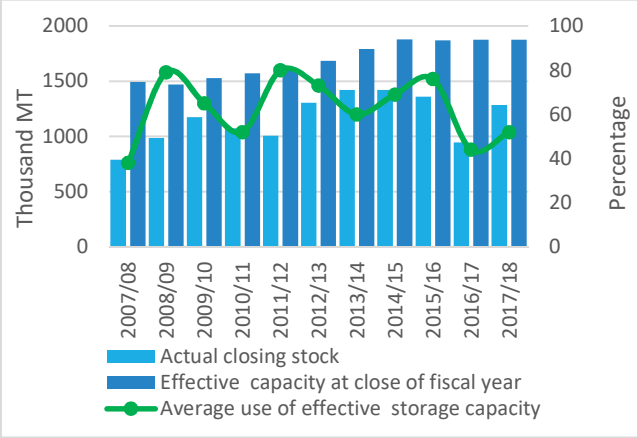
The foodgrain distributed by the Government declined

Most of the Public Food Distribution System (PFDS) channels falls under the Government's recurrent budget and are therefore not monitored under the CIP2. This is the case of the *Vulnerable Group Feeding (VGF)* for example or the *Test Relief (TR)* which are interventions that help households tackle the effect of shocks on their FNS. Although this is also the case of the *Vulnerable Group Development (VGD)*, an *Investment Component for the VGD (ICVGD)* programme falls under CIP2 (see below). While these programmes do not therefore constitute CIP2 outputs, their size matters as they require storage and efficient management, elements that require investments that fall under the purview of the CIP2. The distribution amounted to 1,216 thousand MT in 2015/15 and 2016/17 and declined to 1,102 thousand MT in 2017/18.

Public grain storage capacity remained unchanged

Since the start of the CIP2, effective public grain storage capacity has made very limited progress: from 1,870 thousand MT in 2015/16 to 1,876 in 2016/17 and 1,877 in 2017/18 (Figure 23) in spite of the Government's objective of reaching 2700 thousand MT by 2020. While the Government intends to turn to cash safety nets when appropriate, important storage building projects are currently taking place in strategic locations over the country in order to be able to respond swiftly in case of need, but the results are yet to materialise. This very slow change contrasts with the fast addition of storage witnessed during the life of the CIP1.

Figure 23 - Closing GoB foodgrain effective capacity and average use of storage capacity (%)



Source: Ministry of Food, Bangladesh

The average use of effective GoB foodgrain storage capacity was variable

The average utilisation of effective storage capacity reflects the interactions between stock building through domestic procurement/import and distribution of grains through different channels. From a baseline value of 75% in 2015/16, this indicator experienced a sharp fall in the next year to 44% and picked up again to some extent up to 54% (**Error! Reference source not found.**). The 75% may considered close to full capacity utilisation given the seasonality of procurement and the impossibility of attaining full capacity utilisation for more than a short time in traditional storage facilities. The

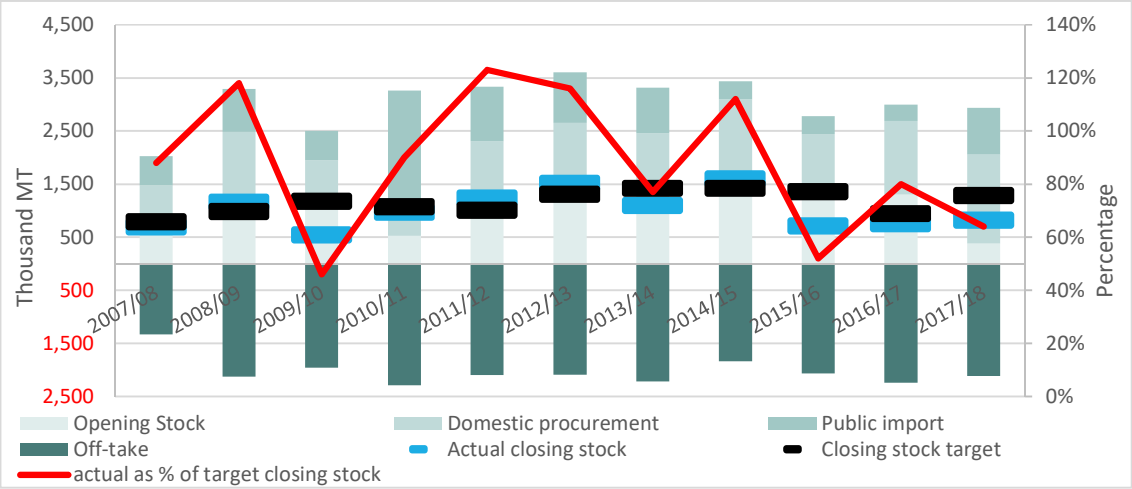
[142] GoB (2009) "*Practicing Gender & Social Inclusion in Disaster Risk Reduction*".

slump observed after that is likely to reflect the flash and severe floods and fungal attacks which created important production shortfalls as well as lower imports in 2016/17. Following these events, the Government tried to rebuild its stocks through imports which took some time to pick up.

Stock planning improved, albeit irregularly

Actual closing Government stocks compared to the budget target increased dramatically in the first year of the CIP2, to 80% from 52%. **Error! Reference source not found.** shows how throughout the fiscal year, GoB adds imports and domestic procurement to the opening stocks on the one hand and distributes foodgrain through the PFDS on the other, yielding the annual closing stock. In 2016/17, the Government target for its closing stocks was particularly low, hence the relatively high actual as percentage of target closing stock. As it increased its target for 2017/18, this indicator ratio declined to 64%: indeed, the opening stock was extremely low (almost a thousand MT less than in the previous year) mostly because of a lower-than-planned procurement explained by a rise in market which the set procurement price could not compete with, devastating floods and very limited imports. The Bangladesh Bank temporarily allowed rice traders to import rice on three months' deferred payment in order to boost rice trading and rice supply to the market. It also slashed the rice import tariff to 2% percent from 10%. However, this was not sufficient to attain the set target for stocks.

Figure 24 - Opening GoB foodgrain stock, intake and offtake, closing stock Budget target and actual closing stock as % of target



Source: ITDS, Food Directorate and MISM, Food Directorate

The number of regional and global initiatives to improve early warning information was static

Since 2015/16, four initiatives aimed to enhance early warning information are in place in Bangladesh: the Cyclone Early Warning, the Cyclone Preparedness Programme, Red Crescent Volunteers as well as Interactive Voice Response technology through mobile phones. These significant investments mean Bangladesh boasts a substantial capacity in warning. Only one additional initiative was initiated in 2017/18 in collaboration with GIEWS. The Country Investment Plan for Environment, Forestry and Climate Change (2016 – 2021) proposes investment areas to bridge the gaps that do exist such as the extension of the time horizon of flood forecasting.

7.1.2 Policy development, programmes and initiatives underway

As of June 30th 2018, 940.5 million USD was channelled under Programme IV.1. This represents 7% of the total CIP2. DPs contributed to a hefty 81% of the 924 million USD already financed (either for ongoing projects or projects already completed in the CIP2 lifetime) in contrast with the GoB's 19%.

Worryingly, only a mere 16.7 million USD - worth of projects were included in the pipeline at the period of reference in spite of the obvious continuing needs in this sector as testified by recurring natural disasters.

Recognition of the need to accelerate progress in disaster preparedness and mitigation

As a signatory to the Sendai Framework for Disaster Risk Reduction 2015-2030 endorsed by the UN General Assembly, Bangladesh is committed to investing in risk reduction and strengthening resilience. This framework is a 15-year, voluntary, non-binding agreement which recognises that the State has the primary role to reduce disaster risk, but that responsibility should be shared with other stakeholders including local Government, the private sector and other stakeholders. The Global Facility for Disaster Reduction and Recovery (GFDRR) has worked since 2007 to help countries, including Bangladesh, better understand and reduce their vulnerability to natural hazards and climate change. Substantial projects such as the 375 million USD World Bank *Multipurpose Disaster Shelter Project* effective since 2015 aim to strengthen emergency preparedness and reduce the vulnerability of the coastal population in selected coastal districts of Bangladesh to climate change and natural disasters. This specific project is expected to benefit nearly 14 million people by improving access to safe havens in the event of a natural disaster, build their resilience to natural calamities and help speed up recovery by protecting critical assets.

Provision of credit for disaster preparedness and post-disaster rehabilitation

Palli Karma-Sahayak Foundation (PKSF) established in 1990 by the GoB, created a Disaster Management Fund in 1998, renamed Sahos in 2007, to provide quick financial assistance to the victims of such disasters to help them cope with and recover from the economic shocks, prevent them from selling advance labour or valuable assets, and enable them to rebuild their life. This fund is generally distributed during or after a disaster for the restoration of livelihood including repairing of houses, installation of tube-wells and latrines, urgent medical services, reinstating IGAs and procuring consumer items to meet emergency needs. The International Federation of Red Cross and Red Crescent Societies (IFRC)is also piloting a Forecast-based Financing (FbF) since 2015 which releases humanitarian funding based on forecast information for pre-agreed activities which reduce risks, enhance preparedness and response, and make disaster risk reduction within the humanitarian assistance overall more effective.

AIGAS provided to protect livelihoods of those most vulnerable

A project such as *ECOFISH* under the Department of Fisheries has shown that protecting natural resources from overexploitation to safeguard the diversity of the nutrition pool of the country does not have to translate in limited sources of livelihood for certain groups. For example, this project has added value to *hilsa* fisheries via fisheries conservation measures while improving the resilience of fisheries-dependent communities by diversifying their economic opportunities. This has also made them more resilient to climate shocks and stresses in the process[143].

Stock building made more efficient

Procurement of rice by the Government to respond to disasters through the PFDS does not always achieve set targets. While this can be due to the inadequacy of the procurement price as was the case in 2016/17 due to big fluctuations in the market price, it can also be explained by inefficiencies in the procurement process. To this effect, the GoB has planned to automate the procurement system to manage communications and services to farmers, millers and Government officials. The World Bank-financed *Leveraging ICT for Growth, Employment and Governance (LICT)* Project of Bangladesh

[143] USAID/Bangladesh ACME (2018) "*ECOFISH Midterm Performance Evaluation Report*".

Computer Council under the ICT Division has developed software-based application to digitise the food procurement system.

Support to move the bulk of food SSNs to cash transfers

While it is essential to improve the mechanism of food distribution, there is a gradual move to cash transfers, and it is important that the initiatives to enhance the PFDS under the CIP2 are synchronised with this proposed change. The 2015 National Social Security Strategy (NSSS) acknowledged the significant advantages of cash transfers over food transfers in supporting food security through conventional social security schemes. Although food transfers are to continue as a disaster management response, this document announced that in a longer perspective, all workfare-based food programmes could be converted into cash transfers. TR was thus discontinued in 2017 with the Government switching to benefits in cash rather than kind. An upcoming 1,343 million USD *Cash Transfer Modernisation Project* is to enhance cash transfer programmes of the Ministry of Social Welfare. It also plans to incentivise the actions of the Department of Social Services (DSS) towards improving the business processes under cash transfer programmes, and to modernise service delivery through enhancements of technology assets, utilisation of integrated information systems for targeting and payment, improvement of citizen engagement, and strengthening human resources capacities. In order to plan further transformations of the transfer system, a Power and Participation Research Centre (PPRC) study has been commissioned by WFP on the transformation of food-based workfare programmes into cash that is to inform the Eight Five Year Plan.

7.1.3 Needs for further actions under this programme include

Enhance gender sensitivity of disaster preparedness and response

Women need tailored support to help them in their role in dealing with disasters, both in terms of preparedness but also response (with women-friendly shelters for example). Gender-specific assessments are needed in the prioritisation of hazards and required actions. Women are often not targeted by post-disaster rehabilitation programmes as they are not the main household breadwinners. Yet, they play an essential role often taking on paid employment to support their families. Men often migrate following disasters, leaving women to undertake activities they were not involved in before the catastrophe. Building women's capacities and providing them the means to undertake these tasks -through the provision of credit or other inputs- and recognising their rights over resources -over land for example- is fundamental.

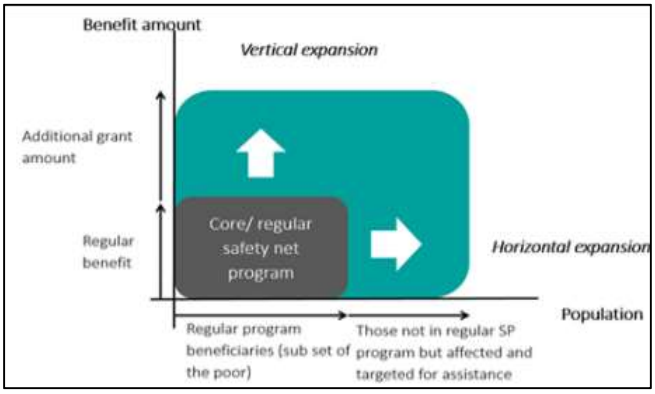
Apply a nutrition-sensitive approach to disaster preparedness and responses

Continued emphasis is needed to ensure nutrition is at the centre of efforts to support affected and at-risk populations. For example, even in the wake of disasters, preference should be given to input distribution of nutrient-dense crops and varieties to meet nutrient requirements, accompanied by nutrition education and BCC. Nutritionally vulnerable populations need to be registered for improved responses in case of emergencies.

Adopt adaptative social protection (ASP)

ASP focuses on enabling social protection to address the impacts of all types of shocks on the households they affect. It entails a dual approach: it reduces poverty and builds resilience before shocks occur so that the most vulnerable populations are better prepared, and it ensures that safety nets are able to respond to shocks swiftly by introducing greater flexibility and scalability in programme designs. Often, these approaches are adopted by the development and humanitarian sector with limited efforts to coordinate. Yet, greater integration between these two aspects covering project funding, institutional setup, types of benefits and targeting approach can bring large positive impacts and should therefore be considered. Projects need to be able to 'scale out' to nonregular beneficiaries that are suddenly affected by a shock and to 'scale up' to increase the benefits as needs suddenly intensify (Figure 25), a process termed horizontal and vertical expansion by Oxford Policy Management OPM (2015)[144].

Figure 25 - Programme scalability to enable shock responsiveness



Source: South-South Learning Forum (2018) "Building Resilience through Adaptive Social Protection: Summary Report"

Develop disaster risk financing

Formal and informal agriculture insurance provision remains very low in Bangladesh despite the high risks that exist and the devastating effects disasters can have on farmers. Less than 1% of agricultural producers currently benefit from agricultural insurance. Yet, insurance for the most vulnerable would promote disaster resilience and improve adaptation capability[145]. Crop insurance is not currently offered but two donor-supported initiatives are under implementation. In addition to this, an innovative flood index insurance programme has recently been piloted by Oxfam in selected villages, providing business interruption cover to very poor landless men and women who are reliant on wage labour. Some financial institutions are showing interest in agriculture insurance as a way to protect their borrowers and their lending portfolios against agriculture shocks since international experience such as in India have shown that agriculture insurance can play a role in unlocking access to credit if integrated in a broader farmer development framework. In order to expand agricultural insurance, a number of constraints will need to be overcome such as the limited access to affordable time-series data to allow risk assessments to be carried out, the constrained capacities of insurance companies, the low affordability of premiums by marginal farmers, and the lack of a legal and regulatory framework. Another important element to ponder over is the fact that the current design of post-disaster relief tends to crowd out insurance since farmers expect relief to be provided and will therefore not willingly purchase insurance[146]. At ministry level, there has been an increase in funding to the Natural Disaster Risk Reduction Fund, a contingency budget line for disaster risk reduction and

[144] OPM (2015) "*Shock-Responsive Social Protection Systems - A research programme for DFID"* Working Paper 1: Conceptualising Shock-Responsive Social Protection.

[145] UNDP (2018) "*Bangladesh Quarterly Development Update"* January - March, 2018.

[146] Quayyum S.N., Clarke D.J., Lo Re F., Sberro R., Stutley C. (2018) "*Bangladesh – Agriculture Insurance Situation Analysis"*, World Bank Group.

climate change adaptation and the Government has explored the feasibility of various risk financing and insurance instruments[147].

Continue the enhancement of different types of storage

The 240 million USD *Modern Food Storage Facilities Project (MFSFP)* implemented by the Directorate General of Food Ministry of Food started in 2014 is to considerably expand the efficacy and capacity across the country of Government storage to better respond to emergencies and recovery efforts. The actual construction of the main steel silos only began in 2018 however. Storage losses constitute a substantial portion of post-harvest losses especially in flood prone areas and more localised Government storage, for example at union and *hat* and *bazar* level is needed (see Sub-programme II.1.3.). Under the MFSFP, family plastic silos are being distributed in disaster-prone districts in order to preserve food grains and seeds. Half a million households should benefit from them. Efforts are still needed to ensure safe storage of foods other than food grains to preserve the nutrients and increase the shelf life of food especially in time of disasters, emergency and drought situations. Storage facilities to preserve seeds are also needed.

7.2 Programme IV.2. Strengthened social protection and safety net programmes for targeted groups across the life cycle, including disabled and displaced populations

Under this programme, the effectiveness, targeting and content of social safety net programmes are improved to provide better protection to different vulnerable groups. This is done through the following three subprogrammes: 1) Expand and strengthen safety net programmes across the life cycle supporting vulnerable groups, such as poor women, children, the elderly, disabled people and displaced populations; 2) Expand and strengthen programmes for supporting people living in vulnerable and disadvantaged areas (*char* land, river bank, *haors*, hill tracts and urban areas); and 3) Introduce nutrition-sensitive social safety net programmes (SSNP), including food fortification, especially for mothers and children.

7.2.1 Progress towards achievements

Table 24 – Programme IV.2: Outputs indicators and progress against baseline

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
Budgeted coverage of VGD and ICVGD (in hundred-thousand-person month)	VGD 91.3 ICVGD 0.1	VGD 120.0 ICVGD 0.1	VGD 139.8 ICVGD 0.1	Min of Finance, Budget
Safety net programmes expenditures as % of GDP (SDG 1.3.1.)	2.08%	2.09%	2.17%	Min of Finance/ GED
Number of children covered by the School Feeding Programs in Poverty Prone Areas (in hundred thousand)	28.3	30.6	29.5	Min of Finance/ GED
Budgeted coverage of employment generation programme for the poor (in hundreds of thousands of beneficiaries)	8.27	8.27	8.27	Min of Finance

More efforts are needed to transform VGD into a more nutrition-sensitive programme such as ICVGD

The *Investment Component for Vulnerable Group Development (ICVGD)* covered under the CIP2 budget, is implemented within the VGD which falls under the Government's recurrent expenditures.

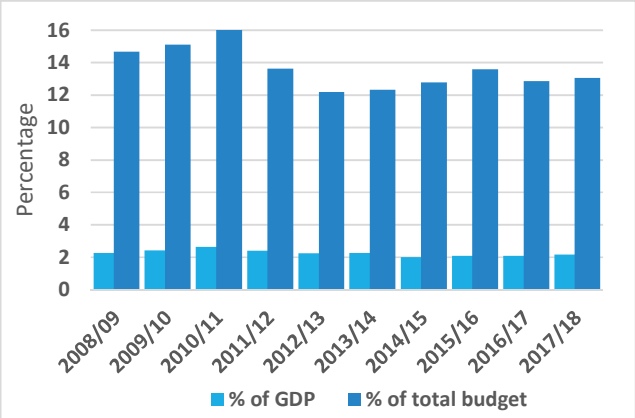
[147] Ulubasuglo, M. (2014) *"ADB Bangladesh Capacity Building for Disaster Risk Finance Project: Funding Gap Analysis"* AIR Worldwide.

It adds a substantial cash grant -15,000 BDT - for investment, fortified rice distribution and nutrition BCC. ICVGD, so far at a pilot stage with a mere 10,000 beneficiaries, is showcased as a model for a promotional and nutrition-sensitive social safety net for ultra-poor women. In 2018, WFP[148] reported that the Government was planning to take it to scale to reach 100 thousand women. This is still far off the 139.8 hundred thousand covered by the VGD programme as of 2017/18.

The weight of safety net programmes in total GDP slightly increased

The CIP1 results framework monitored social protection spending only. The CIP2 spending on safety nets includes spending on social protection and social empowerment so as to align with the NSSS. Indeed, social empowerment is essential in that it covers a large portion of the safety net programmes under the ADP, while a large proportion of social protection are actually civil servant pensions and Freedom Fighters Honorarium, which do not target the most vulnerable. Despite substantial Government spending -2.17% of GDP in 2017/18, up from 2.09% in the previous year and surpassing 13% of the total Government budget (**Error! Reference source not found.**) – coverage and impact on poverty remain low with around two thirds of poor households not having access to any social security programme[149]. The NSSS has planned an increase in the social security budget of one third between 2015/16 and 2019/2020 assuming an annual 6% GDP growth. However, the increase to 2.44% in 2017/18 from 2.09% in the previous year had to be revised to 2.17%.

Figure 26 - GoB social safety net expenditure in total GDP and GoB budget



Source: Minister of Finance, Bangladesh

Around three million children were covered by *School Feeding Programmes in Poverty Prone Areas*

The Ministry of Primary and Mass Education in collaboration with WFP provide biscuits fortified with vitamins and minerals to pre-primary and primary school children in high poverty-prone areas. The programme includes a learning package for children, parents and other community members on vegetable gardening, health, nutrition and hygiene. This has shown to contribute to significantly higher enrolment rates, improved attendance and higher primary education completion. Absenteeism and dropout rates have also declined, even in poverty-prone areas. Since 2013, WFP also started providing cooked meals prepared by local women using local produce from women. As of 2016/17, just over three million children were receiving food in over 15,000 schools in 29 districts. This number declined to 2.95 million in the second year of the CIP2 due to a drop in WFP funding by more than the incremental Government budget. As a result of the project, a 100% enrolment has been achieved at primary level and the school attendance rate has increased from 5% to 13% in the project upazillas. Students' health has also markedly improved[150]. Another outcome of this initiative has been the preparation of a nutrition-sensitive National School Feeding Policy.

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[148] WFP (2018) *WFP in Bangladesh 2017 in Review*.

[149] EU (2018) "*Action Document for Support to National Social Security Strategy reforms in Bangladesh"*.

[150] GoB (2017) "*Bangladesh Primary Education Annual Sector Performance Report – 2017*" Monitoring and Evaluation Division Directorate of Primary Education.

The *Employment Generation Programme for the Poor* reached a steady 0.8 million beneficiaries

The total Government budget for employment generation programmes for the poor under the NSSS remained stable with 8.27 hundred thousand beneficiaries since the CIP2 baseline. This is a substantial project amounting to 3.7% of the total social protection budget, although it fails to include a large proportion of individuals that are eligible to benefit from it. The proportion of female beneficiaries has gradually increased from a third at the onset of the programme to close to 40%.

7.2.2 Policy development, programmes and initiatives underway

This programme accounted for 10% of the CIP2 total budget at 1,447 million USD as of June 30th 2018. Of this amount, 95% was already financed (either for ongoing projects or projects already completed in the life of the CIP2) and the rest, 78.4 million USD were pipeline projects. The GoB accounted for 66% of the already financed budget.

Provision of fortified rice through VGD and FFP with provision of nutrition awareness and training activities

In 2016, the GoB launched the *Food-Friendly Programme for the Ultra-Poor (FFP),* targeting some five million poor families across the country. The scheme aims to provide poor families, selected through the local public representatives, the opportunity to buy up to 30 kg of rice per month for the five lean season months at one fourth of the market price, i.e. lower price than Open Market Sales (OMS) which is sold in major metropolitan areas. In 2018, the Ministry of Food agreed to integrate fortified rice in this programme with the support of WFP. WFP is also providing fortified rice through the ICVGD programme (mentioned above) in 12 sub-districts in collaboration with the Ministry of Women and Children Affairs. In this context, an assessment on the suitability of indicators used for targeting the poor through VGD programme in Bangladesh was carried out under the purview of MOWCA[151]. Improved beneficiary selection criteria were proposed by the assessment and will be considered for implementation in the 2019-2020 VGD programme cycle. The fortification of VGD rice rations is steadily expanding to reach all targeted upazillas.

Improved coordination of policies, strategies and actions plans

In 2015, the NSSS was completed with the objective to streamline and strengthen existing safety net programmes with a view to achieving better efficiency. It also aims to broaden its scope and coverage in order to improve programme design to help lower income inequality and contribute to higher growth by strengthening human development. In 2018, an Action Plan to implement this strategy ensued, outlining the necessary actions until 2021. Reform initiatives are to continue in order to transition to a lifecycle-centric social security system mainly coordinated by the Cabinet Division through the five-cluster approach[152]. Great effort has been put in the design of subsequent strategic documents such as the CIP2 to synchronise their activities with that of the NSSS. For example, this investment plan calls on investments to that will enhance the PFDS but acknowledges that this will need to be done with the NSSS' plans to gradually shift from food-based to cash-based programmes in mind. Its Programme IV.2. on strengthened social protection and safety net programmes for targeted groups across the life cycle, including disabled and displaced populations is also in congruence with the NSSS' objectives and modalities.

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[151] Ahmed, A.U. (2018) "*Assessing indicators for selection of participants for the Vulnerable Group Development (VGD) program in Bangladesh*". Dhaka, Bangladesh and Washington, DC. International Food Policy Research Institute (IFPRI).

[152] "Social Allowances" led by the Ministry of Social Welfare, "Food Security and Disaster Assistance" led by the Ministry of Food, "Social Insurance", led by the Finance Division for Public Pension, Bank and the Financial Institutions Division for Private Pensions, "Labour/Livelihoods Interventions" led by the Ministry of Disaster Management and Relief and "Human Development and Social Empowerment", led by the Ministry of Primary and Mass Education.

Consolidation of the social protection system

A core element of the NSSS is the consolidation of the often-duplicative programmes that existed, into core programmes based on the life cycle. This involved the following reforms: a consolidation of all existing life-cycle type programmes into five core public expenditure-financed social security programmes that address poverty and risk concerns at different stages of the life; a consolidation of public expenditure-financed programmes dealing with natural disasters and food price stabilization into two core programmes; a consolidation of the multitude of small experimental programmes into those that add value, are innovative and hold promise for scaling up, based on a proper review. So far, the 145 programmes, often small in terms of the benefits provided and the number of beneficiaries, have been downscaled to 118 programmes.

SSN payments digitalised to enhance targeting and implementation

Bangladesh continues to make important strides towards achieving the objectives outlined in Digital Bangladesh Initiative defined in *Vision 2021.* There are significant opportunities for cost savings -up to 15 million USD a year- through the digitisation of SSNs payments: digitisation reduces administrative costs of payment and all importantly, it also reduces the risk of leakage and alleviate the time and travel costs incurred by beneficiaries which are high relative to the small amounts received on average. Overall, it is to increase the efficiency of the public service. The GoB piloted a G2P (Government-to-person) payment system and it is to roll it out across the country in 2018/19. Beneficiaries will therefore receive their allowances in their chosen bank accounts or mobile banking accounts though Electronic Funding Transfers.

Towards the creation of an SSN single registry

Meanwhile, the Bangladesh Bureau of Statistics (BBS) is completing the country's first single registry using the National Household Database. The database will be linked with information systems of various ministries and agencies for beneficiary selection purposes and to prevent duplication in beneficiary coverage. New applications for allowances, complaint handling, budget allocation and disbursement, among others, are also to be incorporated in the system. A uniform targeting system across programmes using the upcoming National Household Database and supported by community-based validation mechanisms should help improve targeting and the transparency of the process. In 2018, the World Bank announced 245 million USD additional financing its *Safety Net Systems for the Poorest Project* to help improve beneficiary targeting, information management, and benefit payment of the country's five large safety net programmes, namely the Employment Generation Program for the Poorest, Work for Money, TR, VGF, and Gratuitous Relief. It is to support building the common digital platforms to better administer safety net programmes, enhance equity and reduce administrative efforts, costs and errors.

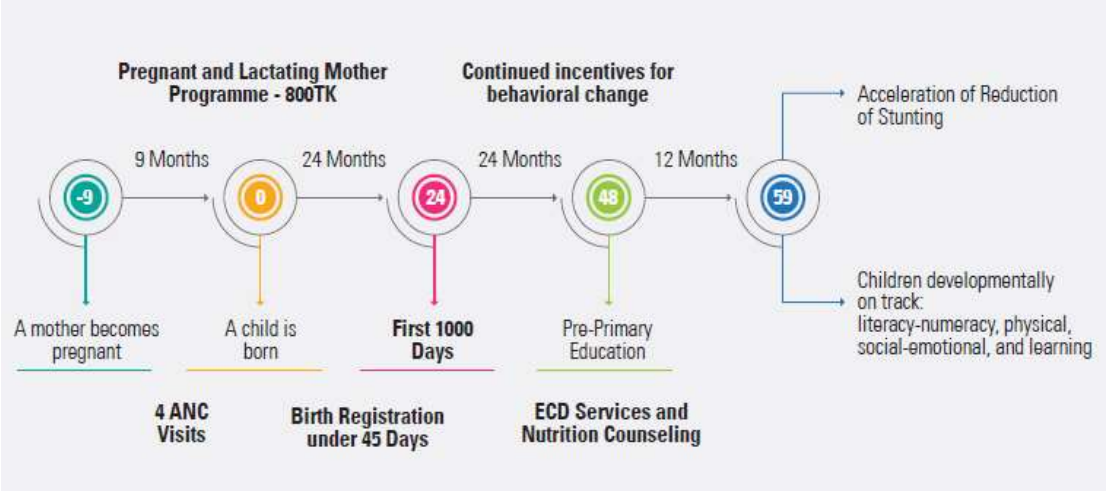
SSN's life cycle approach under implementation

The NSSS addresses the triple challenges of poverty, vulnerability and marginalisation while also reducing malnutrition. This CIP2 programme focuses on the effectiveness, targeting and delivery of social safety net programmes across the life cycle, prioritizing the first 1,000 days of life. Maternal nutrition during pregnancy remains poor in Bangladesh and is associated with low-birth weight, which is responsible for up to 20% of stunting in young children[153]. Much, therefore, needs to be done with regards to preschool children. The NSSS recognises the absence of social protection for young children, to which only 3% of social protection expenditure is allocated. Therefore, in 2015, a child focused

[153] Nguyen P.H., Sanghvi T., Kim S., Mahmud Z., Shabnam S., Aktar B., Afsana K., Frongillo E., Ruel M. (2017) "*Integrating nutrition interventions into an existing maternal, neonatal and child health platform increased maternal dietary diversity and micronutrients intake and exclusive breastfeeding practices in Bangladesh: Results of a cluster-randomized program*", Journal of Nutrition.

budget[154] was created to give adequate attention to this section of the population and indeed, the Government intends to expand it to reach 20% of the total budget as part of mainstreaming children's development in the national planning and budgeting. To this effect, as part of the social security reform process, the NSSS proposes to introduce a Child Benefit Scheme for early childhood, under the newly established Policy Guidance Unit for Child-focused Social Protection (PGU-CSP). Additionally, the coverage of vulnerable elderly individuals, currently protected by the non-ADP Old Age Allowance, needs to be ensured given the demographic aging taking place in Bangladesh. Through the non-ADP Cabinet Division, a *Universal Child Benefit Programme (UCBP)* is being proposed, seeking to encompass a range of child-oriented services to complement the core cash transfer. This should not be limited to services offered by a single ministry, and should be achieved by linking mothers and infants registered on the *UCBP* to a comprehensive range of Government-run services aimed at the first 1,000 days of life (Figure 27), for better nutrition outcomes. Efforts are also being made to reach the disabled populations through the *Allowance for the Financially Insolvent Disabled*, since such individuals often fall through the safety nets because they are not registered as disabled.

Figure 27 - *Agamir shishu*: A continuum of care for children from 0-4 years



Source: GoB and UNICEF (2019)[1]

7.2.3 Needs for further actions under this programme include

Expand the approach of combining cash safety nets with complementary activities for enhanced nutrition outcomes

Cash transfers combined with nutrition behaviour change communications have been shown to have the greatest impact on child stunting in a randomised control trial conducted by IFPRI in collaboration with WFP, the *Transfer Modality Research Initiative (TMRI)*. More work is being done to identify the most effective models to enhance women's empowerment and boost mothers' and new-born babies' nutritional status by adding micronutrient, BCC and diversified food baskets to cash transfers. The association of training, access to agricultural inputs and health services to cash safety nets have also shown to multiply the positive effects on nutrition. These results need to be taken on board given that in Bangladesh and elsewhere, while social safety nets have been shown to have a positive impact on poverty and food insecurity, their limited impact on child nutrition has been repeatedly observed. Cash alone has not shown improvements in nutrition. Some programmes have already embraced this approach such as the LGD implemented *Income Support Programme for the Poorest* which transfers

[154] GoB (2018) "*Blooming Children: Prosperous Bangladesh Child Focused Budget 2*018-19*".*

cash to very poor households with pregnant women and/or mothers of children below the age of 60 months provided they use Growth Monitoring and Promotion services or attend Child Nutrition and Cognitive Development awareness sessions, as relevant.

Continue promoting employment for the most vulnerable

The Government strives to provide work to the most vulnerable through programmes such as the *Employment Generation Programme for the Poor* (see above) but it is important that it invests in ensuring the long-term employability of these groups for sustainable results. This is what its *Strengthening Women's Ability for Productive New Opportunities (SWAPNO)* programme is doing, whereby ultra-poor rural women who are widows, divorced, abandoned or have a disabled husband are engaged for an 18-month employment tenure, mainly in maintaining or rehabilitating important community assets but also in public works and community service beyond infrastructure. This helps them transition from safety net employment to market-driven employment. Formal and informal savings are also encouraged through this intervention and recipients are trained in financial literacy. They are also provided with need-based life skills, livelihoods trainings and formal apprenticeship training. Results of this endeavour are encouraging but its number of beneficiaries is still limited to a few thousand, requiring a substantial effort to scale up this approach.

Gradually introduce contributory social insurance

The NSSS seeks to mitigate the life cycle risks faced by poor and vulnerable populations through its transfers. But it in the medium term, as it seeks to address the emerging needs associated with its middle-income country status, it needs to broaden the scope and modernise it social security system by combining tax-funded safety net programmes with contributory social insurance -and employment regulations- to protect workers. Social insurance schemes should enable those who have sufficient income to invest in an additional level of protection against the risks of old age, disability, unemployment and maternity. Developing social security in a context where informal employment is the norm is complicated but countries with per capita GDPs lower than Bangladesh have successfully initiated this process, especially on the African continent: in Ghana, Senegal, Uganda and Sierra Leone, employee's contribution is 5% and up to 7% in Ethiopia. India and Nepal have initiated such a system with contributions limited to 1% per month for each employee[155].

Include other fortified foods and nutrient-dense foods in the package of foods distributed

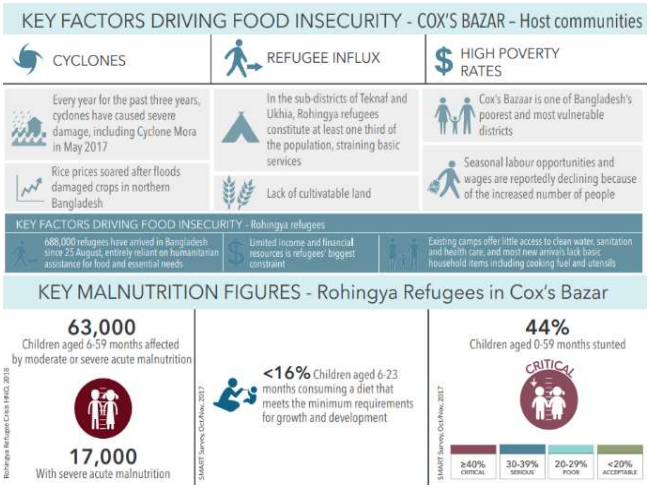
While ongoing efforts are laudable, there is ample scope to fortify other foods to further enhance nutrition outcomes. Indeed, the CIP2 calls for other forms of nutrient supplementation or/and food enrichment to be investigated and foods other than grain with high nutrient content to be distributed such as dried fish, fish powder or pulses. Several programmes under the CIP2 call upon measures that will fortify foods: under Programme I.1., research and technology is called upon to develop food varieties that are naturally rich in key elements such as iron and zinc or are biofortified; Programme I.1.2. is about the development of new high-impact technologies such as, biofortification that will help boost the nutritional qualities of food in an eco-friendly manner; and finally, Programme II.1.2. states that appropriate technology should be adopted and infrastructure developed to allow for more foods to be fortified. These should make fortified foods more readily available, including for distribution through safety nets.

[155] Chowdhury D. (2018) "*Introducing social security tax*" The Financial Express, 31 January.

Cope with displaced populations

Since August 2017, the district of Cox's Bazar has been hosting close to a million Rohingya refugees whom have fled from the northern Rakhine state in Myanmar, thus almost tripling its total population. Around 80% of this displaced population was categorised as food insecure by the Rohingya Emergency Vulnerability Assessment in December 2017[156]. Ensuring the FNS of an additional very large number of already vulnerable people creates immense pressure on the country's food system and on the Government's food distribution system. It also intensifies pre-existing FNS issues of the region in an area prone to natural disasters, with 38% of host community households in Cox's Bazar estimated to be food insecure[157] (Figure 28). Given the uncertainty that surrounds the future of the refugees, the GoB and all involved DPs need to focus on building resilience and providing the necessary conditions for people to build their livelihoods. Measures such as farmer training, promotion of home gardening and provision of agriculture inputs should be supported to contribute to ensuring people's FNS.

Figure 28 - Food and nutrition insecurity and the Rohingya crisis



Source: Food Security Information Network (2018)

Estimate the weight of nutrition-sensitive programmes in total social protection (including recurrent programmes – see Outcome V)

The CIP2 covers only development projects and in doing so excludes a large portion of the social safety net of the country which relies on recurrent expenditures. To fully understand the extent of the actions undertaken to improve FNS through SSNs in the country, it is important that the system is considered in its entirety. The CIP2 has adopted a novel approach whereby projects are classified into nutrition-sensitive and supportive projects and adopting a similar approach for the non-ADP SSNs would help in gauging what is being done and identifying the gaps that need to be addressed. Thus, under Programme V.4, it is proposed that the Ministry of Finance consider adopting nutrition-responsive budgeting.

[156] Food Security Information Network (2018) "*Global Report on Food Crises 2018*".

[157] *Ibid.*

8. Progress towards Outputs for Outcome V

8.1 Programme V.1. Improved food safety, quality control and assurance, awareness on food safety and hygiene

The objective of this programme is that food safety is improved through the introduction of good practices at all stages of the food supply chain complemented by food safety awareness and knowledge at all levels and application of measures to ensure the conformity to foods to safety standards for human consumption and for public health. The aim of each one of the four sub-components is to: 1) ensure conformity of foods for consumption facilitated through accreditation of certification agencies, inspection agencies and laboratory services; 2) introduce and popularize Good Agricultural Practices, Good Aquaculture Practices and Good Husbandry Practices that ensure food safety and quality; 3) introduce and scale-up Good Manufacturing Practices (GMP) and Good Hygienic Practices (GHP), including adherence to Hazard Analysis and Critical Control Points (HACCP) compliance; and 4) enhance food safety education, consumer awareness and food safety networks.

8.1.1 Progress towards achievements

Table 25 – Programme V.1: Outputs indicators and progress against baseline

CIP2 output proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
Farmers trained on use of organic fertiliser, green fertiliser and microbial fertiliser, in thousands	800	1,025	1,431	MoA APA Indicator 3.3.1, DAE
Number of food safety management system certificates awarded by BSTI	5	7	10	BSTI, MoI, BAB
Number of processed food items standardised by BSTI (mandatory certification)	58	58	74	BSTI, MoI, BFSA, IPH
Identified number of violations of food safety standard under FSA 2013 reported by BFSA	76	70	31	BFSA
Number of HACCP/FSMS certified institutions	10	45	70	MoI, BAB, BSTI,
Number of courses delivered on GAP, GHP and GMP	GAP: 1 GHP & GMP:1	GAP: 0 GHP & GMP:7	GAP:1 GHP & GMP:11	MoA, MoI, BFSA
Number of trainees that have benefited from training on GAP, GHP and GMP	GAP: 50, GHP & GMP: 50	GAP: 0, GHP+GMP: 233	GAP: 45, GHP+GMP:437	MoA, MoI, BFSA
Number of food safety initiatives /days observed	…*	1 (Int. food conference)	1 (National Food Safety day)	BFSA, IPH

Training of farmers on the use of biofertilisers including organic, green and microbial fertiliser was expanded

Consumption of organic food is becoming more popular around the world including Bangladesh, as people realise the importance of healthy food. The steady increase in the numbers of farmers trained on the use of organic fertilisers, green and microbial fertilisers -from 0.8 million in 2015/16 to 1.025 million in 2016/17 and 1.431 million in 2017/18- is encouraging. This is especially the case given that the CIP1 emphasised the supply, subsidies and quality of inorganic/chemical fertilisers but did not stress the importance of organic fertilisers. Thus, Bangladeshi farmers have been shown to overuse inorganic fertilisers leading to serious degradation of soils, productivity losses and imbalances in the ecosystem that eventually can affect the food chain. This can negatively impact food security, human

health and nutrition status[158]. The private sector is embracing the need to shift to organic farming. Some companies are using the production of compost or organic fertilisers as an efficient waste management solution which is better than producing biogas. Kazi Farms Group for example, one of the largest poultry producers in the country is producing organic fertiliser out of poultry manure, simultaneously responding to the need to dispose of very large volumes of such manure and to the fast-increasing demand for organic fertilisers. Urban waste is also a potential source of organic fertiliser[159]. The Bangladesh Organic Products Manufacturers Association (BOPMA) instructs farmers on how to prepare compost fertiliser in their home yard by using cow-dung, kitchen waste, food waste and vegetable waste.

BSTI awarded more food safety management system certificates

BSTI awarded ten food safety management system certificates in 2017/18 compared to seven in 2016/17 and five in 2015/16. Such certification demonstrates the capacity to comply with the control of food safety hazards. Multiplying the number of certified organisations will entail an expansion of accredited certification institutions. Action has been taken, notably with support from FAO, to strengthen the capabilities of the Bangladesh Accreditation Board (BAB) to accredit inspection and certification bodies based on international standards (ISO 17020 and ISO 17021), including supporting the Board's application for membership to the International Accreditation Forum. The National Accreditation Board for Certification Bodies of India has been contracted to train lead assessors from the BAB, and to participate in National Accreditation Board for Certification Bodies accreditation missions to build direct, hands-on exposure[160]. In recognition of the demand expressed by the Bangladesh Food Safety Authority (BFSA) for the engagement of technically competent and qualified professionals to verify compliance with food regulations, the Bangladesh Agricultural University (BAU) has newly introduced a new four-year BSc (Honours) course in Food Safety Management System. The university is partnering with FAO and the Dublin Institute of Technology. BFSA is also working to introduce a Diploma course for food safety inspectors.

The rise in the number of processed foods standardised by BSTI under mandatory certification is encouraging

BSTI is entrusted with the responsibility of formulation of national standards, laboratory testing and product certification (both mandatory and voluntary), Management System Certification (MSC) and metrology service[161]. The second year of the CIP2, 2017/18 has seen a clear drive by BSTI to increase the number of standardised processed foods under mandatory certification. This rose to 74 in 2017/18 from 58 in 2015/16, a number which was unchanged in the last decade, in spite attempts by the CIP1 to make food standardisation a priority. However, this number remains abysmally low in comparison to the number of food items available in the entire market.

The identified number of violations of food safety standard reported by BFSA has declined

BFSA mobile courts across the country can fine and sentence people for violation of food safety regulations. Thus, it reported 76 violations of food safety standards in 2015/16, 70 the following year, but only 31 in 2017/18. This decline may be explained by the deterrent nature of checks that are taking place but also points to the need to geographically expand the work carried out by BFSA. Foods are often adulterated by the use of harmful chemicals and non-permitted artificial colours. In addition, rotten foods are sometimes stored and sold to consumers. BFSA is taking steps to accelerate

[158] Randolph T.F., Shelling E., Grace D., Nicholson C.F., Leroy J., Cole D.C., Demment M.V., Omore A., Zinsstag J., Ruel M.T. (2007), "*Role of livestock in human nutrition and health for poverty reduction in developing countries",* Journal of Animal Science, 85.

[159] Emerging Credit Rating Limited (2017) "*Fertilizer Industry of Bangladesh"* May 2017 Volume-I.

[160] FAO (2017) "*Bangladesh Food Safety Cluster Evaluation*" Office of Evaluation - Project evaluation series.

[161] BSTI (2018) "*Annual Report 2017/18"*.

legislation measures to address the problem. The lack of adequately trained food inspectors is one of the challenges faced by BFSA and much more needs to be done in this respect. Another issue is the inadequate number of accredited laboratories to meet the demand of food safety certification. BAB which was established in September 2006 has only accredited 52 laboratories so far.

There was a surge in the number of HACCP/FSMS certified institutions

A successful Food Safety Management System (FSMS) provides a systematic approach to identify and prevent safety hazards across the food chain. Hazard Analysis and Critical Control Point (HACCP) is an internationally recognised system intending to reduce the risk of safety hazards in food at specific points in the food preparation process. This includes biological, chemical or physical hazards. Food processing companies should initiate the use of HACCP to minimise food safety hazards in their product during manufacturing, processing or handling of food products. The number of HACCP/FSMS certified institutions has significantly increased from 10 in 2015/16 to 70 in 2017/18. There are currently 14 private sector certification agencies accredited by BAB in addition to BSTI. Among them are international companies which have identified the need for this service in Bangladesh.

There was a clear drive to deliver GHP and GMP courses, but GAP is lagging behind

In 2015/16, only one training was delivered on good agricultural practices (GAP), and another on good hygienic practices (GHP) and good manufacturing practices (GMP) by Government institutions with only 50 trainees in each course. The following year, no training took place on GAP, but seven trainings were delivered on GHP and GMP to a total of 233 trainees. In 2017/18, again, just one GAP training was organised with 45 attendees, but 11 courses were delivered on GHP and GMP to a larger 437 individuals. So, while GHP and GMP courses are steadily expanding their reach, GAP sensitisation is clearly lagging behind. Yet, GAP is essential to control and minimise the risk of food hazards in production, postproduction and marketing of food. Non-Government organisations, including the private sector are getting involved in imparting such training.

A National Food Safety Day is now observed every year

Since 2018, the second of February has become the National Food Safety Day to coincide with the establishment date of BFSA. This is intended to raise awareness and reiterate to the public the importance of the prevention and control of food contamination and adulteration to ensure safer food for all. Sensitising the public across the country to these issues ensures they can continue to apply pressure on relevant stakeholders. The slogan for 2018's event was '*Nirapad Khadye Bhorbo Desh-Sobai Miley Gorbo Sonar Bangladesh*' (Let the country be filled with safe food, let all join hands to build a golden Bangladesh). The previous year, an international conference on food safety was organised attended by 1,200 national and international participants amidst the presence of the ministers for commerce, industry, agriculture and food.

8.1.2 Policy development, programmes and initiatives underway

The programme V.1, as the three other programmes in Pillar V that endeavours to create an enabling environment for FNS and focus on cross-cutting issues, represents a very small proportion of the total budget: 0.7% or 100.7 million USD. Contrary to other programmes, a large share of this- 69%- is a funding gap in the form of pipeline projects, which could be interpreted as an increased interest which needs to be further promoted. While 68% of the budget already financed in the form of ongoing projects or project already completed were GOB funds, the 92% of pipeline projects are to be funded by DPs.

Pesticide Act (2018) passed

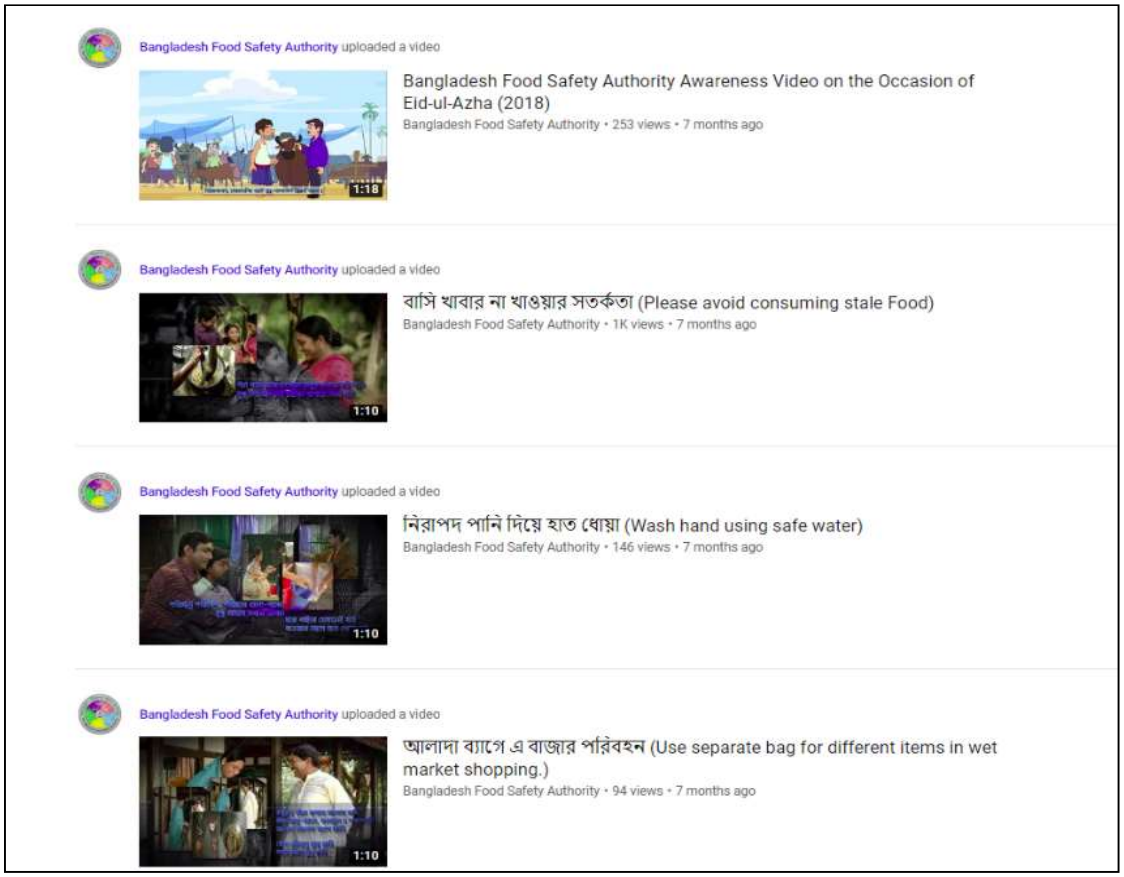
This Act foresees punitive actions for the storage and marketing of contaminated pesticides. False labelling and tagging of tainted pesticides will also incur sanctions. Efforts need to be sustained to ensure that fertilisers are unadulterated and respond to certain quality criteria, and growers must be

trained to use these inputs properly through GAP. Pesticide residues in foods of plant origin also need to be monitored given the risk exposures and threats to animal and human health.

Drive to raise food safety awareness continued

Given the low level of food safety knowledge and awareness among consumers, mass sensitisation and capacity strengthening of the public is needed. In addition to sensitisation activities, food safety and hygiene practices need to be promoted at all levels and compliance and maintenance of standards as well as adherence to food safety regulations, advocated for. To this effect, BFSA has launched mass awareness programmes for schools on food safety and hygiene. In keeping with the spirit of Digital Bangladesh, the BFSA is launching a YouTube channel to create public awareness (Figure 29). In addition, the BFSA is planning to set up a call centre to register complaints and gauge public opinion.

Figure 29 - BFSA YouTube Channel



Source: GoB and UNICEF (2019)[1]

Gradation system for restaurants introduced

In 2018, BFSA introduced an international gradation system for restaurants in Dhaka city to indicate their quality on the basis of hygiene and food safety regulation. Restaurants are given green, blue, yellow and orange stickers (corresponding to A+, A, B and C, respectively) based on a checklist of food safety compliance under the following headings: proof/ certification documents; personnel and restaurant hygiene; cleanliness; approved food sources; relative level of contamination; processing procedures and temperature control; equipment/machinery hygienic maintenance; chemical substances; pest and insect control; garbage disposal; and drainage and water pipeline management. This is to encourage business owners to pay attention to food safety, expand the number of customers

and increase their profits. Restaurants given a yellow sticker have three months to upgrade their quality, while those given an orange sticker are given one month for improvement if they do not want to lose their registration. The initiative is to ultimately extend across the country. A mobile application will also enable potential customers to check any given restaurant's grading.

8.1.3 Needs for further actions under this programme include

Accelerate the adequate management of solid waste

Dhaka's solid waste management system has seen no major improvement despite various initiatives taken by the two city corporations under Greater Dhaka to modernise the process through urban public and environmental health development projects, community-based waste management activities, development of sanitary landfill, medical waste recycling plant and waste-based power plant. Households need to be sensitised to disposing off their rubbish and kitchen waste appropriately and using designated waste posts. Plans to build secondary transfer stations in every ward have been limited due to lack of space and land disputes. Urban waste generation is a problem that needs to be dealt with to minimise contamination. Urban waste generation has been estimated at 6,493 tons/day in 1991, 13,300 tons/days in 2005 and projected to reach a staggering 47,064 tons/day in 2025[162]. However, organic waste constitutes a great potential for the manufacture of fertiliser and biogas. Adequately handling solid urban waste is essential as it constitutes a substantial source of GHG emission from open burning, illegal dumping and open landfill.

Create demand for organic fertiliser

Value chains for organic fertiliser need to be nurtured over time[163]. Thus, although Bangladesh is witnessing growth in this area, action is still required by multiple stakeholders such as the private sector, NGOs, Government agencies and farmers. Moreover, as links have been established between education of farmers and the use of organic fertilisers[164], it is essential that programmes to sensitise and educate them are undertaken on a nationwide basis.

Enable the standardisation of foods by BSTI

Currently 71 food and agricultural items have been brought under the Mandatory Certification Mark Scheme[165]. To enable certification of all processed and packaged foodstuffs as in many other countries, BSTI needs to have access to a database of all the foods produced in the country. It also needs standards for a number of chemicals used for cultivation, food preparation and product development[166]. Stricter compliance through accredited institutions is needed for the certification of food products before entering the market. More accredited laboratories, with adequate resource allocation, are also needed to increase certifications.

Streamline inspection procedures and harmonise food safety standards

While efforts have been made to streamline the control over food safety with the creation of an apex organization, BFSA, the food safety controls in place in the country are still quite fragmented with overlapping and multiple jurisdiction of several ministries and agencies[167]. Given that Bangladesh is in

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[162] Parvin, M. and Begum, A. (2018) '*Organic Solid Waste Management and the Urban Poor in Dhaka City International*' Journal of Waste Resources.

[163] Cook, S., Henderson, C., Kharel, M., Begum, A. Rob, A., Piya S. (2016) "*Collaborative action on soil fertility in South Asia - Experiences from Bangladesh and Nepal*" IIED Working Paper.

[164] See for example Rahman, K.M. and Zhang, D. (2018) "*Effects of Fertilizer Broadcasting on the Excessive Use of Inorganic Fertilizers and Environmental Sustainability*" Sustainability.

[165] BSTI (2018) *Op. cit.*

[166] Hossain, E. (2018) "*Bangladesh lags far behind on standardization*", New Age, 13 October.

[167] FAO (2017) *Op. cit.*

the process of establishing its food safety system, it should ensure that its food safety standards and inspection procedures satisfy the internationally accepted practices established by the Codex Alimentarius, the 1995 SPS agreement on the Application of Sanitary and Phytosanitary Measures and other WTO requirements so as to facilitate exports and ensure the food safety of imported food items[168].

Establish and strengthen traceability of foods

Food safety is an issue that needs to be addressed from the moment of production to the moment of consumption: "from farm to fork" and "from pond to plate"[169]. Only then can compliance with food safety and traceability of products be ensured throughout the food chain[170]. This requires that each business is able to identify all its suppliers and all the business it, itself, supplies. In doing so, any food safety concern -whether outbreak or consumer food poisoning- may be traced up the production chain and measures taken to avert new cases.

Strengthen capacities across the board for an operational food safety system

Based on the evaluation of FAO's *Food Safety Cluster*[171], a number of recommendations were made on capacities that still require strengthening in Bangladesh in order to establish a fully functioning food safety system. On the whole, the enactment of the Food Safety Act in 2013 and the creation of the BFSA in 2015 have prompted a need for additional capacity development. Qualified human resources are needed for the BFSA to fulfil its mandate and further institutional adjustments are needed to streamline food safety initiatives and prevent duplication of efforts. Laboratories also require adequately trained staffing and appropriate equipment since they often have insufficient capacity to handle the commercial scale of mandatory testing. Inspections need to be facilitated also through the training of human resources but also through the provision of strategic directions and guidelines by BFSA. Inspectors need to be able to oversee as diverse items as animal slaughtering house or processing facilities, imported food at port of entry or food service establishment[172]. Technical support must be given to BSTI in coordination with BFSA to strengthen collaborations with other National Codex Committees in the region.

Strengthen capacities for safe and healthy street food vending

Street foods are widely consumed in Bangladesh and constitute an important source of both income and nutrition for many, especially poorer sections of the population. Yet, they are found to often be contaminated with bacteria such as *E-coli* and salmonella which cause diarrhoea, fever and abdominal cramps. Street food vendors need to be sensitised on the risks that the food they sell poses to their customers and on how they can make it safer. The institutionalisation of street food vending systems needs to be scaled up so as to improve the safety and quality of diets and minimise the burden of food borne diseases. The provisioning of adequate infrastructure, including vending food carts, needs to be ensured. FAO for example distributed street food carts with utensils and clean water jars in specific geographical areas, leading to improvement in the safety of the food sold and increased incomes for the vendors.

Harness market drivers of food safety

Historically, improvements in food safety have often come about as the private sector responded to consumer demand for safe foods. Studies find a strong willingness by consumers to pay for safer

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[168] Saak, A.E. (2019) "*A review of best food safety practices: International experiences and lessons for Bangladesh*", IFPRI.

[169] FAO (2017) *Op. cit.*

[170] Saak (2019) *Op. cit.*

[171] FAO (2017) *Op. cit.*

[172] *Ibid.*

foods[173]. Measures need to be put in place to create an environment that enables the harnessing of market drivers for food safety. The need to impart on different stakeholders that food safety is a shared responsibility between Government, business and consumers where the Government plays important facilitative and regulatory ones has been stressed[174].

Need to review legislation with regards to antimicrobial resistance

The Drugs Act of 1940 and Drug (Control) Ordinance of 1982, the Food Safety Act of 2013 and the Cruelty to Animals Act of 1920 are currently under review with regards to antimicrobial resistance as they are inadequate as the following examples show: the fisheries and aquaculture legislation in Bangladesh does not contain provisions on water quality to prevent contamination with residues from antimicrobials. Also, while antimicrobial waste may be considered a pollutant under the Bangladesh Conservation Act, 1995, antimicrobial waste from establishments where antimicrobials are produced (e.g. hospitals) is not regulated as such so provisions should be inserted to regulating the disposal of waste. Finally, the Fish Feed and Animal Feed Act, 2010 prohibits the production, import, export, sale, transportation and marketing of adulterated feed or feed containing harmful substances but fails to include all antimicrobials leaving an obvious gap[175].

8.2 Programme V.2. Reduced food losses and waste

The objective of this programme is that food losses and waste (FLW) are minimised throughout the production chain down to consumption by households. It comprises three sub-programmes which reflect the different levels of the food value chain: to improve methods of measuring food losses and implement appropriate measures to minimise food losses at farm level; to strengthen capacity in post-harvest handling technology and infrastructure (transport, packaging, storage) and; to reduce wastage and quality/quantity loss of food products at all stages of marketing and consumption.

8.2.1 Progress towards achievements

Table 26 – Programme V.2: Outputs indicators and progress against baseline

Proxy indicators	2015/16 Baseline	2016/17	2017/18	Source
Wastage as a proportion of agricultural produce, including sector specific proportions in Bangladesh				MoFood, MoA, MoFL, MoI

[173] FAO and WHO (2018) *"Empowering consumers to make healthy food choices and support sustainable food systems*" The Future of Food Safety.

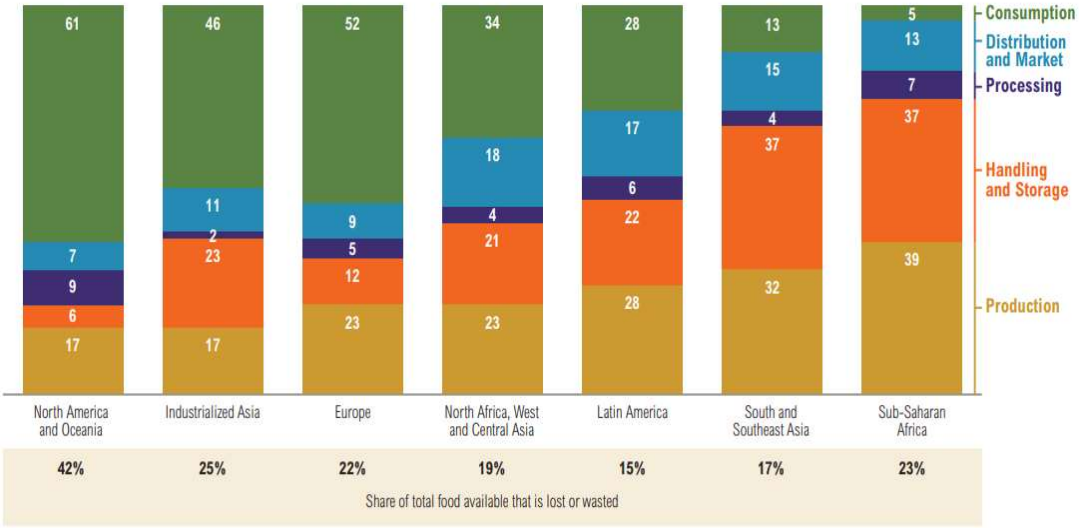
[174] Jaffee, S. (2019) "*Economic case for investments in food safety"* The First FAO/WHO/AU International Food Safety Conference Addis Ababa, 12-13 February.

[175] Choudhury, N. (2018) "*Report of the National Legal Consultant on Legislation relevant for antimicrobial use and antimicrobial resistance (AMU/AMR) in* Bangladesh", FAO Bangladesh, Dhaka.

Recent information on wastage and losses is not yet available in Bangladesh

National post-harvest loss estimations have taken place over the years for specific food commodities, but no recent nationally representative information is yet available. In a study of two wards in Barishal, a loss of 10% of crop productivity in Bangladesh during postharvest operations has been estimated[176]. About 5.5% of the total procured food is wasted of which 3% during procurement and preparation stage, 1.4% during serving, and 1.1% at the point of consumption. Worldwide studies have also shown that in South Asia food losses are mostly prevalent near production, handling and storage, and less so near consumption. The share of total food that is lost or wasted is estimated at 17% in the region against 42% in North America and Oceania (Figure 30). While the focus should therefore be on the lower end of the value chain, as value chains transform, it is likely that waste associated with consumption and distribution will increase.

Figure 30 – Food losses and waste in developed/developing regions (% kcal lost/wasted)



Source: Champions 12.3 (2017) "SDG Target 12.3 on food loss and waste: 2017 Progress Report" An annual update on behalf of Champions 12.3.

8.2.2 Policy development, programmes and initiatives underway

Responsibilities identified and action plans prepared on FLW monitoring

Respective responsibilities of different ministries have been identified in order to carry out the mapping of the SDG indicator for *SDG 12.3.1. Global Food Loss and Waste* and to create related action plans. The Ministry of Food is responsible for FLW monitoring at national level, while the Ministry of Agriculture is the co-lead and the Ministry of Fisheries and Livestock, Commerce, Industries and the Statistics and Information Division under BBS are associated partners.

Request sent for technical cooperation

In response to a GoB request for technical cooperation to estimate FLW, an FAO Technical Cooperation Programme (TCP) has been developed and is expected to begin implementation in 2019. The technical support includes developing a methodology to quantify and assess FLW along with capacity building.

[176] Ahmed, Nazneen (2016) "*Responsible food habit: Role of individual and the State"* paper presented at a seminar organised by the Right to Food", Bangladesh on 30 November.

Development of technologies to minimise post-harvest losses, enable appropriate food handling, transport, storage and enhance awareness on reducing FLW in traditional food value chains are other issues for policy attention.

8.2.3 Needs for further actions under this programme include

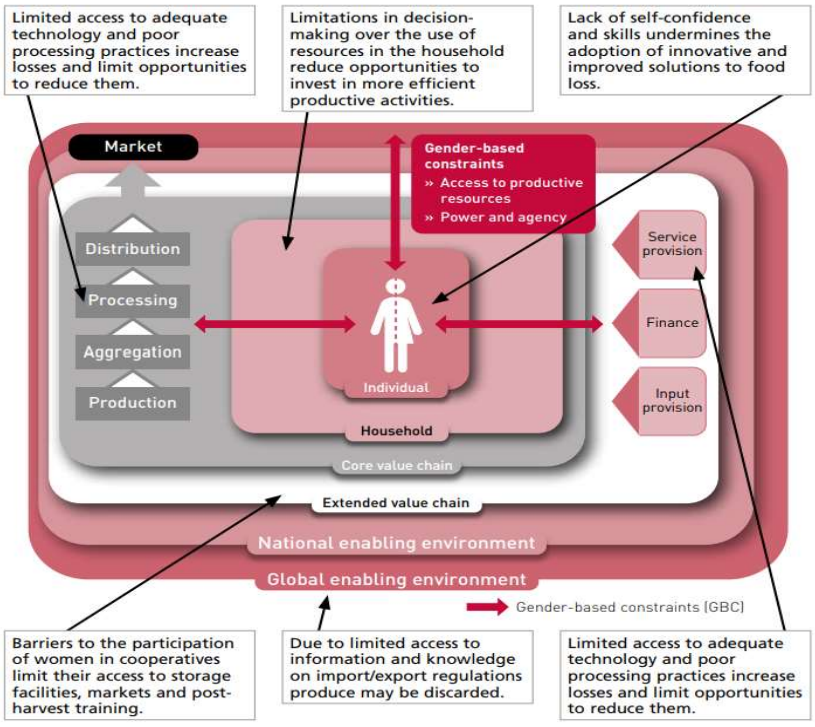
Strengthen information system on FLW monitoring

In Bangladesh, the evidence on the extent of FLW is scattered, thus making a national strategy to handle the problem a challenge. Therefore, it is urgent that the information system to monitor this issue is strengthened and that the capacity to adapt and use the UN established methodology on global food loss[177] is developed. In this context, one immediate output generated from the FAO-supported TCP could serve as the baseline to quantify overall FLW. The private sector should also be engaged in assessing food loss and waste, as it will improve the efficiency in food processing.

Integrate a gender dimension into food loss reduction strategies

The solution to food losses is usually sought in technology and overlooks the relevance of socio-economic factors that influence the functioning of the food value chain, and in particular gender relations, in spite of the impact they can have on the overall efficiency of the food value chain and on food losses[178]. For example, only having limited access to agricultural and financial services can prevent women from utilising more efficient harvest and post-harvest techniques and practices,

Figure 31 - Examples of gender-based constraints influencing food losses in value chain



Source: FAO (2018) "Gender and food loss in sustainable food value chains - A guiding note".

[177] FAO (2018) "*SDG 12.3.1: Global Food Loss Index – Methodology for Monitoring SDG Target 12.3",* approved by the interagency and expert group on SDG indicators, Rome, 6 November.

[178] FAO (2018) "*Gender and food loss in sustainable food value chains - A guiding note*".

storage and cooling facilities associated with lower food losses (**Error! Reference source not found.**. FAO[179] has developed a four-step approach for gender-responsive food loss reduction including practical tools for its implementation which could be incorporated in the FLW ongoing initiatives. It begins by carrying a gender-sensitive value chain mapping and locating the critical loss points. This is followed by the identification of gender-based constraints linked to food losses and the identification of entry points and solutions for gender-responsive food loss reduction. The final step consists in verifying and assessing the social risks associated with the proposed solutions to food loss.

Modernise and adapt machinery and storage that reduce waste and losses of food and its nutrients

A wide-scale analysis of grain losses in the country's public food distribution system found that on the whole, public warehouses in Bangladesh are old with an average age at local supply depots and central storage depots of 37 years. Investments in modernising storage are thus urgent in order to reduce long-run transactions costs and operation costs incurred, including loss and waste of grain, through damaged food storage facilities and unnecessary movement[180]. Other forms of storage, public and private, need to be expanded and modernised such as cold storage and other tools that ensure that cold chains are preserved throughout the supply chain. Other machineries that have the potential to minimise waste and losses between production and processing must be invested in.

Establish departments of food science in Bangladesh universities

Bangladesh needs to broaden its base of food science and nutrition professionals to strengthen leadership in the food industry and in the Government where an improved regulatory and policy environment is created along with enhanced legislation for food safety and nutrition. Partnerships among academia, private sector and Government need to be strengthened to generate and use research evidence on food science to inform policy. The INFS of the University of Dhaka carries out research in different fields of nutrition and food science including nutrition surveys and surveillance, chemical and microbiological experiments but more departments of food science must be established across the country given the scale and variety of food product development and prevalence of food safety and nutrition challenges.

Educate people to reduce food waste

Wise food purchase and storage at household level, standardisation of cooking and serving sizes, portion control along with nutrition education can help minimise food waste and are issues that merit policy attention.

8.3 Programme V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes

The objective of this programme is to ensure that FNS-related decisions are based on evidence and high-quality, timely and comprehensive food and nutrition security analysis that draws on data and information available in the network of existing sector and stakeholder information systems through one single sub-programme: to produce more reliable and timely FNS information and data through improved information infrastructures, enhanced coordination in data collection and data exchange to improve evidence-based decision making, policy formulation and programming.

[179] *Ibid.*

[180] Kabir, R.I., Yunus, M., Hossain, T., Rashid, S. (2019) "*Public food grain storage facilities in Bangladesh - An assessment of functionality, repair needs, and alternative usage*" Integrated Food Policy Research Programme Working Paper 002.

8.3.1 *Progress towards achievements*

Table 27 - Programme V.3: Outputs indicators and progress against baseline

Proxy indicators	Baseline (2015/16)	2016/17	2017/18	Source
Existing food security and nutrition databases/ surveillance systems	FSNSP[181], BDHS[182], FSNIS	NIPU[183] Database, NIS[184], FSNIS	NIPU Database, NIS, BDHS, FSNIS	FPMU
Food Composition Tables (FCT) updated/ disseminated	BIRTAN started training on Bangla version; Research on FCT completed and operational	Operational through trainings and dissemination	BIRTAN has started dissemination through its Training for Trainers	INFS/CARS/ DU/FPMU/ BIRTAN

Different sources of FSN data are available to inform policy

Different sources of FSN data available to inform policy. Government and non-Government institutions continue to produce national, *ad hoc* surveys and surveillance systems that contribute to inform nutrition-sensitive policies and programmes and can provide updates on coverage and effectiveness of nutrition specific interventions. The regular maintenance and update of the FPMU database, the Food Security and Nutrition Information System (FSNIS), has allowed the annual production of CIP monitoring reports which not only provide a yearly assessment of the implementation of the investment plan, but are an opportunity to review the progress of FSN in the country and make adjustments to priorities in order to solve emerging issues. The FSNIS is supported by data bases from a number of other institutions, namely: the Input Monitoring and Information System of the Ministry of Agriculture, the agrometeorological database of the Bangladesh Meteorological Department, the National Water Resources Database (NWRD) of the Water Resources Planning Organization (WARPO) has developed , the Disaster Monitoring Database of Department for Disaster Management, the price information database of the Department of Agricultural Marketing (DAM), the food grain market and PFDS database of MIS,M of DG Food and several other databases of BBS as well as trade and import data from Bangladesh Bank.

Trainings on the Food Composition Tables are ongoing

The Bangladesh FCTs were finalised in 2013 and have since then been disseminated through capacity building activities to enable their use in food and nutrition planning. To this end, trainings have been regularly organised by BIRTAN, the MUCH project and INFS, which selected programme and policy officials from Government, NGOs and INGOs have attended. Hands-on explanations of the updated nutrient content of Bangladeshi foods, use in recipe calculations and in dietary planning, calculations of energy and nutrient density to assess nutrient adequacy of recipes and foods, have been some of the exercises and modules in the training. BIRTAN has also developed a version of the FCT in Bangla to facilitate local use.

8.3.2 *Policy development, programmes and initiatives underway*

Programme V.3 is comparable in size to the other programmes under this pillar (except the one food waste and losses as explained earlier) with a total budget of 98.2 million USD, only 0.7% of the total CIP2 budget. Out of this amount, 96.3 million USD have already been financed through ongoing projects or projects that have already been completed in the life of the CIP2. About 91% of this amount came from DPs with very limited involvement by the GoB. Only 2 million USD's worth of the total

[181] Food Security and Nutritional Surveillance Project.

[182] Bangladesh Demographic and Health Survey.

[183] Nutrition Information and Planning Unit.

[184] Nutrition Information System.

budget were in the pipeline as of 30th June 2018 which is worrying concerning especially in light of the amount of work that remains to be done with regards to SDG indicators.

Wide ranging use of the FCTs

Calculation of the nutrient content of foods is being used in nutrition research and applied nutrition projects, including the interpretation of food consumption studies, the nutritional assessment of food supplies, setting nutrient targets in food production across ministries, in the planning of quantitative dietary guidelines and diets.

Integrated Phase Classification providing support to GoB in conducting FNS chronic analyses

The Integrated Phase Classification (IPC) supports GoB capacity to conduct FNS analysis by enhancing the understanding of FNS underlying causes and risk factors at both national and sub-national level and by supporting evidence-based decision making and targeting. In March 2018, IPC provided an IPC acute level 1 training where 19 participants qualified as IPC level 1 practitioners. The remaining participants will qualify after having participated in an acute analysis, one of the three requirements for qualification as an IPC level 1 practitioner. A chronic-level training and analysis is planned in 2019 for the remaining, or part of the remaining, districts as well as the potential updating of previous rounds of chronic analyses. The objective is to produce a combined report of chronic analyses for the whole of Bangladesh.

Implementation of the National Strategy for the Development of Statistics (NSDS)

The NSDS which was approved in 2013 has four priority areas: improving the quality, coverage, and use of core statistics required for national planning and economic management and for monitoring progress towards national goals; strengthening the professionalism of the National Statistical System (NSS); building capacity to collect, compile, disseminate, and, especially, use statistics at the local level; and promoting and strengthening access to and the use of official statistics at all levels of the society, based on an 'open-data strategy'. These are all essential for the monitoring of the CIP2 and FNS of the country more generally. In 2018, the World Bank committed 15 million USD to enhance coverage and improve collection and quality of data for core statistics and when possible to produce gender-disaggregated data. As part of the implementation of the NSDS, the BBS has begun initiatives such as the 2016-2013 Strategic Plan for Agriculture and Rural Statistics (SPARS) in which it assesses the current status of agriculture and rural statistics, reviews data needs, evaluates the degree of integration of the agricultural sector in the NSS and develops a medium and long-term plan to address key constraints in meeting data demands. Concurrently, the initiative of the European Commission which aims to support countries to create a country-led and country-owned multi-sectoral National Information Platform for Nutrition (NIPN) began its operations in Bangladesh in the course of 2018. It is to provide a hub to facilitate multi-sectoral and multi stakeholder dialogue around sources of data and information for nutrition and their use for the design of evidence-based policies.

Creation of an SDG Tracker

The access to Information (a2i) Programme of the Prime Minister's Office has developed an SDG Tracker aimed at creating a data repository for monitoring the implementation of SDGs, to strengthen timely data and improve situation analysis and performance monitoring of achieving the SDGs along with other national development goals (Figure 32).

Figure 32 - A2i's SDG Tracker

Source: A2i Programme

8.3.3 Needs for further actions under this programme include

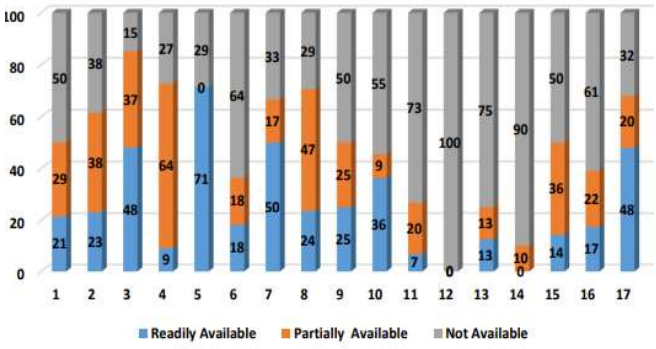
Undertake research on healthy diets to improve nutrition

A total diet study determines population dietary exposure not only to harmful chemical substances but also to beneficial and necessary ones across their entire diets. It is needed to estimate dietary exposure to and to assess health risk of food contaminants and allergens and extraneous materials. Additionally, a national food consumption survey is needed to assess the intake of food and nutrients at individual level.

Sustain efforts to produce SDG indicators' and other relevant FNS data

A mapping of the available data for SDG progress tracking uncovered that 110 of the 232 indicators, close to half, are not yet available. For SDG 2, the main goal covered by the CIP2, only 23% of the indicators readily exist and 38% only partially, leaving 38% non-available (**Error! Reference source not found.**). The CIP2 substantially contributes to many other SDGs (1, 3, 5, 6, 8, 9, 12, 13, 14 and 17) which are all affected to different extents by the dearth of information. For example, no information is available for SDG 12 "Ensure sustainable consumption and production patterns" which includes

Figure 33 - Availability of SDG indicators per goal (%)



Source: Sabbih, M.A. (2017) "Implementation Challenges of SDGs Country Study: Bangladesh" Research-Policy meeting on Interpreting SDGs for South Asia (CPD)

the all-important target 12.3 of halving per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses. Thus, there are still extensive needs in Bangladesh in terms of data generation, compilation and treatment for the purposes of monitoring the FSN evolution and of informing policy and decision making. These requires further sustained political will and continued financial commitment to implement.

8.4 Programme V.4. Strengthened FNS governance, capacity strengthening and leadership across FNS

The objective of this programme is that national capacities to design and implement and monitor policies, investment plans, programmes and legal frameworks are enhanced. To this effect, it comprises two sub-programmes. The first one aims to strengthen existing national coordination mechanisms liaising with existing FNS frameworks, clusters and networks, including the SUN initiative and networks working towards integrating the Right to Food to the Constitution. The second seeks to strengthen capacities to design and monitor the new Food and Nutrition Security Policy and implement, monitor and coordinate the CIP2.

8.4.1 Progress towards achievements

Table 28 - Programme V.4: Outputs indicators and progress against baseline

CIP2 output proxy indicators	Baseline (2015/16)	2016/17	2017/18	Source
CIP Monitoring Reports produced	Yes	Yes	Yes	FPMU
Additional resources mobilised for CIP2 (million USD)	…*	1,479 (1,328 new projects + 151 revision)	1,628 (673 new projects + 955 revision)	FPMU
Increase in ongoing projects (number of projects & value, in million USD)	…*	43 1,328	57 673	FPMU
SUN index for 'Bringing people together into a shared space for action'	54%	69%	75%	SUN Annual Progress Report
Right to Food issues discussed by policy makers and at Parliamentary level	No	No	No	FPMU

** Not applicable*

The CIP continues to be monitored on an annual basis

FPMU continues to coordinate the annual production process of the CIP monitoring report, truly making the CIP a "living document" as was intended. This process allows for the integration of improvements and adaptations based on the yearly analyses of the FNS context in the country. In 2018, the report was produced to cover the CIP1 extension in Bangla with no technical support from the MUCH project. While FPMU has visibly expanded its experience and knowledge in CIP monitoring with every report produced, the capacity to monitor FNS and the leadership to bring about the changes needed in the sector are fast evolving. In recent years, a National Nutrition Policy, NPAN2, the CIP2, BMS Act and Regulations, Food Safety Act and Regulations, Food Labelling regulation 2017, Fortification of Edible Oil with Vitamin A Act, National Guidelines on Nutrition in Emergencies, and a School Meal Strategy have been put in place. This transformation of the FNS landscape requires flexibility to understand how these new changes affect the food system and thus require continuous capacity building and updating.

Additional resources mobilised have grown steadily in the first two years of CIP2 implementation

Additional resources mobilised totalled 3.1 billion USD after two years of implementation, with 1.5 and 1.6 billion USD financed in 2016/17 and 2017/18, respectively. These additional resources

mobilised are either derived from new projects - accounting for 1,328 and 673 million USD - or via revisions (change in budget for existing projects) - amounting to 151 million USD and 955 million - in 2016/17 and 2017/18 respectively.

The number of new ongoing projects continued to rise in 2017/18

The increase in additional resource mobilised is associated with an increased number of newly ongoing projects from 43 in 2016/17 to 57 in 2017/18 (Annex 3).

The SUN index for "Bringing people together into a shared space for action" has markedly improved

The SUN annual Joint-Assessment provides an opportunity for nutrition stakeholders to come together, reflect on progress and bottlenecks and identify where support is needed to realise joint goals, at both national and sub-national level. This exercise is organised around four processes in pursuit of the SUN Movement strategic objectives: 1) Bringing people together in the same space for action; 2) Ensuring a coherent policy and legal framework; 3) Aligning actions around common results; and 4) Tracking finance and mobilising resources. The CIP2 monitoring framework selected the first objective as a mean to gauge the degree to which internal harmonisation and coordination has evolved over time. The "bringing people together in the same space for action" process markedly increased since 2015/16 from 54% to 69% the following year and 78% in 2017/18. Some of the following events contributed to this improvement: in 2017, the revised terms of reference for the Bangladesh National Nutrition Council (BNNC) secretariat were included as part of NPAN2 and the revitalised BNNC held its first meeting in 2017. The Minister of Health and the nutrition community made the "Unite4Nutrition" call to action, aiming to address undernutrition collectively. This momentum continued in 2018 with *National Nutrition Week* and the *Nutrition Olympiad* which drew mass public, youth and parliamentary attention to nutrition. A National Adolescent Nutrition Campaign and Convention was organised to address adolescent nutrition and child marriage. A new SUN Government focal point was appointed in May 2018. Finally, the SUN Business Network (SBN) and SUN Network for Academia are being established[185].

The Right to Food is not yet on policymakers' or the Parliament's agenda

The CIP2 states that promoting the inclusion of the Right to Food -inclusive of nutrition- is a fundamental principle of State policy that can improve FNS governance by improving accountability and eliminating uncertainties with regards to different stakeholders' roles and obligations. And indeed, right activists are increasingly calling for the Right to Food to be embedded in the law and are sensitising people through "Right to Food and Nutrition Campaigns". Human rights activists consider the Right to Food to be weak in Bangladesh, because while the Constitution does mention this right, it is not justiciable[186]. However, despite its weak legal status, it appears to be honoured in practice because of the shadow of the 1974 famine on policy makers[187].

8.4.2 Policy development, programmes and initiatives underway

Bangladesh SUN Business network is in operation

With the support of the Global Alliance for Improved Nutrition (GAIN) and other partners, the Bangladesh SUN Business Network (SBN) is operating today with dedicated staff and a new strategy under development. The SBN aims to reduce malnutrition in all its forms – through engaging and supporting business to act, invest and innovate in responsible and sustainable actions and operations to improve nutrition. At the national level, the SBN convenes businesses, assesses technical, financial

[185] The Scaling Up Nutrition (SUN) Movement (2018) "*Annual Progress Report 2018*".

[186] Hossain, N. and te Lintelo D. (2018) "*A Common Sense Approach to the Right to Food*" Journal of Human Rights Practice.

[187] Hossain N. and Jahan F. (2014) "*The Food Riots That Never Were: The Moral and Political Economy of Food Security in Bangladesh*" Food Riots and Food Rights Project Report, Brighton: Institute of Development Studies.

and other business support service needs for members, and advocates for the role of private sector in addressing nutrition at the country level through responsible investments.

8.4.3 Needs for further actions under this programme include

Activate the role of the Local Consultative Groups (LCGs)

The CIP2 states that FNS-relevant LCGs need to become more active, in particular, to follow up on decisions taken by the Economic Relations Division (ERD). Also, there is currently no LCG dealing specifically with social protection. Such an entity would be useful to effectively communicate with the GoB's Central Management Committee on SSNs.

Strengthen capacities of public staff on FNS

The SUN progress report specifically calls for the BNNC office to be strengthened through human resource allocations and capacity development. More generally, capacity enhancement of all institutional and non-institutional actors involved in FNS policy and programming related mechanisms needs to be undertaken based on capacity needs assessment to be carried out by impartial agencies. This would include private sector and civil society mechanisms, and networks of relevant institutions.

Consider the possibility of adopting nutrition-responsive budgeting

As part of its national budget activities, the GoB currently carries out gender, poverty and child responsive budgeting. It is in the process of establishing climate responsive budgeting. By focusing only on the development part of the budget, recurrent interventions which may also impact FNS are disregarded. UNICEF carried out a public expenditure review focusing on nutrition for 2016/17 but this was a one-off exercise. Thus, the GoB may consider introducing nutrition responsive budgeting to be carried out annually.

Establish a policy support unit for the MoFL

The fisheries and livestock sectors have a great potential for improving the availability and consumption of protein and micronutrient-dense foods for improving the quality of diets, along with promoting livelihood of farmers. It is therefore essential to strengthen the ongoing FNS policy activities that can orient sectoral and cross-sectoral policies and also generate evidence-based policy advice. The establishment of a policy unit may rely on lessons learnt from similar existing units such as the Ministry of Agriculture's Agriculture Policy Support Unit (APSU) and the Ministry of Food's Food Planning and Monitoring Unit (FPMU).

9. CIP 2 Financing

9.1 Integrated approach for financial monitoring

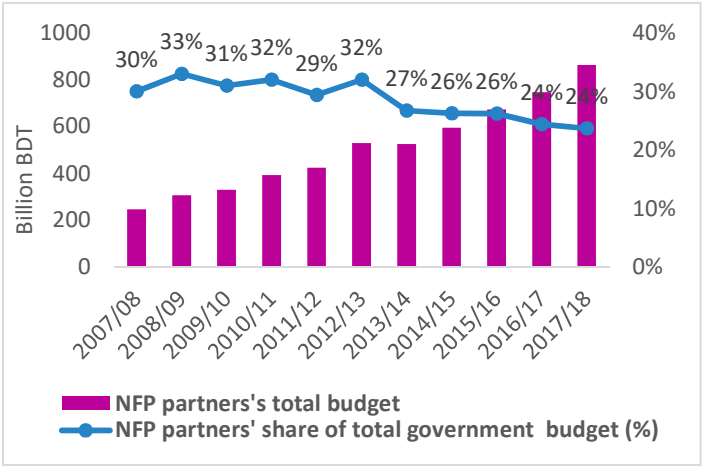
The CIP2 is an investment tool - in continuity with the CIP1-PoA and in alignment with the 7FYP and other tools and monitoring mechanisms used by Government. In particular, it is conducted according to the existing national system for monitoring ADP investments as part of the existing national planning process which involves the Ministry of Finance and the Implementation Monitoring and Evaluation Division (IMED). It is, moreover, complementary to other financial and investment tools such as NPAN2, the Country Investment Plan for Environment Forestry and Climate Change (CIP EFCC) and the upcoming Investment plan to Action plan on Social protection.

9.2 Budget of key FNS partner ministries: space for food nutrition security and gender

FNS partners' budgets

Figure 34 reports on the aggregate budget of ministries and divisions involved in FNS[188] with details provided in Annex 4. This is a rough estimate and will overestimate FNS budgeting since most ministries are involved in areas other than FNS. This particularly true for ministries such as MoLGRDC which carries out very expensive infrastructure projects. However, this figure can help gauge the fiscal weight of FNS in Bangladesh. In absolute terms, these ministries' budgets witnessed a clear upward trend the last decade with the three years leading up to 2017/18 registering annual rises of 13%, 11% and 16%, respectively, well above the inflation rate. Thus, as of 2017/18, the budget of all ministries involved in FNS amounted to 863 billion BDT. These totals, however, conceal wide variations in the yearly evolution of ministerial budgets with that of MoA, for example, fluctuating much less than that of MoFood. Worryingly, since 2013/14, the share of the budget of ministries involved in FNS in the National Budget has steadily declined, down to 24% in 2017/18 against 32% in 2012/13.

Figure 34 - Aggregate budget of FNS ministries/divisions and their share in National Budget



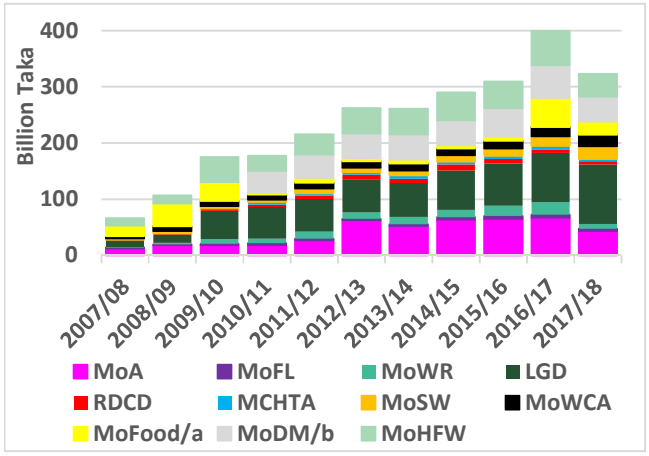
Source: Ministry of Finance

[188] Namely: MoA, MoFL, MoWR, MoLGRDC, MoCHTA, MoSW, MoWCA, MoFood, MoDM and MoHFW.

Gender spending in FNS partners' budgets

Gender budgeting can help flag deficiencies in the efforts made to focus on women and gender equality. This is essential when dealing with FNS given the fundamental reproductive and productive roles of women and their key part in improving households' food security and dietary diversity. The budget allocated to gender-related matters by ministries involved in FNS increased consistently in the last decade with a remarkable spike in 2016/17. In 2007/08, 66 billion BDT was allocated to gender; 309 billion BDT in 2015/16. The following year, this surged to 400 billion BDT but dropped back to 323 billion BDT in 2017/18 (Figure 35).

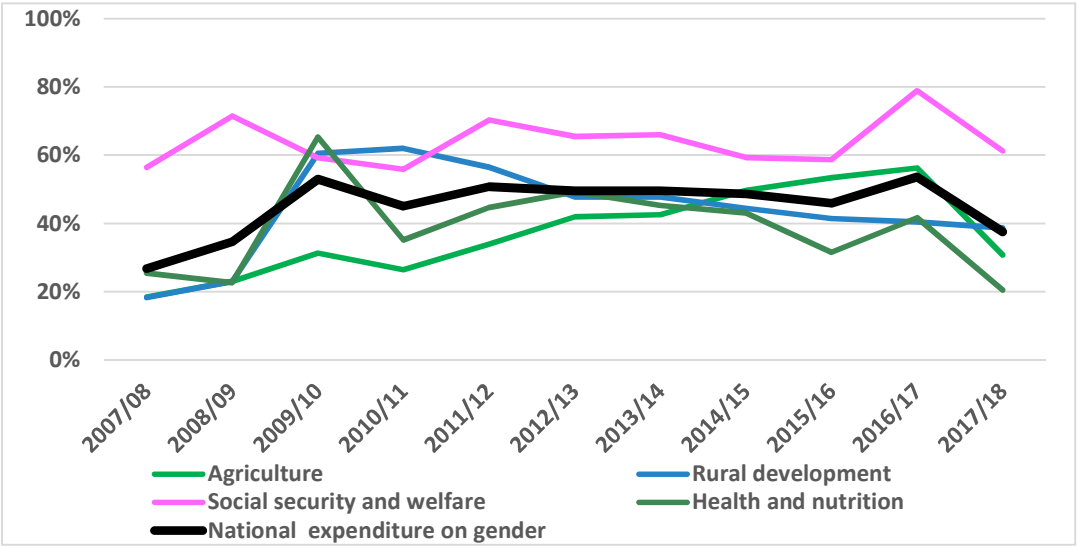
Figure 35 - Planned budget spending on gender by FNS ministries



Source: Ministry of Finance

Gender spending, as a share of total FNS partners' budgets, hovered around 50% in recent years, peaked at 54% in 2016/17 and suddenly dropped to 37% in 2017/18 (Figure 36). This slump was common to all FNS-related sectors. On the whole and apart from 2017/18, encouragingly, the agriculture sector has experienced the steadiest growth of gender in its budget over the years. The health and nutrition and rural development sectors, on the other hand, have mostly experienced declines in the share of expenditures tackling gender issues which should be a cause for concern.

Figure 36 - Gender-related budget spending in total budget by FNS partners



Source: Ministry of Finance

CIP2 financing: a methodological note

CIP2 costing and financial requirements are analysed in terms of financed budget and financial gap to be filled in order to obtain CIP2 expected results within each of the five CIP2 pillars (corresponding to Outcomes), 13 programmes and 39 sub-programmes (see Section 2). At the baseline, the financed

CIP2 budget totalled 9.26 billion USD[189]. This amount was computed as the residual (or unspent budget) of all relevant projects as of 30th June 2016. Each year, for the monitoring exercise, this figure is revised based on the most recent data i.e. revisions and spending in existing projects and newly introduced projects. As of 30th June 2018, the total baseline budget has been revised and it currently stands at 9.97 billion USD (Annex 5). The revision accounted for more ongoing projects reported to have started before 30th June 2016 and 20 more pipeline projects supposed to start in the first year of implementation.

In the CIP1, project budgets were allocated using a yearly pro-rata constant basis. This, however, failed to consider the dynamics of budget expenditure which are seldom linear. Delivery is usually slower at the onset of a project and accelerates in the latter stages. For the CIP2, a new approach factors in the implementation phase of each project. This important refinement is based on a careful review of CIP1 projects that were started and fully implemented over the CIP1 period (2011 – 2016). This revealed the following average pattern of expenditure as a share of their total budget:

- First year of implementation: 3%
- Second year of implementation: 9%
- Third year of implementation: 28%
- Fourth year of implementation: 30%
- Fifth year of implementation: 30%

This was used to derive the share of projects' budget to be counted in the CIP2 during each monitoring exercise as described in Table 29. For example, any project starting in the current monitoring cycle, MR19, will see 40% of its budget counted in the CIP2. The assumption is that there are three years remaining to the CIP2 in which 3%, 9% and 28% will be spent in the first, second and third year of the implementation of the project, respectively.

Table 29 – Share of projects' budget falling within CIP2

Monitoring year	Projects starting period	Implementation duration	Budget share to be included in the CIP2
CIP2: Baseline	Before 30th June 2016	5 years 1st July 2016 – 30th June 2020	100% (of unspent budget as of 30th June 2016)
Year 1: **MR 2018**	1st July 2016 – 30th June 2017	4 years 1st July 2017 – 30th June 2020	70%
Year 2: **MR 2019**	**1st July 2017 –** **30th June 2018**	**3 years** **1st July 2018 – 30th June 2020**	**40%**
Year 3: **MR 2020**	1st July 2018 – 30th June 2019	2 years 1st July 2019 – 30th June 2020	12%
Year 4: **MR 2021**	1st July 2019 – 30th June 2020	1 Year 1st July 2020 – 30th June 2020	3%

9.3 CIP2 nutrition impact assessment with examples from BRAC

BRAC, in collaboration with FAO and the MUCH project, conducted five impact assessments on nutrition-sensitive CIP2 sub-programmes that included Home Gardening and Small Fish Cultivation (Outcome I), Balanced Plate Nutrition (Outcome III) and Social Safety Net Expansion and Fortified Rice Distribution (Outcome IV). The benefits related to human health, nutrition and financial profitability were assessed from existing evidence. The quantification is based on the use of DALYs (Disability Adjusted Life Years) which is used in the health sector (e.g. WHO, the World Bank) to quantify the

[189] The Bangladesh Bank exchange rate of 30th June 2016 has been used: 78.4 BDT for 1 USD.

burden of diseases from mortality and morbidity. Table 30 outlines the benefit/cost ratio (BCR) and cost-effectiveness of the five assessments which shows that all five programmes are cost-effective[190].

Table 30 – Inputs and Costs of intervention

Intervention	Major inputs	Total Cost (Million USD)	Total Benefit (Million USD)	BCR	Cost/ DALY averted (USD)
Home gardening	Training, monitoring & supervision, over-head & seed & input cost	130.6	248.1	1.9	2,366
Fish farming	Training & demonstration	13.4	60.4	4.4	809
Fortified rice distribution	Cost of fortification, distribution, nutrition education	0.4	1.7	3.9	1,800
Social Safety Net Expansion	Cost for fortification, education, nutrition supplement	605.1	17,262	28.5	504
Balanced Plate Nutrition	one-to-one specific nutrition education/ counselling, & practical demonstration to teach pregnant women to plan & prepare balanced meals	0.01	0.1	8.7	-

Source: BRAC-RED/ FAO, 2018 "Cost-benefit analysis of nutrition-sensitive interventions".

The analyses pointed to the potential of the nutrition-sensitive interventions to be leveraged as entry points for nutrition-specific programmes and to be integrated across multiple sectors, in order to impact the improvement of diets and nutrition. However, cost-benefit analyses - while able to quantify the impact of interventions in terms of economic returns – do underestimate many of the actual benefits of the interventions and should not be taken as the only instrument to assess topmost priorities of a certain CIP2 programmes.

[190] BRAC-RED/ FAO, 2018 "*Cost-benefit analysis of nutrition sensitive interventions*".

9.4 Total CIP2 financing

Budget evolution

As of 30th June 2018, the CIP2 budget totalled 14.0 billion USD, of which 8.9 billion was already financed (through ongoing or completed projects) and 5.1 billion USD was the financial gap, i.e. pipeline projects (Table 31). The GoB was responsible for 68% of the financed part and the DPs for 32%. Outcome I (*Primary production*) is the largest area of investment channelling about 5.6 billion USD (40%), followed by Outcome II (*Market & value chain*) with 5.3 billion USD (38%), Outcome IV (*Social protection*) with 2.4 billion USD (17%), Outcome III (*Diversified consumption*) and Outcome IV (*Cross-cutting issues*) covering 2.1% and 2.5% of the CIP2 investment, respectively (Figure 37). These shares are very similar to the ones of the baseline: the largest increase is registered for Pillar II (+3%).

Table 31 - Summary of CIP2 2019 budget (as of 30th June 2018, in million USD)

Pillar	Total CIP			Financed			Pipeline		
	Total	GoB	DP	Total	GoB	DP	Total	GoB	DP
I: Primary production	5,610	2,892	2,718	2,748	1,925	823	2,862	967	1,895
II: Market & value chain	5,363	4,156	1,208	3,371	2,865	506	1,992	1,291	701
III: Diversified consumption	346	205	141	293	196	97	53	9	43
IV: Social protection	2,387	1,157	1,230	2,292	1,081	1,211	95	76	19
V: Cross-cutting	299	42	257	228	34	194	71	8	63
Total	**14,005**	**8,451**	**5,554**	**8,932**	**6,100**	**2,832**	**5,073**	**2,351**	**2,722**

Figure 37 - Evolution of CIP2 2019 budget from baseline to MR 2019

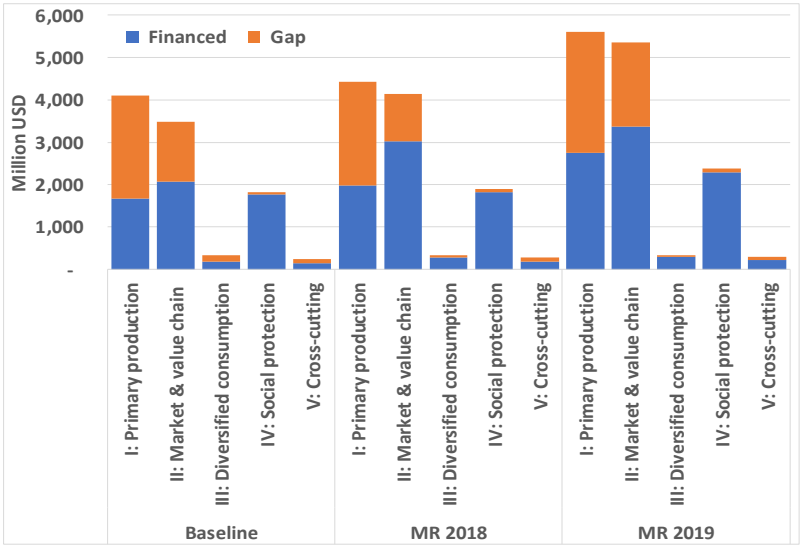


Table 32 presents these results once projects have been weighted according to their nutrition focus as explained in *Section 2* (*Approach to monitoring*). Thus, as of 30th June 2018, the total nutrition-weighted CIP2 budget totalled 8.9 billion USD compared to 14.01 million USD without this weighting. This reflects the fact that some projects are nutrition-supportive and have therefore been given a weight of 50% only, others are nutrition-sensitive and have been given a weight of 75%, while a few are nutrition-sensitive+, for which their entire budget has been counted. The nutrition-weighted financial gap came to 3.3 billion USD compared to 5.1 billion USD without the weighting.

Primary production (Pillar I) remained the largest pillar with the nutrition weighting, even increasing its share in the total budget to 47% compared to 40% without it. *Market & value chain* (Pillar II) also remained the second largest pillar when applying the nutrition weights, although its share declined to 30%, instead of 38%. The shares of the remaining pillars are very close to those observed in the non-weighted budget.

Table 32 – Summary of nutrition weighted CIP2 2019 budget (as of 30th June 2018, in million USD)

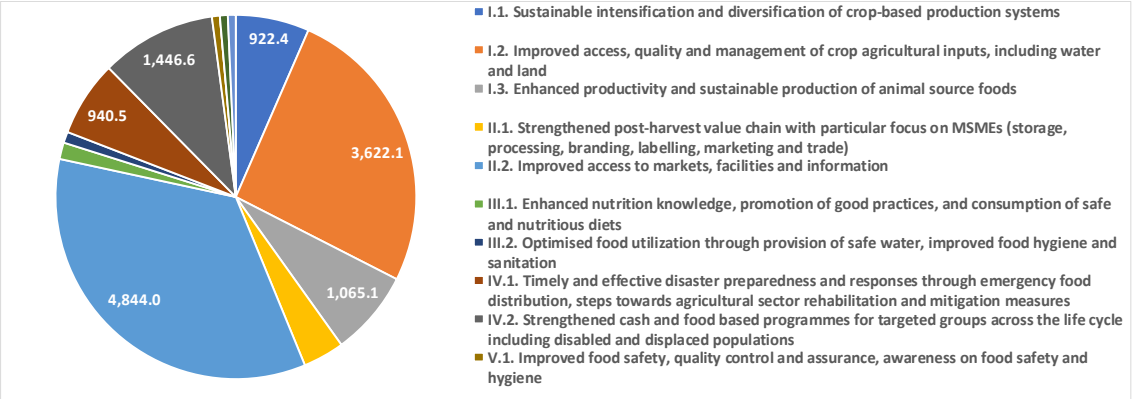
Pillar	Total CIP			Financed			Pipeline		
	Total	GoB	DP	Total	GoB	DP	Total	GoB	DP
I: Primary production	4,188	2,149	2,038	2,042	1,424	617	2,146	725	1,421
II: Market & value chain	2,682	2,078	604	1,686	1,432	253	996	645	351
III: Diversified consumption	311	177	133	258	168	90	53	9	43
IV: Social protection	1,620	837	784	1,549	780	770	71	57	14
V: Cross-cutting	175	28	147	122	23	99	52	5	47
Total	**8,975**	**5,269**	**3,706**	**5,656**	**3,827**	**1,830**	**3,319**	**1,442**	**1,876**

The total CIP2 budget increased by 2.9 billion USD (+26%) compared to 2016/17 and by 4.0 billion USD (+40%) since the baseline (30th June 2016). The percentage increases are comparable when analysing the nutrition-weighted budget. This increase in budget is mainly due to a rise in the financed budget. In fact, while GoB financial commitments have risen steadily at a rate of 30% in the last two CIP2 years (see the outcome indicator for Outcome V), DPs' financial commitments have only risen by an average 13%.

The DPs concentrated the largest proportion of their budgets onto programmes under the *Primary production* area: 49%, and 55% in the nutrition-weighted budget. Interestingly, while 34% of the GoB falls under the *Primary Production* Pillar, when applying the nutrition weights, this rises to 41%, making it its largest destination of funds. Conversely, the GoB dedicates 49% of its resources to *Market & value chain* but this share that declines to 39% when applying nutrition weights, reflecting the fact that most of these projects are infrastructure building which are nutrition-supportive rather than sensitive.

Zooming in on programmes shows that '*Improved access to markets, facilities and information*' (Programme II.2) and '*Improved access quality management of crop agricultural inputs, including water and land*' (Programme I.2) alone cover 60% of the total budget. Another five programmes (IV.2, I.3, IV.1, I.1, II.1) cover 35% of the total budget, which leaves the other six programmes (III.1, III.2, V.1, V.4 V.3, V.2) with 5% of the budget only (Figure 38 and Annex 6). This type of disparities is to be expected in an investment plan with such diverse areas of intervention as the CIP2. Indeed, achieving a nutrition-sensitive and sustainable food system which will achieve improved security and nutrition for all at all times requires, for example, the construction of very expensive fertiliser factories or costly water irrigation projects. Concurrently, BCC nutrition interventions while vital to achieve the CIP2 goals, take place at infinitesimal cost in comparison. So while some areas of the CIP2, by virtue of the nature of the investments involved (infrastructure for example), constitute a much larger share of the total budget, it is important that the GoB and DPs do not lose sight of the importance of interventions under other areas of investment (such as Pillars III and V). Indeed, the areas of investment and CIP2 programmes were identified as jointly paramount to achieve FNS based on extensive consultations with FNS stakeholders. Moreover, programmes such as the one on 'Food waste and losses' remain to be populated with projects which will require concerted efforts from different parties and prerequisites such as the capacity to measure FWL in the country.

Figure 38 - Total CIP2 budget by Programme



Financed budget[191]

Total mobilised CIP2 resources increased by 1.6 billion USD (+22%) to 8.9 billion USD in 2017/18 compared an increase of 25% in the first year of the CIP2 (Table 33). When applying the nutrition weights, the increase in the financed budget was of 24% in both years, bringing it to 5.7 billion USD. These rates are lower than the yearly average of 33% observed during the CIP1. As of 30th June 2018, 38% of the financed budget was allocated to *Market & value chain* (Pillar II), 31% to *Primary production* (Pillar I), 26% to *Social Protection* (Pillar IV), and 3% and 2% respectively to Pillar III and V. These percentages change to 30%, 36%, 27%, 5% and 2%, respectively, when applying nutrition weights.

Pipeline budget[192]

Concerningly, the share of pipeline projects almost entirely fell under *Primary production* (56%) and *Market & value chain* (39%), with just 2% going to *Social Protection* (against 26% of the financed budget). Applying nutrition weights, 65% of the pipeline budget falls under the *Primary production* pillar and 30% under the Market & value chain Pillar. While it is important that the commitments made in these areas are translated into actual financed budget, attention should be brought to the need for the GoB and DPs to also prioritise the other areas of investment of the CIP2 without which many of the challenges faced by Bangladesh with regards to FNS will not be tackled.

Table 33 – Evolution of CIP2 financed budget from baseline to MR 2019

Pillar	Baseline	Change during 1st year of CIP2	MR 2018	Change during 2nd year of CIP2	MR 2019
I: Primary production	1,665	323	1,988	759	2,748
II: Market & value chain	2,069	957	3,025	346	3,371
III: Diversified consumption	174	104	278	15	293
IV: Social protection	1,774	46	1,820	472	2,292
V: Cross-cutting	143	50	192	35	228
Total	**5,826**	**1,479**	**7,305**	**1,627**	**8,932**

Delivery

The cumulative delivery represents the actual expenditures over the two years of CIP2 implementation. As of 30th June 2018, the cumulative delivery amounted to 3.1 billion USD which corresponds to 35% of total financed budget (Table 34), or 1.9 billion USD, 34% of the total financed budget with nutrition weighting. *Primary production*, *Market & value chain*, *Diversified consumption*, *Social protection* and *Cross-cutting issues* delivered 34%, 43%, 31%, 23%, 41% of their respective

[191] See Annex 7 for the list of ongoing and finished projects under the CIP2 and their financial details.

[192] See Annex 8 for the list of pipeline projects and associated financial details.

financed budget. The delivery in the *Social Protection* area of investment is particularly low. These figures vary little when applying the nutrition weights. Table 34 shows that delivery in the first year has slowed down compared to the second year except for *Diversified Consumption* (Pillar III) and *Cross-cutting* (Pillar V). Yearly delivery needs to be accelerated during the third year of implementation in order to compensate for this current trend. To this effect, Government agencies and DPs need to focus on developing the disbursement capacities of implementing agencies, in order to achieve a faster and more focused delivery of the ongoing and planned interventions.

Table 34 – CIP2 2019 Cumulative delivery (as of 30th June 2018, in million USD)

Pillar	Delivery during 1st year (1st July '16 – 30th June '17)			Delivery during 2nd year 1st July '17 – 30th June '18			Cumulative delivery		
	Total	GoB	PA	Total	GoB	PA	Total	GoB	PA
I: Primary production	475	395	80	472	377	95	947	772	175
II: Market & value chain	755	565	190	703	600	103	1,458	1,165	293
III: Diversified consumption	43	23	20	49	34	14	92	57	34
IV: Social protection	298	155	142	232	160	73	530	315	215
V: Cross-cutting	39	11	28	55	8	46	94	19	74
Total	**1,610**	**1,150**	**460**	**1,511**	**1,179**	**332**	**3,120**	**2,329**	**791**

10. Progress and recommendations

Progress towards CIP2 goal

The CIP2 final goal is to achieve improved security and nutrition for all at all times by making food systems nutrition-sensitive and sustainable. Its strategic objective is to ensure availability, affordability and nutritional quality of foods; that all people have access to a variety of safe and nutritious foods; and knowledge to be able to make healthy diet choices.

The proxy estimates chosen to gauge recent changes with regards to the achievement of the CIP2 goal include the prevalence of undernourishment in terms of dietary energy supply (PoU) which, as per the latest FAO estimates, declined from 15.8% in 2015 to 15.1% in 2016 followed by a slight increase to 15.2% in 2017. While hunger levels have continued to decline in Bangladesh, the rate of reduction has slowed down. While child stunting at the national level has shown remarkable decline, halving the prevalence from 60% in the mid-90s to 31% in 2018, the level remains very high and a public health concern. Marked disparities exist across socioeconomic groups, between urban and rural areas, and across regions. Sylhet, Barishal, Chattogram, Mymensingh, Rajshahi and Rangpur districts have very high levels of stunting: over 30%. Wasting, an important component of child undernutrition, has demonstrated some improvement, from 14 % in 2014 to 8% in 2018, which means that the 8% NPAN2 target has already been met and puts the WHO target of less than 5% by 2025 within reach. Agricultural value added per worker, a measure for agricultural productivity and proxy for SDG 2.3.1, almost doubled over the period 2005 - 2017 compared to that of the period 1990 – 2004, but a slow-down was observed in this growth over the reference period (2015 - 2017).

CIP2 outcomes: progress and recommendations

Outcome I: A sluggish drive towards diversification in production

The overall assessment of proxy indicators for primary production shows an increase in the dependency on rice imports in the 2015/16 to 2017/18 reference period, due to all-time high private rice imports in the latter year. Agricultural GDP growth picked up after the drop experienced in 2012/13, reaching 4% in 2017/18. Livestock and fishery sectors combined generated about 40% of agricultural value added over the reference period, a slow trend towards diversification when compared to 36% in 2007/08. The rice value added in total food value slightly increased in the reference period and still stands at 33.8% in 2017/18, suggesting that while diversification - albeit slow - is happening, it has not yet translated into a substantial reduction of value addition from rice in parallel with more value addition and transformation activities in sectors such as livestock and non-cereal crops. The wage differential between male and female in agriculture narrowed to 26.4% in 2016/17, a clear improvement from previous values: 33% in 2015/16 and from 48% in 2007/08.

Recommendations for further actions in this area of investment include the need to:

- Accelerate nutrition-focused agricultural diversification while continue improving the productivity of cereals
- Strengthen the engagement of the private sector to achieve a sustainable and innovative agriculture and contributes to exploiting the potential of livestock and high-value crops
- Sustain agroforestry for environmental protection, climate change mitigation and sustainable agricultural intensification.

Outcome II: Lower agricultural real wage rates in a context of stable inflation, due to volatile rice prices in the wake of flash floods

The proxy indicators for Pillar II, Market & value addition, described a stable level of inflation reflected by a steady Consumer Price Index – a measure of change in the price of a commodities' basket- over the reference period. Concurrently however, the agricultural real rice wage rate (on a 3-year moving average basis) decreased from 7.6% in 2015/16 to -0.2% in 2017/18 due to a steep increase in the rice

price. The Indicator of Food Price Anomalies (IFPA) which measures volatility by identifying abnormal price monthly changes, signalled a particularly high price in 2016/17, probably due to the negative impact of flash floods on production level, consequent harvest loss and supply tightness associated with concurrently reduced imports. The following year witnessed a normalisation of this price.

Recommendations for further actions in this area of investment include the need to:

- Enhancement and conservation of nutrients in post-harvest storage, transformation and distribution
- Encourage measures that can increase profitability for farmers and MSMEs
- Strengthen smallholders' access to information, skills, inputs and nutrition-sensitive technologies.

Outcome III: **Dietary diversity is progressing among women and children, but high prevalence of micronutrient deficiencies persists**

The national consumption of cereals declined and by 2016 stood at just four percentage points above the CIP2 target of 60% energy intake from cereals by 2020. However, disparities exist, with rural areas lagging behind with a 65% figure and urban areas having already achieved the recommended rate with a figure of 59%. The proportion of children aged 6-23 months receiving minimum acceptable diet significantly increased to just over a third in 2016/17 from 23% in 2014 bringing the country close to achieving the NPAN2 target. While current national estimates of consumption of *adequately* iodised salt are not available, BSCIC data point to an 81% of the population consuming iodised salt in 2017/18. The prevalence of anaemia among women of reproductive age was still high at 39.9% in 2016 and has shown little improvement in the reference period. Although recent data on Minimum Dietary Diversity for Women is not yet available, previous trends suggest that Bangladesh is not on track to achieve its target.

Recommendations for further actions in this area of investment include the need to:

- Promote interventions to improve dietary diversification to ensure nutrient adequacy among women in reproductive age, especially among adolescent girls, and young children
- Improve and monitor the consumption of fortified foods in order to inform policy and programmatic changes
- Address overweight and obesity while tackling undernutrition and micronutrient deficiencies.

Outcome IV: **A decelerating poverty reduction rate and many still in need of social protection**

The MDG target of halving the population living below the poverty line from 58% to 29% had been achieved by 2012 and the poverty headcount index stood at 24% in 2016. While poverty has declined, the pace of this fall, especially that of extreme poverty, decelerated after 2010, failing to reflect the strong and rising economic growth, with geographical and socioeconomic inequalities widening. Substantial numbers of people remain poor and susceptible to undernourishment and malnutrition, stressing the need for the interventions proposed under Pillar IV - *Enhanced access to social protection and safety nets and increase resilience*.

Recommendations for further actions in this Pillar include the need to:

- Promote a more inclusive economic growth while protecting vulnerable populations
- Address intrahousehold inequalities in food and resource allocation
- Tackle the effects of worsening inequalities and vulnerabilities which vary across regions
- Make economic growth more inclusive especially in view of the worsening inequalities.

Outcome V: **Adequate institutional arrangements for CIP2 monitoring**

High-level FNS focal points have been established across core ministries and are engaged in policy monitoring through regular meetings. This has meant that high-level FNS policy reports were regularly

produced over the reference period. However, this adequate set up has not translated in sufficient GOB financial commitments which are lagging *vis-à-vis* the set target.

Recommendations for further actions in this Pillar include the need to:

- Institutionalise capacity strengthening rather than carry it out on a project basis. Indeed, in light of the complexity of foods systems and the approaches adopted to conceptualise them, the technical abilities of FPMU and FNS focal points need to be constantly updated
- Continue developing the capacity of FPMU and partner agencies to coordinate, plan, communicate and lead
- Translate the strong political commitment to ensure the effective implementation of the CIP2
- Strengthen the potential of partnership beyond public institutions.

CIP2 programmes: progress and recommendations

Programme I.1. Sustainable and diversified agriculture through integrated research & extension

The production growth of vegetables and fruits showed mixed results over the reference period with rice and wheat bouncing back from a negative figure while the growth of non-cereal crops - except pumpkin, *lal shak*, carrot and jackfruit - slowed down over the same period. The release of new rice, wheat, fruits and vegetables varieties accelerated. However, the production of stress-tolerant seeds dropped slightly in 2017/18 following a sharp rise in the previous year. Meanwhile, the number of farmers trained on sustainable agricultural practices increased in 2017/18. The number of institutions delivering nutrition training remained stable over the same period. Finally, the share of gender budget in total MoA budget dropped significantly.

In the reference period, the following measures stood out:

- Increase in crop intensification in favour of non-cereal crops through GoB provision of appropriate packages of seed-fertiliser-irrigation technologies as well as credit support
- Baseline study on *Agriculture Nutrition and Gender Linkages* to provide field level insight into nutrition and gender sensitivity agricultural planning
- Yield gaps and constraints quantified for cereals
- Research-extension linkages enhanced to improve productivity notably through the second phase of the *National Agriculture Technology Project (NATP II, 2015-2021).*
- Benchmarking of greenhouse gas emissions from different cropping patterns for climate change mitigation.

Recommendations for further actions under this CIP2 programme include the need to:

- Accelerate the dissemination of high yielding, high value, nutrition-dense, stress-tolerant varieties considering private sector involvement notably through Public Private Partnerships
- Continue research on reducing yield gaps which still range between 19% an 64% of the potential gap in Bangladesh
- Implement regulatory requirements to scale up fortification that delivers micronutrients such as iodine and vitamin A to vulnerable groups
- Promote farmers' need-based extension services involving the private sector and NGOs under adequate guidance from the public sector
- Encourage the involvement of the private actors in biotechnological research and innovation adoption.

Programme I.2. Improved access, quality and management of crop agricultural inputs, including water and land

The annual change in availability of improved cereal seeds bounced back in 2016/17 to 15.6% after a negative figure in the previous year and slowed down to 10.1% the following year, due to lower growth

of rice and maize seed production. Over the reference period, the seed supply as share of agronomic requirements improved for all non-cereal crops - except pulses. The frequency of soil testing increased, albeit slowly. Arable land under surface irrigation expanded at faster pace, a positive result since surface irrigation helps reducing the depletion of groundwater resources. WUE remained low particularly for agriculture, albeit in a context of low level of water stress (4% in 2017) relative to the global average and the water stress threshold of 25%. The supply of Urea, MoP and TSP significantly improved in the reference period. Meanwhile, agricultural credit disbursement accelerated and exceeded target set by the Bangladesh Bank. While 40% of beneficiaries of this credit were women, they only received 29.5% of the total. The number of samples of fish feed tested for quality assurance declined, a worrying trend given the need to ensure quality of animal feed. Although organic farming became more common, it remains marginal with only around 0.2% of the country's total farmland concerned. Land salinization remains a problem although no recent figures exist on its prevalence. Direct gender budgeting as share of the Ministry of Water Resources budget registered a mixed trend over the reference period shrinking to 4.9% in 2017/18.

In the reference period, the following measures were noted:

- Boosting access to quality seed, in particular for maize, vegetables and potato through production and imports by the Government, the private sector and NGOs
- Upscaling irrigation infrastructure development. BADC also set up a database on underground water resources and existing irrigation equipment to be updated on a yearly basis
- Ongoing mechanisation programmes mostly for trashing and tillage to help handle labour and available agricultural land shortages.

Recommendations for further actions under this CIP2 programme include the need to:

- Promote private sector investment and involvement in R&D, production, multiplication and distribution of seeds
- Remove constraints to the adoption of deep fertiliser placement and alternate wetting and drying (AWD) techniques which increase the productivity and efficiency of quality inputs' use
- Popularise integrated soil fertility management approach to help restore soil fertility and contribute to food safety
- Accelerate farm mechanisation especially for seeding and harvesting
- Promote sustainable management of water resources for irrigation.

Programme I.3. Enhanced productivity and sustainable production of animal source foods

The degree of protection of coastal and marine areas remained low, with only 5.4% of the marine territory under protection as of 2016/17. The growth in fish production averaged 5.1% between 2015/16 and 2017/18, in line with the previous ten years' average. The country achieved self-sufficiency in fish production in 2016/17 mainly thanks to aquaculture, with marine capture remaining low and mainly artisanal. The share of total fisheries exports slightly decreased from 2% in 2015/16 to 1.4% in 2017/18 following the trend observed in the past ten years. Shrimp exports earnings declined due to declining international prices and competitive pressures on international markets. Concurrently, the contribution of the fisheries sector to agriculture GDP increased from 26.7% in 2015/16 to 28.3% in 2017/18 thanks the growing domestic demand and continued development of fish-rice cultivation and pond inland aquaculture. The production of meat, milk and eggs increased, but continued to be insufficient to cover domestic demand for milk and eggs. The livestock GDP growth rate increased, albeit slowly and the contribution of livestock to agriculture GDP remained stable although far below that of crop and fisheries. The production of vaccines for livestock and poultry picked up, while artificial insemination continued, but at slower rate than before the reference period. Training by the Ministry of Fisheries and Livestock reached more than three million farmers over the reference period and concentrated more on livestock farmers than fisheries/aquaculture

farmers. Finally, the budget allocated to gender by the Ministry of Fisheries and Livestock decreased in spite of the important role women have in in fish value chain development.

The following endeavours stood out in the reference period:

Fisheries

- Improvement of coastal and marine fisheries through projects such as the World Bank- funded *Bangladesh Sustainable Coastal and marine Fisheries project* or the USAID-funded *Enhanced Coastal Fisheries in Bangladesh (ECOFISH-BD)*
- Intensifying the production of small nutrient-rich fish through, for example, the IFAD-supported *Managing Aquatic Agricultural Systems to Improve Nutrition and Livelihoods in Bangladesh* project
- Improving aquaculture productivity by developing hatcheries and nurseries, disseminating improved fish and shrimp seed, enhancing farm management skills of smallholders, promoting new technologies, market linkages, policy reform and capacity building, as done through the USAID *Feed the Future Bangladesh Aquaculture and Nutrition Activity (2018-23)*
- Prioritisation of the ocean economy as a source of growth in spite of environmental limitations

Livestock

- Revitalisation of the National Dairy Development Forum (NDDF) and establishment of its executive committee
- Improving livestock productivity through USAID's Feed the Future's *Bangladesh Livestock Production for Improved Nutrition* project and the 500 USD million World Bank-funded *Livestock Development Project (2018-23).*

Recommendations for further actions under this CIP2 programme include the need to:

Fisheries

- Update the National Fisheries Policy 1998
- Facilitate investments to promote sustainable production of nutrient-dense fish
- Adopt a "blue economy approach" to exploit the ocean ecosystem sustainably

Livestock

- Update the National Poultry Development Policy 2008 to integrate new developments and challenges in the poultry sector, including support to artificial insemination, improvement of animal health and access to veterinary services and support to research development for animal breeding
- Scale-up initiatives that have proven to be cost -effective for the sustainable production of livestock.

Programme II.1. Efficient and nutrition-sensitive post-harvest transformation and value addition

The production of medium and large-scale food manufacturing industries increased, with six leading companies dominating the market. The difference between farm gate and retail prices decreased – drastically so for lentils and onions- but not for potatoes. Prolonged periods of bad weather and interruptions to transportation due to *hartals*, blockades and other forms of interruptions – contributed to the divergence between retail and wholesale prices. Exports of food -mainly fish, crustacean and other aquatic products- and beverages increased from 69,020 million BDT in 2015/16 to 93,584 million BDT in 2017/18. Concurrently, agro-business entrepreneurship training and capacity building was scaled up by the Ministry of Agriculture and the Ministry of Industries through BSCIC.

In the reference period, the following developments stood out:

- Improvement in vertical and horizontal integration of food value chain actors with for instance, more contract farming leading to greater profits facilitated by a number of initiatives
- Release of new BFSA guidelines for the implementation of quality standards and labelling
- Small scale milk and fish, fruits and vegetables value chains under development with the use of mobile technology and e-commerce platforms for example.

Recommendations for further actions in this Pillar include the need to:

- Incentivise the production and processing of affordable nutrient-rich commodities by MSMEs through vertical and horizontal integration through the food value chain
- Strengthen cold -chain system to reduce wastage and quality/quantity loss
- Promote development of agro-processing to boost exports
- Strengthen institutional and individual capacity development to address quality management, safety assurance and loss reduction in fruit and vegetable supply chains and thus support post-harvest systems.

Programme II.2. Improved physical access to markets, facilities and information

The quality of upazilla and union level roads noticeably improved in the reference period through construction and repairs. This was also the case for bridges which are essential to create a complete network to transport food and other resources across the country. LGED and the Department of Agriculture Marketing (DAM) continued building and maintaining growth centres and rural markets, albeit at a slower pace. Cold storage capacity steadily increased to 10 MMT in 2017/18 from 4 MMT in 2015/16. More Digital Centres were built across the country although their use by farmers needs to be promoted.

Among the important developments in this area during the reference period were the following:

- Expansion of transport infrastructure for example with a World Bank financed 515 million USD to improve coastal and marine fisheries, forest management and rural roads
- Promotion of networking among value chain actors for better information sharing and market opportunities through initiatives such as the Syngenta *Farmers' Hubs Agri-Marketing Enterprise (FHAME)*, a one-stop service platform for smallholder farmers.

Recommendations for further actions under this CIP2 programme include the need to:

- Establish Special Economic Zones for agriculture that offer conducive incentives (e.g. simplified financial regulation and procedures) and an adequate business environment (purpose-built facilities, physical proximity of value chain actors along the chain) to support high value crop processing
- Support development of facilities and infrastructure for storage and processing
- Improve the market information system for information on pricing and early warnings to be more readily available.

Programme III.1 Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets

Notable progress was registered in exclusive breastfeeding from 55.7% in 2014 to 65% in 2017. There was a marginal decline in the share of total dietary energy supply (DES) from cereals in the period 2006/2008 to 2013/2015 from 78.7 % to 76.3% but the DES in Bangladesh continues to rely heavily on carbohydrates. The promotion of home gardens and backyard poultry continued among poor households through projects such as the Government's *Amar Bari Amar Khamar* (My House My Farm) programme. Diabetes cases increased from 6.9% in 2015 to 8.6% in 2016, far from the target of 0% by 2025 set in the Multisectoral Action Plan for Prevention and Control of Non-communicable Diseases 2018–2025. The number of nutrition-related mass media activities remained constant. Increased

numbers of institutions promoted the Food Based Dietary Guidelines for Bangladesh. In contrast with the MoA and the MoFL, there was a remarkable increase in direct gender budgeting in the MoFood budget.

In the reference period, the following measures were noted:

- Launching of the Multisectoral Action Plan for Prevention and Control of Non communicable Diseases (2018-2025) that prioritise the promotion of healthy diets high in fruits and vegetables and low intake of saturated fats/trans-fats, free sugars and salt through dissemination of dietary guidelines, mass media campaign and school nutrition education
- Revision of National Dietary Guidelines (2015)
- Promotion of nutrition through national nutrition events such as the National Nutrition Week or the Nutrition Olympiad.

Recommendations for further actions under this CIP2 programme include the need to:

- Integrate nutrition Behaviour Change Communication into nutrition-sensitive programming as recommended by research testing different approaches to enhancing nutrition
- Promote consumption of underutilised foods which mostly have much higher nutrient content, are also less damaging to the environment and are culturally acceptable
- Institutionalize nutrition education in schools, including through school gardening.

Programme III.2 - Optimised food utilisation through provision of safe water, improved food hygiene and sanitation

Access to safe drinking water remained high and is almost universal. However, no progress in access to sanitary latrines, especially in rural areas, was registered. A large number of under-five year children were admitted in health facilities for diarrheal diseases over the reference period, often a consequence of infectious diseases affecting the gastrointestinal tract. Finally, appropriate handwashing was not scaled-up.

In the reference period, the following targeted policy development, programmes and initiatives underway stood out:

- Improvement of access to WASH in rural areas through the World Bank *Bangladesh Rural Water Supply and Sanitation Project*
- Better access to WASH in urban slums through varied GoB interventions such as the *WASH for Urban Poor Project* which targets 450,000 people living in slums of Dhaka, Chattogram and Khulna, and three municipalities in Saidpur, Sakhipur and Paikgachha.

Recommendations for further actions under this CIP2 programme include the need to:

- Promote Public-Private-Partnerships in WASH sector through the provision of adequate incentives
- Scale-up SBCC interventions on improved hygiene practices, especially hand washing through mass-media campaigns and community interventions (one-to-one counselling).

Programme IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, agriculture rehabilitation and mitigation measures

The number of cyclone shelters built remained constant at 3,868 units in 2017/18, far from the 7FYP target. The number of rural communities with disaster resilient habitats and assets gradually increased from 7,334 in 2014 to 7,934 in 2017/18. There was a clear decline in the quantity of foodgrain distributed by the Government from 1,216 thousand MT in 2015/15 and 2016/17 down to 1,102 in 2017/18. Public grain storage capacity remained virtually unchanged at 1,877 thousand MT in 2017/18. Although most of the Public Food Distribution System (PFDS) channels falls under the Government's recurrent budget and are therefore not monitored under the CIP2, it requires storage

and efficient management, elements that involve investments through the CIP2. Since the start of the CIP2, the effective public grain storage capacity has made very limited progress up to 1,877 in 2017/18 in spite of the Government's objective of reaching 2700 thousand MT by 2020. The average use of effective GoB foodgrain storage capacity was variable over the reference period while stock planning improved although it was irregular. The number of regional and global Initiatives to improve early warning information remained static. While the beneficiaries included in the safety nets under this ministry are often selected on the basis of gender or are at least women are given priority, the direct gender budget percentage in their total budget fluctuates from year to year at 23.1% in 2016/17 and 34.7% in 2017/18, quite some way from past figures that stood well over 40%.

In the reference period, the following developments stood out:

- Recognition by the GoB of the need to accelerate progress in disaster preparedness and mitigation through for example the signing of the Sendai Framework for Disaster Risk Reduction 2015-2030 and substantial projects such as the 375 million USD World Bank *Multipurpose Disaster Shelter Project (MDSP)*
- Provision of credit for disaster preparedness and post-disaster rehabilitation through PKSF's a Disaster Management Fund, Sahos, the IFRC's Forecast-based Financing (FbF) pilot
- AIGAS provided to protect livelihoods of those most vulnerable through projects such as ECOFISH under the Department of Fisheries
- Stock building made more efficient through the ongoing automation of the GoB's foodgrain procurement system
- Support to move the bulk of food SSNs to cash transfers.

Recommendations for further actions under this CIP2 programme include the need to:

- Enhance gender sensitivity of disaster preparedness and response
- Apply a nutrition-sensitive approach to disaster preparedness and responses
- Adopt adaptative social protection (ASP) which entails a dual approach: reducing poverty and building resilience before shocks occur so that the most vulnerable populations are better prepared, and ensuring that safety nets are able to respond to shocks swiftly by introducing greater flexibility and scalability in programme designs
- Develop disaster risk financing
- Continue the enhancement of different types of storage: Government storage for PFDS as well as storage at local level and even household level.

Programme IV.2. Strengthened social protection and safety net programmes for targeted groups across the life cycle, including disabled and displaced populations

There was a slight increase in the weight of safety net programmes in total GDP up to 2.17% of GDP in 2017/18, from 2.09% in the previous year, surpassing 13% of the total Government budget. Around three million children are covered by the *School Feeding Programs in Poverty Prone Areas* which in addition to providing fortified biscuits includes a learning package for children, parents and other community members on vegetable gardening, health, nutrition and hygiene. More efforts are needed to transform *Vulnerable Group Development* into a more nutrition-sensitive programme such as the *Investment Component of VGD* which compared to the VGD adds a substantial cash grant for investment, distributed fortified rice distribution and provides nutrition BCC. Over 0.8 million beneficiaries were reached yearly by the *Employment Generation Programme for the Poor* in last three years, out of which 40% are women.

In the reference period, the following measures were noted:

- Provision of fortified rice through VGD and FFP with provision of nutrition awareness and training activities

- Improved coordination of policies, strategies and actions plans with the National Social Security Strategy's Action Plan developed in 2018
- Consolidation of the social protection system
- SSN payments digitalised to enhance targeting and implementation
- Actions taken by BBS towards the creation of an SSN single registry using the National Household Database. The database will be integrated with information systems of various ministries and agencies to use for beneficiary selection purposes and to prevent duplication in beneficiary coverage
- SSN's life cycle approach under implementation.

Recommendations for further actions under this CIP2 programme include the need to:

- Expand the approach of combining cash safety nets with complementary activities for enhanced nutrition outcomes as this has been shown to have the greatest impact on child stunting
- Continue promoting employment for the most vulnerable through programmes such as *Strengthening Women's Ability for Productive New Opportunities (SWAPNO)*
- Gradually introduce contributory social insurance in order to broaden the scope and modernise the social security system by combining tax-funded safety net programmes with contributory social insurance -and employment regulations
- Include other fortified foods and nutrient-dense foods in the package of foods distributed
- Cope with displaced populations by taking measures to build the resilience of host and displaced populations and provide the necessary conditions for people to build their livelihoods
- Estimate the weight of nutrition-sensitive programmes in total social protection.

Programme V.1. Improved food safety, quality control and assurance, awareness on food safety and hygiene

Training of farmers on the use of biofertilizer - including organic, green and microbial fertilisers - intensified from 0.8 million in 2015/16 to 1.431 million in 2017/18. BSTI awarded ten food safety management system certificates in 2017/18 compared to seven in the first year in 2016/17 and five in 2015/16. The numbers of standardised processed foods under mandatory certification rose up to 74 in 2017/18 from 58 in 2016/17. The number of violations of food safety standards reported declined from 76 violations in 2015/16, to 70 the following year, down to only 31 in 2017/18. This decline may be explained by the deterrent nature of checks that are taking place but also points to the need to geographically expand the work carried out by BFSA. The lack of adequately trained food inspectors is one of the challenges faced by BFSA. The number of HACCP/FSMS certified institutions significantly increased from 10 in 2015/16 to 70 in 2017/18. There are currently 14 private sector certification agencies accredited by BAB in addition to BSTI. Among them are international companies which have identified the need for this service in Bangladesh. Over the reference period, a clear drive to deliver Good Hygienic Practices and Good Management Practices courses emerged while Good Agricultural Practices lagged behind. Finally, since 2018, the second of February has become the National Food Safety Day to coincide with the creation date of the BFSA. This is an occasion to raise awareness and remind the public of the importance of preventing food contamination or adulteration and ensuring safer food for all.

In the reference period, the following targeted policy development, programmes and initiatives underway stood out:

- The Pesticide Act (2018) passed
- An international gradation system for city restaurants was introduced

- The drive to raise food safety awareness continued. For example. BFSA launched awareness programmes for school students about food hygiene and launched a YouTube channel to create public awareness.

Recommendations for further actions under this CIP2 programme include the need to:

- Accelerate the improvement of the management of solid waste since the system has seen no major improvement despite various initiatives taken by the two city corporations under Greater Dhaka
- Create demand for organic fertiliser
- Enable the standardisation of foods by BSTI
- Streamline inspection procedures and harmonize food safety standards as the food safety controls in place in the country are still quite fragmented with overlapping and multiple jurisdiction of several ministries and agencies
- Establish and strengthen traceability of foods. Indeed, food safety is an issue that needs to be addressed from the moment of production to the moment of consumption
- Strengthen capacities across the board for an operational food safety system. The enactment of the Food Safety Act in 2013 and the creation of the BFSA in 2015 have prompted a need for additional capacities
- Strengthen capacities for safe and healthy street food vending given the widespread consumption of street foods
- Harness market drivers of food safety since historically, improvements in food safety have often come about as the private sector responded to consumer demand for safe foods
- Review legislation with regards to antimicrobial resistance.

Programme V.2. Reduced food losses and waste

National post-harvest loss estimations have taken place over the years for specific food commodities, but no nationally representative recent information is yet available. Worldwide studies have also shown that in South Asia food losses are mostly prevalent near production, handling and storage, and less so near consumption. While the focus should therefore be on the lower end of the value chain, as value chains transform, it is likely that waste and losses associated with consumption and distribution will increase.

Among the important developments in this area during the reference period were the following:

- Responsibilities were identified and action plans prepared to monitor global food waste and losses
- Requests were sent for technical cooperation in order to estimate food waste and loss.

Recommendations for further actions under this CIP2 programme include the need to:

- Strengthen information system on monitoring food loss and waste
- Integrate a gender dimension into food loss reduction strategies
- Modernise and adapt machinery and storage that reduces waste and losses of food and its nutrients.

Programme V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes

Government and non-Government institutions continue to produce national, *ad hoc* surveys and surveillance systems that contribute to inform nutrition-sensitive policies and programmes and can provide updates on coverage and effectiveness of nutrition specific interventions. Meanwhile, training on the food composition tables developed in 2013 were ongoing during the reference period.

In the reference period, the following developments stood out:

- The FCTs were used in nutrition research and applied nutrition projects, including the interpretation of food consumption studies, the nutritional assessment of food supplies, setting nutrient targets in food production across ministries, in the planning of quantitative dietary guidelines and diets
- Integrated Phase Classification providing support to GoB in conducting FNS chronic analyses
- The implementation of the National Strategy for the Development of Statistics (NSDS) continued
- An SDG Tracker was created as data repository for monitoring the implementation of SDGs, to strengthen timely data and improve situation analysis and performance monitoring of achieving the SDGs along with other national development goals.

Recommendations for further actions under this CIP2 programme include the need to:

- Undertake research on healthy diets to improve nutrition
- Sustain efforts to produce SDG indicators' and other relevant FNS data. Indeed, a mapping of the available data for SDG progress tracking uncovered 110 of the 232 indicators, close to half, are not available.

Programme V.4. Strengthened FNS governance, capacity strengthening and leadership across FNS

FPMU continues to coordinate the efforts to produce the annual monitoring report for the CIP, truly making it a "living document" as was intended. This process allows for an integration of improvements and adaptations based on the yearly analyses of the FNS context in the country. After two years of implementation, as of 30th June 2018, additional resources mobilised totalled 3.1 billion USD, with 1.5 and 1.6 billion USD financed in 2016/17 and 2017/18, respectively. The number of newly ongoing projects increased from 43 in 2016/17 to 57 in 2017/18. There was a marked improvement in the SUN index for "Bringing people together into a shared space for action" reflecting a number of events such as the revitalisation of the BNNC which held its first meeting in 2017. The Minister of Health and the nutrition community also made the "Unite4Nutrition" call to action, aiming to address undernutrition collectively. The Right to Food is not yet on policymakers' or the Parliament's agenda but despite its weak legal status appears to be honoured in practice.

In the reference period, the following developments stood out:

- Bangladesh SUN Business network was in operation. The SBN provides a neutral platform to broker partnerships and collaborations between business and all actors on nutrition at the national, regional and global level in support of SUN countries.

Recommendations for further actions under this CIP2 programme include the need to:

- Activate the role of the Local Consultative Groups (LCGs)
- Strengthen the capacities of public staff on FNS
- Consider the possibility of adopting nutrition-responsive budgeting in the same way the GoB currently carries out gender, poverty and child responsive budgeting.

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CIP2 financing

Budget evolution

As of 30th June 2018, the CIP2 budget totalled 14 billion USD, or 9 billion USD when prioritising project budgets according to their role in achieving positive nutritional outcomes. *Primary production* (Pillar I) is the largest area of investment, channelling about 5.6 billion USD or 75% of this amount when nutrition-weighted (4.2 billion USD). This is followed by *Market & value chain* (Pillar II) with 5.4 billion USD, or 50% of this amount, once nutrition-weighted. *Social protection* (Pillar IV) accounts for 2.4 billion USD or 68% of this (1.6 billion USD) when nutrition-weighted. The *Diversified consumption* area of investment (Pillar III)) has a total budget of 0.35 million USD (0.31 if nutrition-weighted) and the *Cross-cutting issues* (Pillar V), 0.30 billion USD (0.18 billion if nutrition-weighted). Two programmes - 'Improved access to markets, facilities and information' (Programme II.2) and 'Improved access quality management of crop agricultural inputs, including water and land' (Programme I.2)- alone cover 60% of the total budget. Some areas of the CIP2, by virtue of the nature of the investments involved (infrastructure for example), constitute a much larger share of the total budget. However, some areas of investment need to be given more emphasis (Pillar III and IV) and some programmes are yet to be invested in (V.2. Reduced food losses and waste).

Financed budget

Total mobilised CIP2 resources increased by 1.6 billion USD (+22%) to 8.9 billion USD in 2017/18 compared an increase of 25% in the first year of the CIP2. These rates are lower than the yearly average of 33% observed during the CIP1 due to the low increase in DPs' resource mobilisation (an annual average 13% increase since the start of the CIP2). When applying the nutrition weights, the increase in the financed budget was of 24%. The GoB was responsible for 68% of the financed part and the DPs for 32% in both the total and nutrition-weighted budgets. As of 30th June 2018, 38% of the financed budget was allocated to *Market & value chain*, 31% to *Primary production*, 26% to *Social Protection*, and 3% and 2% respectively to Pillar III and V. These percentages change to 30%, 36%, 27%, 5% and 2%, respectively, when applying nutrition weights.

Pipeline budget

Concerningly, the share of pipeline projects almost entirely fell under *Primary production* (56%) and *Market & value chain* (39%), with just 2% going to *Social Protection* (against 26% of the financed budget). While it is important that the commitments made in these areas are translated into actual financed budget, attention must be brought to the need for the GoB and DPs to also prioritise the other areas of investment of the CIP2 without which many of the challenges faced by Bangladesh with regards to FNS will not be tackled.

Delivery

As of 30th June 2018, cumulative delivery amounted to 3.1 billion USD (1.9 nutrition-weighted) which corresponds to 35% (34% nutrition-weighted) of the total financed budget. The delivery in the *Social Protection* area of investment was particularly low, at 23%, while the highest is that of Pillar II and V, albeit not surpassing 43%. These figures vary little when applying the nutrition weights. Delivery in the first year has slowed down compared to the second year except for *Diversified Consumption* (Pillar III) and *Cross-cutting* (Pillar V). Yearly delivery needs to be accelerated during the third year of implementation in order to compensate for this current trend

The following recommendations can be made based on the financial analysis of the CIP2:

- It is important that the GoB and DPs focus on pillars and mobilise adequate resources for all programmes: efforts are needed under the pillars *Diversified Consumption* and *Cross-cutting*

issues, which bear limited weight in the current CIP2 budget and for which very few projects are in the pipeline. While the *Social Protection* Pillar comes third in terms of its weight in the so-far-financed projects, the GoB and DPs need to sustain their efforts since projects planned for the remaining three years of the CIP2 are minimal.

- Some programmes such as the one on *Food Waste and Losses* remains to be populated with projects which will require concerted efforts from different parties and prerequisites such as the capacity to measure FWL in the country.
- Financial commitments need to be intensified, particularly for DPs.
- Government agencies and DPs need to focus on developing the disbursement capacities of implementing agencies to achieve a faster and more effective delivery of the ongoing and planned interventions. This is particularly the case for *Diversified Consumption* and *Social Protection* pillars.

Annexes

Annex 1 – Composition of the Thematic Teams

Thematic Teams (TT)		Ministry/ department/ unit
TT A **Diversified & Sustainable Agriculture, Fisheries & Livestock**	1	FPMU, Ministry of Food
	2	Ministry of Agriculture
	3	Ministry of Fisheries & Livestock
	4	Ministry of Industries
	5	Ministry of Water resources
	6	Department of Agricultural Extension
	7	Department of Fisheries
	8	Department of Livestock Services
	9	Bangladesh Chemical Industries Corporation
	10	FPMU, Ministry of Food
	11	FPMU, Ministry of Food
	12	FPMU, Ministry of Food
TT B **Efficient & Nutrition-Sensitive Post-Harvest Transformation & Value Chain**	13	FPMU, Ministry of Food
	14	Ministries of Industries
	15	Ministry of Agriculture
	16	Ministry of Fisheries & Livestock
	17	Ministry of Environment, Forest & Climate Change
	18	Local Government Division
	19	Ministry of Local Government, Rural Development & Co-operatives
	20	Bangladesh Standard & Testing Institute, BSTI
	21	Department of Agricultural Marketing, DAM
	22	FPMU, Ministry of Food
	23	FPMU, Ministry of Food
	24	Ministry of Food
TT C **Improved Dietary Diversity, Consumption & Nutrition**	25	FPMU, Ministry of Food
	26	Ministry of Food
	27	Ministry of Primary & Mass Education
	28	Ministry of Women & Children Affairs
	29	Health Services Division, MoHFW
	30	Local Government Division
	31	Ministry of Local Government, Rural Development & Co-operatives
	32	Bangladesh National Nutrition Council, BNNC
	33	Department of Public Health Engineering, DPHE
	34	Institute of Public Health & Nutrition, IPHN
	35	INFS, University of Dhaka
	36	FPMU, Ministry of Food
	37	FPMU, Ministry of Food
TT D **Enhanced Access to Social Protection, Safety Nets & Increased Resilience**	38	FPMU, Ministry of Food
	39	Ministry of Food
	40	Cabinet Division
	41	Ministry of Women & Children Affairs, MoWCA
	42	Finance Division, Ministry of Finance
	43	Ministry of Disaster Management & Relief
	44	Ministry of Primary & Mass Education

Thematic Teams (TT)		Ministry/ department/ unit
	45	Ministry of Social Welfare
	46	Local Government Division, MoLGRD&C
	47	General Economic Division
	48	Departments of Food
	49	Bangladesh National Nutrition Council (BNNC)
	50	FPMU, Ministry of Food
TT E **Cross Cutting Issues of Nutrition-Sensitive Food System & Strategies**	51	FPMU, Ministry of Food
	52	GED, Planning Commission
	53	Finance Division, Ministry of Finance
	54	ERD, Ministry of Finance
	55	Ministry of Environment, Forest & Climate Change
	56	Local Government Division, MoLGRD&C
	57	Bangladesh Bureau of Statistics (BBS)
	58	Bangladesh Food Safety Authority (BFSA)
	59	Bangladesh Accreditation Board (BAB)
	60	Institute of Public Health (IPH)
	61	Department of Public Health Engineering
	62	FPMU, Ministry of Food
	63	FPMU, Ministry of Food
	64	FPMU, Ministry of Food

Annex 2 – CIP2 and MR19 results indicators

Goal Indicators

n	CIP2	MR19
1	SDG Indicator 2.1.1: Prevalence of undernourishment	same
2	SDG Indicator 2.2.1: Prevalence of stunting (height for age <-2 s.d. from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	same
3	SDG Indicator 2.2.2: Prevalence of wasting among children under 5 years of age (<-2 s.d. of weight for height)	same
	SDG Indicator 2.1.2: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	
	SDG Indicator 2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size	PROXY: Agricultural value addition per worker (USD)
	SDG Indicator 2.3.2 Average income of small-scale food producers, by sex and indigenous status	
	SDG Indicator 2.4.1 Proportion of agricultural area under productive and sustainable agriculture	

Outcome indicators

Pillar	n.	CIP2	MR19
I. Diversified and sustainable agriculture, fisheries and livestock for healthy diets	1	PoA- CIP1: Rice import dependency (import/availability)	same
	2	7FYP: Agricultural sector GDP growth rate (%) a) Crop and horticulture b) Fisheries c) Livestock	same
	3	PoA- CIP1: Share of rice value added in total food value added in current price	same
	4	PoA- CIP1: Wage differential between males and females in agriculture	same
II. Efficient and nutrition-sensitive post-harvest transformation and value addition	5	7FYP: Average annual CPI inflation rate	same
	6	Change in without food agricultural wage rate of male agricultural labour	same
	7	SDG 2.c.1: Change in Food Price Anomalies	same
III. Improved dietary diversity, consumption and utilization	8	PoA-CIP1: National dietary energy intake from cereals (%)	same
	9	PoA-CIP1: Proportion of children receiving minimum acceptable diet at 6-23 months of age (%)	same
	10	PoA-CIP1: Proportion of households consuming adequately iodised salt containing at least 15 ppm	same
	11	Prevalence of anaemia among women of reproductive age (15-49)	same
	12	Minimum Dietary Diversity (MDD) for women	same
IV. Enhanced access to social protection and safety nets and increased resilience	13	7FYP: Proportion of population living below national poverty line, differentiated by urban and rural (SDG Indicator 1.2.1: Proportion of population living below the national poverty line, by sex and age)	same
	14	Proportion of population under national extreme poverty line (a) Rural and (b) Urban	same
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security	15	GoB financial commitments to CIP2	same
	16	Establishment of high-level FSN focal points across core ministries	same
	17	Process of establishment of FSN focal points engaged in policy monitoring is on-going through regular TT and TWG meetings	same
	18	Annual high level FNS policy reports produced	same

Output indicators

Investment Programme	n	CIP2	MR19
I.1 Sustainable intensification and diversification of crop-based production systems	1	7FYP: % of agriculture budget allocated in the agricultural research	same
	2	PoA- CIP1: Annual change in major crops' production	same
	3	Direct gender budgeting as % of MoA budget (revised)	same
	4	PoA- CIP1: Number of improved new varieties released	same
	5	Production of seeds tolerant to salinity, drought and water submergence in MT	same
	6	PoA- CIP1: Number of farmers trained on sustainable agriculture practices by DAE	same
	7	Number of institutions delivering nutrition training across core ministries	same
I. 2. Improved access, quality and management of crop agricultural inputs, including water and land	8	PoA- CIP1: Annual change in improved rice, wheat and maize seeds production	same
	9	PoA- CIP1: Improved seeds supply (BADC, DAE & private companies) as % of agronomic requirements	same
	10	Number of soil samples analysed to upazilla and union levels	same
	11	Arable land increased by expansion of minor irrigation coverage by encouraging optimal use of surface water, and increasing the area of arable land by reducing water logging and submergence in thousand ha	MODIFIED: Increased arable land under surface irrigation coverage (thousand ha)
	12	Direct gender budgeting as % of MoWR budget (revised)	same
	13	PoA- CIP1: Supply of urea as % of estimated requirements	same
	14	PoA- CIP1: Supply of MoP as % of estimated requirements	same
	15	PoA- CIP1: Supply of TSP as % of estimated requirements	same
	16	PoA- CIP1: Agricultural credit disbursement in billion BDT	same
	17	Number of samples of fish feed tested for quality assurance	same
	18	Area of land affected by salinisation	same
	19	Area of land under organic farming under DAE initiative	same
		SDG indicator 5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	
		SDG indicator 6.4.1 Change in water-use efficiency over time	PROXY: Water-use efficiency (USD/m3)
		SDG indicator 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	same

Investment Programme	n	CIP2	MR19
I.3. Enhanced productivity and sustainable production of animal source foods	20	7FYP: Percentage of (a) coastal and (b) marine areas that are protected	same
	21	7FYP: Percentage of wetland and natural sanctuaries maintained	same
	22	PoA- CIP1: Annual change in quantity of fish production	same
	23	PoA- CIP1: Fishery exports: a) value as % of total export; b) of which shrimp share in %	same
	24	PoA- CIP1: GDP from fishery sector as % of agriculture GDP (excluding forest), at constant prices 2005/06	same
	25	PoA- CIP1: Production of eggs (million), milk, (MT) cattle and meat (MT)	same
	26	PoA- CIP1: GDP from livestock sector as % of agriculture GDP (excluding forest), at constant prices 2005/06	same
	27	Growth rate of livestock GDP	same
	28	Number of doses of vaccines produced	same
	29	PoA- CIP1: Annual change in artificial insemination	same
	30	Number of farmers trained by the DoF and DLS	same
	31	Direct gender budgeting as % of MoFL budget (revised)	same
	32	Number of commercial registered (1. Poultry; 2. Livestock; 3. fish farms)	same
	33	Number of ponds	same
		SDG 14.2.1 indicator Proportion of national exclusive economic zones managed using ecosystem-based approaches	
II.1 Strengthened post-harvest value chain with particular focus on MSMEs (storage, processing, branding, labelling, marketing and trade)	34	Number of large establishments manufacturing food	PROXY: Quantum index of medium and large-scale manufacturing industry for food
	35	Number of medium, small and micro establishments manufacturing food	
	36	PoA- CIP1: Difference between farm gate and retail price of selected goods	same
	37	Food and beverages exported in million BDT	same
	38	Coverage of agro-business entrepreneurship training by the Ministry of Agriculture and the Ministry of Industries (BSCIC), in thousands	same
II.2. Improved access to markets, facilities and information	39	7FYP: Upazilla and union road network in good and fair condition (SDG 9.1.1 indicator Proportion of the rural population who live within 2 km of an all-season road)	same
	40	Number of growth centres, rural markets, women market centres, and Union Parishad Complexes developed by LGED and DAM	same

Investment Programme	n	CIP2	MR19
	41	Cold storage available in thousand MT	same
	42	Number of Digital Centres across the country at national and sub-national levels	same
	43	Number of food, market and infrastructure PPP contracts awarded (2015) by the PPP authority	same
III.1. Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets	45	7FYP: Proportion of children under 6 months who are exclusively breastfed (%)	same
	46	PoA- CIP1: Share of total dietary energy supply for consumption a) from cereal; and b) non-cereal	same
	47	Direct gender budgeting as % of MoFood budget	same
	48	PoA- CIP1: Poor households raising home gardening and backyard poultry in selected vulnerable districts	same
	49	Prevalence of diabetic cases	same
	50	PoA- CIP1: Number of mass media activities for nutrition behavioural change communication (BCC)	same
	51	Number of institutions promoting dietary guidelines	same
III.2. Optimised food utilization through provision of safe water, improved food hygiene and sanitation	52	7FYP: Percentage of urban and rural population with access to safe drinking water (a. Urban, b. Rural) [SDG indicator 6.1.1 Proportion of population using safely managed drinking water services]	same
	53	7FYP Percentage of urban and rural population with access to sanitary latrines (a. Urban, b. Rural) [SDG indicator 6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water]	same
	54	Number of children aged 5 years or less admitted in upazilla health complexes, at the district-level secondary hospitals and in medical college hospitals for diarrhoea and gastroenteritis of infectious origin	same
IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, steps towards agricultural sector rehabilitation and mitigation measures	55	7FYP: No. of usable cyclone shelters	same
	56	7FYP: Number of rural communities with disaster resilient habitats and communities' assets	same
	57	Month of adequate household food provisioning	REMOVED
	58	Direct gender budgeting as % of MoDMR budget	same
	59	PoA- CIP1: Effective grain storage capacity at close of fiscal year	same
	60	PoA- CIP1: Average use of effective GoB foodgrain storage capacity	same
			ADDED: Distribution of foodgrain through PFDS (thousand MT)
	61	Actual closing stocks % of budget target	same
	62	Environment CIP: Early warning information enhanced through Regional and Global Initiatives (MoUs and LoAs)	same

Investment Programme	n	CIP2	MR19
IV. 2. Strengthened social protection and safety net programmes for targeted groups across the life cycle including disabled and displaced population	63	PoA- CIP1: Budgeted coverage of VGF (lakh person) and VGD (lakh person month)	MODIFIED: Budgeted coverage of VGD and ICVGD (in hundred-thousand-person month)
	64	PoA- CIP1: Quantity of VGF and GR distributed (in thousand MT)	REMOVED
	65	PoA- CIP1: Safety net programmes expenditures as % of GDP [SDG indicator 1.3.1. Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work injury victims and the poor and the vulnerable]	same
	66	Number of children covered by the School Feeding Programs in Poverty Prone Areas (in tens of thousands)	same
	67	Coverage of people covered by the Allowance for the Financially Insolvent Disabled (in tens of thousands)	REMOVED
	68	Coverage of Old Age Allowance/Pension (in tens of thousands)	REMOVED
	69	Budgeted coverage of employment generation programme for the poor (in lakh person month)	same
V.1, Improved food safety, quality control and assurance, awareness on food safety and hygiene	70	7FYP: Percentage of urban solid waste regularly collected	REMOVED
	71	Farmers trained on use of organic fertilizer, green fertiliser and microbial fertilizer, in thousands	same
	72	Number of food safety management system certificates awarded by BSTI	same
	73	Number of food items standardised by BSTI	ADJUSTED: Number of processed food items standardised by BSTI (mandatory certification)
	74	Identified number of violations of food safety standard reported by BFSA	same
	75	Number of HACCP/ISMS certified institutions	same
	76	Number of courses delivered on GAP, GHP and GMP	same
	77	Number of trainees that have benefited from training on GAP, GHP and GMP	same
	78	Number of food safety initiatives /days observed	same
V.2. Reduced food losses and waste	79	Wastage as a proportion of agricultural produce, including sector specific proportions in Bangladesh	same

Investment Programme	n	CIP2	MR19
V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes	80	PoA- CIP1: Existing food security and nutrition databases/ surveillance systems	same
	81	PoA- CIP1: Food Composition Tables (FCT) updated/ disseminated	same
V.4. Strengthened FSN governance, capacity strengthening and leadership across FSN relevant stakeholders	82	PoA- CIP1: CIP Monitoring Reports produced	same
	83	PoA- CIP1: Additional resources mobilised for the CIP2 in million USD	same
	84	PoA- CIP1: Increase in ongoing projects (number and value)	same
	85	SUN index for 'Bringing people together into a shared space for action'	same
	86	Right to Food issues discussed by policy makers and at Parliamentary level	same

Annex 3 - Number of projects components by programme[193]

Programme	CIP 2017 (Baseline)			CIP 2018			CIP 2019		
	Ongoing	Pipeline	Total	Completed / Ongoing	Pipeline	Total	Completed / Ongoing	Pipeline	Total
I.1. Sustainable intensification and diversification of crop-based production systems	41	27	68	47	45	93	58	41	99
I.2. Improved access, quality and management of crop agricultural inputs, including water and land	78	17	95	81	46	94	96	43	139
I.3. Enhanced productivity and sustainable production of animal source foods	45	23	68	57	19	67	62	20	82
II.1. Strengthened post-harvest value chain with particular focus on MSMEs (storage, processing, branding, labelling, marketing and trade)	13	19	32	17	18	66	18	19	37
II.2. Improved access to markets, facilities and information	53	29	82	76	9	57	76	20	96
III.1. Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets	3	15	18	4	15	63	15	5	20
III.2. Optimised food utilisation through provision of safe water, improved food hygiene and sanitation	7	3	10	8	2	50	9	1	10
IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, steps towards agricultural sector rehabilitation and mitigation measures	21	2	23	21	2	50	23	2	25
IV.2. Strengthened cash and food-based programmes for targeted groups across the life cycle including disabled and displaced populations	28	8	36	30	12	60	33	13	46
V.1. Improved food safety, quality control and assurance, awareness on food safety and hygiene	8	16	24	9	15	63	18	8	26
V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes	6	1	7	6	2	50	6	2	8
V.4. Improved FSN governance, capacity strengthening and leadership across FSN relevant stakeholders	4	3	7	4	3	51	8	4	12
Total number of projects' components	**307**	**163**	**470**	**360**	**189**	**549**	**422**	**179**	**601**
Total number of projects	**264**	**122**	**386**	**307**	**156**	**463**	**364**	**138**	**502**

[193] A single project may appear in several subprogrammes as its different components may contribute to different areas of the CIP2.

Annex 4 - Aggregate budget of FNS ministries and divisions

Partner ministries	FY11-12			FY12-13			FY13-14			FY14-15			FY15-16			FY16-17			FY17-18		
	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp	Revised budget	Change on previous year	% of total exp
MoA	92.6	10%	6%	148.8	61%	9%	122.8	-17%	6%	122.8	0%	5%	111.4	-9%	4%	103.8	-7%	3%	103.5	0%	3%
MoFL	9.3	18%	1%	8.9	-4%	1%	10.7	20%	1%	12.1	13%	1%	15.5	28%	1%	16.6	7%	1%	17.6	6%	0%
MoWR	22.6	6%	2%	25.0	11%	2%	27.7	11%	1%	29.3	6%	1%	37.9	29%	1%	47.6	25%	2%	61.2	29%	2%
Subtotal agriculture	***124.5***	*10%*	*9%*	***182.7***	47%	11%	***161.2***	-12%	8%	***164.1***	2%	7%	***164.8***	0%	6%	***167.9***	2%	5%	***182.3***	9%	5%
LGD	103.9	11%	7%	132.2	27%	8%	133.2	1%	7%	170.0	28%	8%	192.2	13%	7%	222.5	16%	7%	265.4	19%	7%
RDCD	10.5	75%	1%	12.0	15%	1%	14.3	19%	1%	16.0	12%	1%	14.7	-8%	1%	16.2	10%	1%	22.0	35%	1%
MCHTA	6.7	22%	0%	5.6	-16%	0%	6.3	13%	0%	6.8	8%	0%	7.8	15%	0%	9.7	25%	0%	12.4	28%	0%
Subtotal rural development	***121.1***	15%	*8%*	***149.8***	24%	9%	***153.9***	3%	8%	***192.9***	25%	9%	***214.7***	11%	8%	***248.5***	16%	8%	***299.8***	21%	8%
MoSW	19.5	10%	1%	20.4	5%	1%	21.6	6%	1%	27.9	29%	1%	33.2	19%	1%	41.4	25%	1%	48.2	16%	1%
MoWCA	12.4	4%	1%	13.3	8%	1%	14.3	7%	1%	15.3	7%	1%	17.6	15%	1%	21.7	23%	1%	26.3	21%	1%
MoFood/a	11.0	***NA***	1%	13.2	20%	1%	12.3	-7%	1%	11.4	-7%	1%	17.0	49%	1%	29.4	73%	1%	19.2	-35%	1%
MoDM/b	*54.5*	***NA***	*4%*	*58.6*	7%	4%	*63.6*	9%	3%	*68.6*	8%	3%	*77.7*	13%	3%	89.5	15%	3%	86.8	-3%	2%
Subtotal social security and welfare	***97.4***	***-2%***	***7%***	***105.5***	8%	6%	***111.7***	6%	6%	***123.2***	10%	5%	***145.5***	18%	6%	***182.0***	25%	6%	***180.5***	-1%	5%
MoHFW	81.5	7%	6%	91.3	12%	6%	99.6	9%	5%	115.4	16%	5%	148.4	29%	6%	148.3	0%	5%	200.1	35%	5%
Subtotal health and nutrition	***81.5***	7%	***6%***	***91.3***	12%	6%	***99.6***	9%	5%	***115.4***	16%	5%	***148.4***	29%	6%	***148.3***	0%	5%	***200.1***	35%	5%
Total food security	**424.5**	**8%**	**29%**	**529.3**	**25%**	**32.0%**	**526.3**	**-1%**	**26.7%**	**595.6**	13%	**26.3%**	**673.4**	13%	**26.2%**	**746.7**	11%	**24.4%**	**862.7**	16%	**23.7%**
Total GoB expenditure (development + non development)	**1,445**	19%		**1,653**	14%		**1,970**	19%		**2,266**	15%		**2,570**	13%		**3,059**	19%		**3,643**	19%	

Annex 5 - CIP2 budget by Programme (as of 30th June 2018, million USD)

Programme	Total CIP			Financed			Pipeline		
	Total	GoB	DP	Total	GoB	DP	Total	GoB	DP
I.1. Sustainable intensification and diversification of crop-based production systems	922.4	426.7	495.7	476.0	309.8	166.2	446.4	116.9	329.5
I.2. Improved access, quality and management of crop agricultural inputs, including water and land	3,622.1	1,870.4	1,751.7	1,566.1	1,228.7	337.4	2,056.0	641.7	1,414.2
I.3. Enhanced productivity and sustainable production of animal source foods	1,065.1	594.6	470.5	705.8	386.4	319.4	359.3	208.2	151.0
II.1. Strengthened post-harvest value chain with particular focus on MSMEs (storage, processing, branding, labelling, marketing and trade)	519.3	213.4	305.9	114.0	81.6	32.4	405.3	131.8	273.5
II.2. Improved access to markets, facilities and information	4,844.0	3,942.2	901.8	3,257.2	2,783.3	473.9	1,586.8	1,158.8	428.0
III.1. Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets	205.1	94.0	111.1	152.4	84.7	67.7	52.7	9.3	43.4
III.2. Optimized food utilisation through provision of safe water, improved food hygiene and sanitation	140.6	110.8	29.8	140.6	110.8	29.7	0.1	-	0.1
IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, steps towards agricultural sector rehabilitation and mitigation measures	940.5	193.8	746.7	923.8	177.0	746.7	16.7	16.7	-
IV.2. Strengthened cash and food-based programmes for targeted groups across the life cycle including disabled and displaced populations	1,446.6	963.3	483.2	1,368.1	903.8	464.4	78.4	59.6	18.8
V.1. Improved food safety, quality control and assurance, awareness on food safety and hygiene	100.7	28.9	71.7	32.9	23.2	9.8	67.7	5.8	62.0
V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes	98.2	9.6	88.6	96.3	8.9	87.4	2.0	0.7	1.3
V.4. Improved FSN governance, capacity strengthening and leadership across FSN relevant stakeholders	99.9	3.0	96.9	98.6	1.8	96.9	1.2	1.2	-
Total	**14,005**	**8,451**	**5,554**	**8,932**	**6,100**	**2,832**	**5,073**	**2,351**	**2,722**

Annex 6 - CIP2 baseline (revised) budget by programme (as of 30th June 2016, million USD)

Pillar	Total CIP			Financed			Pipeline		
	Total	GoB	DP	Total	GoB	DP	Total	GoB	DP
I.1. Sustainable intensification and diversification of crop-based production systems	766.2	239.2	527.0	201.9	164.6	37.3	564.3	74.5	489.7
I.2. Improved access, quality and management of crop agricultural inputs, including water and land	2,417.2	1,195.2	1,222.1	1,157.2	903.5	253.7	1,260.0	291.7	968.3
I.3. Enhanced productivity and sustainable production of animal source foods	910.3	484.0	426.4	306.4	275.8	30.5	604.0	208.1	395.8
II.1. Strengthened post-harvest value chain with particular focus on MSMEs (storage, processing, branding, labelling, marketing and trade)	458.8	159.4	299.4	55.1	38.8	16.3	403.7	120.5	283.1
II.2. Improved access to markets, facilities and information	3,020.3	2,391.7	628.5	2,013.7	1,496.6	517.0	1,006.6	895.1	111.5
III.1. Enhanced nutrition knowledge, promotion of good practices, and consumption of safe and nutritious diets	195.9	84.4	111.5	35.4	8.5	26.9	160.4	75.8	84.6
III.2. Optimized food utilisation through provision of safe water, improved food hygiene and sanitation	140.6	111.4	29.2	138.8	109.7	29.1	1.9	1.8	0.1
IV.1. Timely and effective disaster preparedness and responses through emergency food distribution, steps towards agricultural sector rehabilitation and mitigation measures	969.8	164.2	805.6	969.0	164.2	804.7	0.8	-	0.8
IV.2. Strengthened cash and food-based programmes for targeted groups across the life cycle including disabled and displaced populations	859.9	419.1	440.8	805.5	383.4	422.1	54.4	35.7	18.7
V.1. Improved food safety, quality control and assurance, awareness on food safety and hygiene	90.7	18.6	72.1	17.7	15.6	2.0	73.0	2.9	70.1
V.3. Improved information and data for evidence-based monitoring and adjustment of policies and programmes	46.5	5.7	40.9	45.3	5.7	39.6	1.3	-	1.3
V.4. Improved FSN governance, capacity strengthening and leadership across FSN relevant stakeholders	98.3	1.5	96.9	80.0	1.5	78.5	18.4	0.0	18.3
Total	**9,974**	**5,274**	**4,700**	**5,826**	**3,568**	**2,258**	**4,149**	**1,706**	**2,442**

Annex 7 – Financed projects by subprogrammes and nutrition sensitivity (lakh BDT)

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.1.1.	BADC	Enhancing the capacity of horticulture division of BADC by improvement of nutritional security with the supply of horticultural product	100%	7,735	5,801	531	398	Sensitive
I.1.1.	BARC	National Agriculture Technology Program-2nd Phase (NATP-2) (BARC Part)	100%	40,273	30,205	5,437	4,078	Sensitive
I.1.1.	BARI	Strengthening of spices crop research in Bangladesh	100%	6,580	4,935	75	56	Sensitive
I.1.1.	BARI	Citrus Development Project (BARI part)	100%	525	394	478	359	Sensitive
I.1.1.	BARI	Strengthening of oilseed research and development in Bangladesh	100%	2,340	1,755	1,324	993	Sensitive
I.1.1.	BARI	Strengthening the Research of Gardener Crops and the Spread of Technology in the Fields of Horticulture and Field Crops	100%	6,718	5,038	2,603	1,952	Sensitive
I.1.1.	BARI	Improving the Research and Research infrastructure of BARI	100%	6,554	4,916	6,172	4,629	Sensitive
I.1.1.	BARI	Research, Extension and popularization of vegetables and spices cultivation on floating bed project (BARI part)	100%	2,556	1,917	342	257	Sensitive
I.1.1.	BARI	Mujibnagar Integrated Agricultural Development Project	50%	65	49	63	47	Sensitive
I.1.1.	BINA	Strengthening Research Activities and Substations Development of BINA	100%	6,567	4,925	6,531	4,898	Sensitive
I.1.1.	BRRI	Pirojpur-Gopalganj-Bagerhat Integrated Agriculture Development Project	40%	85	64	80	60	Sensitive
I.1.1.	BRRI	Increasing of Research Activities and Physical Facilities of Bangladesh Rice Research Institute	100%	24,085	18,064	9,993	7,495	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.1.1.	BRRI	Integrated Agriculture Productivity Project (IAPP)	100%	15	11	15	11	Sensitive
I.1.1.	BSRI	Strengthening of Integrated Research programme of Bangladesh Sugarcane Research Institute	100%	5,890	4,417	3,959	2,969	Sensitive
I.1.1.	CHTDB	Mixed Fruit Cultivation in remote areas of Chattogram Hill Tracts	100%	3,584	2,688	2,680	2,010	Sensitive
I.1.1.	DAE	Integrated Farm Management, Agricultural Production and Employment Programme	33%	7,086	5,314	5,538	4,153	Sensitive
I.1.1.	DAE	National Agriculture Technology Program-2nd Phase (NATP-2) (DAE Part)	70%	36,859	27,644	9,820	7,365	Sensitive
I.1.1.	DAE	Year-Round Fruit Production for Nutrition Improvement Project	100%	26,947	20,210	11,361	8,521	Sensitive
I.1.1.	DAE	Second Crops Diversification Project	17%	502	377	449	337	Sensitive
I.1.1.	DAE	Establishment of Farmers service centre and technology expansion at Upazilla level	100%	5,077	3,808	2,096	1,572	Sensitive
I.1.1.	DMB	Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP): Disaster Risks Mitigation and Reduction	100%	-	-	-	-	Sensitive
I.1.1.	MOA	National Agriculture Technology Program-2nd Phase (NATP-2) (Project Management Unit)	25%	2,497	1,872	222	166	Sensitive
I.1.1.	NATA	Strengthening the National Agriculture Training Academy	100%	4,674	3,506	1,478	1,108	Sensitive
I.1.1.	RDA	Action research project on extension and dissemination of modern water saving technologies and management practices to increase crop production	100%	3,000	2,250	1,474	1,105	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.1.1.	RDCD	Establishment of Rural Development Academy (RDA) at Rangpur	50%	5,024	3,768	1,480	1,110	Sensitive
I.1.2.	BWDB	Climate Smart Agriculture Water Management Project (CSAWMP)	22%	123	92	65	49	Sensitive
I.1.2.	DAE	Enhancing crop production through extension of solar energy and modern water saving technologies pilot project	100%	4,599	3,449	271	203	Sensitive
I.1.2.	DAE	Development of agriculture weather system project	100%	11,918	8,939	756	567	Sensitive
I.1.2.	DoForestry	Climate Resilient Ecosystem and Livelihood (CREL) (DoForestry part)	100%	8,548	6,411	2,024	1,518	Sensitive
I.1.2.	MOA	Integrated Agriculture Productivity Project (IAPP)	80%	3,370	2,528	1,394	1,046	Sensitive
I.1.2.	RDCD	Establishment of Rural Development Academy (RDA) at Rangpur	50%	5,024	3,768	1,480	1,110	Sensitive
I.1.2.	UGC	Improvement of salt and submergence tolerant rice through genetic engineering approach to ring food security with environmental safety in Bangladesh	100%	115	86	115	86	Sensitive
I.1.3.	AIS	Modernisation of agriculture information service and digital agriculture information and communication strengthening project	100%	4,823	3,617	12	9	Sensitive
I.1.3.	BADC	Strengthening Sustainable Nutrition Security through the production of pulses and oilseeds	20%	2,794	2,095	1,398	1,049	Sensitive
I.1.3.	BARI	Pirojpur-Gopalgonj-Bagherhat Integrated Agriculture Development Project (BARI part)	100%	300	225	300	225	Sensitive
I.1.3.	BARI	Mujibnagar Integrated Agricultural Development Project	25%	32	24	31	23	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.1.3.	BIRTAN	Infrastructure Development and Strengthening of Bangladesh Institute of Research and Training on Applied Nutrition (BIRTAN)	100%	27,555	20,666	9,340	7,005	Sensitive
I.1.3.	BRDB	Expansion, Renovation and Modernisation of Bangladesh Poverty Alleviation Training Complex, Kotalipara, Gopalgonj	100%	22,185	16,639	10,785	8,089	Sensitive
I.1.3.	BRRI	Pirojpur-Goplganj-Bagerhat Integrated Agriculture Development Project	40%	85	64	80	60	Sensitive
I.1.3.	DAE	Research extension and popularization of vegetables and spices cultivation on floating bed project (DAE part)	100%	1,866	1,399	247	185	Sensitive
I.1.3.	DAE	Integrated Agriculture Productivity Project (IAPP) (DAE Component)	100%	291	218	254	191	Sensitive
I.1.3.	DAE	Ensure Food and Nutrition Security by Integrated Agriculture Development	100%	7,236	5,427	4,363	3,272	Sensitive
I.1.3.	DAE	Mujibnagar integrated Agriculture Development (DAE)	57%	597	447	215	161	Sensitive
I.1.3.	DAE	Transfer of Technology for Agricultural Production under Blue Gold Program	100%	910	683	678	509	Sensitive
I.1.3.	DAE	Pirojpur Gopalganj Bagerhat integrated agricultural development project (DAE Component)	100%	1,291	968	721	541	Sensitive
I.1.3.	DAE	Agricultural support for farmers in Southwestern region of Bangladesh (DAE Component)	100%	4,320	3,240	2,227	1,671	Sensitive
I.1.3.	DAE	Increasing Cropping Intensity at Sylhet Region (DAE)	100%	4,427	3,320	2,766	2,075	Sensitive
I.1.3.	DAE	National Agriculture Technology Program-2nd Phase (NATP-2) (DAE Part)	30%	15,797	11,847	4,209	3,157	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.1.3.	DAE	Construction of Rubber Dam in Small & medium Rivers in order to Increase the Food Productivity (DAE Component)	100%	206	155	196	147	Sensitive
I.1.3.	DAE	Development and expansion of bio-rational based integrated pest management technologies of vegetables, fruits and betel leaf (DAE part)	100%	633	475	65	49	Sensitive
I.1.3.	DAE	Farmers Training for Transfer of Technology at Upazilla level (2nd Phase)	100%	1,055	791	-	-	Sensitive
I.1.3.	DAE	Technology Transfer Project (3rd phase) through peasant training at Upazilla level	100%	22,000	16,500	532	399	Sensitive
I.1.3.	DAE	Citrus Development Project (DAE Component)	100%	1,579	1,184	1,305	979	Sensitive
I.1.3.	DAE	Pirojpur Gopalganj Bagerhat integrated agricultural development project (PCU Component)	100%	130	97	61	46	Sensitive
I.1.3.	DAE	Establishment of two Agricultural Training Institutes at Bancharampur Upazilla of Brahmanbaria District and Saturia Upazilla of Manikgonj District	100%	3,559	2,669	3,480	2,610	Sensitive
I.1.3.	DAE	Integrated Farm Management, Agricultural Production and Employment Programme	33%	7,086	5,314	5,538	4,153	Sensitive
I.1.3.	MOA	Integrated Agriculture Productivity Project (IAPP)	100%	-	-	-	-	Sensitive
I.1.3.	MOA	National Agriculture Technology Program-2nd Phase (NATP-2) (Project Management Unit)	35%	3,495	2,621	311	233	Sensitive
I.2.1.	BADC	Project for Using Fallow Land and Increasing Cropping Intensity of Sylhet Region	100%	405	304	347	260	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.1.	BADC	Maintenance and rehabilitation of existing fertiliser storage and strengthening fertiliser management	100%	9,190	6,892	8,889	6,667	Sensitive
I.2.1.	BADC	Establishing Seed Processing Centre and Enhancing Seed multiplication farm at Subarnachar in Noakhali	100%	1,328	996	1,327	995	Sensitive
I.2.1.	BADC	Increasing grain plumpness in Sylhet Region (BADC)	100%	286	214	129	97	Sensitive
I.2.1.	BADC	Strengthening Sustainable Nutrition Security through the production of pulses and oilseeds	40%	5,587	4,190	2,797	2,097	Sensitive
I.2.1.	BADC	Development, multiplication and quality assessment of agricultural seeds through biotechnology and dissemination of the technology	100%	1,883	1,412	1,882	1,412	Sensitive
I.2.1.	BADC	Development and Modernisation of existing seed production, processing and distribution arrangements of BADC	100%	19,782	14,836	15,290	11,468	Sensitive
I.2.1.	BADC	Establishing seed augmentation (multiplication) farm in the South West Coastal region	100%	6,986	5,239	5,250	3,937	Sensitive
I.2.1.	BADC	Technical feasibility study project for establishment of seed production farm in the Borochar of Meghna river under Matlab north Upazilla in Chandpur district	100%	200	150	72	54	Sensitive
I.2.1.	BADC	Enhancing quality seed supply project	100%	3,222	2,417	2,560	1,920	Sensitive
I.2.1.	BADC	Production and Development of High-Quality seed of Rice, Wheat and Maize	100%	21,261	15,946	17,985	13,489	Sensitive
I.2.1.	BARI	Development and expansion of bio-rational based integrated pest management	100%	1,460	1,095	202	152	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
		technologies of vegetables fruits and betel leaf (BARI)						
I.2.1.	BARI	Enhancing Quality Seed Supply	100%	91	68	(13)	(9)	Sensitive
I.2.1.	BARI	Improvement and quality seed production of rice, wheat and maize (2nd phase)	100%	1,833	1,375	1,105	828	Sensitive
I.2.1.	BCIC	Shahjalal fertiliser project	100%	29,466	22,099	14,583	10,937	Sensitive
I.2.1.	BMDA	Farmer training programs, supply and production of standard seed for crop production	100%	717	538	431	323	Sensitive
I.2.1.	BRRI	Enhancing Quality Seed Supply (BRRI)	100%	382	286	360	270	Sensitive
I.2.1.	CHTDB	Chittagong Hill Tracts Rural Development Project (2nd Phase) PMU Component	100%	16,553	12,414	12,544	9,408	Sensitive
I.2.1.	DAE	Second Crops Diversification Project	75%	2,215	1,662	1,983	1,487	Sensitive
I.2.1.	DAE	Production, Storage and Distribution of Quality seeds of Rice, Wheat and Jute at Farmers Level (Phase-2)	100%	6,903	5,177	6,807	5,105	Sensitive
I.2.1.	DAE	Production, preservation, Distribution of Quality Seeds of Pulse, Oil, and Onion at Farmers Level (Phase-2)	100%	2,963	2,222	2,912	2,184	Sensitive
I.2.1.	DAE	Production, preservation and distribution of Lentil, Oil and Spices seed at Farmer's level	100%	11,568	8,676	1,438	1,079	Sensitive
I.2.1.	DAE	Mujibnagar integrated Agriculture Development (DAE)	43%	450	337	162	122	Sensitive
I.2.1.	DAE	Enhancement of Crops Production through Farm Mechanisation (Phase-2)	100%	24,247	18,185	16,283	12,212	Sensitive
I.2.1.	LGED	Rural infrastructure development project: Greater Dhaka, Tangail and Kishorganj District	100%	30,222	22,666	22,558	16,919	Sensitive
I.2.1.	MoI	Fortification of edible oil	100%	1,593	1,195	2,276	1,707	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.1.	PDBF	Eradicating poverty by Supporting Small and marginal farmers in after crop harvesting period	50%	3,050	2,288	799	599	Sensitive
I.2.1.	SCA	Integrated Agriculture Productivity Project (IAPP)	100%	491	369	-	-	Sensitive
I.2.1.	SFDF	Small Farmers Development Foundation Assistance project (2nd Phase)	50%	2,971	2,228	2,808	2,106	Sensitive
I.2.2.	PMO	Asrayan Project-2	25%	96,998	72,749	6,466	4,850	Sensitive
I.2.2.	SRDI	Integrated Agricultural Development project in Pirojpur, Gopalgonj, Bagerhat (IADP-PGB) SRDI part	50%	143	107	141	106	Sensitive
I.2.2.	SRDI	Strengthening of soil research and research facilities	100%	4,416	3,312	132	99	Sensitive
I.2.3.	BADC	Barishal Division Minor Irrigation Development Project	100%	8,132	6,099	5,908	4,431	Sensitive
I.2.3.	BADC	Construction of Rubber Dams in Small & medium River for Increasing Food Production	100%	452	339	406	304	Sensitive
I.2.3.	BADC	Small irrigation development project in greater Bogura and Dinajpur regions	100%	6,296	4,722	619	464	Sensitive
I.2.3.	BADC	Mujibnagar Integrated Agricultural Development Project	100%	4,743	3,557	2,590	1,943	Sensitive
I.2.3.	BADC	Sylhet Division Minor Irrigation Development Project	100%	10,174	7,631	6,194	4,645	Sensitive
I.2.3.	BADC	Small irrigation development project in greater Khulna and Jashore regions	100%	8,888	6,666	650	487	Sensitive
I.2.3.	BADC	Expansion of irrigation through utilisation of surface water by double lifting (3rd phase)	100%	11,940	8,955	7,400	5,550	Sensitive
I.2.3.	BADC	Ashuganj Palash Agro-Irrigation (5th stage)	100%	1,792	1,344	1,189	892	Sensitive

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				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.3.	BADC	Integrated Agriculture Productivity Project (BADC- seed and water management component)	100%	267	200	151	113	Sensitive
I.2.3.	BADC	Pabna-Natore- Sirajganj Irrigation Area Development Project (3rd Phase)	100%	3,239	2,429	3,089	2,317	Sensitive
I.2.3.	BADC	Project for irrigation expansion in poverty prone areas under Greater Rangpur district through modern minor irrigation practices	100%	997	748	993	745	Sensitive
I.2.3.	BADC	Pirojpur-Gopalgonj-Bagerhat Integrated Agricultural Development Project	100%	6,444	4,833	4,455	3,341	Sensitive
I.2.3.	BADC	Eastern Integrated Irrigated Area Development Project	100%	1,949	1,462	1,801	1,351	Sensitive
I.2.3.	BADC	Activating Inoperable Deep Tube wells for Irrigation	100%	12,123	9,092	-	-	Sensitive
I.2.3.	BADC	Construction of rubber dams to increase the use of water for agriculture production on Earth Surface	100%	16,910	12,683	6,690	5,018	Sensitive
I.2.3.	BADC	Mymensingh division and Tangail and Kishorgong district minor irrigation development project	100%	9,800	7,350	379	285	Sensitive
I.2.3.	BADC	Project for development of minor irrigation and increase irrigation efficiency through conservation of surface water in Rangpur area	100%	9,855	7,391	425	319	Sensitive
I.2.3.	BADC	Pilot project of surface water-based irrigation expansion model at Shaniajan union of Hatiabandha upazilla under Lalmonirhat district	100%	1,810	1,358	270	202	Sensitive
I.2.3.	BADC	Digitalization of surveys and monitoring for development of minor irrigation (Phase IV)	100%	3,403	2,552	898	673	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.3.	BADC	Strengthening Sustainable Nutrition Security through the production of pulses and oilseeds	40%	5,587	4,190	2,797	2,097	Sensitive
I.2.3.	BMDA	Panchagarh,Thakurgaon, Dinajpur and Joypurhat Integrated Agricultural Development Project	100%	4,565	3,424	4,556	3,417	Sensitive
I.2.3.	BMDA	Excavation of Dug Well in Barind Area for Cultivation of Crops by Soft Irrigation	70%	3,223	2,417	252	189	Sensitive
I.2.3.	BMDA	Rehabilitation of old deep tube wells in Rajshahi, Naogaon and Chapai Nawabgonj district	100%	2,792	2,094	2,689	2,017	Sensitive
I.2.3.	BMDA	Barind Rainwater Conservation and Irrigation Project (Phase II)	100%	6,203	4,652	6,199	4,649	Sensitive
I.2.3.	BMDA	Deep Tube well Installation Project phase II	100%	4,144	3,108	4,141	3,105	Sensitive
I.2.3.	BMDA	Extension of Irrigation in Barind Area through Conservation of Water in Canal	100%	8,214	6,161	8,214	6,160	Sensitive
I.2.3.	BMDA	Enhancement of Irrigation Efficiency Through Construction of Sub-surface Irrigation Channel	100%	12,237	9,178	10,286	7,714	Sensitive
I.2.3.	BMDA	Expansion of Irrigation Facility by Increasing Availability of surface water and removing water logging in Naogaon District	100%	6,813	5,109	5,500	4,125	Sensitive
I.2.3.	BMDA	Digging shallow well in Barind area to produce crop with less irrigation	100%	4,744	3,558	1,646	1,235	Sensitive
I.2.3.	BRDB	Irrigation expansion programme	100%	549	412	406	304	Sensitive
I.2.3.	BRRI	Mujibnagar Integrated Agricultural Development Project	100%	135	101	134	100	Sensitive

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I.2.3.	BWDB	Procurement of dredgers and relevant machine tools for dredging river of Bangladesh	100%	72,207	54,155	11,578	8,683	Sensitive
I.2.3.	BWDB	Development of irrigation and re-excavation of Curzon canals and adjacent branches of Cumilla district	100%	1,575	1,182	503	377	Sensitive
I.2.3.	BWDB	Maliara-Bakkhain-Vandergaon Flood Control, drainage & Irrigation Project (2nd Phase) in Upazilla: Patiya, District: Chattogram	100%	2,253	1,690	2,046	1,534	Sensitive
I.2.3.	BWDB	Southwest Area Integrated Water Resources Planning and Management (Phase-2)	100%	47,991	35,993	4,818	3,614	Sensitive
I.2.3.	BWDB	Riverbank protection work on both Bank of Sangu & Chandkhali River in Chandanaish and Satkania Upazilla of Chattogram District	100%	14,256	10,692	11,491	8,618	Sensitive
I.2.3.	BWDB	Pre-monsoon Flood Protection and Drainage Improvement in *haor* Areas	25%	11,531	8,649	3,882	2,912	Sensitive
I.2.3.	BWDB	Irrigation Management Improvement Project (For Muhuri Irrigation Project (IMIP))	100%	43,065	32,299	6,258	4,694	Sensitive
I.2.3.	BWDB	Reexcavation of Titas River (Upper) under Brahmanbaria District	100%	15,547	11,660	2,287	1,715	Sensitive
I.2.3.	BWDB	Re-excavation of Bemelia, Lagan Balbhadra river under Nasirnagar upazilla in Brahmanbaria and Habiganj District	100%	1,779	1,335	1,300	975	Sensitive
I.2.3.	BWDB	*Haor* Infrastructure and livelihood improvement project	45%	42,364	31,773	10,748	8,061	Sensitive
I.2.3.	BWDB	Capital (pilot) Dredging of River Systems in Bangladesh	100%	11,383	8,537	8,509	6,382	Sensitive
I.2.3.	BWDB	Climate Smart Agriculture Water Management Project (CSAWMP)	60%	335	251	177	133	Sensitive

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				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.3.	BWDB	Water Management Improvement Project (special revised)	100%	4,421	3,316	(311)	(233)	Sensitive
I.2.3.	BWDB	Tarail Pachuria Flood control, Drainage and Irrigation Project	50%	6,913	5,185	6,243	4,682	Sensitive
I.2.3.	BWDB	Kalni-Kushiara River Management	100%	33,975	25,481	12,341	9,256	Sensitive
I.2.3.	BWDB	Gazner Bill Link River Excavation, Development of Irrigation Facilities and fish cultivation project at Sujanagar Upazilla in Pabna District (BWDB part)	100%	28,940	21,705	11,923	8,942	Sensitive
I.2.3.	BWDB	Teesta Barrage Project,2nd Phase	100%	13,102	9,826	7,788	5,841	Sensitive
I.2.3.	BWDB	Buriganga River Restoration Project (New Dhaleswari-Pungli-Bongshai-Turag-Buriganga river system)	67%	65,638	49,229	11,513	8,635	Sensitive
I.2.3.	BWDB	Blue Gold Programme (BWDB Component)	100%	41,490	31,118	15,220	11,415	Sensitive
I.2.3.	BWDB	Char Development and Settlement Program 4 (BWDB)	100%	14,232	10,674	11,328	8,496	Sensitive
I.2.3.	BWDB	Gorai River Restoration Project	100%	9,275	6,956	8,097	6,072	Sensitive
I.2.3.	DAE	Enhancement of Crop Production Through Improved On Farm Water Management Technologies	100%	5,509	4,132	2,948	2,211	Sensitive
I.2.3.	LGED	Capacity development project for participatory water resources management through integrated rural development	100%	2,028	1,521	1,688	1,266	Sensitive
I.2.3.	LGED	Agricultural support for farmers in Southwestern region - LGED part	100%	6,511	4,883	3,372	2,529	Sensitive
I.2.3.	LGED	Participatory Small-Scale Water Resources Sector Project (3rd phase)	100%	32,742	24,556	24,191	18,143	Sensitive
I.2.3.	LGED	Small-scale water resources development project	100%	90,017	67,513	507	380	Sensitive

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				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.2.3.	LGED	Comprehensive small-scale water resources development project	100%	49,891	37,418	2,170	1,628	Sensitive
I.2.3.	LGED	Construction of Rubber Dams in Small & Medium Rivers for increasing Food Production (LGED)	100%	3,536	2,652	1,607	1,205	Sensitive
I.2.3.	LGED	Bangladesh Agriculture Infrastructure Development Project	25%	3,172	2,379	1,323	992	Sensitive
I.2.3.	RPAF	Poverty reduction through fishery harvesting of jute produced by reproduction of *hajama*/fallen ponds	100%	3,967	2,975	804	603	Sensitive
I.2.4.	BWDB	Rehabilitation of BWDB infrastructure Damaged by Natural Disaster in the Coastal Area of Polder No 64/1A, 64/1B & 64/1C at Banskhali upazilla in Chattogram District	100%	25,030	12,515	15,858	7,929	Supportive
I.2.4.	BWDB	Rehabilitation of Damaged Polders under Cox's Bazar District	100%	35,720	17,860	14,677	7,338	Supportive
I.2.4.	SRDI	Integrated Agricultural Development project in Pirojpur, Gopalgonj, Bagerhat (IADP-PGB) SRDI part	50%	143	72	141	70	Supportive
I.3.1.	BFRI	*Hilsa* research enhancement in Chandpur river centre	100%	3,354	2,515	419	314	Sensitive
I.3.1.	BLRI	Dairy development and research	100%	2,327	1,745	845	634	Sensitive
I.3.1.	BRRI	Hybrid rice research capacity strengthening project	100%	3,174	2,380	3,174	2,380	Sensitive
I.3.1.	BWDB	*Haor* Infrastructure and livelihood improvement project	11%	10,122	7,592	2,568	1,926	Sensitive
I.3.1.	DLS	National Agriculture Technology Program-2nd Phase (NATP-2) (DLS Part)	80%	36,846	27,635	6,599	4,949	Sensitive

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I.3.1.	DLS	Livelihood Development-Based Milk Revolution and Meat Production Project	100%	670	502	523	393	Sensitive
I.3.1.	DLS	Beef Cattle Development Project	100%	1,545	1,159	1,392	1,044	Sensitive
I.3.1.	DLS	Establishment of Regional duck breading farm along with hatchery (3rd phase)	100%	10,799	8,099	7,776	5,832	Sensitive
I.3.1.	DLS	Establishment of Livestock production and quality control research	100%	6,613	4,960	1,137	853	Sensitive
I.3.1.	DLS	Establishment of Upazilla Livestock Development Centre (3rd Phase)	100%	7,237	5,428	5,705	4,278	Sensitive
I.3.1.	DoFish	Water reformation for Increasing fish production	100%	28,831	21,623	7,837	5,878	Sensitive
I.3.1.	DoFish	Neemgasi community-based aquaculture project	100%	2,255	1,691	1,718	1,289	Sensitive
I.3.1.	DoFish	Fisheries registration and issuing of identity card project	100%	766	575	474	356	Sensitive
I.3.1.	DoFish	Expansion of Fisheries Technology Services up to Union Level (Phase II)	100%	22,358	16,769	12,461	9,346	Sensitive
I.3.1.	DoFish	Fisheries development in Rangpur division project	100%	3,091	2,318	2,613	1,960	Sensitive
I.3.1.	DoFish	Fresh Water Prawn Culture Extension Project (2nd Phase)	100%	2,739	2,054	2,634	1,976	Sensitive
I.3.1.	DoFish	Fisheries development in greater Jashore project	100%	3,916	2,937	2,124	1,593	Sensitive
I.3.1.	DoFish	Fisheries development of greater Cumilla District	100%	20,708	15,531	3,941	2,956	Sensitive
I.3.1.	DoFish	Establishment of fisheries diploma institute in Gopalgonj, Kishoreganj	33%	1,514	1,136	1,133	850	Sensitive
I.3.1.	DoFish	National Agriculture Technology Program-2nd Phase (NATP-2) (DoFish Part)	55%	21,355	16,017	4,985	3,739	Sensitive

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I.3.1.	LGED	*Haor* Infrastructure & Livelihood Improvement project	11%	5,650	4,237	1,248	936	Sensitive
I.3.1.	LGED	*Haor* Flood Management and Livelihood Improvement project	11%	8,497	6,373	2,302	1,726	Sensitive
I.3.1.	Milk Vita	Establishment of Buffalo Breading Station for Enhancing Milk Production	100%	619	464	388	291	Sensitive
I.3.1.	MOA	National Agriculture Technology Program-2nd Phase (NATP-2) (Project Management Unit)	15%	1,498	1,123	133	100	Sensitive
I.3.1.	MoFL	Integrated fisheries and livestock development project in flood control and command area (drainage and irrigation project area) and other water bodies (4th phase)	100%	2,763	2,072	1,942	1,456	Sensitive
I.3.2.	BLRI	Conservation and improvement of native sheep through community farming and commercial farming project (component A) (2nd phase)	100%	1,292	969	972	729	Sensitive
I.3.2.	BLRI	Red cattle development and conservation (2nd phase)	100%	3,442	2,582	184	138	Sensitive
I.3.2.	BLRI	Buffalo Development Project	100%	335	251	334	251	Sensitive
I.3.2.	BLRI	Scavenging (*deshi*) Poultry Conservation and Development Project	100%	410	308	387	291	Sensitive
I.3.2.	DLS	Artificial Insemination (AI) Activities Extension and Embryo transfer (ET) technology Implementation Project (3rd Phase)	100%	26,143	19,607	9,979	7,484	Sensitive
I.3.2.	DLS	Breed Upgradation Through Progeny Test Project phase III	100%	3,289	2,467	1,956	1,467	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.3.2.	DLS	Establishment of Institute of Livestock science and technology	100%	19,599	14,699	9,801	7,351	Sensitive
I.3.2.	DLS	Conservation & Improvement of Native Sheep Through Community Farming & Commercial Farming Project (component B: DLS) - 2nd Phase	100%	1,006	755	790	592	Sensitive
I.3.2.	DLS	Buffalo Development Project	100%	1,456	1,092	1,368	1,026	Sensitive
I.3.2.	DoFish	Establishment of fisheries diploma institute in Gopalgonj, Kishoreganj	33%	1,514	1,136	1,133	850	Sensitive
I.3.2.	DoFish	Aquaculture development and fisheries extension project in CHT (3rd phase)	100%	1,817	1,363	1,791	1,343	Sensitive
I.3.2.	DoFish	Establishment of *beel* nursery and fingerling stocking in inland open waters	100%	6,358	4,769	2,800	2,100	Sensitive
I.3.2.	DoFish	Brood Bank Establishment project (3rd phase)	100%	3,138	2,353	1,656	1,242	Sensitive
I.3.2.	DoFish	Rehabilitation and development of fisheries infrastructure to increase production of quality fish seed and fingerlings	100%	4,073	3,055	3,666	2,749	Sensitive
I.3.3.	BFDC	Construction of Multi-channel Slipway project	100%	1,695	1,271	1,679	1,259	Sensitive
I.3.3.	BFRI	Strengthening Marine fisheries research and infrastructure development	100%	3,452	2,589	75	57	Sensitive
I.3.3.	DoFish	Enhanced Coastal Fisheries (Ecofish)	100%	7,931	5,948	4,369	3,277	Sensitive
I.3.3.	DoFish	Sustainable Coastal and marine fisheries in Bangladesh	100%	186,887	140,165	-	-	Sensitive
I.3.3.	DoFish	Technical Support Stock Assessment of Marine Fisheries Resources in Bangladesh	100%	271	203	116	87	Sensitive
I.3.3.	DoFish	Establishment of fisheries diploma institute in Gopalgonj, Kishoreganj	33%	1,514	1,136	1,133	850	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
I.3.3.	DoFish	National Agriculture Technology Program-2nd Phase (NATP-2) (DoFish Part)	18%	6,795	5,096	1,586	1,190	Sensitive
I.3.3.	DoFish	Bangladesh marine fisheries capacity building project	100%	7,567	5,675	2,219	1,664	Sensitive
I.3.4.	BLRI	Fodder research and development project	100%	2,388	1,791	1,996	1,497	Sensitive
I.3.4.	BLRI	Foot and mouth disease and PPR research in Bangladesh	100%	488	366	293	220	Sensitive
I.3.4.	DLS	South East Region Livestock Development Project	100%	5,824	4,368	5,310	3,983	Sensitive
I.3.4.	DLS	Integrated Agriculture Productivity Project (IAPP)	100%	177	133	0	0	Sensitive
I.3.4.	DLS	Establishment of Jhenaidah veterinary college (2nd phase)	100%	1,699	1,274	1,327	996	Sensitive
I.3.4.	DLS	Animal Nutrition Development and Technology Transfer Project (2nd phase)	100%	1,950	1,463	1,329	997	Sensitive
I.3.4.	DLS	Modernisation of Vaccine Production Technology & Extension of Laboratory Facilities Project	100%	4,413	3,310	4,349	3,261	Sensitive
I.3.4.	DLS	Establishment of national institute of livestock and poultry management and disease diagnostic laboratory	100%	3,334	2,501	3,143	2,357	Sensitive
I.3.4.	DLS	Food security and public health development through regulation of Bangladesh Veterinary Services and new regressive infectious diseases	100%	10,192	7,644	3,978	2,984	Sensitive
I.3.4.	DLS	Livestock Disease Prevention and Control Project	100%	3,067	2,300	2,949	2,212	Sensitive

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I.3.4.	DLS	Establishment of Quality Control Laboratory for Livestock inputs and its Food Products (EQCLIFP)	100%	6,613	4,960	89	67	Sensitive
I.3.4.	DLS	Establishment of Sirajgonj Govt. Veterinary college	100%	4,045	3,034	3,981	2,986	Sensitive
I.3.4.	DoFish	Livestock Disease Prevention and Control Project	100%	3,042	2,281	-	-	Sensitive
I.3.4.	DoFish	National Agriculture Technology Program-2nd Phase (NATP-2) (DoFish Part)	18%	6,795	5,096	1,586	1,190	Sensitive
I.3.4.	UGC	Molecular characterisation and identification of important genetic and infectious diseases of livestock poultry in Bangladesh	100%	90	68	50	38	Sensitive
II.1.1.	DAE	Second Crops Diversification Project	8%	236	118	212	106	Supportive
II.1.1.	MoCommerce	Agribusiness for Trade Competitiveness Project (ATCP)	100%	5,702	2,851	(15,493)	(7,746)	Supportive
II.1.2.	BFDC	Establishment of fish landing centres with ancillary facilities in 3 coastal districts at 4 selected areas	100%	5,255	2,627	2,109	1,054	Supportive
II.1.2.	DAM	Mujibnagar Integrated Agricultural Development Project	50%	55	27	55	27	Supportive
II.1.2.	Milk Vita	Establishment of Super Instant Milk Plant at Baghabarighat, Sirajgonj	100%	5,537	2,769	617	309	Sensitive
II.1.2.	Milk Vita	Establishment of Milk Plant for Enhancing Milk Production at Patiya, Chittagonj	100%	3,761	1,881	356	178	Sensitive
II.1.3.	BRDB	Rural livelihood project (RLP) 2nd phase	100%	36,762	18,381	11,972	5,986	Supportive
II.1.3.	DAE	Integrated Farm Management, Agricultural Production and Employment Programme	33%	7,086	3,543	5,538	2,769	Supportive
II.1.3.	DAM	Fellow land utilisation and crop intensification project in Sylhet region	100%	1,293	647	-	-	Supportive

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II.1.3.	DAM	Mujibnagar Integrated Agricultural Development Project	50%	55	27	55	27	Supportive
II.1.3.	DAM	Pirojpur Gopalganj Bagerhat integrated agricultural development project	100%	402	201	280	140	Supportive
II.1.3.	DAM	Increasing grain plumpness in Sylhet Region	100%	1,378	689	800	400	Supportive
II.1.3.	DLS	National Agriculture Technology Program-2nd Phase (NATP-2) (DLS Part)	20%	9,212	4,606	1,650	825	Supportive
II.1.3.	DOC	Poverty reduction and socio-economic development of Greater Faridpur, Barishal & Khulna Districts through Expansion of Milk Co-operative Society Programmes	100%	687	344	615	308	Supportive
II.1.3.	DOC	Extension of dairy cooperative in Gangasora Upazilla to create employment, milk and meat production	100%	2,389	1,195	21	11	Supportive
II.1.3.	DoFish	National Agriculture Technology Program-2nd Phase (NATP-2) (DoFish Part)	10%	3,883	1,941	906	453	Supportive
II.1.3.	MOA	National Agriculture Technology Program-2nd Phase (NATP-2) (Project Management Unit)	25%	2,497	1,248	222	111	Supportive
II.1.3.	RDA	Making Markets work for the Jamuna, Padma and Testa Chars (M4C)	100%	3,206	1,603	1,637	819	Supportive
II.2.1.	BARI	Mujibnagar Integrated Agricultural Development Project	25%	32	16	31	16	Supportive
II.2.1.	BFDC	Establishment of fish landing centres in *Haor* and *Baor* area in Bangladesh	100%	5,948	2,974	1,557	778	Supportive
II.2.1.	BMDA	Marketing of Agricultural Products through Development of Rural Communication Project	100%	7,097	3,549	7,085	3,543	Supportive

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II.2.1.	BWDB	Pre-monsoon Flood Protection and Drainage Improvement in *Haor* Areas	25%	11,531	5,766	3,882	1,941	Supportive
II.2.1.	DDM	Construction of Bridge/Culverts more or less 15-meter-long on Rural Roads	100%	311,678	155,839	225,097	112,548	Supportive
II.2.1.	DDM	Construction of bridge/culvert (up to 12 m long) on the rural roads at Chittagong Hill Tracts region (2nd phase)	100%	2,627	1,313	1,664	832	Supportive
II.2.1.	LGED	Infrastructure Development in the Greater Jashore District (Jashore, Jhenaida, Magura & Narail districts)	100%	33,779	16,890	27,599	13,799	Supportive
II.2.1.	LGED	Char Development & Settlement-4 (LGED component)	88%	5,967	2,984	4,787	2,394	Supportive
II.2.1.	LGED	Infrastructure Development Project in Greater Kushtia District (Kushtia, Chuadanga & Meherpur District).	100%	21,667	10,834	16,500	8,250	Supportive
II.2.1.	LGED	Development of Important Rural Infrastructure Project (DIRIP)	100%	32,317	16,158	12,880	6,440	Supportive
II.2.1.	LGED	Greater Rangpur and Dinajpur District Rural Communication and other infrastructure Improvement Project (2nd Revision)	100%	21,463	10,731	20,616	10,308	Supportive
II.2.1.	LGED	Rural Road, Bridges/Culverts and other Infrastructure development of backward Upazilla (Pabna, Sirajgonj, Natore, Naogaon, Rajshahi, Nobabgonj and Bogura districts) in the North West region of the country	100%	13,323	6,662	10,036	5,018	Supportive
II.2.1.	LGED	Coastal Climate Resilient Infrastructure Improvement Project	100%	87,452	43,726	53,921	26,960	Supportive
II.2.1.	LGED	Climate Change Adaptation Pilot Project.	50%	2,686	1,343	2,683	1,341	Supportive
II.2.1.	LGED	Barishal Division Infrastructure Development Project	100%	46,233	23,116	22,426	11,213	Supportive

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II.2.1.	LGED	Bangladesh Agriculture Infrastructure Development Project.	75%	9,517	4,758	3,970	1,985	Supportive
II.2.1.	LGED	Development of Sylhet Division Rural Infrastructure	100%	12,225	6,113	10,961	5,481	Supportive
II.2.1.	LGED	Greater Barishal District and Rural Communication and Hat-Bazaar infrastructure development (Barishal, Pirojpur, Bhola and Jhalkati districts)	100%	13,278	6,639	11,266	5,633	Supportive
II.2.1.	LGED	Sustainable rural infrastructure improvement project (SRIIP)	100%	24,471	12,236	21,378	10,689	Supportive
II.2.1.	LGED	Greater Faridpur rural infrastructure development (2nd Phase)	100%	78,168	39,084	55,495	27,747	Supportive
II.2.1.	LGED	Rural Transport Improvement Project (RTIP-2)	100%	221,293	110,647	165,506	82,753	Supportive
II.2.1.	LGED	Construction of two bridges on the river Brahmaputra under Islampur Upazilla of Jamalpur District	100%	3,022	1,511	2,966	1,483	Supportive
II.2.1.	LGED	Greater Faridpur district rural infrastructure Development Project (2nd Revised)	100%	86,649	43,324	62,831	31,415	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Cumilla, Chandpur and Brahmanbaria District	100%	51,402	25,701	28,388	14,194	Supportive
II.2.1.	LGED	Rural Infrastructure development in Aatpara and Mohangonj in Netrokona district	100%	4,734	2,367	1,600	800	Supportive
II.2.1.	LGED	Climate resilience Rural Infrastructure development	100%	41,848	20,924	9,779	4,890	Supportive
II.2.1.	LGED	Greater Noakhali Rural Infrastructure Development Project (Part-II).	100%	42,714	21,357	33,988	16,994	Supportive
II.2.1.	LGED	Important Bridge construction in Rural Roads	100%	392,676	196,338	8,849	4,424	Supportive

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II.2.1.	LGED	Important Rural Infrastructure Development: Bhola district	100%	45,462	22,731	7,251	3,626	Supportive
II.2.1.	LGED	Rural Road development in Potnitola and Dhamoirhaat of Naogaon	100%	2,655	1,328	99	50	Supportive
II.2.1.	LGED	Rural Road development in Dohar and Nowabgonj Upazilla of Dhaka	100%	2,123	1,062	2	1	Supportive
II.2.1.	LGED	Rural Infrastructure development in South Sunamgonj, Jagannathpur Upazilla of Sunamgonj	100%	4,569	2,285	1,212	606	Supportive
II.2.1.	LGED	Rural Infrastructure development in South Sadar and Langolkot Upazilla in Cumilla	100%	4,497	2,248	3,682	1,841	Supportive
II.2.1.	LGED	Rural Infrastructure development in Jamalpur and Sherpur district	100%	38,881	19,441	6,615	3,308	Supportive
II.2.1.	LGED	Rural Infrastructure development in Araihazar Upazilla of Narayangonj	100%	2,097	1,049	1,974	987	Supportive
II.2.1.	LGED	Rural Infrastructure development in Islampur of Jamalpur	100%	2,229	1,114	1,900	950	Supportive
II.2.1.	LGED	Rural Infrastructure development in Gournadi and Agaijhara of Barishal	100%	2,300	1,150	1,825	913	Supportive
II.2.1.	LGED	Rural Infrastructure development in Nandail Upazilla of Mymensingh district	100%	2,499	1,249	1,250	625	Supportive
II.2.1.	LGED	Important Rural Infrastructure Development of Gopalgonj District	100%	61,384	30,692	15,054	7,527	Supportive
II.2.1.	LGED	Chittagong Hill Tracts Rural Development Project (2nd Phase) LGED Component	100%	22,434	11,217	2,677	1,338	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Fakirhat in Bagerhat District	100%	2,198	1,099	2,083	1,041	Supportive
II.2.1.	LGED	Development of the Rural Road of Sadar Upazilla of Kushtia	100%	2,391	1,195	2,268	1,134	Supportive

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II.2.1.	LGED	Rural Infrastructure Development of Kuliarchar and Bhairab Upazilla in Kishoreganj District	100%	2,417	1,209	1,900	950	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Akkelpur, Kalai and Khetlal Upazilla in Joypurhat District	100%	2,008	1,004	2,002	1,001	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Greater Rajshahi district (Rajshahi, Naogaon, Natore and Chapainababganj) project	100%	39,832	19,916	17,490	8,745	Supportive
II.2.1.	LGED	Important Rural Infrastructure Development of Kishoregonj Sadar and Hoshenpur Upazilla in Kishorganj District	100%	2,115	1,058	2,021	1,011	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Faridpur Sadar Upazilla in Faridpur District	100%	2,375	1,188	2,182	1,091	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Citalmari, Mollahat and Fakirhat in Bagerhat District	100%	2,320	1,160	2,203	1,101	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Mathbaria upazilla in Pirojpur District	100%	2,028	1,014	2,028	1,014	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Greater Pabna-Bogura District	100%	46,409	23,205	21,987	10,994	Supportive
II.2.1.	LGED	Infrastructure Development in the Greater Chattogram (Chattogram and Cox's Bazar District)	100%	36,100	18,050	6,000	3,000	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Naria Upazilla in Sariatpur District	100%	1,706	853	1,565	783	Supportive
II.2.1.	LGED	Important Rural Infrastructure Development: Khulna Division	100%	263,570	131,785	20,287	10,144	Supportive
II.2.1.	LGED	Rural Infrastructure Development of Mollahat in Bagerhat District	100%	2,094	1,047	1,664	832	Supportive

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II.2.1.	LGED	improvement of rural roads in Sadar Upazilla of Sirajgonj	100%	2,247	1,124	1,200	600	Supportive
II.2.1.	LGED	Development of important rural infrastructure of Kishoreganj district	100%	34,724	17,362	15,996	7,998	Supportive
II.2.1.	LGED	Rural development of Lazam, Manoharganj and Barura Upazilla in Cumilla development	100%	1,747	874	1,692	846	Supportive
II.2.1.	LGED	improvement of rural infrastructure and communication system of Bauphal Upazilla	100%	2,224	1,112	2,067	1,033	Supportive
II.2.1.	LGED	Rural infrastructure development in Brahmanpara and Burichang Upazilla of Cumilla district	100%	2,022	1,011	1,342	671	Supportive
II.2.1.	LGED	Development of rural roads at Galachipa and Dashmina Upazilla in the district of Patuakhali	100%	2,033	1,017	1,614	807	Supportive
II.2.1.	LGED	Development of Sylhet division rural access roads	100%	28,704	14,352	548	274	Supportive
II.2.1.	LGED	*Haor* Flood Management and Livelihood Improvement project	85%	65,661	32,831	17,787	8,894	Supportive
II.2.1.	LGED	Faridpur district's important rural infrastructure development	100%	62,500	31,250	18,500	9,250	Supportive
II.2.1.	LGED	improvement of rural roads in Kamarkhand Upazilla of Sirajgonj district	100%	2,285	1,143	1,158	579	Supportive
II.2.1.	LGED	Rural infrastructure in Bakshiganj and Dewanganj Upazilla of Jamalpur district	100%	970	485	850	425	Supportive
II.2.1.	LGED	Improvement of rural roads & bridges/culverts in Kazipur Upazilla of Sirajgonj district	100%	2,235	1,117	900	450	Supportive
II.2.1.	LGED	Rural infrastructure development project: Bauphal Upazilla, Patuakhali	100%	2,366	1,183	2,276	1,138	Supportive

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II.2.1.	LGED	Union link Road & Infrastructure Development Project: Greater Chattogram (Chattogram & Cox's Bazar) District	100%	15,335	7,667	13,424	6,712	Supportive
II.2.1.	LGED	Development of rural roads in Patnitala and Dhamirhat Upazilla of Naogaon district	100%	2,655	1,328	2,195	1,098	Supportive
II.2.1.	LGED	Rural infrastructure development of Panchagarh, Lalmonirhat and Kurigram districts (extinct enclaves)	100%	16,911	8,456	11,253	5,627	Supportive
II.2.1.	LGED	Union Infrastructure Development Project (Khulna, Bagerhat & Sathkhira District)	100%	16,790	8,395	15,878	7,939	Supportive
II.2.1.	LGED	*Haor* Infrastructure & Livelihood Improvement project	85%	43,658	21,829	9,645	4,822	Supportive
II.2.1.	LGED	Development of rural roads in Dohar and Nawabganj Upazilla of Dhaka district	100%	2,123	1,062	1,855	927	Supportive
II.2.1.	LGED	South-Western Bangladesh Rural Infrastructure Development Project	100%	58,162	29,081	54,210	27,105	Supportive
II.2.3.	MoCommerce	Bangladesh Economic Growth Programme	100%	3,533	1,767	-	-	Supportive
II.2.3.	RDCD	Strengthening ICT Program and E-service for Rural Poverty alleviation	100%	269	134	152	76	Supportive
III.1.1	BIRTAN	Integrated Agricultural Approach for Ensuring Nutrition and Food Security Project (BIRTAN phase)	100%	840	840	159	159	Sensitive+
III.1.1	DGFP	Information, Education and Communication (FP)	100%	2,199	2,199	1,383	1,383	Sensitive+
III.1.1	MoHFW	NNSA3-2- Updating of existing training module and academic curriculum etc.	100%	14	14	-	-	Sensitive+
III.1.1	MoHFW	NNSA11-4 - Printing of IEC materials, bulletin, training modules & guidelines,	100%	1,000	1,000	-	-	Sensitive+

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		poster/festoon, recording & reporting tools etc.						
III.1.1	MoHFW	NNSA11-3 -SBCC related Campaign	100%	4,520	4,520	-	-	Sensitive+
III.1.1	MoHFW	NNSA11 -2- SBCC Coordination, E-toolkit & Website (maintenance & update)	100%	126	126	-	-	Sensitive+
III.1.1	MoHFW	NNSA11-1 - Develop & Update SBCC materials	100%	87	87	-	-	Sensitive+
III.1.2	DGHS	Community Based Health Care	17%	83,589	83,589	16,021	16,021	Sensitive+
III.1.2	DGHS	NNSA10-2 - Dietary guideline	100%	30	30	-	-	Sensitive+
III.1.2	LGD	Support to Urban Health and Nutrition to Bangladesh	100%	25,010	25,010	3,198	3,198	Sensitive+
III.1.3	DGHS	NNSA1-1 - Update National IYCF Strategy	100%	54	54	-	-	Sensitive+
III.1.3	DGHS	NNSA1 -3- Orientation Program on IYCF including Home fortification	100%	810	810	-	-	Sensitive+
III.1.3	DGHS	NNSA1-2- Baby Friendly Hospital Initiative (BFHI)	100%	1,155	1,155	-	-	Sensitive+
III.1.3	MoHFW	NNSA3-3 - Training for teachers and student representatives on adolescent nutrition	100%	65	65	-	-	Sensitive+
III.1.3	MoHFW	NNSA10-1 - Nutrient profile model	100%	23	23	-	-	Sensitive+
III.2.1	BMDA	Excavation of Dug Well in Barind Area for Cultivation of Crops by Soft Irrigation	30%	1,381	1,036	108	81	Sensitive
III.2.1	DPHE	Char Development and Settlement Project-4 (DPHE Component)	100%	819	615	649	487	Sensitive
III.2.1	DPHE	Ground Water Investigation and Development of Deep Ground Water Source in Urban and Rural Areas in Bangladesh	100%	4,842	3,632	277	207	Sensitive
III.2.1	DPHE	Bangladesh Rural Water Supply and Sanitation Project (BRWSSP)	80%	18,133	13,600	17,414	13,060	Sensitive

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III.2.1	DPHE	Water Supply in Rural Areas	100%	79,641	59,731	28,023	21,017	Sensitive
III.2.2	MOA	Integrated Agriculture Productivity Project (IAPP)	15%	632	474	261	196	Sensitive
III.2.2	MoHFW	NNSB2-1 - Workshop on development of GHP and GMP communication materials	100%	5	3	-	-	Sensitive
III.2.3	DPHE	Bangladesh Rural Water Supply and Sanitation Project (BRWSSP)	20%	4,533	3,400	4,353	3,265	Sensitive
III.2.3	MOA	Integrated Agriculture Productivity Project (IAPP)	5%	211	158	87	65	Sensitive
IV.1.1.	BFID	Pilot project on weather index-based crop insurance	100%	1,567	783	1,433	717	Supportive
IV.1.1.	BWDB	Flood & Riverbank Erosion Risk Management Investment Program	100%	63,915	31,958	33,510	16,755	Supportive
IV.1.1.	BWDB	Protection of Left Bank of Meghna River Through Bank Revetment work at Maniknagar of Nabinagar upazilla of Brahmanbaria District	100%	3,372	1,686	3,056	1,528	Supportive
IV.1.1.	BWDB	Pre-monsoon Flood Protection and Drainage Improvement in *Haor* Areas	50%	23,063	11,531	7,764	3,882	Supportive
IV.1.1.	BWDB	Preservation of the left bank of the river Padma from Boairbazar, Dohar upazilla in Dhaka District to Braha bajaraghata	100%	21,762	10,881	3,750	1,875	Supportive
IV.1.1.	BWDB	Climate Smart Agriculture Water Management Project (CSAWMP)	18%	100	50	53	27	Supportive
IV.1.1.	BWDB	Shibpur Flood Control, Drainage and Irrigation Project under Shibpur upazilla in Narshingdi District	100%	4,823	2,412	2,438	1,219	Supportive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
IV.1.1.	BWDB	Coastal embankment improvement project Phase I (CEIP I) in Satkhira, Khulna, Bagerhat, Pirojpur, Barguna, and Patuakhali District	100%	313,008	156,504	24,856	12,428	Supportive
IV.1.1.	BWDB	Tarail Pachuria Flood control, Drainage and Irrigation Project	50%	6,913	3,457	6,243	3,121	Supportive
IV.1.1.	BWDB	Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP) BWDB Part	100%	23,450	11,725	16,487	8,244	Supportive
IV.1.1.	DDM	Construction of flood shelters in the flood prone and river erosion areas (2nd phase)	100%	8,002	4,001	7,084	3,542	Supportive
IV.1.1.	DoForestry	*Char* Development and Settlement Project-4 (Do Forest Part)	100%	1,352	676	743	372	Supportive
IV.1.1.	LGD	Improvement of Women Ability to Participate in Productive Potential Action (SWAPNO)	25%	20,896	10,448	1,964	982	Supportive
IV.1.1.	LGED	*Char* Development & Settlement-4 (LGED component)	12%	814	407	653	326	Supportive
IV.1.1.	LGED	Climate Change Adaptation Pilot Project.	50%	2,686	1,343	2,683	1,341	Supportive
IV.1.1.	LGED	Emergency 2007 Cyclone Recovery and Rehabilitation Project (ECRRP)	100%	35,124	17,562	28,827	14,414	Supportive
IV.1.1.	Planning Div	Emergency 2007 Cyclone Recovery and Restoration Project (ECRRP): Project Coordination and Monitoring Unit	100%	1,362	681	816	408	Supportive
IV.1.2.	DoFish	Culture of Cuchia and Crab in the Selected Areas of Bangladesh and Research Project (Component A: DoF)	100%	1,574	1,181	1,208	906	Sensitive
IV.1.2.	MoHFW	NNSA7-2 - Emergency supplies (Need base)	100%	541	406	-	-	Sensitive
IV.1.2.	UGC	Resource on disasters prevention mitigation measures against flood and storm surges in Bangladesh	100%	2,518	1,889	485	364	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
IV.1.3.	MoFood	Construction of 1.05 lakh MT Capacity new Food Go-down Project	100%	37,770	28,328	15,171	11,379	Sensitive
IV.1.3.	MoFood	Construction of multistoried warehouse at Santahar Grain Silo Premises, Bogura (25,000 MT)	100%	2,290	1,718	2,012	1,509	Sensitive
IV.1.3.	MoFood	Modern Food Storage Facilities Project (MFSP)	80%	147,327	110,495	24,298	18,224	Sensitive
IV.2.1.	BADC	Small Selection Development Project in Greater Noakhali Feni Laxmipur area	100%	10,059	7,545	682	512	Sensitive
IV.2.1.	BFRI	Culture of Cuchia and Crab in the Selected Areas of Bangladesh and Research Project (Component B : BFRI)	100%	1,117	838	999	749	Sensitive
IV.2.1.	BRDB	Initiative for Development, Empowerment, Awareness and Livelihood Project (IDEAL project), Kurigram	25%	235	176	175	131	Sensitive
IV.2.1.	BRDB	Participatory Rural Development Project-3 (PRDP-3)	50%	11,484	8,613	2,793	2,095	Sensitive
IV.2.1.	DOC	Livelihood improvement of disadvantaged women by rearing cows	100%	15,157	11,368	83	62	Sensitive
IV.2.1.	DOC	Development of quality of living women through improved cow care is improved	100%	10,610	7,957	3,487	2,615	Sensitive
IV.2.1.	LGD	Improvement of Women Ability to Participate in Productive Potential Action (SWAPNO)	65%	54,330	40,747	5,107	3,830	Sensitive
IV.2.1.	LGED	Rural Employment and road Maintenance Program-2 (RERMP-2)	100%	50,789	38,091	43,391	32,543	Sensitive
IV.2.1.	MoLE	Northern Areas Reduction of Poverty Initiative (NARI)	50%	12,014	9,011	7,406	5,554	Sensitive
IV.2.1.	NWA	Promotion of Women Entrepreneurship for Economic Empowerment (Phase 3)	100%	8,445	6,334	5,081	3,811	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
IV.2.1.	PDBF	Eradicating poverty by Supporting Small and marginal farmers in after crop harvesting period	50%	3,050	2,288	799	599	Sensitive
IV.2.1.	RDA	Integrated Rural Employment Support for the Poor Women (RESPW)	100%	6,107	4,580	6,060	4,545	Sensitive
IV.2.1.	RDCD	Economic Empowerment of the Poorest in Bangladesh (EEP)	88%	1,072	804	627	470	Sensitive
IV.2.1.	RDCD	*Chars* Livelihoods Improvement Programme (CLP) 2nd Phase	50%	212	159	196	147	Sensitive
IV.2.1.	RPAF	Extension of Programme of Rural Poverty Alleviation Foundation (PDBF) for Creation of Poverty Alleviation & Self Employment	100%	12,669	9,502	12,651	9,488	Sensitive
IV.2.1.	SFDF	Small Farmers Development Foundation Assistance project (2nd Phase)	25%	1,486	1,114	1,404	1,053	Sensitive
IV.2.1.	SFDF	Expansion of SFDF's activities for poverty Alleviation	50%	553	415	547	410	Sensitive
IV.2.2.	BRDB	Participatory Rural Development Project-3 (PRDP-3)	50%	11,484	8,613	2,793	2,095	Sensitive
IV.2.2.	BRDB	Employment Guarantee Scheme for Hardcore Poor of Northern Region	100%	8,472	6,354	4,270	3,202	Sensitive
IV.2.2.	LGD	Income Support Programme for the Poorest	100%	243,754	182,815	4,464	3,348	Sensitive
IV.2.2.	LGED	*Haor* Infrastructure & Livelihood Improvement project.	4%	2,054	1,541	454	340	Sensitive
IV.2.2.	LGED	*Haor* Flood Management and Livelihood Improvement project	4%	3,090	2,317	837	628	Sensitive
IV.2.2.	MoCommerce	Eradication of Rural Poverty by Extension of Small Holding Tea Cultivation in Lalmonirhat	100%	487	365	194	145	Sensitive
IV.2.2.	MoLE	Northern Areas Reduction of Poverty Initiative (NARI)	50%	12,014	9,011	7,406	5,554	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
IV.2.2.	PMO	Asrayan Project-2	75%	290,994	218,246	19,399	14,549	Sensitive
IV.2.2.	RDCD	*Char*s Livelihoods Improvement Programme (CLP) 2nd Phase	50%	212	159	196	147	Sensitive
IV.2.2.	SFDF	Small Farmers Development Foundation Assistance project (2nd Phase)	25%	1,486	1,114	1,404	1,053	Sensitive
IV.2.2.	SFDF	Expansion of SFDF's activities for poverty Alleviation	50%	553	415	547	410	Sensitive
IV.2.3.	DPE	School Feeding Programme in Poverty Prone Area	100%	287,785	215,839	95,023	71,268	Sensitive
IV.2.3.	LGD	Improvement of Women Ability to Participate in Productive Potential Action (SWAPNO)	10%	8,358	6,269	786	589	Sensitive
IV.2.3.	MoHFW	NNSC2-3 - District orientation workshop on food fortification for Supervision & monitoring among district/Upazilla level respective personnel	100%	102	77	-	-	Sensitive
IV.2.3.	MOWCA	Investment Component for Vulnerable Group Development programme	100%	2,317	1,737	683	512	Sensitive
IV.2.3.	RDCD	Economic Empowerment of the Poorest in Bangladesh (EEP)	6%	77	58	45	34	Sensitive
V.1.1.	BAEC	Modernisation of food and radiation biological services of the Bangladesh atomic energy commission	100%	4,544	3,408	2,082	1,562	Sensitive
V.1.1.	BCSIR	Improvement of IMS for dairy and dairy products laboratories	100%	1,784	1,338	1,647	1,236	Sensitive
V.1.1.	BFSA	Institutionalization of Food Safety in Bangladesh for Safer Food	33%	921	691	608	456	Sensitive
V.1.1.	BSTI	Expansion and strengthening of BSTI	100%	-	-	-	-	Sensitive
V.1.1.	MoHFW	NNSB1-1 - Laboratory Analysis of Food:	100%	1,246	935	-	-	Sensitive
V.1.1.	MoHFW	Improving Food Safety in Bangladesh	100%	247	185	-	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
V.1.1.	MoHFW	NNSB1-3 - Food-borne illness surveillance	100%	378	283	-	-	Sensitive
V.1.1.	MoHFW	NNSB1-2 - Risk Based Food Inspection	100%	1,388	1,041	-	-	Sensitive
V.1.2.	BFSA	Institutionalization of Food Safety in Bangladesh for Safer Food	33%	921	691	608	456	Sensitive
V.1.2.	BRRI	Pirojpur-Gopalganj-Bagerhat Integrated Agriculture Development Project	20%	43	32	40	30	Sensitive
V.1.2.	DAE	Safe Crop Production Project through Integrated Pest Management (IPM) Approach	100%	2,163	1,623	2,076	1,557	Sensitive
V.1.2.	DAE	Strengthening Bangladesh phytosanitary capabilities (1st Revised)	100%	8,076	6,057	4,536	3,402	Sensitive
V.1.2.	DoFish	Strengthening of fisheries and aquaculture food safety and quality management system in Bangladesh	100%	521	391	506	379	Sensitive
V.1.3.	MoHFW	NNSB2-2 - Risk Based Food Inspection	50%	694	520	-	-	Sensitive
V.1.3.	MoHFW	NNSB2-4- IEC/BCC on Food Safety	50%	458	343	-	-	Sensitive
V.1.4.	MoHFW	NNSB1-4 - IEC/BCC on Food Safety	100%	915	686	-	-	Sensitive
V.1.4.	MoHFW	NNSB2-3 - Food-borne illness surveillance	100%	378	283	-	-	Sensitive
V.1.4.	MoHFW	NNSB2-4- IEC/BCC on Food Safety	50%	458	343	-	-	Sensitive
V.1.4.	MoHFW	NNSB2-2 - Risk Based Food Inspection	50%	694	520	-	-	Sensitive
V.3.1.	APSU	Orientation Agriculture towards improve Nutrition and Women's Empowerment	100%	448	224	431	215	Supportive
V.3.1.	BBS	Strengthening Agriculture Market Information System (AMIS) in Bangladesh	100%	340	170	312	156	Supportive
V.3.1.	BBS	Household Income and Expenditure Survey (HIES) Project	100%	1,667	834	907	454	Supportive
V.3.1.	BBS	Monitoring the Situation of Vital Statistics of Bangladesh	100%	1,255	628	1,068	534	Supportive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 (as of 30-Jun-18)		Cumulative delivery over CIP2 (as of 30-Jun-18)		Nutrition sensitivity
				CIP weighted	Nutrition weighted	CIP weighted	Nutrition weighted	
V.3.1.	BBS	Census of the Undocumented Myanmar Nationals Staying in Bangladesh 2015 Project	100%	601	301	368	184	Supportive
V.3.1.	BBS	National Household Database (NHD)	100%	71,158	35,579	40,636	20,318	Supportive
V.4.1.	MoHFW	NNSC1-1 - Revitalization & operation (Inter-ministerial & multisectoral coordination) of BNNC	50%	250	125	-	-	Supportive
V.4.2.	BFSA	Institutionalization of Food Safety in Bangladesh for Safer Food	33%	921	461	608	304	Supportive
V.4.2.	DDM	Strengthening of the ministry of disaster management and relief programme administration	100%	21,501	10,750	8,812	4,406	Supportive
V.4.2.	MoFood	Meeting the Undernourishment Challenge Programme	100%	13,900	6,950	-	-	Supportive
V.4.2.	MoFood	Modern Food Storage Facilities Project (MFSP)	20%	36,832	18,416	6,075	3,037	Supportive
V.4.2.	MoHFW	NNSC1-1 - Revitalization & operation (Inter-ministerial & multisectoral coordination) of BNNC	50%	250	125	-	-	Supportive
V.4.2.	Planning Div	Strengthening Public Investment Management System (SPIMS)	100%	3,685	1,843	2,131	1,066	Supportive

Annex 8 – Pipeline projects by subprogramme (financial gap) (lakh BDT)

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.1.1.	BARC	Farmer Technology Development Project for the production of profitable crops	100%	479	479	-	Sensitive
I.1.1.	BARC	In the greater Faridpur and Barishal regions, pulses research and development strengthening projects	100%	735	735	-	Sensitive
I.1.1.	BARC	Strengthening BARC capacity	50%	7,500	-	7,500	Sensitive
I.1.1.	BARC	Strengthening of Farm Machinery Research Programs for the production of rice by the mechanical method	100%	752	752	-	Sensitive
I.1.1.	BARC	Vegetation and spice cultivation research and expansion project in floating bed	100%	256	256	-	Sensitive
I.1.1.	BARI	Enhance farm crop research and expansion of crop technology in *char* area	50%	3,528	3,528	-	Sensitive
I.1.1.	BARI	Establishment BARIs agriculture research center in Gopalgonj and agriculture development by strengthening research in south west area	100%	6,280	6,280	-	Sensitive
I.1.1.	BARI	Integrated agricultural development project for Magura, Jessore, Narail, Khulna, Satkhira (BARI part)	100%	1,994	1,994	-	Sensitive
I.1.1.	BARI	Smallholder agricultural competitiveness project (SACP)	50%	292	85	206	Sensitive
I.1.1.	BARI	Strengthening of environmental stress research for sustainable crop production in the problem areas of Bangladesh	50%	44,573	-	44,573	Sensitive
I.1.1.	BARI	Technology development and dissemination of homestead and field crops in *char* areas for income generation and poverty alleviation	100%	1,481	1,481	-	Sensitive
I.1.1.	BARI	Upgrading regional horticulture research station, Cumilla to regional agriculture research station	100%	3,727	3,727	-	Sensitive
I.1.1.	BFRI	Sea-weed cultivation and seaweed made commodity production and research	50%	337	337	-	Sensitive
I.1.1.	DAE	Smallholder agricultural competitiveness project (SACP)	33%	3,113	1,026	2,086	Sensitive
I.1.1.	DAE	Strengthening diversified crop production by climate smart agriculture system	50%	40,550	-	40,550	Sensitive
I.1.1.	DAE	Strengthening mushroom development project	100%	7,750	-	7,750	Sensitive
I.1.1.	DLS	Integrated livestock development in coastal area	100%	3,814	3,814	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.1.2.	BARC	Strengthening BARC capacity	50%	7,500	-	7,500	Sensitive
I.1.2.	BARI	Strengthening of environmental stress research for sustainable crop production in the problem areas of Bangladesh	50%	44,573	-	44,573	Sensitive
I.1.2.	DAE	Strengthening diversified crop production by climate smart agriculture system	50%	40,550	-	40,550	Sensitive
I.1.2.	DAM	Integrated Project for Environmentally Friendly Sustainable Agriculture in Hilly Areas of Bangladesh (DAM)	100%	5,240	5,240	-	Sensitive
I.1.3.	BADC	Smallholder agricultural competitiveness project (SACP)	50%	6,603	2,152	4,451	Sensitive
I.1.3.	BARI	Enhance farm crop research and expansion of crop technology in *char* area	50%	3,528	3,528	-	Sensitive
I.1.3.	DAE	Agricultural production enhancement project in urban areas	100%	275	275	-	Sensitive
I.1.3.	DAE	Barishal Patuakhali Bhola Jhalokati, Barguna, Madaripur, Shariatpur Agricultural Development Project	100%	7,834	7,834	-	Sensitive
I.1.3.	DAE	Citrus management expansion and production plantation project	100%	1,312	1,312	-	Sensitive
I.1.3.	DAE	Condon Crop Development Project	100%	3,329	3,329	-	Sensitive
I.1.3.	DAE	Corn and sunflower farming expansion project in *chars* and river areas in the southern region	100%	987	987	-	Sensitive
I.1.3.	DAE	E-Agriculture Extension and Digital Document Services Strengthening Project	100%	696	696	-	Sensitive
I.1.3.	DAE	Extension of Granular Urea Technology Project	100%	10,413	-	10,413	Sensitive
I.1.3.	DAE	GIS base crop monitoring and area wise agriculture extension service project	100%	14,500	-	14,500	Sensitive
I.1.3.	DAE	Greater Kushtia and Jessore Agriculture Development	100%	1,920	1,920	-	Sensitive
I.1.3.	DAE	Greater Mymensingh Agricultural Development Project	100%	1,061	1,061	-	Sensitive
I.1.3.	DAE	Noakhali Feni Lakhipur Chittagong Chandpur Agricultural Development Project	100%	4,860	4,860	-	Sensitive
I.1.3.	DAE	Pirojpur Gopalganj Bagerhat Khulna Satkhira Agricultural Development Project	100%	4,439	4,439	-	Sensitive
I.1.3.	DAE	Production and production of Vegetable crops through better agricultural management	100%	2,255	2,255	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.1.3.	DAE	Rangpur division agriculture and rural development project	100%	11,323	2,548	8,775	Sensitive
I.1.3.	DAE	Safe crop production project through environment friendly strategy	100%	12,049	12,049	-	Sensitive
I.1.3.	DAE	Skills Development Program of Agricultural Institute	100%	8,230	8,230	-	Sensitive
I.1.3.	DAM	Magura-Jashore-Narial-Khulna-Satkhira Integrated Agricultural Development Project	100%	1,933	1,933	-	Sensitive
I.1.3.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	6%	27,394	2,526	24,869	Sensitive
I.2.1.	BADC	Mujibnagar Irrigation Area Development Project	100%	2,142	2,142	-	Sensitive
I.2.1.	BADC	Strengthening hybrid rice seed production, processing, sorting and distribution system.	100%	2,772	2,772	-	Sensitive
I.2.1.	BARI	Strengthening of Vertebrate pest research and development in Bangladesh	100%	1,337	1,337	-	Sensitive
I.2.1.	BCIC	Construction of 34# buffer godown in the country for effective preservation and distribution of fertilizer	100%	79,322	79,322	-	Sensitive
I.2.1.	BCIC	Ghorashal Polash Urea fertilizer project	100%	418,436	73,768	344,669	Sensitive
I.2.1.	BCIC	Setting up of a Modern, energy efficient with higher capacity urea fertilizer factory in the vacant land of UFFL & PUFFL	100%	800,000	200,000	600,000	Sensitive
I.2.1.	BMDA	Enhancing seed producing capacity of BMDA	100%	986	986	-	Sensitive
I.2.1.	DAE	Establishment and Enhancement of Pesticide laboratory	100%	5,099	-	5,099	Sensitive
I.2.1.	DAM	Ensuring Sustainable Agricultural Development through Access of Market and Finance	50%	5,960	280	5,680	Sensitive
I.2.1.	SCA	Creative projects for seed certification	100%	984	-	984	Sensitive
I.2.1.	SCA	Innovation project of seed certification	100%	14,063	-	14,063	Sensitive
I.2.1.	SCA	Strengthening seed certifying program	100%	3,135	3,135	-	Sensitive
I.2.1.	SFDF	Capacity Building of the Small Farmers Development Foundation	50%	1,996	-	1,996	Sensitive
I.2.1.	SFDF	Production, Employment and Income Generation Programme for the Small Farmers of Bangladesh	100%	2,905	-	2,905	Sensitive
I.2.2.	DAE	Soil Fertility Productivity Management Project	100%	1,779	1,779	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.2.2.	SRDI	Gopalgonj-Khulna-Bagerhat-Satkhira-Pirojpur agriculture Development (DAE part)	75%	577	577	-	Sensitive
I.2.3.	BADC	Cumilla, Chandpur, Brahmanbaria District Irrigation Development Project	100%	2,568	2,568	-	Sensitive
I.2.3.	BADC	Irrigation area development project in greater Dhaka region	100%	9,571	9,571	-	Sensitive
I.2.3.	BADC	Irrigation Area Development Project in Greater Faridpur region	100%	1,409	1,409	-	Sensitive
I.2.3.	BADC	Irrigation Development Project using ground water in Chittagong Cox's bazar district	100%	3,575	3,575	-	Sensitive
I.2.3.	BADC	Irrigation Development Project using groundwater in Sirajganj district of Pabna Natore	100%	4,819	4,819	-	Sensitive
I.2.3.	BADC	Small irrigation development projects using solar power	100%	5,784	5,784	-	Sensitive
I.2.3.	BADC	Smallholder agricultural competitiveness project (SACP)	50%	6,603	2,152	4,451	Sensitive
I.2.3.	BARI	Smallholder agricultural competitiveness project (SACP)	50%	292	85	206	Sensitive
I.2.3.	BMDA	Small irrigation development project by re-digging the pond using ground water	100%	960	960	-	Sensitive
I.2.3.	BMDA	*Char* livelihood improvement by solar irrigation, communication and WATSAN development project	33%	66	-	66	Sensitive
I.2.3.	BMDA	Irrigation expansion project using Gomani river water in Pabna district	100%	630	630	-	Sensitive
I.2.3.	BMDA	Irrigation expansion project using water from the Rangpur Dinajpur district	100%	2,781	2,781	-	Sensitive
I.2.3.	BMDA	Irrigation extension program in Bagha, Charghat and Poba of Rajshahi district by decreasing Waterlogging and increasing surface water availability	100%	1,024	1,024	-	Sensitive
I.2.3.	BMDA	Irrigation Project in Natore district by saving rainwater	100%	1,339	1,339	-	Sensitive
I.2.3.	BWDB	Barishal Irrigation Rehabilitation Project	100%	599	599	-	Sensitive
I.2.3.	BWDB	Feasibility study for re-excavation of small and medium *khal* and *beels* in the country	100%	199	199	-	Sensitive
I.2.3.	BWDB	Flood Control and Irrigation Project of Marshi in Madarganj and Islampur Upazilla of Jamalpur district	100%	1,345	1,345	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.2.3.	BWDB	North Rajshahi Irrigation Project	100%	110,054	-	110,054	Sensitive
I.2.3.	BWDB	Small river, canal and water body re-excavation project in 64 districts (1st phase)	100%	91,182	91,182	-	Sensitive
I.2.3.	BWDB	Tangan Barrage Irrigation Rehabilitation Project	100%	3,504	3,504	-	Sensitive
I.2.3.	BWDB	The flood control and irrigation project of Marishi in Jhenaigati Upazilla of Sherpur district	100%	174	174	-	Sensitive
I.2.3.	DAE	Smallholder agricultural competitiveness project (SACP)	33%	3,113	1,026	2,086	Sensitive
I.2.3.	DAM	Mushroom Development Project	100%	543	-	543	Sensitive
I.2.3.	DAM	Smallholder agricultural competitiveness project (SACP)	50%	4,042	926	3,117	Sensitive
I.2.3.	LGED	Construction of dam on small and medium rivers to increase food production	100%	917	77	840	Sensitive
I.2.3.	LGED	Construction of Rubber Dams in Small & Medium Rivers for increasing Food Production	100%	13,100	1,100	12,000	Sensitive
I.2.4.	SRDI	Gopalgonj-Khulna-Bagerhat-Satkhira-Pirojpur agriculture Development (DAE part)	25%	192	192	-	Supportive
I.3.1.	BLRI	Establishment of dairy research development center project	100%	6,259	6,259	-	Sensitive
I.3.1.	BRDB	Production and marketing program for high quality raw material rich in poverty reduction	100%	2,659	2,659	-	Sensitive
I.3.1.	DLS	Beef fattening using modern technology project	33%	563	563	-	Sensitive
I.3.1.	DLS	Khulna regional livestock development project	100%	8,148	8,148	-	Sensitive
I.3.1.	DoFish	Sustainable Management and Value Chain Development in Fisheries Sector	17%	26,667	26,298	369	Sensitive
I.3.1.	Milk Vita	Project for establishment of cattle development in Dakshin and Parsh Suri areas in multiplied Faridpur district	100%	24,093	24,093	-	Sensitive
I.3.1.	Milk Vita	The project to set up a junkyard factory in Sirajganj Baghbari	100%	276	276	-	Sensitive
I.3.1.	PDBF	Re-excavation of ponds and fish culture after jute decomposition	100%	3,967	3,967	-	Sensitive
I.3.2.	DLS	Beef fattening using modern technology project	33%	563	563	-	Sensitive
I.3.2.	DLS	Black Bengal goat development and extension	50%	1,450	1,450	-	Sensitive
I.3.2.	DLS	Buffalo development project	50%	3,259	3,259	-	Sensitive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
				Total	By GOB	By DP	
I.3.2.	DoFish	Sustainable Management and Value Chain Development in Fisheries Sector	17%	26,667	26,298	369	Sensitive
I.3.3.	BFRI	Establishing *Haor* Fisheries Research Station in Kishoreganj and *beel* Fisheries Research Station in Gopalganj	100%	16,248	16,248	-	Sensitive
I.3.3.	DoFish	Sustainable Management and Value Chain Development in Fisheries Sector	17%	26,667	26,298	369	Sensitive
I.3.3.	DoFish	The sustainable coastal fisheries project	100%	9,281	-	9,281	Sensitive
I.3.4.	DLS	Beef fattening using modern technology project	33%	563	563	-	Sensitive
I.3.4.	DLS	Black Bengal goat development and extension	50%	1,450	1,450	-	Sensitive
I.3.4.	DLS	Buffalo development project	50%	3,259	3,259	-	Sensitive
I.3.4.	MoFL	e-service delivery in fish and livestock	100%	630	630	-	Sensitive
I.3.4.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	28%	118,994	10,971	108,023	Sensitive
II.1.1.	DAM	Agricultural Marketing Services Extension Quality assurance system and value chain Development Project	100%	1,500	-	1,500	Supportive
II.1.1.	DAM	Improving Marketing efficiency through value chain linkage in 06 selected districts	100%	1,000	-	1,000	Supportive
II.1.1.	DLS	Milk development and marketing project	100%	14,245	-	14,245	Supportive
II.1.1.	MoA	Smallholder Agricultural Completeness Project	30%	15,092	-	15,092	Supportive
II.1.2.	DAE	Safe gardener crop production and post-harvest management project	100%	1,653	1,653	-	Supportive
II.1.2.	DAM	Development of marketing of agricultural products for the development of quality and value chain	100%	105	-	105	Supportive
II.1.2.	DAM	Ensuring Food Security through Enhancing Value Addition and Processing Activities of Agricultural Commodities in 10 Selected Districts.	100%	990	-	990	Supportive
II.1.2.	DAM	Ensuring sustainable agricultural development by entering into market and financial institutions	100%	840	42	798	Supportive
II.1.2.	DAM	Improving local level food security through enhancing value addition and processing activities of agricultural commodities in selected 20 districts	100%	10,020	430	9,590	Supportive

Sub programme ID	Agency	Projects	Allocation by subprogram	Allocation over CIP2 period			Nutrition sensitivity
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II.1.2.	DLS	Establishment of slaughterhouses at Upazilla level	50%	5,940	-	5,940	Supportive
II.1.2.	DoFish	Sustainable Management and Value Chain Development in Fisheries Sector	50%	80,000	78,895	1,106	Supportive
II.1.2.	MoA	Smallholder Agricultural competitiveness Project	30%	15,092	-	15,092	Supportive
II.1.2.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	26%	109,149	10,063	99,086	Supportive
II.1.3.	DAE	Smallholder agricultural competitiveness project (SACP)	33%	3,113	1,026	2,086	Supportive
II.1.3.	DAM	Smallholder agricultural competitiveness project (SACP)	50%	4,042	926	3,117	Supportive
II.1.3.	DOC	Development of cooperatives based direct marketing system of agricultural products	100%	4,163	4,163	-	Supportive
II.1.3.	DOC	Livelihood Improvement of the Indigenous Community through Cooperatives	100%	3,635	3,635	-	Supportive
II.1.3.	MoA	Smallholder Agricultural competitiveness Project	39%	19,796	-	19,796	Supportive
II.1.3.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	6%	27,394	2,526	24,869	Supportive
II.2.1.	BMDA	*Char* livelihood improvement by solar irrigation, communication and WATSAN development project	33%	66	-	66	Supportive
II.2.1.	DAM	Agricultural Marketing Infrastructure And crop storage-based credit expansion Development Project	100%	15,000	15,000	-	Supportive
II.2.1.	DAM	Ensuring Sustainable Agricultural Development through Access of Market and Finance	50%	5,960	280	5,680	Supportive
II.2.1.	DAM	Ensuring Sustainable Agricultural Development through Market access	100%	12,000	600	11,400	Supportive
II.2.1.	DAM	The strengthening of the agricultural marketing project	100%	7	7	-	Supportive
II.2.1.	DDM	Construction of 15-meter bridge and culvert in rural roads	100%	460,474	460,474	-	Supportive
II.2.1.	LGED	Begumgonj Upazilla rural infrastructure development project under Noakhali	100%	1,932	1,932	-	Supportive
II.2.1.	LGED	Disaster damaged and other important rural infrastructure development project in 3 CHT area	80%	23,971	23,971	-	Supportive
II.2.1.	LGED	Greater Dhaka rural infrastructure development project-4	100%	31,899	31,899	-	Supportive

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II.2.1.	LGED	Greater Kushtia rural infrastructure development project	100%	37,986	37,986	-	Supportive
II.2.1.	LGED	Jessore rural infrastructure development project	100%	38,090	38,090	-	Supportive
II.2.1.	LGED	Khulna, Bagerhat and Satkhira rural infrastructure development project	100%	37,517	37,517	-	Supportive
II.2.1.	LGED	Rangpur division agriculture and rural development	100%	8,320	1,471	6,848	Supportive
II.2.1.	LGED	Rural bridge development assistance project	100%	198,840	61,016	137,824	Supportive
II.2.1.	LGED	Rural connectivity improvement project	100%	146,697	46,885	99,812	Supportive
II.2.1.	LGED	Rural road rehabilitation project	100%	140,640	140,640	-	Supportive
II.2.1.	LGED	South Sunamgonj and Jagannathpur Upazilla rural infrastructure development project (2nd phase)	100%	1,733	1,733	-	Supportive
II.2.1.	PMO	Special economic zone, (Nilphamari) agriculture Development project	100%	6,125	1,925	4,200	Supportive
II.2.2.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	17%	72,766	6,709	66,057	Supportive
II.2.3.	DAM	Establishment of Agricultural system, market, information and centres	100%	4,029	400	3,629	Supportive
III.1.1	DPE	Technical assistance projects for the preparation of National School Feeding Program	100%	13	-	13	Supportive
III.1.1	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	5%	21,830	2,013	19,817	Supportive
III.1.2	DWA	Primary health care, reproductive health and nutrition service in 21 districts	100%	3,934	3,934	-	Supportive
III.1.3	MoA	Smallholder Agricultural competitiveness Project	2%	980	-	980	Supportive
III.1.3	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	3%	14,553	1,342	13,211	Supportive
III.2.1	BMDA	*Char* livelihood improvement by solar irrigation, communication and WATSAN development project	33%	66	-	66	Sensitive
IV.1.1.	BADC	Disaster victim Chandpur potato seed producer rehabilitation and increasing opportunity of potato seed collection and processing	100%	454	454	-	Supportive
IV.1.3.	MoFood	Old godown renovation and new infrastructure development	100%	12,675	12,675	-	Sensitive

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IV.2.1.	DOC	Livelihood improvement of the disadvantaged women	100%	9,461	9,461	-	Sensitive
IV.2.1.	RDA	Technical study project on sustainable rural livelihood and empowerment of women through expansion of crop seed business model by RDA invented rural women	100%	347	347	-	Sensitive
IV.2.1.	RDCD	Comprehensive village development programme (CVDP)	50%	10,537	10,537	-	Sensitive
IV.2.1.	SFDF	Capacity Building of the Small Farmers Development Foundation	25%	998	-	998	Sensitive
IV.2.1.	SFDF	Livelihood Improvement of Ethnic and Marginal Population	100%	6,562	-	6,562	Sensitive
IV.2.1.	SFDF	Production, employment and income generation programs for small farmers in Bangladesh	100%	203	-	203	Sensitive
IV.2.2.	BFRI	Sea-weed cultivation and sea-weed made commodity production and research	50%	337	337	-	Sensitive
IV.2.2.	CHTDB	High value spice cultivation	100%	1,395	1,395	-	Sensitive
IV.2.2.	LGED	Disaster damaged and other important rural infrastructure development project in 3 CHT area	20%	5,993	5,993	-	Sensitive
IV.2.2.	RDA	Decrease poverty of Kurigram and Jamalpur district	100%	7,806	7,806	-	Sensitive
IV.2.2.	RDA	Enhancement of Coastal Livelihood through Small and medium Enterprise (SME) Development	100%	6,302	300	6,002	Sensitive
IV.2.2.	RDCD	Comprehensive village development programme (CVDP)	50%	10,537	10,537	-	Sensitive
IV.2.2.	SFDF	Capacity Building of the Small Farmers Development Foundation	25%	998	-	998	Sensitive
V.1.1.	BFSA	Institutional Capacity Strengthening project	33%	600	600	-	Sensitive
V.1.1.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	2%	8,989	829	8,160	Sensitive
V.1.1.	MoFood	Establishment of 7 food laboratories in seven division	100%	10,000	-	10,000	Sensitive
V.1.2.	BFSA	Institutional Capacity Strengthening project	33%	600	600	-	Sensitive
V.1.2.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	2%	8,989	829	8,160	Sensitive
V.1.3.	DLS	Establishment of slaughter house at Upazilla level	50%	5,940	-	5,940	Sensitive
V.1.3.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	2%	8,989	829	8,160	Sensitive

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V.1.4.	MoFL	Livestock Development based dairy and meat production project (LDDMPP)	2%	8,989	829	8,160	Sensitive
V.3.1.	BBS	Data conversion, meta data preparation and time series data compilation	100%	565	565	-	Supportive
V.3.1.	DAM	Strengthening capacity building of department of agriculture marketing (DAM) in research and policy analysis of agriculture marketing information	100%	980	-	980	Supportive
V.4.1.	BBS	National Information Platforms for Nutrition	100%	-	-	-	Supportive
V.4.1.	GED	Institutional Planning Capacity Development to Graduate to Middle Income Country	100%	364	364	-	Supportive
V.4.1.	GED	Strengthening the capacity of development planning superstructure for achieving the developed country status project	100%	-	-	-	Supportive
V.4.2.	BFSA	Institutional Capacity Strengthening project	33%	600	600	-	Supportive

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