

**Bangladesh Third Country Investment Plan
Sustainable, Nutrition-Sensitive and
Resilient Food Systems
(2021-2025)**

March 2022

This document is the result of a joint effort by the following ministries: Ministry of Agriculture, Ministry of Fisheries and Livestock, Ministry of Food, Ministry of Water Resources, Ministry of Industries, Ministry of Social Welfare, Ministry of Disaster Management and Relief, Ministry of Women and Children Affairs, Ministry of Chittagong Hill Tracts Affairs, Ministry of Environment, Forest and Climate Change Local Government Division, Ministry of Local Government, Rural Development and Cooperatives Rural Development and Cooperatives Division, Ministry of LGRDC Health Services Division, Ministry of Health and Family Welfare Statistics and Informatics Division, Ministry of Planning General Economics Division, Bangladesh Planning Commission Implementation Monitoring and Evaluation Division, Ministry of Planning Economic Relations Division, Ministry of Finance Division, Ministry of Finance.

This document was developed in close consultation with private sector representatives, civil society organisations, farmer groups and organisations, representatives from research and academia, and resource partners.

Coordinated by the Food Planning and Monitoring Unit (FPMU), Ministry of Food

Table of contents

Table of contents.....	iii
Acronyms	iv
Executive summary.....	1
1. Introduction.....	2
2. CIP3: an effective guide to orient sustainable, nutrition sensitive and resilient investments within food systems in support of SDGs.....	3
3. A sustainable, nutrition-sensitive and resilient food system	5
4. Formulation and characteristics of the CIP3	7
5. CIP3 guiding principles	8
6. Institutional arrangements for coordination and monitoring the CIP3 and PoA.....	10
7. CIP3 structure	12
8. CIP3 Programmes	14
PILLAR I. Availability of safe and nutritious food for healthy diets	14
PILLAR II. Access to safe and nutritious food at an affordable price.....	21
PILLAR III. To enhance the consumption and utilization of healthy and diversified diets for achieving nutrition improvements	30
PILLAR IV. To increase access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	37
PILLAR V. Cross-cutting Programmes	43
9. CIP3 markers	49
10. Results framework, indicators of programmes and impact of investments	54
11. CIP3 baseline budget	64
12. CIP3 markers: baseline budget	68
13. Challenges in implementing and monitoring the CIP3	69
14. Annexes.....	70

Acronyms

ADB	Asian Development Bank	DPs	Development Partners
ADP	Annual Development Programme	DPHE	Department of Public Health Engineering
APA	Annual Performance Agreement	EAS	Extension and Advisory Services
AoI	Area of Intervention	EPZ	Export Processing Zones
ARDFS	Agriculture, Rural Development and Food Security	ERD	Economic Relations Division
ARI	Acute Respiratory Infections	EZ	Economic Zone
BADC	Bangladesh Agricultural Development Corporation	FAO	Food and Agriculture Organization of the United Nations
BARC	Bangladesh Agricultural Research Council	FBCCI	Federation of Bangladesh Chambers of Commerce and Industry
BARI	Bangladesh Agricultural Research Institute	FBDG	Food Based Dietary Guidelines
BAU	Bangladesh Agricultural University	FFP	Food Friendly Program
BB	Bangladesh Bank	FIES	Food Insecurity Experience Scale
BBS	Bangladesh Bureau of Statistics	FLW	Food Loss and Waste
BCC	Behaviour Change Communication	FNS	Food and Nutrition Security
BCIC	Bangladesh Chemical Industries Corporation	FPMC	Food Planning and Monitoring Committee
BIHS	Bangladesh Integrated Household Survey	FPMU	Food Planning and Monitoring Unit
BDHS	Bangladesh Demographic and Health Survey	FPWG	Food Policy Working Group
BDT	Bangladeshi Taka	FS	Food Security
BFRI	Bangladesh Fisheries Research Institute	FVC	Food Value Chain
BFSA	Bangladesh Food Safety Authority	G2P	Government-to-Person
BFSN	Bangladesh Food Safety Network	GAP	Good Agricultural Practices
BIHS	Bangladesh Integrated Household Survey	GAqP	Good Aquaculture Practices
BINA	Bangladesh Institute of Nuclear Agriculture	GDP	Gross Domestic Product
BIRTAN	Bangladesh Institute of Research and Training on Applied Nutrition	GED	General Economics Division
BMDA	Barind Multipurpose Development Authority	GHG	Greenhouse Gas
BWMRI	Bangladesh Wheat and Maize Research Institute	GHP	Good Hygienic Practices
BMMS	Bangladesh Maternal Mortality and Health Care Survey	GIEWS	Global Information and Early Warning System
BNNC	Bangladesh National Nutrition Council	GMP	Good Manufacturing Practices
BRRI	Bangladesh Rice Research Institute	GoB	Government of Bangladesh
BRTC	Bangladesh Road Transport Corporation	HIES	Household Income and Expenditure Survey
BSCIC	Bangladesh Small and Cottage Industries Corporation	HPNSDP	Health, Population and Nutrition Sector Development Programme
BSTI	Bangladesh Standards and Testing Institution	ICT	Information & Communication Technology
BWDB	Bangladesh Water Development Board	ICVGD	Investment Component for Vulnerable Group Development
CIP	Country Investment Plan	IFAD	International Fund for Agriculture Development
CIP2	Second Country Investment Plan for Nutrition-Sensitive Food Systems	IFPA	Indicator of Food Price Anomalies
DAE	Department of Agricultural Extension	IMCI	Integrated Management of Childhood Illness
DAM	Department of Agricultural Marketing	IMED	Implementation Monitoring and Evaluation Division
DDP	Desirable Dietary Pattern	JICA	Japan International Cooperation Agency
DEI	Dietary Energy Intake	LCG	Local Consultative Group
DER	Disaster Emergency Response	LGD	Local Government Division
DG	Directorate General	LGED	Local Government Engineering Department
DGHS	Directorate General of Health Services	MAD	Minimum Acceptable Diet
DG Food	Directorate General of Food	MDD	Minimum Dietary Diversity
DLS	Department of Livestock Services	MICS	Multiple Indicator Cluster Survey
DNCC	District Nutrition Coordination Committees	MIS	Management Information System
DoF	Department of Fisheries	MoA	Ministry of Agriculture
		National Nutrition Services	
		MoC	Ministry of Commerce

MoEFCC	Ministry of Environment, Forest & Climate Change	NNS	National Nutrition Services
MoDMR	Ministry of Disaster Management and Relief	NSSS	National Social Security Strategy
MoE	Ministry of Education	OMS	Open Market Sales
MoF	Ministry of Finance	PFDS	Public Food Distribution System
MoFood	Ministry of Food	POs	Producers' Organizations
MoFL	Ministry of Fisheries and Livestock	PoA	Plan of Action
MoHFW	Ministry of Health and Family Welfare	PP2041	Perspective Plan of Bangladesh 2021-2041
MoInd	Ministry of Industries	PPP	Public Private Partnership
MoIB	Ministry of Information and Broadcasting	PPPA	Public Private Partnership Authority
MoLGRD&C	Ministry of Local Government, Rural Development and Cooperatives	ppm	Parts per million
MoP	Ministry of Planning	RDCCD	Rural Development and Cooperatives Division
MoPA	Ministry of Public Administration	R&D	Research and Development
MoPEMR	Ministry of Power, Energy and Mineral Resources	SAARC	South Asian Association of Regional Cooperation
MoST	Ministry of Science and Technology	SBCC	Social Behaviour Change Communication
MoWCA	Ministry of Women and Children Affairs	SDG	Sustainable Development Goal
MoWR	Ministry of Water Resources	SMART	Specific, Measurable, Achievable, Relevant and Time-bound
MSEs	Micro and Small Enterprises	SME	Small and Medium Enterprises
MSMEs	Micro, Small and Medium Enterprises	SOFI	State of Food Insecurity in the World
MT	Medium Term	SRDI	Soil Resource Development Institute
m ton	Metric Ton	SUN	Scaling Up Nutrition
MUCH	Meeting the Undernutrition Challenge	SVRS	Sample Vital Registration System
NAP	National Agricultural Policy	TT	Thematic Team
NARS	National Agricultural Research System	TVET	Technical and Vocational Education and Training
NATP	National Agriculture Technology Project	UNCC	Upazila Nutrition Coordination Committee
NBCC	Nutrition Behaviour Change Communication	USD	US Dollar
NCDs	Non-Communicable Diseases	VGD	Vulnerable Group Development
NFNSP	National Food and Nutrition Security Policy	WFP	World Food Programme
NFP	National Food Policy	WHO	World Health Organization
NGOs	Non-Governmental Organisations	7FYP	Seventh Five Year Plan
NPAN2	Second National Plan of Action for Nutrition	8FYP	Eighth Five Year Plan

Executive summary

The Bangladesh Third Country Investment Plan – Sustainable, Nutrition Sensitive and Resilient Food Systems (CIP3, 2021-2025) is a powerful tool for fulfilling the commitments of the National Food and Nutrition Security Policy (NFSNP, 2020), its Plan of Action (PoA, 2021-2030) and those of the Eight Five Year Plan and the 2030 Sustainable Development Goals (SGDs), all which require well-targeted financial resources. It serves to mobilise and orient funds towards sustainable, nutrition sensitive and resilient investments prioritized in view of achieving food and nutrition security (FNS) for all in Bangladesh.

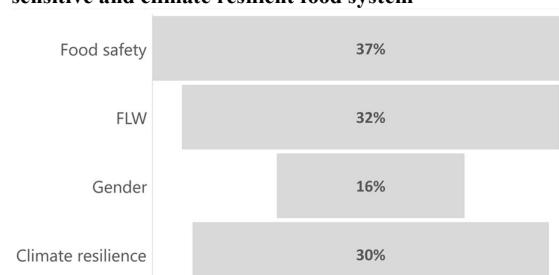
While Bangladesh has witnessed tremendous advances in recent years with substantial economic growth which has translated into food security and nutrition improvements, significant challenges to FNS remain, some of which will have been exacerbated by the COVID-19 pandemic. To address these, the CIP3 proposes a set of 35 Investment Programmes under five Pillars. As of June 2020, the CIP3 is valued at 31.52 billion USD of which 5.30 billion USD are pipeline projects which still require funding. This total is 20.24 billion USD when prioritising nutrition weighted funding for nutrition impact, and the gap is 3.37 billion USD. Indeed, in consonance with the Second Country Investment Plan for Nutrition-Sensitive Food Systems (CIP2, 2016-2020), the CIP3 promotes the use of a “nutrition lens” to assess and prioritise various options for designing multi-sectoral inter-linked interventions that are centered around shaping food systems for improving diets and the nutritional outcomes.

Total CIP3 budget in million USD as of June 2020

Pillar	Total budget			Nutrition weighted budget		
	Total	Financed	Pipeline	Total	Financed	Pipeline
I. To ensure availability of safe and nutritious food for healthy diets	4,471	3,812	659	3,271	2,779	492
II. Efficient and nutrition-sensitive post-harvest transformation and value addition	8,024	7,018	1,007	4,080	3,577	503
III. Improved dietary diversity, consumption and utilization	9,029	7,703	1,326	7,162	6,119	1,044
IV. Enhanced access to social protection and safety nets and increased resilience	9,086	7,040	2,046	5,271	4,072	1,199
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security	908	650	258	454	325	129
Total	31,518	26,222	5,295	20,238	16,871	3,367

Food safety -a necessary condition to ensure that the food system can adequately contribute to positive nutritional outcomes, food losses and waste (FLW) reduction, resilience to effects of climate change and gender are also given particular attention.

Contribution of the CIP3 nutrition-weighted budget to food safety, reducing FLW, and creating a gender sensitive and climate resilient food system



and gender are also given particular attention. This is done through an innovative methodological approach which assesses the CIP3’s budget contribution to these concerns.

Because of its cross sectoral nature, the CIP3 is aligned with relevant strategic national policies. It has been prepared by the GoB under the coordination of the Food Planning and Monitoring Unit (FPMU) of the Ministry of Food, in collaboration with a wide range of ministries, government agencies and departments, and contributions from donors,

development partners, civil society, the private sector and Non-Governmental Organisations (NGOs), all stakeholders in the food system.

1. Introduction

Bangladesh has witnessed tremendous advances in recent years with substantial economic growth, which has translated into food and nutrition security (FNS) improvements. Agriculture has managed to keep up with the needs of an ever-growing population. Bangladesh is now the fourth largest rice producer in the world and the third largest vegetable producer in the world after China and India. Food self-sufficiency in terms of per capita calorie availability has thus been achieved at national level. Over the last decade, the country has been among the fastest growing economies in the world thanks to a demographic dividend, strong ready-made garment exports, and stable macroeconomic conditions. It reached lower-middle-income status in 2015 and is now on track to graduate from the UN's Least Developed Countries list in 2026. This translated into a halving of poverty and extreme poverty down to 20.5% and 10.5%, respectively, between 2005 and 2019 although the COVID-19 pandemic will have side-tracked this progress and will require adjusting antipoverty strategies. Child stunting has demonstrated a sustained decline over the last 30 years from around 55 % in the mid-90s to around 28% at the present time. Amidst these gains, more efforts are needed with regards to dietary diversity, as consumption of good quality protein and bioavailable micronutrient-rich foods is still limited.

These achievements have been supported by strong investments in nutrition sensitive food systems among other initiatives of pro poor policies, health care and nutrition services, access to hygiene and sanitation and education, as documented by the monitoring of the Second Bangladesh Country Investment Plan – Nutrition Sensitive Food Systems (CIP2, 2016-2020). Substantial[§] challenges to FNS remain however, some of which will have been exacerbated by the pandemic. This includes rising income inequality in a country where still about half of the population consumes inadequate diets and suffers from hidden hunger and micronutrient deficiencies. Concurrently, the rise in obesity is leading to a sharp increase in non-communicable diseases. With a continuous move towards urbanization and increasing industrialization, agricultural labour is becoming increasingly scarce which, together with the effects of climate change, affects food production and availability. Amidst the COVID-19 pandemic, the need to build a resilient and sustainable recovery at global level strongly emerged. Against this backdrop, the Government of Bangladesh (GoB) has proactively engaged in realizing its vision of a resilient, nutrition sensitive and sustainable food system, able to deliver safe and diversified diets to all, and contributing to enhance nutrition outcomes and the livelihoods of rural communities, marginalized and fragile groups. In this context, a new National Food and Nutrition Security Policy (NFSNP, 2020) was approved by the Cabinet in August 2020.

To translate this vision into actionable interventions, the Plan of Action of the National Food and Nutrition Security Policy (PoA, 2021-2030) was formulated by the Government. It is anchored on the 8th Five Year Plan 2021-2025 (8FYP) and is to contribute to fulfilling national commitments lay down in other relevant strategic national policies and sectoral planning documents such as the Second National Plan of Action for Nutrition (NPAN2, 2016-2025). It is aligned with the National Pathway Document for the UN Food System Summit – Towards Sustainable Food Systems in Bangladesh (September 2021).

The execution of the PoA requires strong consensus among all the stakeholders including development partners (DPs), and adequate resource allocation to ensure that the required interventions in sectors and cross sectors, institutions, infrastructure, regulations, and markets are effectively implemented. To this effect, Bangladesh has joined efforts with initiatives such as Nutrition for Growth (N4G) and Scaling Up Nutrition. The Bangladesh Third Country Investment Plan – Sustainable, Nutrition Sensitive and Resilient Food Systems (CIP3, 2021-2025) will guide the level of commitment and financial resources generated by the GoB and DPs to support the PoA implementation. The CIP3 will work as a reference tool to guide and track progress of regional, local and sectoral investment plans and programmes. The CIP3 has been prepared by the GoB under the coordination of the Food Planning and Monitoring Unit (FPMU) of the Ministry of Food (MoFood), in collaboration with a wide range of ministries, government agencies and departments, and contributions from donors, civil society, the private sector and NGOs, all stakeholders in the food system.

2. CIP3: an effective guide to orient sustainable, nutrition sensitive and resilient investments within food systems in support of SDGs

Achieving the goal and objectives of the NFNSP 2020, its PoA and those of the 8FYP and the 2030 Sustainable Development Goals (SGDs) requires well-targeted financial resources. Finance is one the means of implementation of the SDGs which in addition to technology development and transfer, capacity-building, inclusive and equitable globalization and trade, regional integration, as well as the creation of a national enabling environment is required to implement the sustainable development agenda. Thus, SDG 17 endeavours to ‘strengthen the means of implementation and revitalize the global partnership for sustainable development’ which the CIP3 contributes to.

The CIP3 is a powerful tool that can help mobilise and orient funds towards sustainable, nutrition sensitive and resilient investments. Its yearly monitoring gauges the ongoing and planned efforts towards reaching the outcome of each programme. This enables the government and DPs to direct financing where priorities lie and to identify gaps in a coordinated manner across sectors, ministries, GoB and DPs in order to avoid duplications and leverage synergies. This is in keeping with the ‘whole of society approach’ adopted by the GoB for the SDGs implementation, which seeks to include all segments of society in planning and implementing the SDGs.

The CIP3 is expected to significantly contribute to meeting the Sustainable Development Goals (SDG) 2 ‘End hunger, achieve food security and improved nutrition and promote sustainable agriculture’ but it is also expected to play a significant role for most other SDGs, namely:

- SDG1 ‘End poverty in all its forms everywhere’ through increasing incomes from farmers from diversification into more profitable crops for example (Programmes I.6.), value addition from more efficient agro-processing (Pillar II) and social protection for the most vulnerable so as to reduce extreme poverty (Programmes IV.5. in particular).
- SDG3 ‘Ensure healthy lives and promote well-being for all at all ages’ through its Pillar III.
- SDG5 ‘Achieve gender equality and empower all women and girls’. The inclusion of a gender marker in the CIP3 reflects the role that it plays in ensuring FNS. Promoting the role of women in agriculture through more adapted extension services (Programme I.2) or increased access to inputs for example ((Programme I.4), as well as in the agroprocessing industry (Pillar II), or targeting them specifically in safety nets (Pillar III) will contribute to gender equality.
- SDG6 ‘Ensure availability and sustainable management of water and sanitation for all’ through Programme I.3 that promotes efficient and environmentally friendly irrigation technology and Programme III.7. that aims to enhance the supply of safe water for consumption and domestic use and improve sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes.
- SDG8 ‘Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all’ through strengthening post-harvest value chains with particular focus on Micro, Small and Medium Enterprises (MSMEs) (Pillar II).
- SDG9 ‘Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation’ through Pillar II which endeavours to strengthen post-harvest value chain with particular focus on MSMEs, improve physical access to markets, facilities and information and create an enabling environment in which the food industry can thrive. Programme V.5. also holds an important role in creating the right conditions for participation of on State actors in the development of food value chains.
- SDG10 ‘Reduce inequality within and among countries’ through the opportunities provided to participate in agriculture (Pillar I), food processing (Pillar II) and other economic activities along the food value chain, as well as the safety nets (Pillar IV) which increases households’ resilience and protects their living standards. Pillar III will also impact inequality through its interventions on the health of women of reproductive age and awareness of adequate infant and young child nutrition. Unhealthy and malnourished women often given birth to low-birth

weight whose poor growth in early life, worsened by poor feeding practices reduces educational progress thereby reproducing the poverty level of the household.

- SDG12 ‘Ensure sustainable consumption and production patterns’ through the efficient use of natural resources for agriculture (Programme I.4 in particular), the rationalisation of subsidies on resources such as water and electricity (Programme II.3) and sustainable consumption (Programme III.4). The FWL marker has been integrated to the CIP3 framework to ensure that the focus on reduces losses and waste prevails throughout the value chain also contributing to her sustainability of food production and consumption.
- SDG13 ‘Take urgent action to combat climate change and its impacts’. While Pillar IV specifically emphasizes the need to increase the resilience of agricultural systems (Programme IV.1.) and the disaster coping ability of vulnerable families (Programme IV.2.), and the need to facilitate and coordinate disaster response, mitigation and rehabilitation (Programme IV.4.), the marker on climate resilience also translates the emphasis that the CIP3 places on integrating this issue across the food system.
- SDG14 ‘Conserve and sustainably use the oceans, seas and marine resources for sustainable development’ through Programme I.7 on developing the Blue Economy.
- SDG15 ‘Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss’ also relates to resilient food systems and sustainability of natural resource utilization which is accounted for in the CIP3 through the introduction of a climate resilience marker.
- SDG17 ‘Strengthen the means of implementation and revitalise the global partnership for sustainable development’ through the operationalization of NFNSP, its PoA and CIP3’s implementation (Programme V.2), strengthened policy uptake at national and subnational level (Programme V.4) and strengthened FNS governance through enhanced participation of private sector and non-state actors (Programme V.5).

The fact that the CIP3 can contribute to 13 out of the 17 SDGs speaks of its multisectorality.

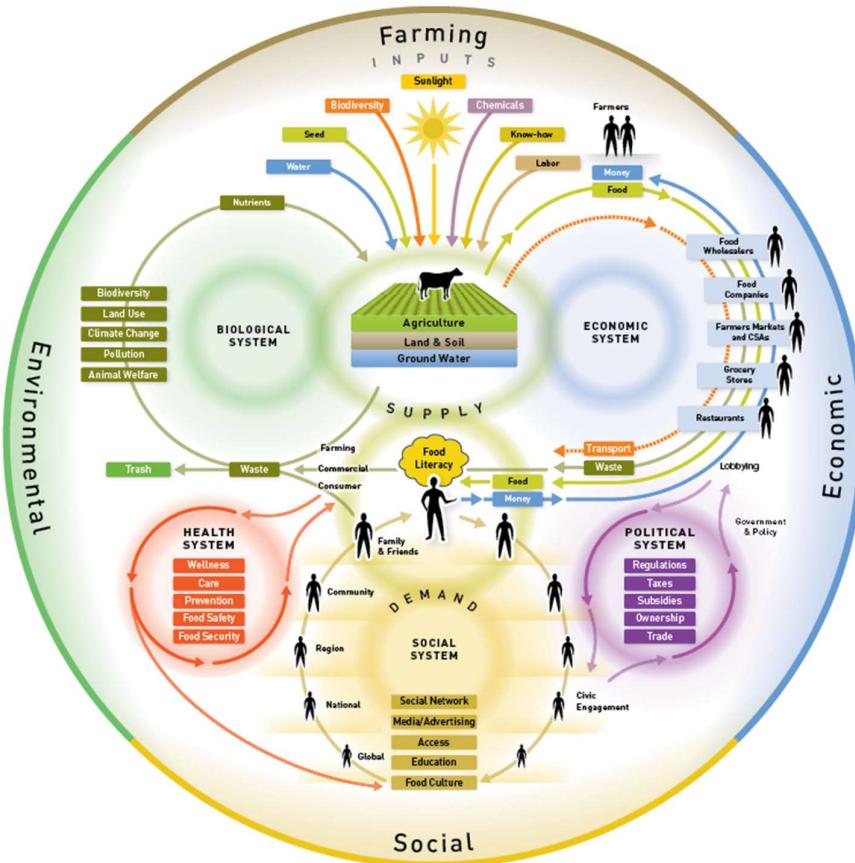
While the FNS Country Investment Plans developed so far by Bangladesh establish backward linkages with existing policy frameworks and strategic documents, they also facilitate forward linkages notably through the lessons learnt through the annual monitoring process: investment plans are set up as ‘living documents’ that evolve during their lifetime and feed into new frameworks. This, for example, has been the case of the NFNSP which was designed through a thorough consultative process but also by incorporating knowledge acquired through the monitoring of the CIP2 and the Plan of Action of the National Food Policy 2006. Emerging priorities such as the response to the COVID-19 pandemic will also be incorporated as they arise.

The General Economics Division of the Planning Commission has estimated the cost of implementing SDGs at annual cost of USD 66.32 billion at constant 2015-16 currency. It identifies the potential sources for financing the resource gap as the private sector, the public sector, public-private partnership, and external financing, and NGOs. While the CIP3 only includes funding from the GoB and DPs for projects included in the national Annual Development Programme (ADP), it is clear that realising FNS for all will be achieved through efforts that also figure outside this framework. This stresses the need for involving the private sector, in particular in the CIP3 monitoring and implementation.

3. A sustainable, nutrition-sensitive and resilient food system

This investment plan seeks to generate a sustainable and nutrition sensitive food system that is resilient to shocks and crises. Figure 1 illustrates the *food system* which gathers ‘all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, storage, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes’ (HLPE, 2017)¹. ‘A sustainable food system is a system that delivers FNS for all such that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised’ (FAO, 2018)². Given the extent of FLW in Bangladesh, attempts to tackle this problem can significantly contribute to creating a sustainable food system, hence the focus on this issue throughout the CIP3 (see Section 9).

Figure 1. The food system



Source. WorldLink. 2014. [Food system tools](#). Map. Nourish

A *resilient food system* has the capacity ‘to deliver desired outcomes in the face of shocks and stressors’ (de Steenhuijsen Piters et al, 2021)³. A marker for climate resilience inbuilt in the CIP3 (see Section 9) ensures a systematic consideration and inclusion for FNS projects contributing to adaptation to and mitigation of climate change for a resilient food system. Programmes such as IV.3. Disaster coping abilities of vulnerable families and IV.4. Facilitation and coordination of disaster response, mitigation

¹ HLPE. 2017. Nutrition and food systems. [A report by the High-Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security](#). Rome.

² FAO. 2018. [Sustainable food systems Concept and framework](#). ESA Brief.

³ de Steenhuijsen Piters, B, E. Termeer, D. Bakker, H. Fonteijn & H. Brouwer. 2021. [Food system resilience - Towards a joint understanding and implications for policy](#). Wageningen University & Research

and rehabilitation' also ensure that resilience to diverse types of shocks, such as COVID-19, can be ensured.

In consonance with the Second Country Investment Plan for Nutrition-Sensitive Food Systems (CIP2, 2016-2020), the CIP3 promotes the use of a “nutrition lens” to assess and prioritise various options for designing multi-sectoral inter-linked interventions that are centred around shaping food systems for improving diets and the nutritional outcomes. The issue of food safety is also given particular attention by including a marker to this effect (see Section 9). Food safety is a necessary condition to ensure that food value chains can adequately contribute to positive nutritional outcomes. The CIP3 introduces this new element in a context of increasingly complex food system as the country becomes wealthier and more urban (with for example the existence of multiple stages and actors and longer distances from farm to fork, and increased processing).

4. Formulation and characteristics of the CIP3

The CIP3 formulation process took place of a period of seven months beginning with the preparation of a CIP3 Roadmap. This working document provides operational reference to all actors involved in the development of the CIP3 by describing the steps and roles of all contributors. The formulation of the CIP3 built on the previous CIPs' methodological approach and the NFNSP PoA but it also introduced new features and modifications as explained below. Once the structure of the CIP3 was developed, a total of 1,019 projects/project components relevant to the CIP3, ongoing and pipeline, were identified through a thorough review of the Government's Annual Development Plan and in close consultation with Thematic Team (TT) members.⁴

The next step consisted in assigning each relevant project/project component to CIP3 Investment Pillars and Programmes with accurate apportionment. Indeed, different components of a project may fall under different Programmes and some may not be relevant to the CIP3 at all. Their portion of the budget should therefore not be accounted for in the CIP3 budget. Subsequently, a Food system (FS) weight and a nutrition weight were applied as explained below.

Concurrently, a results framework was designed to assess the impact of the CIP3. This will serve as a reference for the monitoring of the progress of each Pillar and Investment Programme over the life of the CIP3. Following logical checks on the CIP3 financial database to ensure its robustness and consistency, a draft CIP3 was produced and extensive national and regional level consultations carried out in order to finalise the document: four TT workshops, meetings with individual or subgroups of TTs (for example all the agencies from the MoA), three regional consultations that brought together a total of 335 stakeholders, a workshop with Development Partners and a national validation workshop.

The CIP3 shares a number of key characteristics with the CIP2, namely:

- It is a five-year investment framework.
- Its budgeting is based on financed expenditure and commitments (pipeline projects).
- In order to prioritize interventions according to their contribution to nutrition outcomes, a nutrition weight was attributed to each project (see Annex 2 for details).
- The main sources of information are the Planning Commission financial documents and TT meetings.
- It adopts a results-based management approach and provides a results framework with proxy indicators that will serve to monitor each Investment Programme.

However, this document also introduces new key elements:

- A simplified investment framework with only two tiers: Pillars and Investment Programmes (no subprogrammes). The project classification and apportionment is based on this simplified framework.
- For projects which benefit sectors of the economy and society other than FNS (such as road infrastructure development, building of power plants and large data gathering projects such as the census), the estimation of projects' contribution to the food systems and to the objectives of the CIP3 by applying a FS weight (see Annex 2).
- The concept of markers which are issues, such as gender sensitivity or climate resilience, that cut across all Programmes. This method allows to understand the extent to which these issues are accounted for in the CIP3 (see Section 9).

⁴ The list of the projects is provided in Annex 1.

5. CIP3 guiding principles

A food system's approach

In continuity with the CIP2, the NFNSP, its PoA and this investment plan adopt a food system's approach. 'Food systems encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. The food system is composed of sub-systems (e.g. farming system, waste management system, input supply system, etc.) and interacts with other key systems (e.g. energy system, trade system, health system, etc.)' (FAO, 2018)⁵. Such holistic approach is essential to expand opportunities to strengthen nutrition access, enhance the capabilities of individuals to make nutritionally balanced healthy dietary choices and ensure the sustainability of nutritional outcomes. The approach also facilitates the identification and prioritisation of multi-sectoral interventions for synergistic impact.

Policy consistency

The cross sectoral nature of the NFNSP means it encompasses the strategies and actions proposed in a number of other national policies and sectoral planning documents. The NFNSP and the CIP3 require complete alignment and consistency in what they propose with the contents of these documents. For this, an exhaustive review of relevant documents is carried out in the PoA which the CIP3 is based in, in order to avoid duplication and rather reinforce and build on existing initiatives. Thus, relevant actions proposed in documents such as the NPAN2 or the National Agricultural Policy Plan of Action 2018 (NAP PoA) which will contribute to achieving the goals of the NFNSP are covered by the CIP3.

Consultative process

The MoFood's FPMU has a lead role in processes such as the development of the NFNSP or its action and investment plans. This is done in consultation with other relevant government units through the institutional setup in place (see Section 6). In particular, the Thematic Teams (TTs) bring together assigned officials from all relevant government ministries and agencies who, through regular meetings, participate and contribute to these processes. Consultations are not limited to Government but other stakeholders – DPs, civil society organizations, academia and the private sector- are also consulted as these documents are formulated. These consultations take place both at national and subnational levels. This dialogue between stakeholders continues throughout the life of these documents with, for example, their continued involvement in monitoring activities.

Focus on gender

In order to achieve the goal of the NFNSP, the fact that women and men often have different, if complementary, roles to play needs to be acknowledged and due attention given to the role of women. In Bangladesh, women exceed 50% of the agricultural labour force and they are mostly responsible for producing food on homestead premises. Through their reproductive work, they also influence nutrition of household members and they are responsible for the processing and food preparation as well as the hygiene and health of the family, children and the elderly in particular. Their own health and nutritional status have an intergenerational impact on nutrition in that it affects that of the babies they bear. Empowering women is key to tackling malnutrition through the many roles that they hold. Their contribution to their local economies, to global trade, to agroprocessing and post-production as smallholder farmers, entrepreneurs, and labourers needs to be promoted. Gender-based discrimination on control over land and access to inputs and services such as credit, irrigation, rural advisory and extension services needs to be tackled and specific needs addressed. Evidence shows that women are more likely than men to use their incomes to improve their children's nutrition, health care and schooling. Easy access to safe food and water needs to be ensured, as well as access to health services,

⁵ FAO. 2018. [Sustainable food systems Concept and framework](#)

especially for women of reproductive age, pregnant and lactating women. Information on and sensitisation to adequate nutrition is also key across the board, and not just for women as is traditionally the case. While the NFNNSP PoA has incorporated these considerations throughout the actions proposed under each strategy, investments need to reflect this. The gender marker (see Section 9) allows to understand the extent to which each Programme and the CIP3 as a whole are sensitive to gender issues.

Role of the private sector

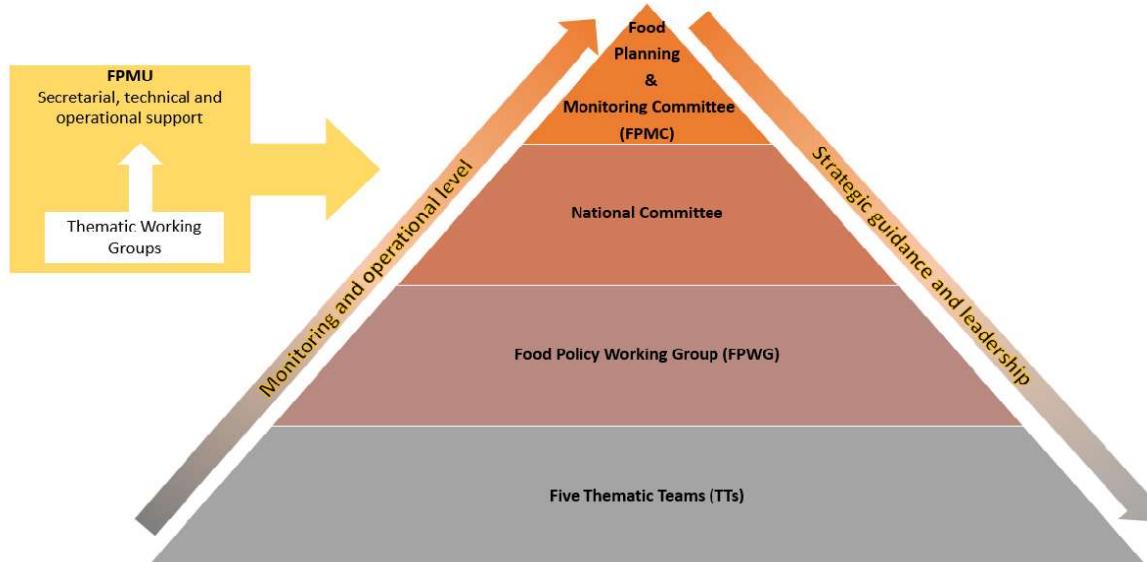
The private sector plays a key role in the path towards achieving the goals of the NFNNSP because Bangladesh is market-oriented, with food production, processing and marketing largely in the domain of the private sector. Public Private Partnerships (PPPs), which Bangladesh pioneered PPPs in South Asia in the 1990s, is an effective mechanism for public and private sector collaboration and a means to overcome financial constraints in certain sectors. While the actual PPP budgets are not included in the CIP3 as such, projects working to develop concepts, policies, design, technically assist and generally facilitate and promote PPPs are, and must be encouraged. Policy instruments such as incentives and regulations can also encourage private sector participation. Laws, rules and regulations may be reviewed to create an environment that is conducive to investment in the agri-food sector, including foreign investment. Public investment in research and development (R&D) and subsequent transfer of technology and knowledge to private actors is essential where it is likely to produce public benefits and where private agents may not be able or willing to take on such investments because costs outweigh their potential benefit.

6. Institutional arrangements for coordination and monitoring the CIP3 and PoA

The institutional arrangements to monitor the CIP3 and PoA are described in Figure 2. The institutions involved are:

- The Cabinet-level Food Planning and Monitoring Committee (FPMC) chaired by the Minister of Food and which includes ministers and secretaries from other key ministries. The FPMC delivers strategic guidance on FNS-related 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.
- The National Committee (NC) chaired by the Minister of Food which comprises the secretaries of key ministries and divisions, heads of universities/research institutions, DPs, private sector representatives and other NGOs. The NC oversees the CIP3 implementation and monitoring process.
- The Food Policy Working Group (FPWG) chaired by the Food Secretary which 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) of the Planning Commission (Ministry of Planning), and the Economic Relations Division (ERD) to provide feedback on the financial section of the CIP3.
- The five Thematic Teams (TTs) corresponding to the five Pillars of the NFNSP which carry out the monitoring activities.
- The FPMU of the MoFood which provides technical, operational and secretarial support with inputs from the Thematic Working Groups.
- The Local Consultative Group on Agriculture, Food Security and Rural Development (LCG ARDFS) which is the venue for dialogue between GoB and DPs. LCGs are designed to contribute towards effective and coordinated implementation of national policies, strategies, plans and programmes.

Figure 2. Institutional set-up for CIP3 monitoring



This structure coexists with another central coordination and governance body specifically for nutrition, namely the Bangladesh National Nutrition Council (BNNC), chaired by the Honourable Prime Minister. Close linkages between the two institutional setups must be ensured and exploited as possible. For actions directly relating to nutrition, field level interventions must be implemented through the Upazila and District Nutrition Coordination Committees (UNCCs and DNCCs) which are the multi-sectoral coordination and governance structures for nutrition at sub-national level and are considered extended bodies of BNNC. In fact, the PoA recommends that the institutional capacity of BNNC be strengthened for effective implementation of NPAN2, CIP3 and NFNSP.

7. CIP3 structure

The CIP3 has five Pillars -which correspond with those of the PoA:

- I. Availability of safe and nutritious food for healthy diets
- II. Access to safe and nutritious food at an affordable price
- III. Consumption and utilization of healthy and diversified diets for achieving nutrition improvements
- IV. Access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions
- V. Cross-sectoral/cross cutting issues which are relevant across the different elements of the food system.

Table 1 lists the 35 CIP3 programmes of the CIP3. These programmes are based on the Areas of Intervention (AoI) described in the PoA and have been designed to take into account the reality of investments. As such, CIP3 Programmes reduce overlaps that exist in the PoA to make a consistent investment framework⁶. This is followed by a brief description of each programme.

Table 1. CIP3 Programmes

Pillar	CIP3 Programme
PILLAR I: Availability of safe and nutritious food for healthy diets	1 I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas
	2 I.2. Gender, climate and nutrition sensitive extension services
	3 I.3. Efficient and environmentally friendly irrigation technology
	4 I.4. Improved efficiency of agricultural inputs
	5 I.5. Enhanced role of Producers' Organisations (POs) and cooperatives
	6 I.6. Promotion of agricultural diversification into high nutrient content and market value commodities, including animal-source, regional and ethnic foods
	7 I.7. Developed Blue economy
PILLAR II: Access to safe and nutritious food at an affordable price	8 II.1. Efficient Food Value Chains (FVCs) through transport infrastructure
	9 II.2. Efficient FVCs through innovation and improvements in post-harvest management and marketing, improved infrastructure, reduced FLW and enhanced cooperation among agents
	10 II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices
	11 II.4. Trade liberalisation and facilitation to support the supply of quality food at all times
	12 II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agro-processors including for the most vulnerable sections of the population
	13 II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers
	14 II.7. Promotion of inclusive cooperative/group-based processing and marketing
	15 II.8. Preservation and promotion of food safety and nutrients along the value chain including though fortification
	16 II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people
PILLAR III: Consumption and utilization of healthy and diversified diets for achieving nutrition improvements	17 III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis
	18 III.2. Operationalization of healthy diets for nutrition outcomes
	19 III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhancing child nutrition outcomes at sub national levels
	20 III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and Non-Communicable Diseases (NCDs)
	21 III.5. Expansion of programmes for immunization, control of Acute Respiratory Infections (ARI), prevention of cholera and diarrhoeal diseases and NCDs
	22 III.6. National Nutrition Services (NNS) delivery and early childcare practices to promote maternal and child nutrition

⁶ Annex 3 shows the correspondence between the CIP3 programmes and the PoA AoIs.

	23	III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes
PILLAR IV: Access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	24	IV.1. Improved management of the public food stock and distribution system
	25	IV.2. Increased resilience of agriculture systems
	26	IV.3. Disaster-coping ability of vulnerable families
	27	IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation
	28	IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity
	29	IV.6. Safety nets in place during periods of seasonal crises and food shortages
	30	IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development
PILLAR V: Cross-sectoral issues	31	V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data
	32	V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development efforts
	33	V.3. Effective regulatory instruments and guidelines
	34	V.4 Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government
	35	V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors

The CIP3 introduces the concept of markers (detailed in Section 9) which are used to ‘mark’ projects by signalling to what extent they support a certain desired outcome. The OECD-DAC pioneered this approach and this is now used by many bilateral aid and UN agencies for gender equality. Such markers can be used to document trends in budget allocations and to help raise awareness on particular issues. CIP3 markers are designed to assess how investments towards improving the food system in Bangladesh are able to achieve important outcomes: improved food safety, reduced food loss and waste (FLW), mainstreamed gender within the food system, and climate resilience (Figure 3). These key outcomes are aligned with the follow-up actions to the 2021 Food Systems Summit identified to achieve the 2030 Agenda.

Figure 3. CIP3 Pillars and Markers



8. CIP3 Programmes

PILLAR I. Availability of safe and nutritious food for healthy diets

Programme I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas

Justification for this programme

Improved technologies not only increase the overall food availability but also drive the process of diversification towards the production of nutrient-dense foods by releasing scarce resources such as land and labour. To that end, agricultural R&D is essential to expedite technological applications. Agricultural R&D is low: for each 100 USD worth of agricultural products, the country spends only 0.38 USD in agricultural R&D, far below the UN-recommended 1% target for developing countries. By raising the input-use efficiency, improved technologies, which include mechanisation – also promote sustainable intensification as production gains can be achieved by optimizing the timely use of inputs to avoid wastage, water contamination, adverse impact on human health and environmental degradation.

Priority interventions

The effectiveness and efficiency of the NARS institutions must be further enhanced through institutional reforms. The development and spread of high-yielding varieties need to be accelerated, especially for nutrient-dense crops such as pulses, nuts and oilseeds that are experiencing a decrease in production. In addition to raising the research intensity, there is a need to redress the current imbalance in the allocation of research expenditure to crop, livestock and the fisheries sectors which currently accounts for 53% of the total R&D expenditure. Within the crop sector, the allocation to pulses and oilseeds needs to be increased from the current total combined share of 9% only. Climate-smart technologies are needed to reduce production losses likely to result from high frequency of extreme weather patterns induced by climate change, and to facilitate production in coastal and newly developed lands. Improved technologies are needed to increase the availability of micronutrient-dense fruits and vegetables, improved breeds of livestock, poultry, and fish that are high in good quality protein and bioavailable micronutrients. Biofortification can also play a role in boosting the micro-nutrient content of crops. Technological adoptions also include innovations to incentivize production in urban and peri-urban areas that can shorten the supply chains. To accommodate the limited space and land available such as in urban and peri-urban areas, practices such as rooftop gardening must be promoted and innovations such vertical gardens using hydroponics developed and disseminated. Hydroponics can also be used in coastal areas where arable land is not adequate and is affected by salinity. Mechanisation must also be promoted to ensure high productivity and sustainability.

Programme I.1 Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
81	74	7	61	55	5

Salient features of the programme

This programmes only represents 1.8% of Pillar I's budget, and requires more attention given the substantial list of priority interventions required to achieve its objectives. As expected, the majority of projects under this programme fall under the purview of the Ministry of Agriculture (MoA) with the most important one being the Bangladesh Agricultural Research Council's (BARC) component of the *National Agriculture Technology Project- 2nd phase (NATP-2)* which constitutes 35% of this programme's budget. This project holds a key role in strengthening research capacity. BARI accounts for 19.0 million USD through the implementation of six projects. As of June 2020, only two projects

were in the pipeline. Targeted efforts are needed to involve the private sector in achieving the objectives of this Programme. As advocated in Programme V.5., technological and knowledge transfer to private agents must be enabled and promoted, and bottlenecks preventing these transfers from happening identified and removed. The means to access the improved technologies, be it financial or other, must also be provided especially to poorer farmers. Efforts are needed to develop peri-urban and urban agriculture: so far, only a Department of Agricultural Extension (DAE)/ Soil Resource Development Institute (SRDI) pilot *Agricultural production support project* is looking into this. This is also the case for biofortification.

Programme I.2. Gender, climate and nutrition sensitive extension services

Justification for this programme

Extension and advisory services (EAS) transfer the technologies and skills to diversify agriculture, raise agricultural productivity, strengthen food safety, promote climate change adaptation, and boost value addition and rural incomes, especially in lagging regions. While Bangladesh boasts one of the largest networks of extension frontline personnel that provide training, technologies and services down to the village level, the EAS system is not as effective as needed, despite continuing reforms. Accountability weaknesses mean there is a tendency to provide more services to the richer, large-scale farmers, who are often better connected. EAS are provided by a wide range of public, private and civil society actors, but are still woefully stretched and there is weak coordination among the different extension service providers, with a low-ratio extension officers to farmers. EAS are mostly supply-led, with institutional bottlenecks in the research-extension-farmer linkage, and little accountability.

Priority interventions

Increased spending based on “value-for-money”, stronger governance and accountability, and better approaches to EAS are needed. Participatory approaches that ensure the research that is produced is needed and used, will lead to greater incomes and demand, thereby creating the required virtuous cycle. More intensified and widespread efforts are needed on inclusion of women, youth, indigenous groups and vulnerable groups, nutrition and climate adaptation. The capacities of extension workers must be enhanced and better adapted to agro-ecological needs, prevailing productivity gap and regional specificities. Given the shortage of personnel, all district and upazila extension workers should be trained in multidisciplinary skills across livestock, fisheries, and crops EAS. The use of Information & Communication Technology (ICTs) will help develop coverage down to the upazila level. In addition, Farmers Information and Advisory Centers (FIACs) -a one-stop local service centre- need to be strengthened through programmes such as NATP-2. Efforts to promote nutrition-sensitivity will continue in capacity strengthening with EAS training including nutrition education and diversification of homestead production and improved husbandry practices. Strengthening public-private-NGO partnerships will be key to scale-up extension services, meet diverse extension needs and promote commercialisation of agriculture. The partnerships will focus on greater coordination, mutual support between actors, quality control of services and consistency of services across places, following the outline in the Agricultural Extension Manual and with greater involvement of the Bangladesh Extension Network (BAEN) and district and upazila Agricultural Extension Committees.

Programme I.2 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
290	166	124	218	125	93

Salient features of the programme

At 290 million USD, 6.5% of Pillar I's budget falls under this Programme. All operations are nutrition sensitive, bring its nutrition weighted total to 218 million USD. As of June 2020, 43% of this

programme's funds were towards financing pipeline projects which reflects substantial commitment to providing producers adequate support. Close attention needs to be given to responding to the needs of all types of farmers, since extension services tend to be aimed at richer, large-scale farmers, who are often better connected. A precondition to properly addressing farmers' extension needs across socio-economic and geographical strata is the production of relevant and practical knowledge (see Programme I.1.) and its transmission to the EAS. Logically, DAE is the main implementation agency with interventions through projects such as the *Tuber Crops Development Project*, the *National Agricultural Technology Program-2nd Phase (NATP-2)* or *Farmers Training at the Upazila Level for Transfer of Technology (3rd Phase)*. Four out of the five pipeline projects are also to be implemented by DAE. This includes the *Agricultural mechanization project through integrated management* (part of which has been apportioned to Programme I.4) which accounts for 24% of the total budget of I.2.

Programme I.3. Efficient and environmentally friendly irrigation technology

Justification for this programme

Water scarcity is one of the main constraints to agriculture in Bangladesh. Consumption is increasing with the rise in population and industrial development. Concurrently, water availability is declining: the groundwater table has been dropping up to three meters per year in some areas of the country, sometimes beyond the suction limit during the dry season. As the lowest riparian country in the Ganges-Brahmaputra-Meghna basin, Bangladesh is largely dependent on other countries for its surface water. In Southern districts, groundwater is affected by salinity, limiting its use for agriculture and drinking purposes. Large infrastructure projects taking place in India, dams in particular, are also set to worsen the problem of water availability by decreasing river volumes. These challenges are exacerbated by climate change. Water scarcity affects poorer farmers more and can hinder diversification.

Priority interventions

The sustainability of water delivery advocated by the National Water Policy 1999 and the Water Act 2013 through “appropriate legal and financial measures and incentives including delineation of water rights and water pricing” remains to be achieved. The current context means that water usage needs to become more efficient, groundwater economised, and surface irrigation used less wastefully. Novel approaches therefore need to be developed, rules and prices reviewed to reflect water scarcity and water-efficient technologies disseminated. Forests have a role to play in balancing the discharge and recharge of water tables. Irrigation methods that consume less water will continue to be disseminated. Reuse of wastewater, especially in peri-urban areas will be considered with the necessary adjustments to existing rules and regulations made to upkeep safety standards. R&D will continue in collaboration with the private sector to develop new sustainable and energy efficient irrigation technologies learning from other countries’ experience. Concurrently, large infrastructure projects required to ensure country wide irrigation will continue, including those that upgrade and modernise existing systems. Excavation and re-excavation of canals and rivers will continue. Producer groups and cooperatives can secure better access to infrastructure and ensure its effective maintenance and management and will thus be promoted (see Programme I.5). Particular attention will be given to women’s access and participation to irrigation schemes and water management initiatives. Access to clean and sustainable technologies will be favoured with the promotion of solar powered irrigation pumps for example.

Programme I.3 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
614	568	46	460	426	34

Salient features of the programme

Due to the nature of many of the projects under this Programme which entail infrastructure development, it weighs more heavily in the total budget of Pillar I at 13.7% or 614 million USD. The nutrition weighted total budget is of 460 million USD reflecting the nutrition sensitive nature of the projects under this programme. Implemented by the Local Government Engineering Department (LGED), the projects *Improvement of ponds, canals across the country* and *Small scale water resources development project (2nd Phase)* are two examples of the type of sizeable projects/project components included under this programme. The Bangladesh Agricultural Development Corporation (BADC), the Barind Multipurpose Development Authority (BMDA) and the Bangladesh Water Development Board (BWDB) are however, the agencies with most ongoing projects. Only 7.4% of the budget are funds allocated to upcoming projects as of June 2020, with two projects dominating: the BMDA *Expansion of irrigation in greater Dinajpur and Joypurhat districts through ground water development* and the BADC *Mujibnagar irrigation development*. The success of this programme relies on the close collaboration between several the Ministries of Agriculture, and Water Resources in particular. The involvement of farmer organisations and the private sector is also critical and needs to be encouraged. The Bangladesh Delta Plan 2100 projects that on average Bangladesh should be able to mobilize at least 0.5% of Gross Domestic Product (GDP) per year from private sector to finance projects of water resource management and related infrastructure. This is important for costly endeavours such as dredging which are not only needed to maintain river navigability and control floors but also for properly functioning irrigation systems.

Programme I.4. Improved efficiency of agricultural inputs

Justification for this programme

This programme considers the effective and sustainable utilization of all productive agricultural inputs -from fertilizers, pesticides, feed, machinery, agricultural land, credit to power supply. Higher input use efficiency -including inclusive agricultural finance- is essential and a necessary condition not only to raise farmer incomes but also to promote sustainable intensification. Excessive use of chemical fertilisers, pesticides and irrigation is one of the major environmental concerns in the agriculture sector of Bangladesh. The low use efficiency of nitrogenous fertilisers in Bangladesh indicates that large proportions are lost to the atmosphere and to the groundwater, with major negative health and environmental consequences. The lion's share of the total seed requirement is still provided by farmers although home-grown seeds are typically of poor quality. Inadequate rights on land use and water hamper their sustainable efficient use and competing sectoral demands on land are elements of concern. Credit disbursement is uneven across the country and across sectors with farmers in the *char, haor* and less developed areas receiving less than 1% and fisheries and livestock receiving only 10% each of the total disbursement. The average size loans disbursed often fails to meet farmers' needs which often resort to microfinance institutions and the informal sector, at times exposing them to high interest rates, credit overlapping, unfavourable repayment periods, and credit ceilings. The growth of the fisheries and livestock sector is constrained by the availability of affordable and safe feed and fodder and high prices of day-old chicks and medicines. Low profit margins prevail in this sector because of high feed costs due to the importing of feed's ingredients. Half of the feed mills operate without registration which makes quality and safety checks challenging. In Bangladesh, a quarter of the population is directly involved with livestock management, exposing them to the diseases and further transmission in the human population. The high density of and interaction between human and livestock coupled with the fragile and flood-prone ecosystem increases Bangladesh's risk for zoonotic diseases, emerging and re-emerging infectious diseases and pandemics. Yet, Bangladesh has limited medical and veterinary health services infrastructure.

Priority interventions

The substantial adverse impact of toxic pesticides on human health and the environment and the high usage of nitrogenous fertilizer calls for expanding the use of integrated pest management practices and

accelerated use of cost-saving fertilizer such as guti (granular) urea. Timely access to credit is pivotal to ensure that small-scale producers have the liquidity to acquire, adopt and timely operate climate smart technology and machinery, and diversify their crops. Introducing Krishok Credit Card agent banking and mobile financial services for the agricultural sector may reduce the cost of providing formal credit to the beneficiaries. More generally, institutional reform in the service provision of the agricultural credit, its terms and conditions, mode of payment, etc is needed. Emphasis will be given on developing quality seeds by strengthening capacities of Bangladesh Institute of Nuclear Agriculture (BINA) and BRRI for example, but also on training farmers on how to produce quality seeds and store them to preserve them. This should include seeds of regional and ethnic foods prioritised for their nutritional qualities. The production of quality feed and fodder will be promoted through appropriate support to feed and fodder industries. With regards to animal health, in 2008, the One Health approach⁷ was adopted and in 2012 the Strategic Framework for One Health Approach to Infectious Diseases developed. While this is a big step towards institutionalising this approach for prevention, detection and control of infectious diseases at the human animal ecosystem interface, a lot remains to be done to implement this approach. For instance, an Outbreak Investigation and Response Strategy Plan and Standard Operating Procedures need to be developed and implemented as well as an overall communication strategy for One Health. A standard supply chain is required for vaccines with robust inventory management.

Programme I.4 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
2,608	2,238	370	1,956	1,679	278

Salient features of the programme

Programme I.4 channels 2,608 million USD over the CIP3 period, of which 370 million USD represent pipeline projects. When taking into account the nutrition sensitivity of the projects, this amounts to 1,956 and 278 million USD, respectively. A large chunk (33%) of the total budget is driven by a costly project relating to fertilizer production namely the *Ghorashal polash urea fertilizer project* implemented by the Bangladesh Chemical Industries Corporation (BCIC) under the Ministry of Industry with joint funding from JICA. BADC's *Strengthening Production, Preservation & Distribution of Quality Seed Potato* and the National Institute of Biotechnology's (NIB) *Establishment of National Gene Bank* also weigh heavily on this programme's total ongoing budget. Almost two thirds of the projects included under this programme belong to the Ministry of Power, Energy and Mineral Resources and relate to the provision of energy such as the *Energy Efficiency in Grid Based Power Supply Project* and the *Distribution network expansion for 100% Rural Electrification (Rajshahi, Rangpur, Khulna, Barisal Division)*.⁸ The most sizeable pipeline project is DAE's *Agricultural mechanization project through integrated management* which proposes to procure and distribute large amounts of equipment such as combine harvester, rice transplanter, power thresher, dryer, power weeder, power spare, potato digger and maize shellers. Future projects need to ensure that the vital issue of adulteration is tackled in the development of certain agricultural inputs (feed or fertilisers for example).

⁷ The “One Health” concept was introduced in Bangladesh in 2007 and has been the key tool to respond to emerging diseases such as avian influenza, anthrax and chikungunya. It is a multidisciplinary collaborative platform to combat the challenges of emerging infectious diseases and other health issues arising at human-animal interface in a complex ecosystem.

⁸ Projects contributing to creating and supplying power have been counted in equal measure under Pillars I, II and III to reflect the fact that they have a role to play throughout the foodchain.

Programme I.5. Enhanced role of POs and cooperatives

Justification for this programme

Producers' Organisations (POs) and cooperatives in Bangladesh play a vital role in employment creation, poverty alleviation, and socio-economic development in the agro-food sector both for producers and agents involved further down the value chain. They reduce farmers' costs, broaden their access to markets and increase the prices they receive thus increasing their competitiveness. Such organisations improve market access by offering combined marketing platforms, e-commerce platforms and cold chain management, food grading, processing, and packaging services, otherwise out-of-reach for lone smaller farmers. They also help increase the profitability of the producers by promoting contract farming, digital marketing systems, helping to ensure timely input supply and utility services, and extension services. Horizontal cooperation such as the aggregation of production, processing, and marketing activities can lead to economies of scale for farmers and reduce the cost of production and marketing. Cost reduction can also be achieved through the economies of scale achieved in bringing producers together in input management and technical assistance, as well as in commercial logistic management. Mechanisation is another important area of cost reduction for agricultural produce. POs and cooperatives may ease market entry barriers for processing high-value and nutritious foods such as milk, meat, and fish, providing the required legal and compliance status such as sanitary certifications, environmental compliance certifications, and business registrations.

Priority interventions

In spite of the clear role for POs and cooperatives in the context of Bangladesh, the cooperative movement has weakened over the past few decades and many farmer organizations have become inactive requiring measures to revive it. To this end, a number of measures may be taken such as easing of the registration process of POs and cooperatives. The development of a digital registration system may help in this regard. Financial services and other ancillaries for POs and cooperatives should be increased. Training and capacity building should also be provided to strengthen the POs and cooperatives based on a needs' assessment. Support to POs and cooperatives should be adapted to their needs which may vary according to their geographical location and degree of access to different markets.

Programme I.5 Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
61	61	-	30	30	-

Salient features of the programme

This programme can be expected, by nature, to be smaller than others in this pillar. However, it only channels 61 million USD, over the CIP3 period. Actions under it are classified as nutrition supportive for which the nutrition weighted total budget is only 30 million USD. Some of the larger projects/project components are the *Small-Scale water Resources Development Project (2nd Phase)* as it supports water management cooperative associations, implemented by LGED and financed by JICA; and the *Comprehensive Village Development Program (CVDP) (3rd Phase)* under the Rural Development Cooperative Division. As of June 2020, no projects were planned, calling for attention to be given to the priority actions delineated in the NFNSP PoA.

Programme I.6. Promotion of agricultural diversification into high nutrient content and market value commodities including animal-source, regional and ethnic foods

Justification for this programme

Agricultural diversification is the basis for diversified diets. In addition to non-crop foods, horticulture, inland fisheries and livestock including poultry, foods with high nutrient content including certain regional and underutilized, ethnic foods, need to be produced. Hybrid varieties, seed production technologies, technological innovations may be used to improve nutritional composition of foods. Increased supply of such nutritious products along with nutrition education encourages consumption by making them more accessible especially to the poorest sections of the population and directly improves their nutritional status. It also indirectly improves the nutritional status of poor farmers through increased earnings from selling high value products. The pace of diversification has been slow in Bangladesh. Cereal crops still account for over 50% of the agricultural GDP, with the livestock sector remaining stagnant at around 10%. The predominance of the crop sector is largely due to rice production which still accounts for a third of the total food value added. The fisheries sector has, however, demonstrated some progress and holds much potential for future growth.

Priority interventions

Agricultural diversification is a market-driven process with farmers responding to increased market demand for high-value food products with income growth. Diversification and commercialisation of agriculture tend to reinforce each other. Interventions that improve marketing systems (such as marketing infrastructure, cold chains, and market information) facilitate commercialisation and, in doing so, support the process of diversification. The drive for increased diversification also needs to include regional and ethnic foods which often fall under the neglected and underutilized species (NUS): not only do they often offer superior nutritional qualities, but they also require limited inputs, can be grown on marginal lands and are easily intercropped or rotated with staple crops, and easily fit into integrated practices such as agro-ecology.

Programme I.6. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
550	446	104	413	335	78

Salient features of the programme

At 550 million USD, Programme I.6 mobilizes 12.3% of pillar I and 1.8% of the total CIP3. The largest ongoing project by far in this programme is the Department of Livestock Services (DLS)/World Bank *Livestock and Dairy Development*. Examples of other smaller projects included under this programme are DAE's *Year-Round Fruit Production for Nutrition Improvement Project* or the Department of Fisheries *Enhancement of Fish Production Through Restoration of Waterbodies Project*. Out of the ten projects/project components in the pipeline, five focus on developing inland fisheries. More efforts are needed to promote regional and ethnic foods which currently only appear in the following projects: BMDA's *Project for popularization of cultivation of high value unconventional fruits and medicinal crops in Barind area*; DLS' *Improvement of Socio-Economic and Livelihood Development of Tribal/Minor races People Through Integrated Livestock Project*; and Department of Fisheries' (DoF) *Conservation and development project of native species of fish and snails*.

Programme I.7. Developed Blue Economy

Justification for this programme

The Blue Economy which is prioritised by the Perspective Plan of Bangladesh 2021-2041 (PP2041) to sustainably exploit the ocean ecosystem, comprises activities that directly or indirectly take place in the seas, oceans and coasts using oceanic resources and contribute to sustainable, inclusive economic

growth, employment, well-being, while preserving the health of the ocean. This sector's contribution to Bangladesh's gross value added is estimated at 6.2 billion USD or about 3% in 2015, with around 30 million people depending on it. It comprises tourism and recreation (25%), marine capture fisheries and aquaculture (22%), transport (22%), and offshore and oil extraction (19%)⁹. While traditional sectors, such as capture fisheries and marine aquaculture will continue playing a prominent role, the potential of new ocean industries – such as marine culture of seaweed and other algae, euglena, mussels, oysters, marine pearls, sea cucumbers, and sea urchins – needs to be assessed. The capture fisheries sector is characterized by weak governance and management to set, monitor and enforce sustainable catch levels. Lack of access to adequate infrastructure, equipment and finance to preserve high value catch are further bottlenecks together with the absence of investment-ready enterprises. Against this backdrop, fisher households are among the most vulnerable to poverty, food insecurity and natural shocks.

Priority interventions

The Ministry of Fisheries and Livestock (MoFL) has adopted a [National Aquaculture Development Strategy and Action Plan of Bangladesh 2013-2020](#) which includes the sustainable development of marine fisheries resources with involvement of local communities, to promote alternative livelihood opportunities and avoid overexploitation of coastal waters resulting from growing trawl capacity and operations. These initiatives were slowed by the impact of COVID-19 in 2020 on coastal aquaculture and shrimp farming, which received immediate emergency support targeting logistics and supply chain disruptions in the wake of the pandemic. More emphasis will be given to supporting a coordinated policy planning towards the Blue Economy and efforts will be made to regularly monitor its contribution in terms of value addition. DoF will carry out regular stock surveys and develop national fishery management plans with adequate monitoring, control, and surveillance systems in place. Sustaining community's empowerment and their livelihoods and improving infrastructure and production practices with a focus on green technologies for seafood production associated with coastal protection and payment for ecosystem services need to be prioritized.

Programme I.7. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
266	258	8	133	129	4

Salient features of the programme

Programme I.7 represents less than 1% of total CIP3 and 6% of pillar I, with just 11 projects/project components, two of which are in the pipeline. The *Sustainable Coastal and Marine Fisheries Project (2018-2023)* which aims to sustainably develop the country's enlarged Exclusive Economic Zone constitutes 81% of this programme's total budget. Other examples of projects under this programme are the *Strengthening Marine Fisheries Research and Infrastructure Development (1st Revised)* or the *Seaweed culture and seaweed product development in Bangladesh coast* both implemented by BFRI. This programme is likely to expand thanks to potential upcoming investments on new ocean industries.

PILLAR II. Access to safe and nutritious food at an affordable price

Programme II.1. Efficient Food Value Chains (FVCs) through transport infrastructure

Justification for this programme

Efficient transport infrastructure, such as highways, rural roads, railways and waterways, plays an essential role in sustaining food market access by ensuring reduced transport time, thereby contributing – together with proper handling, transformation and transport facilities (e.g. cold chain) – to adequate

⁹ [P.G. Patil, J. Virdin, C.S. Colgan, M.G. Hussain, P. Failler, and T. Vegh .2018. Toward a Blue Economy: A Pathway for Sustainable Growth in Bangladesh. Washington, DC: The World Bank Group.](#)

logistics. It contributes to preserving the quality and nutritional content of foods and to reduce food loss and waste.

Priority interventions

The poor state of roads, especially in rural areas where most of the production is concentrated, aggravates losses during transportation. Monsoon rains worsen the condition of roads and further exacerbate seasonal scarcity of foods. This calls for supporting the expansion and maintenance of transportation infrastructure at both national and local level. Bangladesh will boost connectivity between different transport modalities, and will strengthen arterial transport corridors, and bypass and connecting roads. The PP2041 aims to equip every village with a climate resilient core road network. Waterways also need maintenance through dredging for example, in order to ensure that they are navigable. Rail transport will also be developed as a cleaner alternative to road transport.

Programme II.1. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
5,591	5,085	506	2,796	2,542	253

Salient features of the programme

Programme II.1 represents 70% of pillar II and 18% of the total CIP3 which reflect the high cost of transport infrastructure development. The budget of LGED, which is responsible for the rural road network, represents 16% of this programme's total budget, while the Road Transport and Highways Division -which is in charge of the primary road network- constitutes 28% of the total budget. Railways, newly introduced in the CIP3 as an important and climate-friendly means of connecting produce to markets and consumers, also account for a substantial 36% of Programme II.1. The largest contributor to the total budget of this programme is the Ministry of Railway's *Padma Bridge rail link* which it is estimated, will add 1% to the national GDP. The associated *Construction of Padma Multipurpose Bridge (Revised)* will be the largest bridge in Bangladesh and the first fixed river crossing for road traffic. It will link the south-west of the country, to northern and eastern regions. As explained in Annex 2, for projects/project components of this type which do not only benefit the food system but many other areas of the economy and society, only part of their budget -16.7%, the share of GDP associated with the agro-food sector- has been included to reflect this.

Programme II.2. Efficient FVCs through innovation and improvements in post-harvest management and marketing, improved infrastructure, reduced FLW and enhanced cooperation among agents

Justification for this programme

Innovation-led productivity growth represents a core strategy to achieve the PP2041 targets in all sectors, including agro-processing. In Bangladesh, the lack of well-established processors, formal distributors or exporters still limit knowledge transfer and high-quality standards in agro-food markets. The fragmented structure of FVCs translates into high transaction costs for farmers and high levels of food loss, food safety issues and reduced investments. Lack of innovation in shortening the value chain and limited cooperation among agents are also impediments to guaranteeing the availability of safe and nutritious foods. Post-harvest infrastructure and processing facilities for fruits, vegetables, non-cereal crops, livestock and fishery products are key to reducing risk and improving farmers' income, enhancing access to safe and nutrient dense foods for consumers, and reducing FLW. Marketing infrastructure – in addition to transport (Programme II.1.) includes cold storage, growth centres and rural markets. Processing facilities can be: *primary*, typically on-farm and commonly used to prepare crops for storage and further processing (e.g. washing, peeling, drying, slicing), thereby ensuring that crops do not spoil; *secondary*, ensuring the conversion of ingredients into edible products; and *tertiary*, for the production of prepared convenience foods. Farm processing facilities have the potential to

increase value addition at the farm gate and – coupled with the mainstreaming of producers' associations and farmers' centres – can contribute to improving farmers' know-how, knowledge, technology and bargaining power.

Priority interventions

Proper, planning, management and allocation of adequate resources are necessary to ensure post-harvest infrastructure and processing and storage facilities development, including on-farm ones, especially for perishable nutrient rich foods. To this end, establishing PPPs is essential. The establishment, improvement, management and maintenance of cold storage and transportation facilities for perishable nutrient rich foods will be facilitated. While the private sector is investing significantly in processing and improved marketing to meet a growing domestic demand, access to know-how and technology need to be provided to small producers to facilitate processing, including on-farm, to prevent produce from spoiling and nutrient content loss through adequate investments. The shortening of FVCs, especially for perishable foods, will be promoted by incentivizing the formal distribution channels through the registration of the value chain actors. The adoption of a technological platform hosting digital invoices and order maintenance may bring efficiency gains in FVCs. The generation of innovative solutions -for example in packaging and storage services- will be promoted with adequate incentives. This should contribute to reducing FLW and enhancing food safety.

Programme II.2. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
661	576	85	330	288	42

Salient features of the programme

II.2 represents 8.2% of pillar II and 2.1% of the total CIP3 budget. The actions covered are nutrition supportive which brings the nutrition weighted budget to 330 million USD, or 2.5% of the nutrition weighted total CIP3. LGED's *Countrywide Rural Market Infrastructure Development Project* constitutes 29% of the total budget of this programme. Another notable example of sizeable projects/project components under this investment programme is the value chain development component of the *Livestock and Dairy Development* project implemented by DLS with World Bank support. There are only five pipeline projects/project components one of which is the LGED-IDA *Western Economic Corridor and Regional Development Expansion Program (WeCare) Part-I: Expansion of Rural Communication and Market Related Physical Facilities (RCMNIIP)*.

Programme II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices

Justification for this programme

Improving market access and stabilising food markets requires maintaining orderly market management systems. This can be achieved by adequately protecting property rights and incentivizing competition. By securing property rights, conditions are created to generate return on investments. Patenting in the agro-food sector in Bangladesh is applicable to various agricultural stakeholders such as input providers (seeds, germplasm, transgenic plants animals), cold chain technology and food processing technology (e.g., to stabilise colour and improve taste). Avoiding inefficiencies related to market dominance and entry barriers by promoting competition and ensuring symmetric access to information is essential for newcomers to invest. A positive enabling environment for investment and for innovation can generate large investments in the agro-food sector. However, Bangladesh is still underperforming in innovation in relation to its level of per capita GDP, with a low level of intellectual property receipts. Intellectual property rights' enforcement is therefore needed to facilitate innovation. Concurrently, private investments, if not carefully regulated, are likely to generate dominant positions in certain subsectors, to increase price volatility, which in turn threaten the livelihood of small-scale farmers, lower food

quality and limit consumers' rights. Different food industries have different degree of concentration and receive different incentives and subsidies from the Government. This needs to be monitored. Ensuring transparency and fairness in the attribution of public contracts and procurement in general is also needed for an orderly market. Finally, with regards to foodgrain markets, the Government needs to continue stabilising prices through strategies such as its Open Market Sales (OMS), procurement and export and import.

Priority interventions

Main interventions under this investment programme include the operationalisation of the Bangladesh Competition Commission, in particular for the agro-food sector. This is essential in order to assess and monitor the degree of competition and potential dominant position in strategic agro sub-sectors. In addition, the National Innovation and Intellectual Property Right Policy needs to be operationalized, in particular for the food industry. Access to land and water bodies and their efficient use will be ensured by continuing the digital land zoning of Bangladesh and efforts to establish land rights especially for the most vulnerable groups, with a special focus on women will also continue. The public procurement system must continue to be strengthened, especially to ensure transparency and accountability in public contracts and fairness in the selection process of participants in government or public purchases. The Agricultural Produce Markets Regulation Act (1964), amended in 1985, needs to be amended to handle current unethical practices of market functionaries. Policy reforms are required to incentivise clean, efficient and sustainable technologies and practices at scale. This includes the review of fertiliser and water subsidy. Finally, the operation of public stocks, procurement and management for price stabilisation must be improved.

Programme II.3. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
6	6	-	3	3	-

Salient features of the programme

Only two projects populate this programme so far: BCIC's *Construction of 13 new buffer godowns at different districts* for fertilizer is included under this programme as the timely availability of and access to fertilizers is an essential component to ensure the price stabilization for this essential productive input; and the Water Resources Planning Organisation's (WARPO) *Study on Developing Operational Shadow Prices for Water to Support Informed Policy and Investment Decision Making Processes*. Programme II.3 totals only 6 million USD, which is entirely financed. There is clear need to focus much more on this area of investment.

Programme II.4. Trade liberalisation and facilitation to support the supply of quality food at all times

Justification for this programme

Access to food is achieved by ensuring that food products are physically and economically accessible to consumers. This implies short-term actions aiming at alleviating sudden shortfalls in domestic production and long-term provision of food and productive inputs (such as seeds, fertilisers and machineries) "structurally" lacking in the national production systems via imports. Strategies to ensure economic access include preserving the purchasing power of the poorest and most vulnerable and can be supported by stabilizing food prices and by incentivizing food exports. In this context, the PP2041 predicts that trade liberalisation will continue, and trade facilitation will reduce the cost and increase the speed of trade. This also aims at boosting regional food trade among South Asian countries. The production of rice has doubled over the last two decades and the recent market liberalisation measures enabled private traders to import rice thereby compensating shortfalls in domestic availability. While agricultural trade deregulation and liberalization measures have taken place since the 1990s,

Bangladesh still lags behind in the trade of seed, fertilisers, machinery and agriculture products compared to its regional peers. For instance, it can take up to 150 hours -against a 45-hour regional average- to obtain mandatory agricultural related documents to be able to trade.

Priority interventions

Against this backdrop, Bangladesh signed the World Trade Organization (WTO) Trade Facilitation Agreement on 29 August 2017. While this is predicted to boost exports by 13% and reduce trade cost by 33% with a potential savings of more than 0.7 billion USD per year for Bangladesh, trade liberalisation and facilitation efforts to ensure the supply of quality food at all times need to continue. It will be essential to strengthen human and financial capacity of the Ministry of Commerce and other institutions such as the Bangladesh Trade and Tariff Commission (BTTC). Support to export needs to be provided especially towards making it more transparent for instance by making timely available import-export related information on Bangladesh trade portal, in particular for SMEs and by enabling paperless trade. Food trade partnerships with key food exporting countries will be stabilised through foreign trade agreements especially within the South Asian Association of Regional Cooperation (SAARC) region. Measures will be taken to support the operationalization of the SAARC Food Bank. Export support policies will be optimised based on FVC comparative advantage and specialisation.

Programme II.4. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
482	126	356	241	63	178

Salient features of the programme

Programme II.4 channels 6.0% of pillar II budget and 1.5% of total CIP3 budget. The actions under this programme are nutrition supportive which means its nutrition weighted budget is 241 million USD. Fifteen out of the 19 projects ongoing under this programme are implemented by the Ministry of Shipping and have been included for their role in liberalizing trade, the largest being the *Payra Deep Sea Port Operations Infrastructure / Facilities Development*. Other types of projects/project components include the National Board of Revenue project *Bangladesh Regional Connectivity Project I: National Single Window Implementation and Strengthening Customs Modernization* and the *Bangladesh Regional Connectivity Project-I: Development of Sheola, Bhomra* supported by the Land Port Authority and the World Bank. Since trade facilitation and infrastructure contribute to various sectors, their specific contribution in support of the food system was estimated and applied to these investments (see Annex 2). Four of the five pipeline projects pertain to port development and the fifth is the Ministry of Commerce's *Feasibility Study on Export Competitiveness of Agro-Products and Jute Goods (ECAJ) of Bangladesh*.

Programme II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agro-processors including for the most vulnerable sections of the population

Justification for this programme

Improved access to credit is essential to develop Nutrition Sensitive Food Systems from production to processing and marketing. To ensure that MSMEs -including vulnerable groups like poor unemployed youth, persons with disabilities and women- are able to invest in process and product innovations, in marketing infrastructure and processing facilities, financing is needed through mechanisms such as credit, savings, and insurance products. Yet the challenges to accessing finance along the food systems reflect those faced by farmers: from high interest rates to the need for collateral, poor diversity in financial products and services to meet the different types of demand. Rural users often turn to informal lenders who are able to quickly respond to the growing demand for financing. Complementing financial

services with technical assistance, ICT services, credit guarantee schemes, and quality compliance services can enhance their value to the beneficiaries.

Priority interventions

Financing facilities, including insurance services, must be expanded to allow the development of agro-processing activities with a focus on those traditionally excluded especially in rural areas, and women in particular. Investments in agro-processing that is resilient to climate change and abates Greenhouse Gas (GHG) emissions will be promoted. Public finance alone cannot respond to the needs and private finance must be tapped into. This investment programme includes ICT related projects which help lower prices and increase quality for consumers while offering a fair and stable price to producers. Responding to spread of the COVID-19 pandemic, producer organisations formed virtual call centres with the support of the Missing Middle Initiative (MMI) of the Global Agriculture's Food Security Program (GAFSP). These centres connect producers – looking for a way to sell their produce, especially perishables – to consumers, via mobile orders and payment, thereby minimising physical contact. Technologies such as mobile phones, messaging, digital money, online meeting platforms need to be integrated with market information systems in support of farmers' decision making and in timely sales. While the Department of Agricultural Marketing (DAM) of the MoA collects price data, its staff should be adequately equipped to collect price information to capture price volatility at upazila level. Tailored-made financial, technical and managerial support will be designed based on enterprise profiling and surveys.

Programme II.5. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
14	14	-	7	7	-

Salient features of the programme

Programme II.5 totals 14 million USD. Just five projects/project components have been included under this programme with none planned as of June 2020 calling for attention to be given to the priority areas described. Among the projects included under this investment programme are the *Establishment of ICT Network to Remote Areas (Connected Bangladesh)* of the Bangladesh Computer Council and the *Integrated Farm Management Component-Phase-2 (IFMC-II)* of DAE with DANIDA funding.

Programme II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers

Justification for this programme

The private sector's role is essential for sustained investment in food processing, transformation and marketing. To ensure the profitability and positive socio-economic impact of private investments, a necessary condition is the creation of an enabling environment whereby the following are provided: a favourable FNS investment, regulatory, policy and legislative environment, including on food safety; public goods such as large infrastructure and networks; reliable access to energy, data and information; technical education and vocational training. This is closely linked with food trade liberalisation and creating opportunities for agro-food exporting subsectors. Policies and incentives that support agro-food businesses already exist: for instance, the Agro-Food Processing Promotion Policy 2019 with a 20% cash incentive and tax exemption for selected fresh and processed food exports. However, adequate private investments and certainty in the policy and regulatory environment requires closer dialogue between the private and public actors. A viable solution shown to be effective by the Ready-Made Garment industry is the establishment of Special Economic Zones which are to be set up for agro processing. Agro-processing Economic Zones (EZs) can stimulate demand for diversified and nutrient-dense raw products and for other productive inputs (machineries and infrastructure) and services

(including financial, technical support, and training, leasing). These can in turn increase demand for efficient road and rail infrastructure, health facilities, housing, schools and training facilities.

Priority interventions

While Bangladesh policy making is not new to the inclusion of relevant private actors, this will be made more demand-driven and tailor made to the needs of the private sector. To facilitate private sector investment, the government may provide incentives such as easy land leasing system, one-stop service for all utility connections, guarantee for loans and tax concessions. The private sector can build the infrastructure in exchange for land and basic utilities. As a member of the Nationally Determined Contributions partnership and with one of the fastest growing power sectors in South Asia, Bangladesh is committed to achieving universal access to affordable and clear electricity. However, reliable access to energy still represents a major bottleneck with less than 80% power generation capacity operational with frequent scheduled blackouts. The Bangladesh Power Development Board will address the surge in power demand. Innovation and development of appropriate technologies to preserve nutritional value in local and export processing zones (EPZs) will be promoted with particular attention given to the connection with local economies, local employment generation, knowledge and technology and know-how transfer, and human capital creation, all key to ensure the success of EZs.

Programme II.6. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
1,027	968	59	514	484	30

Salient features of the programme

Programme II.6 totals 1,027 million USD, out of which 59 million USD represent the gap to be financed. This represents 12.8% of this programme and 3.3% of the entire CIP3 budget. Out of the 90 projects/project components included in programme, 85 focus on power generation. The largest is the *Matarbari Coal Fired Power Plan Project*. Although only part of the budget of such projects has been included to reflect exclusively their contribution to the food system¹⁰, they weigh heavily on the overall budget due to their nature, which requires costly infrastructure.

Programme II.7. Promotion of inclusive cooperative/group-based processing and marketing

Justification for this programme

While cooperatives and group-based associations still play a limited role in Bangladesh, their promotion and strengthening can be beneficial for both farmers and other actors within the food systems. Agro-food processing in Bangladesh is largely constituted by Micro and Small Enterprises (MSEs) with two to five employees, and just one in 30% of the cases. The majority are informal entities. This translates into limited access to inputs, technology, finance, know-how, information (including on food safety standards and practice) and markets. Against this backdrop, group-based and cooperative input management, technical assistance and commercial logistic management can offer economies of scale in processing and marketing, thereby increasing competitiveness and profitability, especially for MSEs. Institutional support from the Government, adequate financial intermediaries, apex supervision bodies are necessary for co-operative or group-based food processing and marketing to develop and thrive.

Priority interventions

While the role of the private sector in FNS has been actively promoted, there has not been adequate attention and thinking on the potential role of cooperatives. There is a need to update the Cooperative Policy 2012 to provide a clear vision on the value added of cooperative systems for the members and their communities compared to private endeavours. As the cooperative model remains relatively

¹⁰ See Section 11 for further details.

underdeveloped in Bangladesh and it will be essential to assess and demonstrate its comparative advantage compared to the private sector. Besides, for the establishment of the cooperatives, it is essential to have institutional support from the local government, along with implementation of transparency and anti-corruption measures. From other countries' experiences, cooperatives provide more employment compared to private companies generating the same level of revenue. The cooperative system has shown to be successful when membership is voluntary and open, the control democratic, the benefits produced for the members and their community and when decision making follows a bottom-up approach. It will be therefore essential to sensitise communities, including women's groups, to the potential value addition of the cooperative system integrating it with other entrepreneurial and community development projects and activities. Cooperative/ group-based food processing and marketing will receive special attention and dedicated lines of credit and financial managerial support.

Programme II.7. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
35	35	-	17	17	-

Salient features of the programme

Programme II.7 is small, with only four projects/project components, and totals 35 million USD or 17 million USD when nutrition weighted, all ongoing as of June 2020. It contains projects such as the *Capacity Development of Joyeeta Foundation* project and its component in support of women entrepreneurs and associations implemented by the Ministry of Women and Children Affairs (MoWCA); and the group mobilization component of the *Smallholder Agricultural Competitiveness project (SACP)* by DAE and IFAD. Given the lack of pipeline projects, it is important that the attention is directed to the priority interventions outlined in this programme.

Programme II.8. Preservation and promotion of food safety and nutrients along the value chain including though fortification

Justification for this programme

Longer and more complex value chains and markets mean greater risks of loss in the nutritional value of food and of its safety being jeopardised. The main food safety hazards in Bangladesh includes accidental foodborne illness (microbiological, chemical, physical, natural, process induced and environmental contamination) and economically driven (adulteration, and fraudulent, mislabelling, etc.) foodborne hazards. Since food borne illnesses are a significant threat to health, application of safe and hygienic practices in food handling, appropriate technologies in post-harvest processing, product development and storage is of utmost importance to preserve the nutritional quality and ensure food safety. Yet, there has been an increased reporting of food safety incidents and hazards by the media, emphasizing the need to sensitise actors of the value chain to the importance of food safety and quality. Adherence to food safety legislations, standards, and norms must also be ensured at every stage of the supply chain. Given the extensive role of private sector in the FVC, its capacity to maintain food safety standards is a major challenge. Businesses need to be able to demonstrate their compliance to consumers so as to maintain their confidence and reduce possible liability, especially in a context of heightened publicity of the problems of food safety and food adulteration related issues. This programme is also about biofortification: although not an alternative to improving nutrition through the consumption of nutritionally adequate diversified diets, fortification of foods with essential micronutrients is a supportive and efficient intervention that can go a long way towards solving micronutrient deficiency.

Priority interventions

Food producers and agribusinesses must be sensitised to the importance of preserving the nutritional value of food and when possible, enhancing it, as well to food safety issues. Businesses also need to be

able to implement effective food traceability and recall systems, both of which are still limited. Good Agricultural Practices (GAP), Good Aquaculture Practices (GaQP), Good Hygienic Practices (GHP), Good Manufacturing Practices (GMP) training and knowledge transfer will be accelerated and customised. Concurrently, capacities of the private sector to test, trace, recall foods and communicate with the public will be needed across the country. The formation of private sector based accredited independent certification and inspection agencies will be promoted. Commercial and public storage facilities need to be regularly audited and the facilities need to follow the standards set by the Bangladesh Food Safety Authority (BFSA). Food certification and nutrition labelling must be strengthened for assuring quality and safety. More consumer awareness will create more demand for safe foods, giving the private sector an incentive to comply to the required standards. The BFSA drive to introduce an international gradation system for restaurants needs to be accelerated and expanded nationally. With regards to fortification of foods, while edible oil fortified with vitamin A and iodine-fortified salt have become widely available, outreach, coverage and access to fortified foods by targeted populations remain inadequate and needs to be tackled. Experiences from other countries and research will help devise other fortification programmes to complement what is currently taking place.

Programme II.8. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
64	64	-	64	64	-

Salient features of the programme

Programme II.8 totals 64 million USD which are entirely financed. This programme includes a component of the Directorate General of Health Services (DGHS) and World Bank project on *COVID-19 Emergency Response and Pandemic Preparedness* in support of activities aimed to improve prevention and response planning for Emerging Infectious Diseases in the context of human and animal health system development; and a component of the *National Nutrition Services (NNS)* to control micronutrient deficiencies implemented by DGHS and UNFPA among other DPs. There is clearly much scope for the development of projects to tackle all the priorities delineated under this programme.

Programme II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people

Justification for this programme

Rural youth, women, and disabled persons lack earning opportunities in agriculture, with negative repercussions on their FNS. Indeed, they have less access to land, and hence benefit less from efforts to create jobs on-farm. Lack of adequate skills, information asymmetry, low market integration, and inadequate extension services are other factors that prevent these disadvantaged groups from successfully engaging in on-farm income generating activities. Moreover, in the medium to long run, increasing mechanisation and growing land scarcity will also mean fewer opportunities for on-farm job creation. Expansion and promotion of agriculture-driven off-farm employment opportunities along the FVC can facilitate income generation for these three groups. Adapted vocational training arrangements for skill generation, market integration and extension services may help make them economically solvent as well as training and capacity development along with financial services and development of market linkages.

Priority interventions

The Technical and Vocational Education and Training (TVET) sector which plays a key role in providing skills to disadvantaged groups faces multi-faceted challenges such as the absence of comprehensive training needs assessments, lack of responsiveness to market demands, small size of the industrial base, low female participation, inconsistent certification according to the National Skill

Development Policy 2011, and poor monitoring and governance. All these need to be tackled. There are also shortcomings in the service delivery and in the utilization of these services provided by public institutions. If the skills gap that exists is to be filled in order to create employment along the FVC, regulation mechanisms need to be strengthened and the quality of the skill training system ensured through accreditation of courses, TVET certification and registration of training providers. Harmonized coordination among the apex government agencies for skill development in the FVC will be essential since training service delivery and its utilization in the FVC falls under more than one government agency.

Programme II.9. Cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
144	144	-	108	108	-

Salient features of the programme

Programme II.9 channels 144 million USD. The nutrition weighted total is 108 million USD since actions under this programme are considered to be nutrition sensitive. Some examples of projects/project components considered under this programme are the *Tottha Apa: Empowering Women through ICT Towards Digital Bangladesh* by the National Women Agency; and *Establishment of ICT Network to Remote Areas (Connected Bangladesh)* of the Bangladesh Computer Council. Given the lack of pipeline projects as of June 2020, more attention needs to be given to championing agriculture-driven, off-farm employment and other employment along the food chain especially for rural youth, women and disabled people.

PILLAR III. To enhance the consumption and utilization of healthy and diversified diets for achieving nutrition improvements

Programme III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis

Justification for this programme

In order to achieve optimum health and nutritional well-being, it is essential to ensure the availability, continuous supply, access and consumption of diversified nutrient-rich, safe foods at affordable cost to meet the nutrient demands of the population, by age, sex, physical activity and physiological status. An 83 kcal gap remains between desirable 2400 kcal and actual dietary patterns. Even though the per capita intake of rice decreased from 416g in 2010 to 367g in 2016, this is still higher than the desirable norm of 350g. Conversely, the per capita vegetable intake of 167g and 35 g of fruits in 2016 is much lower than the recommended normative intake of 400g of vegetables and fruits/day. Among animal source foods (ASF), only fish consumption meets the desirable intake. As national household averages, these estimates do not indicate individual dietary diversity and nutrient adequacy.

Priority interventions

An assessment of the gap in availability and actual dietary intake is needed at the individual level to plan food production and supply. Per capita energy and nutrient requirements for different groups across the life cycle are also needed for food planning. Long-term food planning for ensuring healthy and nutritious diet is an immediate need for Bangladesh considering its growing population, income growth, socioeconomic status, and high burden of child malnutrition. For this, this programme proposes to establish and work to achieve the proposed normative nutrient targets for long-term national and sector-specific diversified food planning. Food consumption measurement and nutrient gap analysis need to be carried out in a timely and periodic manner. National dietary guidelines must be periodically updated

and implemented as well as Food Composition Tables which are essential for food and agriculture planning, setting nutrient targets for policy and planning, formulation of institutional and therapeutic diet, food-based nutrition training, nutrition labelling, food regulation and consumer protection.

Programme III.1 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
38	32	6	38	32	6

Salient features of the programme

Only four projects/project components populate this programme as of June 2020 for a total of 38 million USD, representing a mere 0.1% of the CIP3 total budget. The one contributing the most is the Health Services Division's *Health Information Systems and e-Health (HIS & E-Health)*¹¹. Programme III.1 only has one project in the pipeline as of June 2020. It is clear from this that more resources are needed to develop a national-level food production, supply and consumption plan in Bangladesh.

Programme III.2. Operationalization of healthy diets for nutrition outcomes

Justification for this programme

Latest available estimates indicate that the prevalence of acute malnutrition (wasting) is 9.8% among under-five children. Only one in three children aged 6-23 months has a Minimum Acceptable Diet (MAD). National estimates reveal that 46% of the women of reproductive age consumed five out of 10 food groups, indicative of Minimum Dietary Diversity for women (MDD-W) and micronutrient adequacy in the diets. There is evidence that the COVID-19 pandemic may have worsened this through lack of access to fresh fruits and vegetables, dairy and poultry from the food system. The Desirable Dietary Patterns (DDP) provides normative guidance for planning healthy diets using dietary and nutritional principles. It guides uptake and implementation of DDP based nutrition targets into the sectoral plans of agriculture, livestock and fisheries to produce and enable consumption of nutrient dense and healthy foods.

Priority interventions

Given the emerging impacts of climate change on nutrition coupled with the multiple burden of malnutrition, policy must adapt to increase consumption of plant-based foods and reduce consumption of red meat and sugar for both health and environmental benefits. Therefore, integrated nutrition guidance tools, which provide guidance beyond DDP and consider cross cutting issues that impact food systems and diets are needed. Notably, women, smallholder farmers and climate change considerations can contribute towards delivering sustainable diets. A balance of plant and animal-based foods within the framework of the DDP is imminently required. Accordingly, evaluation of diets and food systems practices for nutrition outcomes can together contribute towards achievement of the SDGs and the Paris Agreement, to which Bangladesh is a signatory. Private sector engagement needs to be enhanced for market-based approach for safe and healthy diets at affordable cost. To this end, the SUN Business network can play an important role.

Programme III.2 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
152	3	149	152	3	149

¹¹ This project is also counted for half of its value under the Programme V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data.

Salient features of the programme

More efforts are needed on this programme which only amounted to 152 million USD in June 2020, with 149 million USD in the pipeline which is in fact just a single project: the Health Service Division *Health and Gender Support in Cox's Bazar District (HGS-CXB)* which is to be funded by the World Bank. The interventions under this programme are considered to be “nutrition sensitive +” which means that their entire budget is counted under the nutrition weighted budget.

Programme III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhancing child nutrition outcomes at sub national levels

Justification for this programme

A clear shortage of skilled resources at national and sub national levels to implement the NPAN2 has been identified by BNNC. Over 20 ministries are involved in implementing the NFNNSP’s PoA. The interface between national and sub national (district and upazila) institutional arrangements needs to be strengthened to facilitate and mobilize field level implementers. With a dominance of upazila Medical Officers and civil surgeons in the supervision and implementation of nutrition services at the field level, there is focus on the curative aspects of service delivery. The Medical Officers with clinical expertise are also responsible for nutrition services that encompass activities related to food and agriculture beyond the domains of the health sector. To this end, BNNC has developed minimum nutrition packages to be delivered through the UNCCs and DNCCs at the sub national levels through multi sectoral expertise.

Priority interventions

To be able to adequately deliver the minimum nutrition packages across the country, the institutional arrangements and capacity to improve performance and delivery of multi sectoral nutrition services across the Ministry of Health and Family Welfare (MoHFW), MoA, MoFL, MoWCA, Ministry of Education (MoE) need strengthening and expansion. For this, action will be taken to fill up all the vacant positions of MoHFW for health /nutrition service delivery personnel. Besides, based on the needs’ assessment, allocation and recruitment of nutrition workforce need to be accelerated. The institutional capacity of BNNC and other institutions working on FNS programmes will be strengthened. This will help to orient the DNCC and UNCC for scaling up multisectoral approaches towards formulation of district/ upazila level multisectoral annual nutrition plan to implement minimum nutrition packages. Existing linkages between key institutions within Bangladesh and with international institutions will be fostered for capacity building and identifying and sharing technical expertise of the institutions. Human resource capacity and nutrition expertise will also be enhanced through multi sectoral trainings.

Programme III.3 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
134	134	-	134	134	-

Salient features of the programme

This programme amounts to USD in 134 million USD as of June 2020, one of the smaller programmes in the CIP3 and which represents 1.5% only of the total (or 1.9% of the nutrition weighted budget). This includes components of the *NNS* of the *Health, Population and Nutrition Sector Development Programme (HPNSDP)* comprises actions to develop human resources in nutrition. It also plans to development institutional capacity and to revitalise the BNNC. However, as of June 2020, there are no pipeline projects to further achieve the objectives of this programme.

Programme III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and Non-Communicable Diseases (NCDs)

Justification for this programme

Lack of nutrition awareness, poor diet quality and inadequate diversity are among the immediate causes of malnutrition. Diets remain largely cereal based and cultural taboos, lack of nutrition awareness and gender inequity restrict the consumption of a healthy and diversified diets, especially for women and children. Integrating food-based nutrition education activities with agricultural and health interventions are shown to impact household diet quality, dietary diversity, and nutrition outcomes. With the country transitioning to a middle-income status, rapid urbanization and globalization are influencing the country's food culture. This has increased the availability of cheaper, high calorie, low nutrient dense foods in the market that attract adolescents and youth which contributes to a risk of overweight, obesity and diet-related diseases. Another challenge in Bangladesh, is that habitual food preparation techniques often incur considerable nutrient loss.

Priority interventions

Nutrition education strategies need to promote knowledge on the importance of local foods, its use in preparing healthy diets and lifestyle approaches to prevent and control of malnutrition among children, adolescents, and youth. Thus, this programme advocates consumption of local, neglected and underutilised nutritious foods which are often nutrient-dense and have substantial benefits on health, the economy, and the environment. They can contribute to diversity in diets, can be produced in marginal land with limited inputs, do not require long supply chains and are often better adapted to their local environment with beneficial impact on the soil. Knowledge also needs to be imparted on what healthy cooking and food combinations are. Nutrient-dense recipes have been developed and are being promoted through nutrition training and mass media campaigns by a number of institutions. Expanding the range of recipes based on updated Food Composition Tables needs to continue. Creating awareness on appropriate cooking techniques but also on ways to keep food safe while handling, preparing, storing and serving food, so as to ensure their nutritional quality and safety is needed, along with the understanding of food labels.

Programme III.4 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
866	866	-	866	866	-

Salient features of the programme

Programme III.4 amounts of 866 million USD and its budget is entirely counted toward the nutrition weighted total since actions under it are classified as "nutrition sensitive +". It includes the *Maternal, Child Reproductive and Adolescent Health (MNCAH)* which accounts for 81% of this programme's budget, as well as a number of components of the *NNS* and the *Lifestyle and Health Education & Promotion (LHEP) project*. As of June 2020 however, no project was in the pipeline to address the objectives of this programme.

Programme III.5. Expansion of programmes for immunization, control of Acute Respiratory Infections (ARIs), prevention of cholera and diarrhoeal diseases

Justification for this programme

A strong relationship exists between malnutrition, infection, and child mortality, because poor nutrition leaves children underweight, weakened, and vulnerable to infections. Incomplete vaccination schedule is also strongly correlated with prevalence of underweight. In Bangladesh, the prevalence of ARIs and diarrhoea among children under 5 in the last two weeks has been reported as 3% and 4.7% respectively,

and only 86% of children age 12-23 months have received all basic. Suboptimal breastfeeding practices, inadequate complementary foods, poor anthropometric status along with food insecurity are identified as important risk factors for ARIs and diarrhoea which are linked to greater morbidity via inadequate nutrient intake all which affect immune function. Contaminated complementary foods due to poor water and food quality, unclean cooking and serving utensils, inadequate handwashing practices are also risk factors for diarrhoeal episodes. Disparities in health seeking behaviour among poor rural households along with weak execution of nutrition services within community based Integrated Management of Childhood Illness (IMCI) and Primary Health Care have also been identified as additional challenges to addressing childhood illnesses.

Priority interventions

Child nutrition services must continue being expanded via community based IMCI and social behaviour change communication (SBCC) strengthened to promote consumption of safe food and water for healthy diets and nutrition of children. A community-based prevention approach to malnutrition via integration and delivery of Essential Health Service Package (ESP) should be prioritised within primary health care and community clinics. Coverage of immunisation can be scaled up particularly in hard-to-reach haor and remote hilly areas, and in urban slums. NNS can provide support for technical interventions under IMCI. Positive nutrition practices will be promoted through SBCC and sensitisation on uptake of essential nutrition services as well as on food safety and healthy diet and related complementary issues such as water and sanitation, Expand Programs for Immunization, and prevention of NCDs from public and private facilities. Demand for safe food and water must be created through increased awareness. Hygiene and sanitation interventions should be coupled with food safety education and consumer awareness among food preparers in the household, school children and men who often take care of the food shopping. Women should be especially prioritized for BCC given their multiple roles in the household. Research collaborations will be explored with academia and agencies such as icddr,b to help better understand infection-malnutrition interactions and further explore the effects of environmental enteropathy and malabsorption on nutritional interventions and early growth/development.

Programme III.5 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
89	89	-	89	89	-

Salient features of the programme

Programme III.5 amounts of 89 million USD. Its most prominent projects are, for some of their components, the DGHS *Community Based Health Care (CBHC)* and *Non-Communicable Diseases Control (NCDC)*. No projects are in the pipeline for this programme as of June 2020, however.

Programme III.6. NNS delivery and early childcare practices to promote maternal and child nutrition

Justification for this programme

Micronutrient deficiencies can have major adverse health consequences, contributing to impairments in growth, immune competence, cognitive development and poor reproductive outcomes. The first 1000 days of life serves as a critical window to reverse the situation by nutrition interventions. A large proportion of children 6 to 59 months of age suffer from zinc deficiency while substantial proportions of preschool children report vitamin D, zinc and vitamin A deficiency and are often anaemic and iron deficient. Non-pregnant and non-lactating women are also predominantly deficient in zinc and iodine, while one-quarter of women live with anaemia and many suffer from vitamin B12 and vitamin D deficiencies. The aetiology of micronutrient deficiencies is multi-factorial, with household food insecurity, poor quality diets, lack of nutrition awareness, intra household food disparity, along with

genetic, parasitic and infectious diseases, all playing a role. Despite the situation, the coverage of micronutrient supplementation remains low. Critical challenges relating to service delivery at community levels for iron-folic acid supplementation for lactating women and adolescent girls and for multiple micronutrient powder for 6–23-month-olds have also been identified. Similarly, though calcium supplementation during pregnancy has been included in the NNS Operational Plan, the modality of service delivery has remained undefined.

Priority interventions

Integrating nutrition education with production strategies should be encouraged, ensuring the produce is not only sold for cash but consumed by households/individuals at high risk of micronutrient deficiencies. As part of nutrition sensitive approaches, innovative programmes on nutrition-sensitive food systems such as integrated household farming, and promoting home-based beneficial traditional practices for improving micronutrient intake (incorporating dietary enhancers such as lemon, tamarind, sour fruits and related ingredients in preparations and reducing inhibitors of micronutrient absorption in plant-based diets through roasting, soaking, germination, fermentation) will be recommended. Mainstreaming of nutrition services within the proposed delivery platforms of NNS must be accelerated. In particular, for improved child nutrition, coverage and outreach of iron supplementation (micronutrient powder) should be speeded up through community based IMCI and community clinics. Similarly, other micronutrients of public health importance like Vitamin D and calcium supplementation should also be mainstreamed within nutrition services.

Programme III.6 cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
282	242	40	282	242	40

Salient features of the programme

Thirteen different projects have been classified under this CIP3 programme for a total of 282 million USD, of which 40 million USD in the pipeline. The main project under this programme is the *Development of Newborn, Infant and Maternal Health and Health System project* under the Directorate General of Health Services followed by the *Family Planning Field Services Delivery (FPFSD) project*. The *Community Based Health Care (CBHC) project* where Community Health Care Clinics provide basic health care services in the rural communities of Bangladesh is also included in this programme. There are two pipeline projects including the JICA-funded *Upazila Health Care (UHC) project* which ensures healthy lives and promote well-being for all by increasing accessibility, affordability and utilization of quality Primary Health Care Services from UHC, other hospitals within upazila and Union Sub Centers. However, at just under 1% of the total CIP3 budget, it is evident that further efforts are needed to promote maternal and child nutrition.

Programme III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes

Justification for this programme

While 98% of households have access to basic drinking water, it is overwhelmingly contaminated with E-coli at source and household levels, including amongst the richest households. Inequitable water access particularly among informal settlements in terms of insufficient water, intermittent water supply and inflated water rates due to illegal supply are other challenges adding to the water woes among urban slums. Limited investments in infrastructure development related to water treatment facility, water storage, transmission and distribution network also limit access to clean water. Lack of access to safe water impinges on household health care and increases the household's expenses and women's time in providing care services and looking for water. The limited capacity of the Department of Environment as a monitoring and enforcing body on water quality along with limited resources and water testing

facilities are also factors that severely undermine the quality of available water. Concurrently, poor sanitation and hygiene have a synergistic effect on malnutrition with infectious disease, especially diarrhoea exacerbating the situation. Inadequate sanitation and hygiene cost Bangladesh an estimated of USD 4.23 billion, which is 6.3% of its GDP¹². Unhygienic practices among food handlers with regards to cooking and processing of foods coupled with unsanitary environments in restaurants and fast-food outlets in Bangladesh's food industry is common. Inadequate solid waste management creates an unhygienic environment that puts human health at risk. Furthermore, highly infectious biomedical waste often ends up in the sewage systems which can lead to various communicable diseases. Transmission of diseases from animals to humans also has negative consequences on nutritional status of those infected. Diseases in animals impact the quantity and quality of food produced, such as meat and milk. Inadequate animal shelters and faulty animal faeces disposal are common reasons for contamination of the household environment. Unhygienic animal handling, inadequate animal health and veterinary services coupled with a lack of "soft" skills in livestock programmes are additional challenges.

Priority interventions

This programme includes both actions to ensure the supply of safe water and facilities and practices needed for good sanitation and hygiene. Nationwide supply of safe drinking water is a priority. Introducing water supply projects in urban areas and installing piped water supply for the urban poor will constitute an important area of intervention. Private sector investment will be explored to support for scaling up the provision of safe water from the water source to the point of consumption, including in-house handling, for piped and non-piped water supply systems. The number of tube wells in rural areas will be increased and water supply options will be installed to minimize arsenic contamination, excessive iron and salinity. Awareness-raising campaigns along with emotional/social drivers will be conducted towards ensuring attention to the issue of safe water supply. Water quality monitoring and surveillance programmes along with R&D on appropriate and affordable technologies will be undertaken for scaling up safe drinking water availability. Measures will be taken to ensure sanitary and hygienic handling of food from "farm to fork". Animal disease surveillance and control needs to be scaled up and targeted for maximum effect of actions on prevention of food and water borne illness. Policy support will be provided to scale up the development and delivery of private and community-based veterinary services. An autonomous quality control agency will be established to ensure quality of veterinary drugs, vaccines, feeds, feed ingredients and breeding tools and materials. Finally, garbage disposal will be promoted as well as recycling of waste for environmental hygiene and human health protection.

Programme III.7. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
7,467	6,336	1,131	5,600	4,752	848

Salient features of the programme

This programme amounts to 7,467 million USD, almost 24% of the total CIP3 budget, reflecting the costly infrastructural projects needed to build or improve water supply networks and sewerage systems in cities. It stands out in Pillar III for the number of projects/project components that constitute it compared to others: 193 -with 21 at a planning stage- while none of the other programmes exceed 15. Of these, it should be noted that 85 are Ministry of Power, Energy and Mineral Resources projects/project components that endeavour to power the entire country. A share of the budget of such projects has been included in the CIP3 as power is essential to guarantee the right conditions for the food system to operate, for instance by preserving food safety along the value chain by maintaining the cold chain.¹³ One important ongoing project is DPHE's *Project for safe water supply throughout the*

¹² Water and Sanitation Program. 2012. [Economic Impacts of Inadequate Sanitation in Bangladesh](#). Flagship Report

¹³ See Section 9.

country (PSWSC). Its budget alone amounts for 11% of this programme's budget. The fact that this programme is one of the largest in the CIP3 conceals the fact that some of the interventions it recommends need much further attention: this is the case of water quality monitoring and surveillance, R&D to widen safe drinking water availability, the promotion of hygienic handling of food, or animal disease surveillance and control as well as development of community-based veterinary services.

PILLAR IV. To increase access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions

Programme IV.1. Improved management of the public food stock and distribution system

Justification for this programme

Food price volatility can deter farmers from making investments in more efficient technologies, mechanization and GAP. Low prices can even dissuade them from growing food altogether. The impact of price volatility is likely to be acute on poor and vulnerable people which can lead to political instability. In response to this, the Government needs to support farmers' prices while continuing to ensure access of staple food by the most vulnerable at all times by stabilizing prices and distributing food through the Public Food Distribution System (PFDS) when required. The PFDS also acts to provide food relief during emergency periods of natural disasters and to alleviate chronic food insecurity. To ensure effective implementation of the public food management activities, the NFNNSP proposes to maintain stocks of 1.05 million metric tons of foodgrain at the beginning of the financial year with due consideration to the seasonal changes in government procurement and distribution needs. Domestic rice procurement is the instrument used to build rice stocks for the PFDS. Deciding when, how much and for which price to procure foodgrain from farmers and anticipating the role that public and private imports should have in rice price stabilization is complex. Inclusion of nongrain foods in the food distributed also needs to be considered. Procurement targets and objectives are not always met, as hindrances to smooth procurement implementation exist: procurement centres can be out of reach, the requirements with regards to moisture content of the paddy are challenging for farmers to comply with, and centres are sometimes unwilling to accept small amounts from farmers

Priority interventions

This programme endeavours to make decision-making on procurement and PFDS more efficient by for example, improving monitoring of foodgrain prices, stocks, domestic production and imports. Methodologies as well as the legal and institutional set up to set procurement prices and amounts and implement procurement drives also need to be reviewed. It also aims to improve procurement and food distribution by providing information to the different stakeholders for enhanced decision making, be it from the farmers or the consumers. It also tackles the issue of storage both in terms of capacity and quality since grain storage capacity can constitute a constraint to a well-functioning PFDS and can limit the scope of a procurement drive needed for price support if the stocks are already high. Many traditional godowns lack moisture and temperature control facilities which can impact the quality and shelf life of the stocks and imposes a fast turnover. Foodgrain stored in inadequate warehouses pose potential food safety risks to the PFDS beneficiaries. Once plans are made to incorporate non-grain nutritious foods to the PFDS, nutrient-sensitive storage adapted to these new commodities will also need to be made available.

Programme IV.1. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
162	159	3	122	119	2

Salient features of the programme

This programme amounts to 162 million USD, 122 million USD when nutrition weighted, with five projects, four of which are ongoing. All are about building or repairing foodgrain godowns and storage. There is a clear need for projects to be developed to deal with all the other aspects of PFDS improvement as spelt out in the NFNSP PoA. One single project, the Modern Food Storage Facilities Project (MFSP), jointly funded by the GoB and the World Bank, accounts for 67% of this project's budget.

Programme IV.2. Increased resilience of agriculture systems

Justification for this programme

Resilience and adaptation in agriculture are crucial for ensuring the continuity of food production after disasters. Bangladesh's disaster profile may be changing under climate change in terms of disaster types, frequency, intensity, locations and predictability. A range of practices and technologies exist that are useful against high-to-medium frequency disasters occurring with low or medium intensity, as are common in Bangladesh. Examples include stress-tolerant varieties, alternate wetting and drying, cropping systems better adapted to drought or flood, urea deep placement, and floating agriculture. However, adoption has not reached the scale needed, even though there exist policies to enable scale-up, documentation of experiences, and economic benefits have been demonstrated at up to four times the costs.

Priority interventions

This programme proposes to shortlist existing technologies and practices for upscaling specifically for "disaster hotspots". In addition, new technology and practices require investments in related infrastructure. For example, water infrastructure reduces risks from storm surges, cyclones, floods and droughts, which can further accelerate adoption of new practices and technologies. Other measures such as the strengthening of extension and advisory services for technologies and practices need to be prioritized for different disaster hotspots.

Programme IV.2. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
3,390	2,331	1,060	1,695	1,165	530

Salient features of the programme

Of the 107 ongoing projects that populate this programme, 96 fall under the Ministry of Water Resources. They aim to conserve riverbanks, re-excavate and dredge waterways (canals, beels etc) in order to remove waterlogging, rehabilitate polders to preserve agricultural systems. The majority of the pipeline projects are also from this ministry. This programme includes projects such as the *Coastal Embankment Improvement Project Phase-I in Satkhira* for which 335 USD million are included. In total, this programme amounts to 3,390 million USD of which 1,060 million USD are pipeline projects. Because interventions under this programme are categorised as nutrition supportive, its nutrition weighted budget is 1,695 million USD. The nature of these investments means that these projects are very costly. This programme therefore amounts to 10.8% of the total CIP3 budget (8.4% when applying the nutrition weights).

Programme IV.3. Disaster-coping ability of vulnerable families

Justification for this programme

Investments to increase resilience, at household and community levels, help restart agricultural and other recovery after disasters. Whilst planning and resource allocation prioritised using poverty data remains important, a direct measure of vulnerability would be useful also. Homestead agriculture

strengthens household resilience as it requires little land, women can contribute and it generates household cash, and can improve nutrition in the family. Protecting livestock and assets is important for enhancing the disaster-coping ability of families.

Priority interventions

Few emergency shelters in disaster prone areas accommodate livestock. In many places killa, a raised earthen platform for livestock, have been effective. Such structures are not capital intensive and should be expanded, although there can be issues with land availability, proximity to human emergency shelters and lack of maintenance. Infrastructure for basic services also needs to be made more resilient to disasters. The market for agriculture or disaster insurance needs development and requires better assessments of risks for actuarial development. In the 8FYP the Government will form a technical team to undertake a rigorous risk accounting, and determine the baseline, benchmarks and targets. Some of the infrastructure construction and maintenance under this initiative can be done through seasonal public works. Bangladesh has increased the number of emergency shelters, by rehabilitating existing shelters and building new ones. Multipurpose shelters have been constructed that double-up as schools, which ensures that the buildings are maintained. Bangladesh still needs to invest in the capacity, quality, operation and maintenance of shelters. Many need improved basic services, especially power, water and sanitation, and the infrastructure for basic services in the community needs to be made more resilient and adapted to women, elderly, disabled persons and children who have special vulnerabilities during disasters.

Programme IV.3. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
912	906	6	684	680	4

Salient features of the programme

Of the 20 ongoing projects/project components falling under this programme, 11 are implemented by LGED and aim to build resilient infrastructure in rural areas. This programme includes the RDCD *Amar Bari Amar Khamar (One House One Farm)* which the NFNSP PoA specifically seeks to support and expand. There is only one project in the pipeline, under the Directorate General of Food (DG Food), to provide vulnerable households with small scale silos to safely storage food. The overall value of this programme is 912 million USD, or 684 million if applying the nutrition weighting.

Programme IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation

Justification for this programme

The effectiveness of emergency relief depends on pre-positioning food, logistics and the capacity for rapid and inclusive distribution. PFDS storage could be better linked to data on disasters, such as hazard maps, spatial information, and household-level data. A lot of food – and rice in particular - is held by the private sector, and so its post-disaster mobilisation matters. Humanitarian logistics is “the process of planning, implementing and controlling the efficient, cost-effective flow and storage of goods and materials, as well as related information, from the point of origin to the point of consumption to alleviate the suffering of vulnerable people.”¹⁴ PPPs could draw on private sector logistics expertise and stimulate other innovations, such as using unmanned aerial vehicles (drones). Shock-responsive social protection can rapidly expand coverage, increase benefits and add extra types of assistance (“cash plus”). Social registers, digital payments and financial inclusion help for shock-responsive cash transfers. The COVID-19 pandemic underlined the need for greater shock responsiveness in social protection. Anticipatory or forecast-based social protection is delivered before disasters and better supports post-

¹⁴ Logistics Cluster. 2006. [Logistics Cluster Concept and Guidelines](#). World Food Programme (lead agency).

disaster recovery, because families are less harmed and productive assets can be protected. Disasters exacerbate nutritional risks, through increased morbidity and disrupted healthcare; worsened diets, especially access to fresh fruits, vegetables and/or animal source protein; inadequate water, hygiene and sanitation; and reduced breastfeeding and care for infants because mothers are stressed, malnourished and sick. Pregnant women, young children, the elderly and the sick are specially at risk. Technical capacities are low, preparedness is often weak, and coordination mechanisms need strengthening to address nutrition issues during emergencies.

Priority interventions

Policies and procedures for disaster management will be strengthened, including the enactment of a legal framework to implement the Standing Orders on Disasters. This will strengthen targeting mechanisms in public food distribution in line with the National Social Security Strategy (NSSS), including attention to gender. Actions will be taken to strengthen union and upazila disaster management committees to be more effective before, during and after disasters. The Government will take actions to enhance the pre-positioning of public food stocks, so that it is in the right place at the right time, such as by improving the use of data, ICT and early warning methods, and by increasing safe storage capacity, especially in remote areas and at the community level. The Government will build on existing work to strengthen logistics in disasters, notably the mapping of national logistics capacities and stakeholders and assessing logistics gaps in partnership with the Global Logistics Cluster of the Inter-Agency Standing Committee started in 2019. Private sector involvement will be encouraged for example to mobilise foodgrains held by the private sector in each locality, to help stabilise post-disaster food markets, to improve humanitarian logistics and on the application of new technologies, such as ICT and drones. Shock-responsive and anticipatory social protection will be promoted under the framework of the NSSS. Attention to nutrition in disaster preparedness and response will be enhanced through, for instance, the inclusion of Nutrition Coordination Committees in disaster preparedness and responses.

Programme IV.4. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
887	199	688	665	149	516

Salient features of the programme

The majority of the 17 ongoing projects under this programme fall under the MoLGRDC with projects/project components such as *Promoting Resilient of Vulnerable Through Access to Infrastructure, Improved skills and information (PROVATi)* or the *Coastal Towns Environmental Infrastructure Development*. The only project in the pipeline is titled *Rehabilitation of Rural Road Infrastructure Damaged by Cyclone Amphan and Flood*.

Programme IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity

Justification for this programme

Gaps in social protection coverage exist in Bangladesh due to locational disadvantages, and socioeconomic disadvantages. Progressively increasing coverage is necessary for the Government's goal to eradicate extreme poverty by 2031. There is also the need to increase the size of benefits to match needs. The NSSS foresees in the longer-term the development of a National Social Insurance Scheme (NSIS). The COVID-19 pandemic underlined the urgency of strengthening urban social protection, especially those in informal sector work. Targeting tools need to be improved by including FNS dimensions. The 8FYP proposes to develop multidimensional poverty measures for policy use. Electronic government-to-person (G2P) cash transfers can enhance inclusion of disadvantaged places and inclusion of disadvantaged people. G2P would help the current problems of transfers arriving

bunched together and requiring beneficiaries to travel to collect them. But social protection can also be used to positively impact nutrition by improving dietary quality, increasing income and improving access to health services. It can also influence practices related to care, sanitation and education. Also, the Vulnerable Group Development (VGD), Vulnerable Group Feeding (VGF) and the FFP offer opportunities to support nutrition by including fortified foods. Combining social protection transfers with nutrition education and Nutrition Behaviour Change Communication (NBCC) substantially improves children's nutritional status.

Priority interventions

The actions proposed under this Programme seek to render existing social protection programmes more nutrition-sensitive and to reach the nutritionally vulnerable. For this, the Government will continue and expand existing social protection programmes for disadvantaged places and disadvantaged people, and reform the programmes in line with the NSSS. It will ensure that access to food and nutrition is not compromised and "lost" in the various NSSS reform processes, by generating and reporting social protection coverage and budget data in *chars, haors*, hill tracts, remote areas and urban slums, and for poor female-headed households, children, elderly, disabled people and displaced people. FNS data will be incorporated into social protection management systems, such as for beneficiary selection. This will be part of broader NSSS reforms to create a Single Registry and a unified Management Information System (MIS). The Child Benefits Scheme will be initiated. The Government will also increase the use of electronic G2P payments to beneficiaries. Efforts will be made to develop a more comprehensive approach to urban social protection. The inclusion of fortified rice in the FFP and OMS will be scaled up, diversify the food distributed in social protection programmes, and monitor impacts on nutrition. Social protection programmes will be enhanced for nutritionally vulnerable women of reproductive age and children during the first 1000 days as it is the most efficient way to break the inter-generational cycle of malnutrition and poverty. NBCC will be enhanced and integrated into social protection. The School Feeding Programme in Poverty Prone Areas which began in 2013 provides school children in selected areas biscuits fortified with vitamins and minerals and hot meals using locally sourced vegetables, lentils and micronutrient-fortified rice and oil will also be expanded.

Programme IV.5. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
887	886	2	665	664	1

Salient features of the programme

The largest item among the 25 ongoing projects/project components is MoPME's GoB-WFP jointly funded *School Feeding Programme in Poverty Prone Areas* which accounts for 60% of the total budget of Programme IV.5. LGD's *Income Support Programme for the Poorest* whose main objective is to provide income support through conditional cash transfer to the poorest mothers in selected 43 Upazilas thereby increasing mothers' use of Child Nutrition and Cognitive Development (CNCD) Services is another prominent project under this programme in terms of budget size. This programme amounts to 887 million USD in total. As of June 2020, only one project was planned: the *Establishment of Bangladesh Poverty Alleviation Organization Health Service Center in Char Fashion Upazila*.

Programme IV.6. Safety nets in place during periods of seasonal crises and food shortages

Justification for this programme

Seasonality in Bangladesh is linked to rice production, although less strongly than previously. There are two lean seasons, with employment shortages, income drops and food price rises. The exact timings and durations can vary year to year, and Bangladesh's northwest is widely recognised as afflicted, but seasonal stresses occur across the country in subsistence farming families. Fisherfolk need support in periods when fishing is banned. Urban seasonality was evidenced by the 2016-17 HIES that showed

large dynamics through the year in urban poverty incidences ranging from 15.5% to 21.2%. Urban and rural sectors are linked by migration, remittances and other ways. Household nutrition can be seasonal due to seasonal access to water, sanitation, diversity of foods, and healthcare. Seasonal nutritional dynamics can differ in timing from the wider lean seasons. The State of Food Security and Nutrition in Bangladesh 2015 found that food and nutrition insecurity peaked in January-April in the northwest, coastal belt and northern chars, but not in the eastern hills, haor and Padma chars, where it peaked in September-December. Women and adolescent girls tended to be first to cut food consumption to cope with seasonal shortages. Complicating matters is that climate change might be altering Bangladesh's seasonal weather patterns: data from over 50 years suggest that Bangladesh's traditional six seasons might be merging into four seasons. Compared to natural disasters, seasonality is relatively slower onset, protracted and recurrent, and hence more predictable. This means that rather than an ex-post shock-responsive social protection system, such as for disasters, the need is for an ex-ante adaptive system that can adjust to year-to-year needs.

Priority interventions

The coverage of seasonal employment programmes will be expanded in line with NSSS. Greater management attention will be paid to ensure that programme implementation coincides fully with the timing of lean seasons, and that programmes adjust better to year-to-year variations in seasons. The four programmes are implemented by the Ministry of Disaster Management and Relief (MoDMR) and possibilities for consolidation will be explored under the NSSS to harmonise and strengthen targeting, administration, MIS and digital payments. MoDMR will explore how the public works activities in these programmes could be focused on reducing disasters risks and seasonality, because these will account for most of the remaining poverty in Bangladesh after economic growth lifts more and more people out of poverty in the next decade. Cash and food transfer programmes will be enhanced and expanded for fisherfolk especially during the banned period of fishing. Direct food transfers will be continued to vulnerable groups who cannot work during seasonal crises. Priority will be given to nutritional seasonality in the “first 1000 days” because for this age-group short seasonal stresses can be very impactful. Other prioritised vulnerable groups will be adolescent girls, pregnant women and lactating mothers.

Programme IV.6. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
63	57	6	47	43	4

Salient features of the programme

This CIP3 programme channels 63 million USD and only represents 0.2% of the total CIP3 budget with only six projects/ project components, one of them in the pipeline, the DSS' *Providing employment-oriented training to improve the living standards of the neglected, widows, destitute, backward and backward communities project*. It includes for example DWA's Investment Component for Vulnerable Group Development (ICVGD) (2nd phase) or BRDB's *Employment Guarantee Scheme for Hard Core Poor of Northern Region* programme.

Programme IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development

Justification for this programme

Social protection integrated with agriculture, income generation, and micro-entrepreneurship - “productive social protection”- helps strengthen the inclusion of the poor into GDP growth. This is crucial because the 8FYP estimates that even economic growth of 8 or 9% could be insufficient for the Government’s target to eradicate extreme poverty by 2031. Moreover, the PP 2041 targets full

employment by 2031, which will need the creation of two million jobs annually to 2031. Productive social protection promotes resilience to cope with risks and income volatility and reduces reliance on low-productivity and insecure informal sector work. Productive social protection requires wide-ranging enablers.

Priority interventions

Productive social protection will be expanded and consolidated in line with the NSSS and adapted to the needs of women, other excluded groups and young people. Existing programmes will be redesigned and modernised towards productive activities that stimulate agricultural diversification, agro-processing and structural transformation. The Government's My Village, My Town Programme has great potential to help by extending to every village the facilities of modern towns, but coordination will be needed to ensure that productive social protection programmes best exploit the new opportunities. There is also need to modernise and strengthen the training and skills formation component in most productive social protection programmes, because not only does the quality tend to be low, but also the training tends to be on a limited range of traditional activities and skills. Further efforts are needed to eliminate gender gaps. Around one-third of the population is aged 16-24 years. Productive social protection should be designed and implemented better towards the needs and careers of young people. The school-to-work transition is very difficult and causes many to become locked into low productivity, survival activities.

Programme IV.7. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
2,786	2,503	282	1,393	1,252	141

Salient features of the programme

This programme amounts to a total of 2,786 million USD (8.8% of the total CIP3 budget), with 93 ongoing projects/project components and eight pipeline ones. Sixty-eight of them are LGED infrastructure projects which also endeavour to provide employment to the poorest sections of the population. While currently implementing two projects under this programme, DSS has also two in the pipeline: *Improving socio-economic status through training for self-employment of backward and extremely poor* and *Providing employment-oriented training to improve the living standards of the neglected, widows, destitute, backward and backward communities*.

PILLAR V. Cross-cutting Programmes

Programme V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data

Justification for this programme

FNS data production, generation and dissemination plays a pivotal role in evidence-based decision and policy making, by helping to gauge economic development, poverty and nutrition progress. A distinct feature of the planning process in Bangladesh – led by IMED- is the emphasis on results-based management tools, implying regular monitoring and evaluation of targets, achievements and financing. Accordingly, the CIP2, 2016-2020 provided an analytical framework to assess the results achieved in poverty and nutrition as well as the investments made towards achieving these results. Data are also needed for decision making by actors along the FVC and can improve the functioning of value chains and marketing systems. Certain information can help direct and drive private investments for example. Not having the information can drive up transaction costs and create entry barriers in agro-food processing, marketing and distribution. While BBS is the centralized official bureau for collecting and disseminating on a host of FNS relevant subjects, many other organisations also hold a role in data

generation. For instance, BNNC has developed a web portal for divisional and district level nutrition profiling and a data warehouse was also developed for NPAN2 nutrition related indicators monitoring.

Priority interventions

The wide range of data required by all stakeholders calls for an FNS data strategy to develop a comprehensive network of FNS information system, in line with “Digital Bangladesh”. A prerequisite for such system is the harmonisation of FNS information systems across sectors which consider UN fundamental principles, and quality standards and good practices. The FAO Hand-in-hand initiative and other relevant initiatives will be leveraged. The Aid Information Management System (AIMS) will be integrated with the Hand-in-Hand Initiative and investment planning. Data provided by the government functions are not always made available in a timely fashion or remain unavailable in some key areas and there is scope for improvement in terms of how they are publicised. New types of data (e.g., Big data, block chain data), interconnections between databases to enable data exchange and accessibility, property rights on data are also issues that need consideration. A Big Data governance framework will also be required to govern data access and use. To harness the potential of big data in agro-food sustainable development requires the realization of Digital Bangladesh and the achievement of full power generation capacity in rural areas as well as the strengthening of capacity and budget allocation of all FNS data collecting agencies. In line with the e-Government Master Plan for Digital Bangladesh (2019) and the PP2041, the key FNS actors will have ICT units able to effectively follow up and translate Digital Bangladesh into reality in the FNS-related government offices. Specific examples of areas where efforts are needed in this area are the development of surveillance data to better assess seasonality in nutrition and of dietary data for vulnerable groups suffering from micronutrient deficiencies. Indicators that measure gender disaggregated dietary diversity must be incorporated into national surveys and nutrition portals such as the National Information Platform for Nutrition (NIPN) and Nutrition Information and Planning Unit (NIPU) and Food Security and Nutrition Information Systems (FSNIS) for regular monitoring. Efforts will be made to improve data exchange notably by setting up an inter-agency FNS data sharing mechanisms. DAM’s market price data monitoring system needs to be improve in order to cover real time and upazila level price data. In continuation with the country-level work of FAO with the Food Price Monitoring and Analysis (FPMA) Tool, a tool needs to be developed to disseminate the price information collected, in coordination with existing and effective initiatives in support of farmers’ decision making and income opportunities.

Programme V.1. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
356	217	139	178	108	69

Salient features of the programme

Out of the 34 projects/project components included under this programme, six are in the pipeline, and the total amounts to 356 million USD, of half of that if nutrition sensitivity is taken into account. BBS is in charge of important data collection with relevance across sectors – for example with the *Monitoring the Situation of Vital Statistics of Bangladesh (MSVSB) (3rd Phase) Project* or the *Population and Housing Census 2021 Project*, and implements projects that account for 19% of this programme’s total budget. But other ministries are also involved in data collection. For example, the Meteorological Department’s *Strengthening Meteorological Information Services and Early Warning System* is essential to help families prepare and cope with disasters and BWDB is implementing one of the components of the *Strengthening Hydrological Information Services and Early Warning System* project. This is an ambitious programme with regards to what it proposes and more attention is clearly needed to develop projects that will contribute to generating, disseminating and facilitating access to reliable and timely FNS data and information.

Programme V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development efforts

Justification for this programme

Evidence-based support to policy makers is needed more than ever to address the multi-layered and fast-evolving challenges faced by Bangladesh in its endeavour to achieve FNS for all and in particular for the poorest and most vulnerable communities, especially women and children, the elderly and the disabled living in poor, disconnected and fragile areas. Adequate information and analyses must be provided to decision makers so that they can effectively prioritise interventions. The NFNSP adopts a food systems approach in order to address the complexities of the food system. Its PoA aims at operationalizing the NFNSP by translating the targeted initiatives into concrete areas of interventions within food systems in connection with other reference strategic and programmatic documents. This CIP helps effectively prioritize interventions and necessary investments designed and will continue to do so through its regular monitoring.

Priority interventions

A necessary condition to effectively operationalize the NFNSP PoA and this investment plan, and to ensure its policy uptake is its coherence with the PP2041 strategy formulated in the five-year plans, and the cross-sectoral integration with other FNS-related initiatives. This is ensured, firstly, through adequate stakeholders' participation in FNS governance (including the private sector's), which requires effective representation in the unified institutional framework for NFNSP PoA, its investment plan and the relevant SDGs monitoring; and secondly, by leveraging on existing initiatives and synergizing with the private sector. From a practical point of view, this is done through the inclusion and active participation of all potential FNS stakeholders from design to implementation of both the NFNSP PoA and this Investment Plan. Also, adequate cross-fertilisation of the monitoring efforts and its related products (e.g., thematic policy briefs) will ensure that the outputs of the PoA and its associated investment plan are effectively utilized. This can be facilitated by enabling positive collaborations among the government, the private sector and DPs through continuous institutional capacity strengthening of relevant FNS agencies. To ensure this, high level political commitment and leadership to prioritise FNS of the most vulnerable and poorest in the most remote and fragile areas of the country must continue.

Programme V.2. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
12.0	11.8	0.2	6.0	5.9	0.1

Salient features of the programme

This programme amounts to only 12 million USD -6.0 in the nutrition weighted budget since interventions included are nutrition supportive- with 14 ongoing projects/project components. Eight are implemented by the Ministry of Planning with for example *Support to the Implementation of the Bangladesh Delta Plan-2100*. Only one project has been identified for the pipeline of this programme as of June 2020. This needs attention if the NFNSP, its PoA, and this Investment Plan are to be adequately implemented over the next ten, ten, and five years, respectively.

Programme V.3. Effective regulatory instruments and guidelines

Justification for this programme

The right to food is enshrined as a fundamental principle of state policy in Article 15 of the Constitution and the country has policies for ensuring the right to safe food, but it is not a legal right. The Bangladesh Law Commission has recommended enactment of a Right to Food Act and constitution of a Food Commission to oversee its implementation. Bangladesh does have a number of policies on food and

food related issues, which require a structured policy framework for enforcement. The 8FYP highlights foodborne diseases and dietary risk exposures arising from pesticide residues in food, use of harmful agrochemicals and excessive dose of food preservatives, as areas of concern. Alongside, NCDs reportedly account for an estimated 59% of total deaths. With increasing reliance on ready-to-eat and processed foods and online shopping for groceries and food delivery in urban areas, ensuring food safety is critical by applying the existing rules and regulations.

Priority interventions

Existing regulations will be effectively implemented, and new guidelines/regulations introduced as required, to ensure sustainable management of natural resources, safe diets, and inclusive markets. Food safety, market-place management (including online and retail markets), food price stabilization, NCDs control, environment conservation and biosafety, anti-trust and anti-monopoly, breast milk substitution, complementary food, and the right to adequate food are among the priority issues. Measures will be initiated to strengthen surveillance and response to foodborne diseases of plant and animal origin. Enforcement of the Breastmilk Substitutes Act 2013, related byelaws and implementation of complementary feeding guidelines will continue. With regards to the prevention and control of NCDs, an operational PoA with regulations and guidelines for enforcement will be developed, including nutrition labelling, reformulation of food standards limiting high sugar, salt and fat, and banning industrial trans fats; restriction of food advertising particularly marketing of unhealthy foods to children and imposing tax on sugar sweetened drinks and ultra-processed junk foods. The Competition Act passed in 2012 needs regulatory frameworks and enforcement. Rules will be framed by the Competition Commission, to regulate anti-competitive behaviour and arrangements among companies, to ensure equitable and inclusive food markets.

Programme V.3. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
41	39	2	20	20	1

Salient features of the programme

Only eight projects/project components have been found as relevant to this programme – for 41 million USD or 20 million USD for the nutrition weighted budget- with one only in the pipeline. The MoFL for example is implementing the *Food security and public health development through regulation of Bangladesh - Veterinary Services and new regressive infectious diseases*. More emphasis needs to be placed on implementing regulatory instruments and guidelines.

Programme V.4. Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government

Justification for this programme

The current FNS institutional structure is strong, but inadequate capacity hampers analysis and policy implementation. Whilst successful implementation of the HPNSDP and the National Food Policy Plan of Action 2008- 2015 (NFP PoA) attest to national capacities, sub-national/local level capacities are insufficient. Local government institutions hold key roles in the successful planning, execution and monitoring of FNS projects through their leadership, technical knowledge and partnerships. Bangladesh needs a stronger uptake of FNS policy into planning organisations, so that policies are better translated into implementation and operations of line ministries and other actors, down to grassroots level. Food safety control is hindered by inadequate capacity to lead, technically guide and manage actors with fragmented and overlapping responsibilities. Synergies are not maximized in the interventions of 22 ministries implementing nutrition sensitive interventions, and leadership and capacity shortfalls limit

collaborations with civil society and the private sector on advocacy, service delivery, technology solutions, and nutritious food supply chains.

Priority interventions

This programme aims to strengthen the policy uptake and enhance the nutrition leadership and institutional capacity of the government, both at central and local levels. Particularly key are capacities of three institutions with inter-linked mandates, namely the BFSA, BNNC, and FPMU because they provide crucial technical services to Bangladesh's FNS governance architecture. Sub-national level capacities must also be developed to formulate projects, implement them and measure results. There is a need to “close the loop on monitoring” so that lessons from Bangladesh's results-based monitoring efforts lead to informed leadership that ensures “course corrections” to align implementation closely to policy goals. Support to the Scaling Up Nutrition (SUN) Multi-sectoral Platform that is led by MoHFW needs to continue to enable improved coordination and strengthened linkages between nutrition specific and nutrition sensitive policy frameworks and interventions to help scale up nutrition programmes. In addition, partnerships with non-government actors are weak or lacking, and measures are needed to enhance multi-sectoral horizontal and vertical coordination, to fully mainstream FNS national frameworks into coordinated actions of all local actors. Partly due to the limited guidance from national authorities, multi-sectoral coordination is inadequate at district and upazila level. As part of coordination, a clear division of responsibilities is needed to strengthen the interface between local and national government officials, including delineation of the role of NGOs in implementing Government programmes. Initiatives that involve the collaboration of all local stakeholders, including in monitoring progress, are more likely to succeed, and gain sustained technical and financial support (see Programme V.5).

Programme V.4. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
279	162	117	139	81	59

Salient features of the programme

This program channels 0.9% of the total CIP3 budget -or 0.7% of the nutrition sensitive budget-, or 279 million USD, contributing to strengthening government policy uptake, nutrition leadership and institutional capacity at national and subnational level. It includes projects/project components such as the Cabinet's Division *Platforms for Dialogue-Strengthening Inclusion and Participation in Decision Making and Accountability Mechanisms in Bangladesh* which clearly endeavour to enhance the role of the government in its FNS leadership. Many others are about strengthening institutional or human resource capacities: the *Strengthening the Capacity of Department of Livestock Services Project* or the *Digital Survey Management Capacity Building Project* of the *Department of Land Records and Survey for Digital Land Survey Project*, for instance.

Programme V5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors

Justification for this programme

The many stakeholders of the food system – farmers, industry, government, academia, and NGOs - by partnering with each other, bring a variety of expertise, perspectives and resources that can help achieve the common goal of NFNSP. Partnerships can take a host of shapes with their own type of cross-sector collaboration: public-non-profit, private-private (P2P), public-private, private-non-profit, tripartite, and multi-stakeholder partnerships. They can be subnational, national and international. Bangladesh has long been a pioneer in multi-sector and multi-stakeholder partnerships engaging the government, businesses and civil society as demonstrated in the CIP2 2016-2020 implementation and monitoring. The role of the government is crucial to guiding through policy and legislation but also to investing in goods and services that other stakeholders cannot afford. The private commercial sector holds a key

role in FNS given the limited public sector resources yet there are still only few ongoing instances of PPPs relevant to FNS. Any partnership will typically involve some degree of risk taking which need to be mitigated by adequate frameworks that can help ensure mutual accountability, transparency and effectiveness.

Priority interventions

Institutions to bring together FNS actors such as the FBCCI or the Bangladesh Supermarket Owners' Association are limited in their scope. While FPMU has been leading a multi-agency government coordination mechanism since the onset of the NFP 2006, there is need for a broader umbrella organisation that can bring together all FNS stakeholders, including non government ones, in order to support and coordinate their work, exploit synergies, avoid duplication of efforts and encourage learning. Given the private sector's role at all stages of the FVC, its capacity to contribute to executing the commitments made in the NFNSP and other national strategies is paramount. Building a sustainable food system thus requires that private actors are able to use and access innovative technologies and knowledge in an efficient manner. Technological and knowledge transfer to private agents must be enabled and promoted, and bottlenecks preventing these transfers from happening identified and removed. In particular, public investment in R&D and subsequent transfer of technology and knowledge to private actors is essential where it is likely to produce public benefits and where private agents may not be able or willing to take on such investments because costs outweigh their potential benefit. In order to establish an environment where stakeholders want to engage in partnerships in a way that will benefit them as well as contribute to achieving the goals and objectives of the NFNSP, it is important that the understanding of these is harmonised across actors. This requires capacity building and advocacy activities across all sectors of society. The widespread networks of NGOs, even in remote areas, constitute a tremendous asset for the country, whose potential must be exploited further through collaboration within established rules. The Bureau of NGO Affairs will continue to play a major role in scaling up the service delivery across the country.

Programme V.5. cost and financing requirements in million USD

CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
220	220	-	110	110	-

Salient features of the programme

Amounting to a total of 220 million USD, this cross-cutting issue amounts to 0.7% of the total CIP3 budget. Out of the 16 projects/project components that are currently included in this programme, the Cabinet Office *Platforms for Dialogue-Strengthening Inclusion and Participation in Decision Making and Accountability Mechanisms in Bangladesh* specifically addresses its particular issues of concern. This project has been split in equal measure with Programme V.4. as it tackles the objectives of both these programmes. Another example is LGED's *Upazila Governance and Development Project* which aims to enhance the capacity of upazila parishads to deliver more effective and responsive public service to citizen through providing additional development fund and a series of capacity development to concerned stakeholders. Given that no project was planned as of June 2020, it is important that attention is given to the areas prioritised under this programme and that this is monitored over time.

9. CIP3 markers

CIP3 markers are designed to capture the sensitivity of CIP3 investments to food safety, FLW, gender, and climate resilience.

1. Improved food safety, quality control, and awareness of food safety and hygiene

The Constitution has enshrined the right to food as a fundamental principle of state policy in Article 15, and the food safety requirements must be ensured through enactment of appropriate laws. Amidst the complexity and wide range of acts, laws and regulations of various categories of food products that cut across the functions of various sectors, the Safe Food Act 2013 needs to be implemented. In 2020, the Bangladesh Agricultural Good Practices Policy was approved. Food safety standards and regulations cover not only food safety, but also issues such as plant and animal health, product quality, environmental protection, and social welfare. At the moment, there are central testing laboratories in the country but many lack updated facilities, have inadequate coordination and compliance of quality and technical standards set out by the Bangladesh Standards and Testing Institution (BSTI). With regard to export, there is need to comply with options for benchmarking national GAP codes in Asian developing countries to internationally accepted standards, such as the Codex and EUREPGAP, and more generally respect international food safety and environmental requirements. There are only few laboratories with appropriate international accreditation. The current inspection system needs to be reformed to create a functional, competent inspection authority overseeing food safety for imported foods. With the rise in consumer's expectations of safe and healthy food, participants along the food supply chain need to ensure that effective practices are in place to ensure food safety. Traceability processes -almost non-existent in Bangladesh- and regulatory frameworks are vitally important for food safety as well as operational efficiency of the food supply chain. As part of the food safety control system, it is also important to engage in public dialogue for effective and efficient control based on scientific evidence and good governance principles. BFSA needs to integrate robust traceability studies as part of its regulatory mechanisms to inform the system and put in place measures to improve the FVC. While food contamination and food adulteration happen because of the absence of satisfactory food regulatory and control systems, lack of education and awareness among food producers, food handlers and consumers is also to blame. Awareness raising on the importance of food safety must continue, tailoring the messages to groups as different as household cooks, children, men who often take care of the food shopping and women given their multiple roles in the household -preparing the food, distributing it, feeding children, storing it, etc. Particular attention to vulnerable sections of the population is needed to protect them from unscrupulous suppliers who may divert contaminated food to them in the absence of adequate food standards and enforcement.

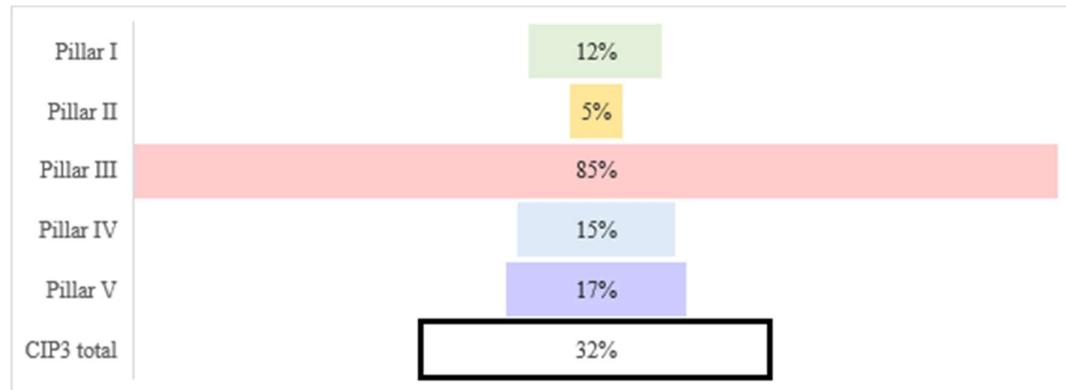
Projects for which any of the following questions yields a positive answer will be considered as contributing towards improving food safety, quality control, and awareness of food safety and hygiene. Does the project contribute to:

- Setting up the institutional framework needed to regulate and coordinate the food safety ecosystem of Bangladesh?
- Establishing the standards required by the Food Safety Act 2013 -while respecting Bangladesh's international obligations- and strengthening regulatory compliance?
- Mainstreaming food safety by building capacities and awareness across the value chain (from producers through GAP, GMP, GAqP and GHP, to processors, transporters, retailers and consumers).

Of the total CIP3 budget, 32% positively impacts on food safety. Sizeable projects/ project components that have been found to contribute to food safety include LGD's *Project for safe water Supply throughout the country (PSWSC)* which seeks to keep water safe for consumers, sanitation projects and those trying to deal more efficiently with waste and sewerage. DPHE's *Arsenic Risk Reduction Project for Water Supply*; and MoFL's *Combating the threats of antimicrobial resistance and zoonotic disease to achieve the GHSA in Bangladesh and Zoonoses and Transboundary Animal Diseases Prevention and Control Research Project* which deal with animal health are other examples of projects contributing to

improving food safety. There are important differences across Pillars in the contribution to food as can be seen from Figure 2. In fact, the very high contribution of Pillar III due to the projects included under *Programme III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes* conceals low contributions in other Pillars and most notably in Pillar II. One can conclude from this that there is a clear and urgent need for projects to be developed that can tackle the issue of food safety in Bangladesh especially in making food safe available at the point of production and processing.

Figure 2. Food safety marker by Pillar for the CIP3 nutrition weighted budget



2. Minimised on-farm and off-farm food losses, and waste

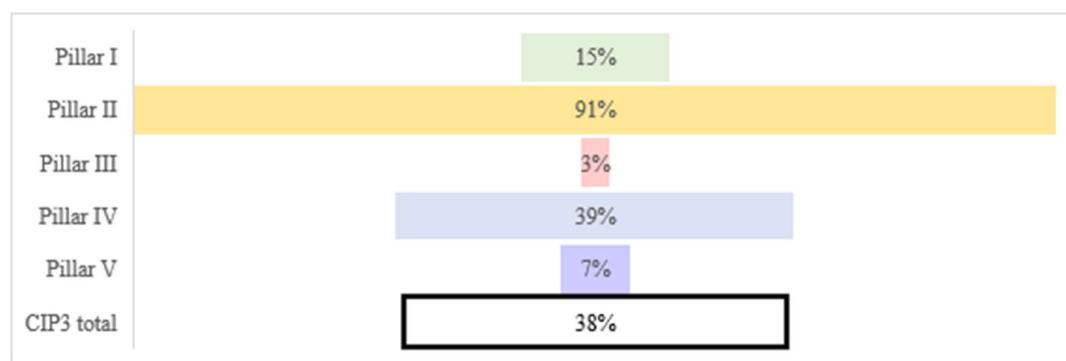
Food loss is the decrease in the quantity or quality of food resulting from decisions and actions by food suppliers in the chain from post-harvest up to, but not including the retail level. Losses negatively impact nutrition and safety of foods, notably fresh produce, which arises as a result of chemical and microbiological risks in horticultural chains and mechanisms for mitigating these risks. Reducing food losses is paramount to achieve FNS but it is also needed for environmental sustainability: up to 10% of global GHG emissions originated in FLW over 2010-2016. Transportation from the farm introduces a time gap between various stages of the food supply chain, from production to consumption where food and nutrient losses can occur. This may be due to damage of the produce because of inadequate temperature, mishandling, or even contamination. In Bangladesh, perishable foods are at high risk given the environmental variability, climate and limited availability of cold chains. Inadequate processing facilities also translate in elevated losses for produce such as milk. While Bangladesh needs to focus on achievement of SDG 12.3 which seeks to halve global food waste at retail and consumer levels as well as to reduce food loss during production and supply, care must be taken to work on this target in conjunction with the objective of keeping food safe: lack of compliance with and inadequate enforcement of laws, rules and regulations on food safety and hygiene will result in food being discarded and therefore in higher losses. Food waste refers to the decrease in the quantity or quality of food resulting from decisions and actions by retailers, food services and consumers. Not only does the disposal food waste constitute a sizeable logistical problem which adds to the problem of environmental pollution, especially in the context of a fast-growing population, it also raises ethical issues in a country where many still suffer from food insecurity and malnutrition. Decreasing FLW can thus be achieved through a host of measures that range from the implementation of rules, laws and regulations that relate to this issue, to investments in specific infrastructure that can preserve required temperature or humidity levels for example, or training of all agents of the food value chain, to sensitise them to this problem and provide solutions to it. Investments that do not pertain directly to the food system such as transport infrastructure can also have a substantial impact on FLW reduction by shortening value chains and therefore need to be given due attention.

Projects deemed to contribute to FLW reduction will yield an affirmative answer to any of the following questions. Does the project contribute to decreasing:

- Losses occurring during harvest/slaughter or on-farm losses associated with post-harvest/slaughter operations?
- Losses arising during transport, storage and distribution, processing or packaging?
- Waste arising during retail or consumption (at public or household level)?

The value of the projects included in the CIP3 estimated to contribute to minimising on-farm and off-farm FLW is 11,880 million USD which corresponds to the 38% of the total CIP3 budget (see Figure 3). Of this, 61% is concentrated under Pillar II. Efficient and nutrition-sensitive post-harvest transformation and value addition, mostly due to the role of transport infrastructure. Projects that will specifically address the issue of FLW across the value chain are needed if SDG 12.3 is to be achieved. MoA is planning three projects that are to establish vapor heat treatment as a means to preserve mangoes for longer for export purposes. But more needs to be done to achieve a sizeable reduction in FLW.

Figure 3. FLW marker by Pillar for the CIP3 budget



3. Gender equity achieved in food and nutrition security

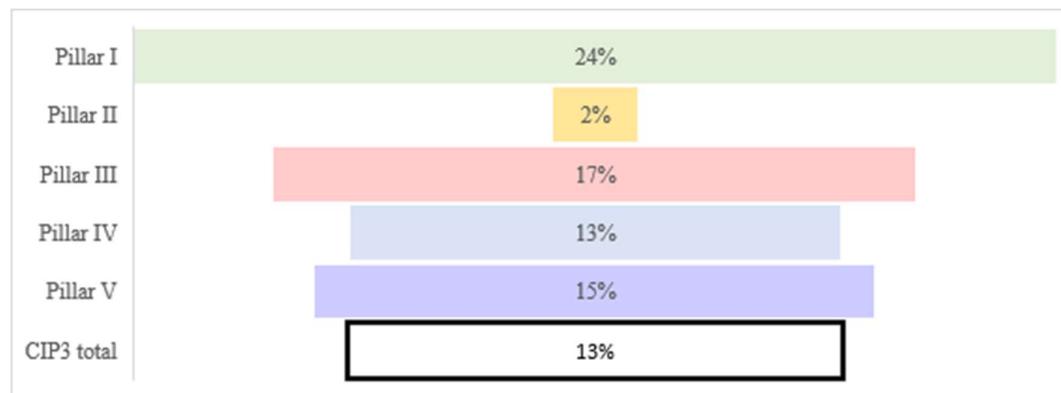
Addressing gender equality in policy and programming is key to achieving FNS. Recognising and focusing on women for their key role in ensuring FNS across the value chain is one of the guiding principles of this investment plan. Women account for about half of the work force in agriculture and nearly three-fourth of the rural female work force is engaged in agriculture yet a majority does not have title to land and access to support services. The agricultural wage differential was 31.4% in 2018-19. Further, women belonging to ethnic and marginalised communities are generally found to be more food and nutrition insecure. The National Women's Development Policy (2011) flagged the need to recognize women's contribution in agriculture and remove wage discrimination. The Gender Policy of the NSSS 2018 has recommended a 50% share for women for settlement or agriculture in *khas* lands; the Ministry of Land has taken measures to secure women's rights to land. Capacity building of women and other groups discriminated based on their gender, inclusive and gender-sensitive financing arrangements and institutional reforms to tackle gender-based inequalities and discrimination are priorities listed in the NFNSP. Gender dimension will be integrated in all programmes and at the institutional level, capacities will be strengthened for generating gender disaggregated data to enable targeted policy making with a socially inclusive approach.

In order to identify the projects that contribute to achieving gender equity in FNS, a positive response will be needed to any of the following questions. Does the project contribute to:

- Levelling up by allocating assets and resources to all, irrespective of gender, giving them access to inputs, employment etc.
- Transforming the food system to promote gender equality by promoting shared control of resources and decision making and women empowerment.
- Gender mainstreaming by integrating gender concerns within institutions and their decision-making.

Much effort is required still to integrate a gender focus in the projects working to achieve the goal of the NFNSP with 213 out of 1019 projects/project components marked as gender sensitive throughout food systems for 13% of the total CIP3 budget, or 4,115 million USD. This includes projects/project components that expressly aim to mainstream the issue of gender for FNS and advance the plight of women both at policy level and on the ground (e.g. MOWCA's *Strengthening Gender Responsive Budgeting in Bangladesh* and the *Second Phase of the Urban Based Marginal Women Development Project*). But it also includes projects where these objectives are implicit or mentioned among the several objectives. Pillar II particularly requires more efforts with regards to gender (Figure 4).

Figure 4. Gender marker by Pillar for the CIP3 budget



4. Adaptation to and mitigation of climate change for a resilient food system

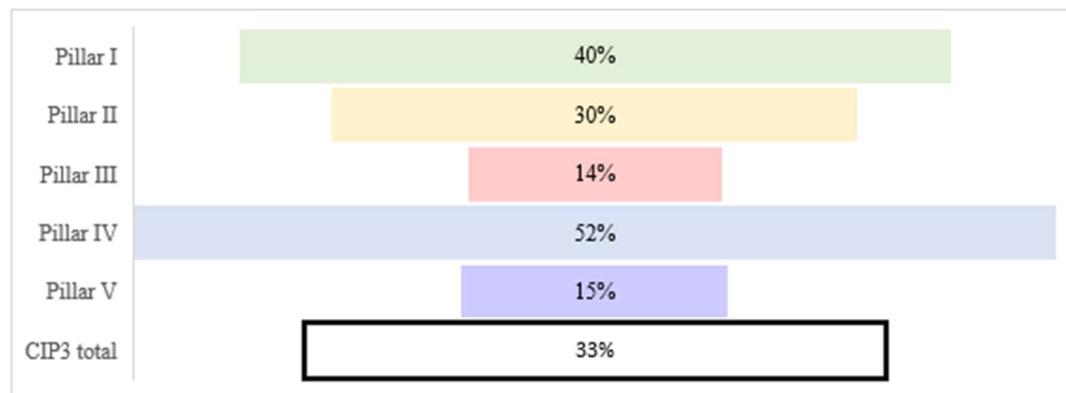
Climate change is expected to continue adversely impacting Bangladesh's food systems. Erosion and intrusion of saline water caused by rise in sea levels affects the livelihood of people living in coastal regions. Shortages in cultivable agricultural land are exacerbated, yields reduced, and road maintenance costs in coastal areas increased due to blistering and cracking of road surfaces. Measures to support climate resilience are being taken across the food system and through a Climate Smart Agriculture (CSA) approach, with initiatives on improved technological adoptions, capacity building, and financial and institutional support at both national and local levels. Inter-ministerial cooperation, convergence, partnerships, and coordination and a conducive enabling policy environment are essential conditions for these initiatives to be effective. Interventions to support resilient infrastructure development are considered under this marker because they are key in reducing saline water infiltration and soil erosion. The Ministry of Environment, Forest & Climate Change (MoEFCC) has demonstrated how climate resilience and food security can be enhanced with community participation in coastal areas with endeavours such as the *Integrating Community-based Adaptation into Afforestation and Reforestation (ICBA-AR)* project through mangrove forest restoration integrated with livelihood promotion. Also, Power Division's projects focusing on the expansion of renewable energy are considered as contributing to climate change mitigation. Appropriate innovative fiscal instruments (e.g., tax incentives for low carbon green development, subsidy for green products, and loan and insurance products) will be worked out drawing on experience from other countries, as recommended under the Climate Fiscal Framework 2020. Execution of the many initiatives formulated requires effective governance based on proper understanding of the issues. To this end, capacity building on climate adaptation to, and mitigation of climate change for resilient food systems and finance will be undertaken at multiple levels – government officials at national and sub-national levels, private sector, NGOs and community at the grassroots. The government will continue to actively engage with the international community for knowledge sharing, raising finance, demonstrating pilots and learning from best practices.

In line with the *Handbook on OECD-DAC Rio Markers on climate change* and the *Climate Financing for Sustainable Development Budget Report 2021-22*, a project is marked as climate-resilience related if it contributes to:

- “The objective of stabilization of greenhouse gas concentration” and
- Reducing “the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience”¹⁵.

The value of projects/project components in the CIP3 estimated to contribute to climate resilient food systems is 10,301 million USD which corresponds to the 33% of the total budget. Of this, 46% is concentrated in Pillar IV because of the Programme IV.2. which aims to increase the resilience of agricultural sector through climate smart technology (Figure 5). Examples of projects that specifically contribute to rendering the food system resilient are the *Flood and Riverbank Erosion Risk Management Investment Program (Tranche-1)* and more generally riverbank protection rehabilitation projects. Projects aiming to develop railway transportation have also role to play.

Figure 5. Climate resilience marker by Pillar for the CIP3 budget



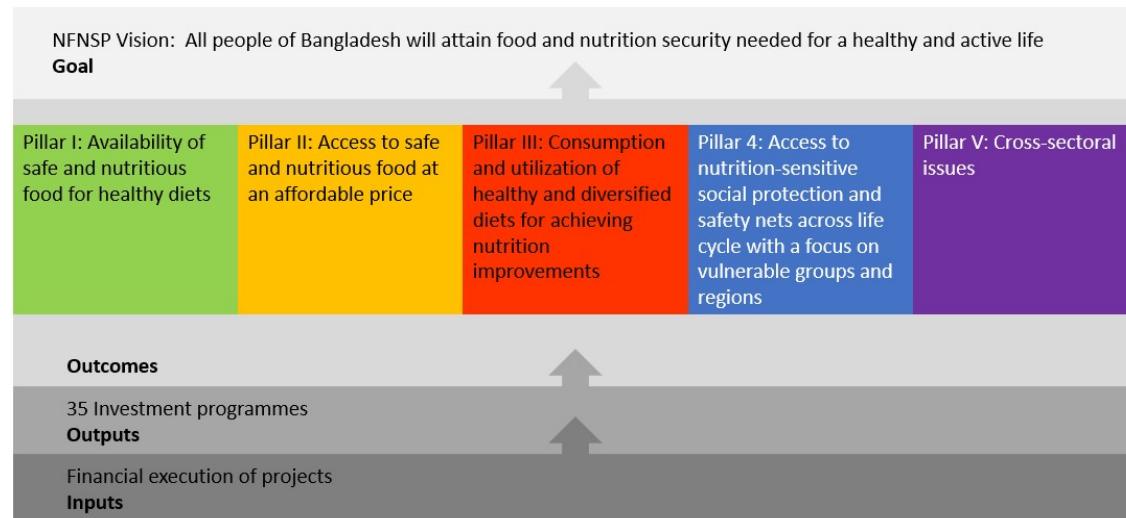
¹⁵ [OECD DAC Rio Markers for Climate - Handbook](#)

10. Results framework, indicators of programmes and impact of investments

To ensure that the Plan of Action of the NFNSP can be operationalized, investments are needed. This means transitioning from the PoA to the CIP3: on one side we have the desired interventions, on the other the budgeted financing and commitments to ensure food systems in Bangladesh become sustainable and resilient. The five Objectives, 17 Strategies and 64 AoIs of the PoA were the result of several consultations at both national and district levels with the government, civil society organizations, the private sector and local stakeholders. GoB and DPs allocate or commit financial resources to make the proposed interventions under the PoA AoIs actionable and these are included in the CIP3.

Figure 6 depicts the three-level results chain of logically linked expected outcomes, outputs and inputs whereby it is assumed the effective implementation of the identified investment interventions will contribute to the achievement of the related expected outputs (the 35 Investment Programmes) and outcomes (the 5 Pillars), thus leading to the attainment of the NFNSP Vision.

Figure 6. CIP3 Results chain



At the input level, results are monitored by measuring the evolution in the financial execution of projects, government and donor commitment, aggregated by Programme and Pillar. A series of SMART¹⁶ indicators have been identified in order to monitor outputs, outcomes and the goal of the CIP3 (Table 2). The CIP3 results framework shares its goal and outcome indicators with the PoA while the CIP3 output indicators are a subset of that of the PoA. Both documents are monitored simultaneously on a yearly basis.

¹⁶ Specific, Measurable, Achievable, Relevant and Time-bound.

Table 2. CIP3 Results indicators

	Proxy indicator	Baseline 2020/21	Target	Verification source
GOAL LEVEL				
Improve the food and nutrition security status to the level needed to achieve the Food and Nutrition Security (FNS)-relevant SDG targets and fulfil related national and international commitments by 2030	Prevalence of Undernourishment (SDG indicator 2.1.1.)	9.7% for 2018-20	12% by 2025 10% by 2030 (as per SDG Tracker)	FAOSTAT
	Prevalence of moderate and severe food insecurity in the population, based on the Food Insecurity Experience Scale- FIES (SDG indicator 2.1.2)	31.9% for 2018-20	Decreasing	FAOSTAT
	Prevalence of stunting (height for age <2 SD from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age (SDG indicator 2.2.1)	28.0% in 2019	20% by 2025 15.5% by 2030 (as per SDG Tracker)	BBS, SDG Tracker
	Prevalence of wasting among children under 5 years of age (<-2 SD of weight for height) (SDG indicator 2.2.2)	9.8% in 2019	7% by 2025 5% by 2030	BBS, SDG Tracker

	Proxy indicator	Baseline 2019/20	Target	Verification source
MARKERS - OUTCOME LEVEL				
MARKER I Improved food safety, quality control, and awareness of food safety and hygiene	n. of food items certified as per BSTI mandatory standards	80	Increasing	BSTI
MARKER II Minimised on-farm and off-farm losses and waste	Food Waste and Loss as a % of agricultural production	Data not yet created. No national FLW survey planned yet. FLW strategy needed.	Decreasing	MoFood, BBS
MARKER III Gender mainstreamed for food and nutrition security	% of national budget allocated to gender by: MoA MoFL MoFood MoWCA Health Services	3.9% 31.4% 3.4 % 58.1% 2.7%	Stable or more	Gender Budget , MoF
MARKER IV Food systems adapted and resilient to climate change	% of national budget allocated to climate by: MoA MoFL MoFood MoWCA Health Services	37.1% 30.5% 2.9% 12.9% 2.7%	Stable or more	Climate Budget , MoF

	Proxy indicator	Baseline 2020/21	Target	Verification source
OUTCOME LEVEL				
PILLAR I Availability of safe and nutritious food for healthy diets	Rice import dependency, 3-year average of (Total rice import/Total domestic availability*100) ¹⁷	1.35%	0%	BBS and FPMU
	Agricultural sector GDP growth rate in %	3.17%	3.9% in 2025	BBS
	a) Crop and horticulture	2.29%		
	b) Fisheries	5.74%		
	c) Livestock	2.94%		
	d) Forestry	4.98%		
	Share of non-rice value added in total food value added in current price ¹⁸	76.5%	Increasing	BBS
OUTPUT LEVEL				
I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas	n. of new improved crop varieties released	36		
	Rice	10		BRRI, BINA, MoA
	Wheat	5		
	Maize	1		
	Potato	1		
	Pulses	2		
	Vegetables	6		BARI, BINA, MoA
	Edible oilseeds	2		
	Fruits	3		
	Jute	1		
	Sugarcane	1		
	Spices	4		
I.2. Gender, climate and nutrition sensitive extension services	n. of farmers trained on sustainable practices by	DAE	545,890	DAE, MOA
		DLS	220,000	DLS, MoFL
		DoF	132,554	DoF, MoFL
I.3. Efficient and environmentally friendly irrigation technology	Annual increase in arable land under surface irrigation in ha		10,000	MoLGDRCLGED
I.4. Improved efficiency of agricultural inputs	Supply of fertilizers as % of estimated demand ¹⁹ for:			
	Urea	55%		
	MoP	34%		
	TSP	35%		
	DAP	63%		DAE, MoA

	n. of 'Krishi Cards provided in million male female	20.15 18.80 1.35		DAE, MoA
I.5. Enhanced role of POs and cooperatives	n. of agriculture-related cooperative societies - government sponsored - self-initiated	2,254 881 1,373		DAE
I.6. Promotion of agricultural diversification into high nutrient content and market value commodities including animal-source, regional and ethnic foods	Production of selected animal-source ethnic and regional foods in thousand MT <ul style="list-style-type: none">- Potato- Pulses- Brinjal- Oilseeds- Lal shak- Pumpkin- Beans- Guava- Mango- Jackfruit- Coconut- Papaya (ripe)- Pineapple- Banana	9,887.2 931.2 936.2 1,199.7 121.95 492.18 678.35 525.85 2,410.25 2,170.25 569.22 611.55 435.18 1,855.27		BBS, Agriculture Yearbook
	<ul style="list-style-type: none">- milk- meat- egg in crore	11,985.00 8,440.00 2,057.64		DLS APA Report
	<ul style="list-style-type: none">- fish	4,621		Fisheries Resource Survey System, DoF
	<ul style="list-style-type: none">- tara sob in m ton- jhur/ tan in m ton- dhumur in m ton	88 90 60		DAE
I.7. Developed Blue economy	Coverage of marine protected areas in ha	69,800		DoFish/ MoEFCC

¹⁷ Total domestic availability = Net production + Private import + Public distribution - Domestic procurement; Total rice import = Public import + Private import

¹⁸ The indicator is computed as follows: total value added minus rice value added

	Proxy indicator	Baseline 2020/21	Target	Verification source
OUTCOME LEVEL				
PILLAR II: Access to safe and nutritious food at an affordable price	Average annual CPI inflation rate (8FYP indicator) Rice purchasing capacity (average agricultural wage -without food- as % of average retail coarse rice price) Change in Indicator of Food Price Anomalies (IFPA) for rice (SDG 2.c.1) ⁵⁴	5.6% 5.90% (2019/20) 1.1 ²¹	4.60% by 2025 as per 8FYP 7.7% by 2025 (per capita real GDP growth rate + 0.5) ²⁰ Stable	Bangladesh Bank Bangladesh Bank/ DAM/ BBS FAOSTAT
OUTPUT LEVEL				
II.1. Efficient FVCs through transport infrastructure	% of upazila and union road network in good condition (8FYP indicator)	67%		LGED
II.2. Efficient FVCs through innovation and improvements in post-harvest processing and marketing, improved infrastructure, reduced FLW and enhanced cooperation among agents	n. of growth centres, rural markets, women market centres, and Union Parishad Complexes developed by LGED and DAM	205 LGED 96 DAM		LGED and DAM
II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices	Number of markets regulated by DAM	977		DAM
II.4. Trade liberalisation and facilitation to support the supply of quality food at all times	Bangladesh food trade in million USD	380		World Integrated Trade Solutions – Trade Statistics, Food
	Bangladesh's food trade in SAARC as a share of its total trade	20%		BBS
II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agroprocessors including for the most vulnerable sections of the population	n. of 4G mobile users in rural areas in million (SDG 9.c.1)	35.2		BTRC Annual Report
	actual disbursement of agricultural loan in billion BDT & share of its target	227.5 & 94% (2019/20)		Bangladesh Bank

²⁰ According to the 8FYP, the GDP growth rate is projected at 8.51% in 2025. Factoring in the projected population growth rate (1.18%), the target is computed as: $8.51 - 1.34 + 0.5 = 7.67\%$.

²¹ Calculations based on the [FAO-GIEWS methodology](#).

	Proxy indicator	Baseline 2020/21	Target	Verification source
II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers	National, urban and rural proportion of population with access to electricity (SDG 7.1.1 and 8FYP indicator)	96.2% (2020)		SDG Tracker
	n. of agricultural produce export zones (EZ)/ export processing zones (EPZ)	To be produced		FPMU
II.7. Promotion of inclusive cooperative/group-based processing and marketing	n. of agricultural marketing groups (DAM)	1520		DAM
II.8. Preservation and promotion of food safety and nutrients along the value chain including though fortification	n. of mandatory food items certification by BSTI	80		BSTI
	Management System Certification	23		BSTI
II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people	n. of Agri Service Centres (Krishi Tottho Service)	12,362		DAE

	Proxy indicator	Baseline 2020/21	Target	Verification source
OUTCOME LEVEL				
PILLAR III: Consumption and utilization of healthy and diversified diets for achieving nutrition improvements	National DEI from cereals	64% (2016)	50% by 2025 (NPAN)	HIES, BBS
	Proportion of households consuming adequately iodised salt i.e., containing at least 15 ppm (NPAN2 indicator)	58.5% (MICS 2019)	90% by 2025 (NPAN2)	MICS, MoHFW, BBS
	Proportion of women with minimum dietary diversity using MDD-W (NPAN2 indicator)	46% (FSNSP 2015)	75% by 2025 (NPAN2)	BBS
	% of children aged 6-23 months receiving MAD (WHO)	27% (2019)	>40% by 2025 (NPAN2)	BDHS, BBS
	Proportion of population using safely managed drinking water services (SDG 6.1.1 and 8FYP indicator)	42.6% (2019)	75% by 2025 (8FYP)	MICS, BBS
OUTPUT LEVEL				
III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis	% of Dietary Energy Intake (DEI) from cereals	64% (2016)	DEI-HIES, BBS LGD APA Report BNNC, MoHFW FPMU BBS Sample Vital Registration System 2020	DEI-HIES, BBS
III.2. Operationalization of healthy diets for nutrition outcomes	n. of "Growth Centres" in rural and urban areas	120		LGD APA Report
III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhancing child nutrition outcomes at sub national levels	n. of district nutritionists recruited	0		BNNC, MoHFW
III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and NCDs	n. of institutions promoting dietary guidelines	18 (2020)		FPMU
III.5. Expansion of programmes for immunization, control of ARI, prevention of cholera and diarrhoeal diseases	Under-5 mortality rate per 1,000 live births (SDG 3.2.1, SDG-NPT 6 and 8FYP indicator)	28 per 1,000 live birth (2020)		BBS Sample Vital Registration System 2020
III.6. NNS delivery and early childcare practices to promote maternal and child nutrition	Proportion of households consuming adequately iodised salt i.e., containing at least 15 ppm (NPAN2 indicator)	58.5% (2019)	BBS-MICS MICS, MoHFW, BBS	BBS-MICS
	Coverage of vitamin A supplementation in children 6- 59 months (NPAN2)	97% (2020)		MICS, MoHFW, BBS
III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene	Percentage of population using safely managed sanitation services (SDG 6.2.1 and 8FYP)	64.1% (2019)		MICS, MoHFW, BBS

practices to better impact food utilization and nutrition outcomes	Proportion of population using hand-washing facility with soap and water (SDG 6.2.1)	74.8% (2019)		
--	--	--------------	--	--

	Proxy indicator	Baseline 2020/21	Target	Verification source
OUTCOME LEVEL				
PILLAR IV: Access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	Proportion of population living below national upper poverty line (SDG 1.2.1)	20.5% estimate (2019)	12% by 2025	BBS, SDG Tracker
	Ratio of income of top 10% population and bottom 10% population (SDG-NPT 28)	37.8% (2016)	20 by 2030	BBS, SDG Tracker
	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population (SDG indicator 10.1.1.a)	7.7% (2018)	9.5% by 2025	BBS, SDG Tracker
	Social safety net programs budget (excl. gov pensions) as % of national budget	13.5%	2% of GDP by 2025(8FYP)	MoF
OUTPUT LEVEL				
IV.1. Improved management of the public food stock and distribution system	PFDS distribution as % of target	93.3%		DG Food
IV.2. Increased resilience of agriculture systems	Annual change in agricultural rehabilitation budget allocation	129%		MoFin, MoA, MoDMR
IV.3. Disaster-coping ability of vulnerable families	n. of disaster resistant homes establishment in rural areas to cope with the impact of climate change and disaster risk	35,000		MoDRM
IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation	Annual % change in the budget allocated to disaster management	-13.7%		MoF
IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity	Share of fortified rice in PFDS system	7.12%		DG Food
IV.6. Safety nets in place during periods of seasonal crises and food shortages	n. of beneficiaries in seasonal social protection programmes, incl. Employment Generation Program for the Poorest, Food for Work, Work for Money, Test Relief, Food Friendly Programme and OMS (in millions)	34.85		Social safety net Budget Ministry of Finance
IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development	Social safety net programmes budget (excluding government pension) as % of national Budget	13.49%		Social safety net Budget Ministry of Finance

	Proxy indicator	Baseline 2020/21	Target	Verification source
OUTCOME LEVEL				
Pillar V. Cross-cutting Programmes	Number of annual high-level FNS policy reports produced (e.g., NFNSP Monitoring Report, NPAN 2 Monitoring Report, SUN Annual Report)	3: CIP MR 2021, NPAN 2 Monitoring Report, SUN Annual Report	At least 2 per year	FPMU
	Number of certified foods /food products certified as per mandatory standards by BSTI	80	Increasing	BSTI
	Food Waste and Loss as a % of agricultural production	Data not yet created. No national FLW survey planned yet. FLW strategy needed.	Decreasing	MoFood, BBS
	% availability of the 19 FNS indicators listed in FAO 2019 report "Tracking Progress on Food and Agriculture-related SDG Indicators"	47% (2021)	100%	SDG tracker
	Number of meetings of the LCGs on FNS (ARDFS, DER and Health)	8	At least 3 per year for each relevant LCG	FPMU
OUTPUT LEVEL				
V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data	n. of protocols for FNS data generation/exchange approved by BBS	0		BBS
V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development efforts	New CIP produced and operationalised	1 (finalised in 2022)		FPMU
V.3. Effective regulatory instruments and guidelines	% of deaths due to: Cardiovascular disease Cancer (liver) Diabetes Respiratory disease	25.8 3.4 2.9 8.6		SVRS, 2020, BBS
V.4. Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government	n. of gov officers in BFSA, BNNC and FPMU	BFSA: 97 BNNC: 11 FPMU: 21		BFSA BNNC FPMU
V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors	Creation of FNS civil society umbrella organization, and n. of its members (NGO, academia, private sector, etc)	Not created yet		FPMU

11. CIP3 baseline budget

The financed budget and pipeline of this investment plan are estimated based on:

1. the available financing from ongoing investment activities financed by the Government and DPs;
2. additional funds required based on the needs expressed to achieve the CIP2 results as expressed by Government agencies and DPs through their pipeline projects.

Because the CIP3, like the CIP2, is nutrition-sensitive, different types of activities included in the investment programmes are assigned different weights according to their relevance to nutrition. A detailed explanation of the steps taken to estimate the CIP3 budget are given in Annex 2.

Generating the CIP3 baseline budget

- i. **Identification of projects to be included in the CIP3:** All the ADP projects implemented or planned by the GoB and listed in Planning Commission reports as of 30th June 2020 are reviewed in order to identify those that contribute to achieving the goals of the NFNNSP, as specified in its PoA.
- ii. **Classification of the projects selected for inclusion in the CIP3:** Once identified, the projects (or their components) are apportioned according to the CIP3 investment framework.
- iii. **Discounting of the non FNS element:** For projects which benefit sectors of the economy and society other than FNS (such as road infrastructure development, building of power plants and large data gathering projects such as the census), the non-FNS element is discounted by applying a food-system (FS) weight based on the share of the GDP generated by the production, transformation and consumption of agri-food products.
- iv. **Prioritization based on a nutrition-sensitive ranking:** Each project is prioritized according to its level of contribution to nutritional outcomes, in line with the CIP2, namely: Nutrition Sensitive+ (where 100% of the project budget is included in the CIP3), Nutrition Sensitive (75% of the budget is counted) and Nutrition Supportive (50% of their budget is included).
- v. **Attribution of markers:** As detailed in Section 9, each project is scrutinised to decide whether they should be attributed any of the four markers of interest in this investment plan.
- vi. **Data revisions and validation.**

Table 3 provides the CIP3 baseline budget. It is split into the total budget and the nutrition-sensitive budget. The budgets are shown for each programme in Pillars from I to IV, giving the total baseline for the CIP3. Table 5 shows the budgets for each of the cross-cutting programmes of Pillar V. For the total and nutrition-sensitive numbers, three numbers are provided:

1. The total budget which is the sum of 2. and 3.
2. For existing ongoing FNS-relevant projects, the amounts to be financed during the life of the CIP3 as of 30th June 2020.
3. For projects that are in the Government's or the DPs' pipeline, commitments as of 30th June 2020.

The CIP3 total budget amounts to USD 31,518 million of which USD 5,295 million are in the pipeline. When nutrition weights are applied, the CIP3 is worth million 20,238 million with USD 3,367 million in the pipeline.

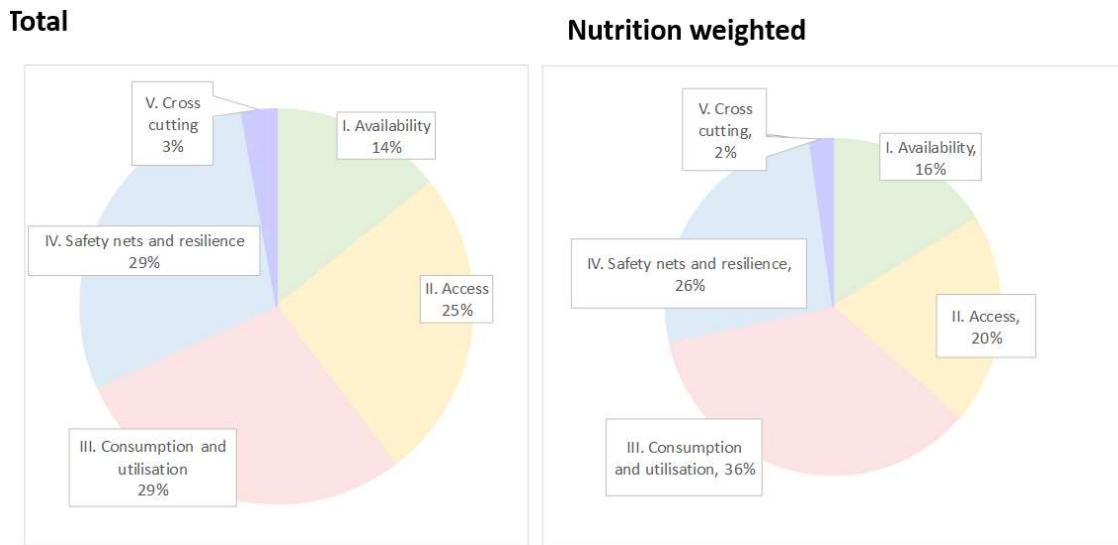
Table 3. CIP3 budget by programme: total and nutrition-sensitive (USD million)

CIP3 Pillar and Programme	CIP3 total	Total financed	Total pipeline	Nutrition-weighted CIP3 total	Nutrition-weighted total financed	Nutrition-weighted total pipeline
I. To ensure availability of safe and nutritious food for healthy diets Sum	4,471	3,812	659	3,271	2,779	492
I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas	81	74	7	61	55	5
I.2. Gender, climate and nutrition sensitive extension services	290	166	124	218	125	93
I.3. Efficient and environmentally friendly irrigation technology	614	568	46	460	426	34
I.4. Improved efficiency of agricultural inputs	2,608	2,238	370	1,956	1,679	278
I.5. Enhanced role of POs and cooperatives	61	61	-	30	30	-
I.6. Promotion of agricultural diversification into commodities with high nutrient content and market value including animal-source, regional and ethnic foods	550	446	104	413	335	78
I.7. Developed Blue economy	266	258	8	133	129	4
II. Efficient and nutrition-sensitive post-harvest transformation and value addition Sum	8,024	7,018	1,007	4,080	3,577	503
II.1. Efficient FVCs through transport infrastructure	5,591	5,085	506	2,796	2,543	253
II.2. Efficient FVCs through innovation and improvements in post-harvest processing and marketing, improved infrastructure, reduced FLW and enhanced co	661	576	85	330	288	42
II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices	6	6	-	3	3	-
II.4. Trade liberalisation and facilitation to support the supply of quality food at all times	482	126	356	241	63	178
II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agroprocessors including for the most vuln	14	14	-	7	7	-
II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers	1,027	968	59	514	484	30
II.7. Promotion of inclusive cooperative/group-based processing and marketing	35	35	-	17	17	-
II.8. Preservation and promotion of food safety and nutrients along the value chain including though fortification	64	64	-	64	64	-
II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people	144	144	-	108	108	-
III. Improved dietary diversity, consumption and utilization Sum	9,029	7,703	1,326	7,162	6,119	1,044
III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis	38	32	6	38	32	6
III.2. Operationalization of healthy diets for nutrition outcomes	152	3	149	152	3	149
III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhanc	134	134	-	134	134	-
III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and NC	866	866	-	866	866	-
III.5. Expansion of programmes for immunization, control of ARI, prevention of cholera and diarrhoeal diseases and NCDs	89	89	-	89	89	-
III.6. NNS delivery and early child care practices to promote maternal and child nutrition	282	242	40	282	242	40
III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization an	7,467	6,336	1,131	5,600	4,752	848
IV. Enhanced access to social protection and safety nets and increased resilience Sum	9,086	7,040	2,046	5,271	4,072	1,199
IV.1. Improved management of the public food stock and distribution system	162	159	3	122	119	2
IV.2. Increased resilience of agriculture systems	3,390	2,331	1,060	1,695	1,165	530
IV.3. Disaster-coping ability of vulnerable families	912	906	6	684	680	4
IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation	887	199	688	665	149	516
IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity	887	886	2	665	664	1
IV.6. Safety nets in place during periods of seasonal crises and food shortages	63	57	6	47	43	4
IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship developmen	2,786	2,503	282	1,393	1,252	141
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security Sum	908	650	258	454	325	129
V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data	356	217	139	178	108	69
V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development effo	12.0	11.8	0.2	6.0	5.9	0.1
V.3. Effective regulatory instruments and guidelines	41	39	2	20	20	1
V.4 Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government	279	162	117	139	81	59
V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors	220	220	-	110	110	-
Total	31,518	26,222	5,295	20,238	16,871	3,367

A few points stand out from the analysis of the CIP3 budget:

- The pipeline projects represent 17% of the entire budget. This means that while resources have been committed to ensure the goals of the NFNNSP are achieved, future commitments need to be closely monitored in order to ensure more resources are mobilized towards food systems.
- The size of the CIP3 is substantially larger than that of the CIP2, which stood at USD 19,225 million as of June 2019. While the CIP2 also adopted a food systems approach, it was the investment arm of a policy which did not. The CIP3 reflects the full-fledged food systems approach of the NFNNSP which results in important sectors being included in the plan. For example, the supply of electricity, essential for the smooth and safe transition of food through the value chain, has now been included. Ministry of Power, Energy and Mineral Resources projects that seek to build the electrical capacity of the country typically require substantial budgets. While previous investment plans focused on rural roads only, in the CIP3, all types of transport systems (all roads, navigational routes, railways) have now been included and estimated based on their actual contribution to the food systems in Bangladesh.²²
- Pillar I only accounts for 14% of the total budget (16% for the nutrition sensitive budget) which is unexpected given the importance and number of actions needed under it. Pillar V is very small which can in part be explained by the less costly nature of projects that are needed under it, but certainly also mean that the programmes under this Pillar need urgent attention.
- While Pillar III constitutes 29% of the total CIP3 budget, this is mostly on account of the water and sanitation projects which are numerous and costly. Without them, Pillar III only accounts for 5.0% of the total CIP3 which is likely to be inadequate to fulfil its objectives.
- While DPs fund 37% of ongoing projects, this differs from Pillar to Pillar (Table 4): they only fund 30% of Pillar IV against half of Pillar I. Their share is slightly higher when looking at the nutrition sensitive budget.

Figure 7. Share of different pillars in total CIP3 budget



²² A detailed explanation of the estimation techniques utilized is included in Section 9.

Table 4. Share of Government and DP funding for ongoing projects by Pillar

Pillar	GoB	DPs
I. To ensure availability of safe and nutritious food for healthy diets	50%	50%
II. Efficient and nutrition-sensitive post-harvest transformation and value addition	60%	40%
III. Improved dietary diversity, consumption and utilization	65%	35%
IV. Enhanced access to social protection and safety nets and increased resilience	70%	30%
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security	54%	46%
Total	63%	37%

12. CIP3 markers: baseline budget

Table 5 and Table 6 present the CIP3 markers which focus on: food safety; FLW; gender sensitive food systems; and climate resilience. These markers have been designed to assess how the CIP3 projects' inventory address those issues both within the food system and by pillars. The total budget dedicated to each marker and as a percentage of each Pillar and of the total CIP3 budget is shown, respectively.

The markers on food safety and FLW are substantial in Pillars II and III, reflecting the fact that they include projects to develop transport and water and sanitation infrastructure. Both are key to ensuring food safety (through faster transportation from producer to consumer and clean water) which in turn can minimise loss and waste of foods.

The marker showing the contribution of CIP3 projects to the creation of a climate-resilient food system amounts to USD 10,318 million or 34% of the CIP3 (30% when considering the nutrition-sensitive budget). While this is substantial, given the scope of the effects of climate changes on food systems in Bangladesh, this percentage is expected to rise over the lifespan of the CIP3.

Table 5. CIP3 markers' budget (in million USD)

Pillar	Total				Nutrition weighted			
	Food safety	FLW	Gender	Climate resilience	Food safety	FLW	Gender	Climate resilience
I. To ensure availability of safe and nutritious food for healthy diets	553	664	1,088	1,787	415	496	749	1,275
II. Efficient and nutrition-sensitive post-harvest transformation and value addition	408	7,299	180	2,376	227	3,675	106	1,188
III. Improved dietary diversity, consumption and utilization	7,685	274	1,532	1,291	5,823	205	1,507	970
IV. Enhanced access to social protection and safety nets and increased resilience	1,340	3,580	1,180	4,710	928	2,055	784	2,599
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security	151	63	134	137	76	32	67	69
CIP3 total	10,137	11,880	4,115	10,301	7,469	6,463	3,213	6,101

Table 6. CIP3 markers' budget as percentage of each Pillar and of the total CIP3 budget

Pillar	Total				Nutrition weighted			
	Food safety	FLW	Gender	Climate resilience	Food safety	FLW	Gender	Climate resilience
I. To ensure availability of safe and nutritious food for healthy diets	12%	15%	24%	40%	13%	15%	23%	39%
II. Efficient and nutrition-sensitive post-harvest transformation and value addition	5%	91%	2%	30%	6%	90%	3%	29%
III. Improved dietary diversity, consumption and utilization	85%	3%	17%	14%	81%	3%	21%	14%
IV. Enhanced access to social protection and safety nets and increased resilience	15%	39%	13%	52%	18%	39%	15%	49%
V. Strengthened enabling environment and cross-cutting programmes for achieving food and nutrition security	17%	7%	15%	15%	17%	7%	15%	15%
CIP3 total	32%	38%	13%	33%	37%	32%	16%	30%

13. Challenges in implementing and monitoring the CIP3

In order for the CIP3 to be utilized implemented, monitored utilised effectively, a number of challenges need to be overcome:

- Stakeholders' engagement throughout the different phases of the CIP3 and at all levels**

Political commitment to the CIP3 -both from all Government quarters and DPs- is paramount for the smooth implementation of the CIP3. Involvement of all stakeholders in the food system needs to be promoted, especially that of the private sector, with particular emphasis on SMEs.

- Adequate human and financial resources**

These are key to an effective CIP3. A well-functioning system requires that the role of officials from FPMU, TTs, TWG and FPWG in the implementation and monitoring process be endorsed at the highest level. This is especially the case for officials from ministries not traditionally associated with the food and nutrition policy of the country and whose role in the CIP3 process may seem as outside their job's purview. Emphasis must also be given to strengthening human resources at local level both for governance purposes and on-the-ground implementation. Regular monitoring of CIP3 which includes the progress in expenditure and resource mobilisation will feed into the GoB's planning and financial systems - 7FYP, MTBF, ADP and into the Economic Relations Division's outreach to organise additional funds.

- Coordination**

Because of the nature of the food system, the CIP3 is the collective responsibility of the numerous implementing entities which poses significant coordination challenges. It is aligned to all relevant existing policy frameworks. This requires however that the CIP3 implementation is also mainstreamed into other country systems and that their planning, budgeting, financial management and reporting are aligned and coordinated. The role of the Finance Division and ERD is key in this instance. Ensuring linkages and coordination among partners working towards common goal will ensure strategic focus and effective use of limited resources. Synergies are particularly important with the NPAN2 and the NSSS.

- Effective and regular monitoring**

Regular monitoring is paramount gauge progress, avoid duplication of efforts and identify gaps. Stakeholders are best positioned to benefit from obtaining relevant information on planned results and investment operations which can feed into planning. This life cycle ensures ownership, learning and sustainability of results making the CIP3 a "living document" that evolves to respond to changes and needs. Annual Review Meetings will promote partnerships and ensure linkages to national development goals.

14. Annexes

Annex 1. List of projects included in the CIP3 by programme (see separate file ‘Annex 1 – CIP3 projects’ list’)

Annex 2. CIP3 baseline budget: detailed steps

The cost and financing requirements of this investment plan are estimated based on:

1. the available financing from ongoing investment activities financed by the Government and DPs;
2. additional funds required based on the needs expressed to achieve the CIP3 results as conveyed by Government agencies and DPs through their pipeline projects.

Because the CIP3, like the CIP2 is nutrition-sensitive, different types of activities included in the investment programmes are assigned different weights according to their relevance to nutrition, as explained below.

Steps towards generating the CIP3 baseline budget

- i. **Identification of projects to be included in the CIP3:** All the ADP projects implemented or planned by the GoB (listed in Planning Commission reports) as of 30th June 2020 are reviewed in order to identify those that can contribute to achieving the goals of the NFNSP as specified in its PoA.
- ii. **Classification of the projects selected for inclusion in the CIP3:** Once identified, the projects (or their components) are apportioned according to the CIP3 investment framework. Each selected project is scrutinized and classified -based on information from multiple data sources (projects' documents, Thematic Team (TT) members' information obtained from GoB or DPs sources, online information)- under the various Investment Programmes (Table 1). Only projects' components relevant to CIP3 are included, i.e. in some cases, part of a project's budget will be excluded because it does not contribute to achieving the goals of the CIP3.
- iii. **Discounting of the non FNS element:** For projects which benefit sectors of the economy and society other than FNS (such as road infrastructure development, building of power plants and large data gathering projects such as the census), the non-FNS element is discounted. A food-system (FS) weight based on the share of the GDP generated by the production, transformation and consumption of agri-food products²³ is applied to the budget of each project. A project considered to only contribute to FNS has a FS weight of 1. If it contributes to other sectors, the FS weight applied is 16.7%.
- iv. **Prioritization based on a nutrition-sensitive ranking:** Each project is prioritized according to its level of contribution to nutritional outcomes, in line with the CIP2, namely: Nutrition Sensitive+ (where 100% of the project budget is included in the CIP3), Nutrition Sensitive (70% of the budget is counted) and Nutrition Supportive (50% of their budget is included). This allows to obtain a nutrition sensitive CIP3 budget in parallel to the total budget.
 - ‘nutrition-sensitive +’: certain interventions categorised by the Lancet as nutrition-sensitive are likely to have a more direct impact on nutritional outcomes e.g. promotion of dietary guidelines linked with national NCD strategies and related nutrition services. They have the potential to be leveraged to serve as delivery platforms for nutrition-specific interventions. They are given a greater weight in the nutrition budget given their more direct impact;
 - nutrition-sensitive;
 - nutrition-supportive: this third category is created for projects that craft an environment that is necessary for nutrition-sensitive or nutrition-specific projects to take place. This is not usually considered in nutrition budgets and yet bears a crucial role, albeit indirect, in the achievement of positive nutritional outcomes. Examples of this are the construction of infrastructure such as roads which will allow access to markets. It is also the case of strengthening of capacities to implement FNS-related policies. Such interventions are often sector-wide in nature which justifies not including their full cost under the CIP3.

²³ Found in the BBS, Statistical Yearbook, 2020/21.

Weights are attributed to each type of project according to which programme they fall under, yielding a nutrition-sensitive CIP3 budget (Table 7). These weights are as follows: - 100% for ‘nutrition-sensitive +’ projects - 75% for nutrition-sensitive projects - 50% for nutrition-supportive projects.

Table 7. Nutrition weights by CIP3 Programme

Pillar	CIP3 Programme	Nutrition weights
PILLAR I: Availability of safe and nutritious food for healthy diets	1 I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas	75%
	2 I.2. Gender, climate and nutrition sensitive extension services	75%
	3 I.3. Efficient and environmentally friendly irrigation technology	75%
	4 I.4. Improved efficiency of agricultural inputs	75%
	5 I.5. Enhanced role of POs and cooperatives	50%
	6 I.6. Promotion of agricultural diversification into commodities with high nutrient content and market value including regional and ethnic foods	100%
	7 I.7. Developed Blue economy	50%
PILLAR II: Access to safe and nutritious food at an affordable price	8 II.1. Efficient FVCs through transport infrastructure	50%
	9 II.2. Efficient FVCs through innovation and improvements in post-harvest processing and marketing, improved infrastructure, reduced FLW and enhanced cooperation among agents	50%
	10 II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices	50%
	11 II.4. Trade liberalisation and facilitation to support the supply of quality food at all times	50%
	12 II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agroprocessors including for the most vulnerable sections of the population	50%
	13 II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers	50%
	14 II.7. Promotion of inclusive cooperative/group-based processing and marketing	50%
	15 II.8. Preservation and promotion of food safety and nutrients along the value chain including though fortification	100%
	16 II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people	75%
PILLAR III: Consumption and utilization of healthy and diversified diets for achieving nutrition improvements	17 III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis	100%
	18 III.2. Operationalization of healthy diets for nutrition outcomes	100%
	19 III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhancing child nutrition outcomes at sub national levels	100%
	20 III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and NCDs	100%
	21 III.5. Expansion of programmes for immunization, control of ARI, prevention of cholera and diarrhoeal diseases and NCDs	100%
	22 III.6. NNS delivery and early childcare practices to promote maternal and child nutrition	100%
	23 III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes	75%
PILLAR IV: Access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	24 IV.1. Improved management of the public food stock and distribution system	75%
	25 IV.2. Increased resilience of agriculture systems	50%
	26 IV.3. Disaster-coping ability of vulnerable families	75%
	27 IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation	75%
	28 IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity	75%
	29 IV.6. Safety nets in place during periods of seasonal crises and food shortages	75%
	30 IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development	50%
	31 V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data	50%

PILLAR V: Cross-sectoral issues	32	V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development efforts	50%
	33	V.3. Effective regulatory instruments and guidelines	50%
	34	V.4 Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government	50%
	35	V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors	50%

v. **Attribution of markers:** As detailed in Section 9, each project is scrutinised to decide whether they should be attributed any of the four markers of interest in this investment plan.

vi. **Data revisions and validation.** This is carried out by:

- Consulting relevant GoB agencies though the TTs
- Checking Planning Commission's reporting documents
- Carrying out internal logical checks within the CIP3 database
- Looking at DPs' reported CIP3 data, including non-ADP data.

Table 3 shows the CIP3 baseline budget and Table 5and Table 6the relative importance of CIP3 markers – Food Safety, FLW, Gender Sensitive Food System, Climate Resilient Food System. In both cases, the total budget is presented as well as the nutrition-sensitive budget. For the total and nutrition-sensitive numbers, three numbers are provided:

1. For existing ongoing FNS-relevant projects, the unspent amounts as of 30th June 2020, classified and apportioned under the CIP3 pillars and programmes, with the FS and nutrition weights applied when necessary.
2. For projects that are in the Government's or the DPs' pipeline, commitments as of 30th June 2020, classified and apportioned under the CIP3 pillars and programmes, with the FS and nutrition weights applied when necessary.
3. The total budget which is the sum of 1. and 2.

Examples of project classification

Example 1

- i. The DoF *Fisheries Development in Rajshahi Division* project is identified as relevant to the CIP3.
- ii. The information available on this project indicates two objectives:
 - o to generate more livelihood scopes of the marginalized population; and
 - o to boost production of fisheries, enhance productivity and protect the endangered fish species.Based on this, the budget of this project is categorized for equal parts in:
 - o Programme I.6. Promotion of agricultural diversification into commodities with high nutrient content including animal-source, regional and ethnic foods, and
 - o Programme IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development.
- iii. This project does not fall outside the remit of the food system. Its FS weight is therefore 1.
- iv. The nutrition weights associated with the budgets under Programme I.6 and IV.7 are 100% and 50%, respectively.
- v. No markers are considered relevant to any of the two components of the project.

Example 2

- i. The *Chittagong Water Supply Improvement & Sanitation Project (CWSISP)* project under the MoLGRDC is identified as relevant to the CIP3.
- ii. It is categorized under Programme III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices.
- iii. This project does not fall outside the remit of the food system. Its FS weight is therefore 1.
- iv. The nutrition weight associated with Programme III.7 is 75%.
- v. Because this project contributes to food safety through the provision of safe water, it is given the food safety marker.

Example 3

- i. The Cabinet Division *Platforms for Dialogue-Strengthening Inclusion and Participation in Decision Making and Accountability Mechanisms in Bangladesh* project is identified as relevant to the CIP3.
- ii. Because it is deemed to contribute to enhancing difference elements of governance both at government and non government level, it is categorized in equal parts under:
 - o PRogramme V.4 Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government
 - o Programme V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors
- iii. Since the sectoral coverage of this project is broader than the food system since it impacts other areas, a FS coefficient of 16.7% has been applied.
- iv. The nutrition weight associated with Programme III.7 is 50%.
- v. No markers are considered relevant to any of the two components of the project.

Annex 3. Correspondence between the NFNNSP PoA's Strategies and Areas of Intervention (AoIs) and the CIP3 Pillar and Programmes

NFNNSP PoA		CIP3	
OBJECTIVE 1 To ensure availability of safe and nutritious food for healthy diets		PILLAR I: Availability of safe and nutritious food for healthy diets	PoA AoI covered
Strategy 1.1 Increase productivity while ensuring sustainable production of nutritious foods	1	AoI 1.1.1. Develop improved climate-smart technologies for productivity gains, agricultural diversification, sustainable intensification, and enhancement of nutrient-content	Programme I.1. R&D and improved technology for more productive nutrient-rich and sustainable agriculture in rural and urban areas
	2	AoI 1.1.2. Disseminate improved technologies and practices at farmer and farm level through effective and participatory extension services	Programme I.2. Gender, climate and nutrition sensitive extension services
	3	AoI 1.1.3. Expand and promote the use of water-efficient and environmentally friendly alternative irrigation technologies, including surface irrigation	Programme I.3. Efficient and environmentally friendly irrigation technology
	4	AoI 1.1.4. Improve timely access to credit including micro-credit, to small-scale producers through suitable institutional reforms	Programme I.4. Improved efficiency of agricultural inputs
	5	AoI 1.1.5. Improve input use efficiency for productivity gains, sustainability, and health and environmental protection	Programme I.5. Enhanced role of POs and cooperatives
	6	AoI 1.1.6. Promote the production of quality feed and fodder through appropriate support to feed and fodder industries for fisheries and livestock	
	7	AoI 1.1.7. Stimulate the blue economy by promoting the sustainable development of marine fisheries and aquaculture in coordination with other non-agricultural uses and the private sector	
	8	AoI 1.1.8. Develop and promote eco-friendly and responsible practices for animal health along the principles of “One Health”	
	9	AoI 1.1.9. Strengthen the role of POs and cooperatives to reduce the cost of production, improve market access, and increasing the prices received by producers	
Strategy 1.2 Scale up nutrition-sensitive diversification of food production	10	AoI 1.2.1. Promote diversification into horticulture, fisheries, livestock, poultry and dairy products with high nutrient and micronutrient content including regional and ethnic foods	Programme I.6. Promotion of agricultural diversification into commodities with high nutrient content and market value including animal-source, regional and ethnic foods
	11	AoI 1.2.2. Increase funding and improve efficiency of R&D for sustainable agriculture	1.2.1.
	12	AoI 1.2.3. Improve the availability of safe nutritious food through innovation and expansion of appropriate methods of urban-based food production	Programme I.7. Developed Blue economy
OBJECTIVE 2: To ensure access to safe and nutritious food at an affordable price		PILLAR II: Access to safe and nutritious food at an affordable price	PoA AoI covered
Strategy 2.1 Improve market access and stabilize food markets	13	AoI 2.1.1. Promote the establishment, improvement and management of post-harvest marketing infrastructure and processing facilities for horticultural products, pulses and legumes, livestock and fisheries	Programme II.1. Efficient FVCs through transport infrastructure
	14	AoI 2.1.2. Set up financial intermediation services with improved access to credit for agro-processors along with other complementary services	Programme II.2. Efficient FVCs through innovation and improvements in post-harvest processing and marketing, improved infrastructure, reduced FLW and enhanced cooperation among agents

	15	AoI 2.1.3. Maintain an orderly market management by securing property rights, regulating competition and stabilizing prices	Programme II.3. Orderly market management by securing property rights, regulating competition and stabilizing prices	2.1.3
	16	AoI 2.1.4. Ensure trade liberalisation and facilitation to support the supply of quality food at all times	Programme II.4. Trade liberalisation and facilitation to support the supply of quality food at all times	2.1.4
Strategy 2.2 Improve value chain and marketing systems	17	AoI 2.2.1. Stimulate innovation-led efficiency gains in FVC by shortening the chain, improving cooperation among agents and by reducing food losses and waste	Programme II.5. Availability of financial intermediation, ICT market information systems and other complementary services for agroprocessors including for the most vulnerable sections of the population	2.1.2; 2.2.2; 2.2.5; 2.4.2
	18	AoI 2.2.2. Encourage and support the establishment and growth of financially viable MSMEs	Programme II.6. Enabling environment to enhance infrastructure, processing, value addition, marketing and eliminate business barriers	2.2.3, 2.3.3
	19	AoI 2.2.3. Create an enabling environment to attract private investment in infrastructure, processing, value addition, marketing and eliminate business barriers	Programme II.7. Promotion of inclusive cooperative/group-based processing and marketing	2.2.4
	20	AoI 2.2.4. Promote inclusive cooperative/group-based processing and marketing		
	21	AoI 2.2.5. Strengthen ICT-based market information system to provide real time support to farmers		
	22	AoI 2.3.1. Preserve and promote food safety and nutrients along the value chain including during transportation, processing, packaging, storage, wholesale and retail	Programme II.8. Preservation and promotion of food safety and nutrients along the value chain including through fortification	2.3.1; 2.3.2; 2.3.4
Strategy 2.3 Preserve and enhance nutrient content along the value chain	23	AoI 2.3.2. Promote the fortification and nutrition enhancement of relevant foods where desirable and efficient		
	24	AoI 2.3.3. Promote innovation and development of appropriate technologies to preserve nutritional value, in local and export processing zones (EPZ), including under Public-Private Partnership (PPP)		
	25	AoI 2.3.4. Build the capacity of the private sector to test food and communicate results to and engage with value chain actors for adequate remedial actions, and establish food traceability mechanisms		
Strategy 2.4 Raise incomes of the poor and food insecure	26	AoI 2.4.1. Expand and promote agriculture-driven, off-farm employment and other employment along the food chain by expanding vocational training opportunities particularly for rural youth, women and disabled people	Programme II.9. Promotion of agriculture-driven, off-farm employment and other employment along the food chain particularly for rural youth, women and disabled people	2.4.1
	27	AoI 2.4.2. Provide adequate credit, technology, information, training and other related services for the growth of agro-based industries and the broader rural non-farm economy, with special emphasis on the most vulnerable sections of the population		
		OBJECTIVE 3: To enhance the consumption and utilization of healthy and diversified diets for achieving nutrition improvements	PILLAR III: Consumption and utilization of healthy and diversified diets for achieving nutrition improvements	PoA AoI covered

Strategy 3.1 Develop a long-term national plan for ensuring safe, nutritious and sustainable diets in alignment with recommended nutrient intakes	2 8	AoI 3.1.1. Develop a national-level food production, supply and consumption plan based on a nutrient gap analysis considering energy and nutrient demand for a healthy and active life	Programme III.1. Development of a national-level food production, supply and consumption plan based on a nutrient gap analysis	3.1.1.
		AoI 3.1.2. Support the implementation of DDP plans for a healthy and sustainable food system	Programme III.2. Operationalization of healthy diets for nutrition outcomes	3.1.2
		AoI 3.1.3. Expand human resources and strengthen institutional arrangements to improve performance of nutrition services with special emphasis on field level	Programme III.3. Expanded human resources and strengthened institutional arrangements to improve performance of nutrition services with special emphasis on enhancing child nutrition outcomes at sub national levels	3.1.3
Strategy 3.2. Enhance nutrition knowledge, promote good dietary practices and encourage consumption of safe and nutritious diets	3 1	AoI 3.2.1 Develop and promote local foods, healthy cooking and food combinations, safe storage including knowledge on nutrient labelling	Programme III.4. Enhanced nutrition knowledge, good dietary practices and consumption of safe and nutritious diets for the prevention and control of malnutrition and NCDs	3.2.1; 3.2.2
	3 2	AoI 3.2.2. Scale-up integrated nutrition education strategies to enhance consumption of healthy, diets, increase awareness of the nutrient composition of local foods as well as to prevent and control malnutrition (undernutrition and overnutrition)		
	3 4	AoI 3.3.1. Expand programs for immunization, control of ARI, prevention of cholera and diarrhoeal diseases	Programme III.5. Expansion of programmes for immunization, control of ARI, prevention of cholera and diarrhoeal diseases	3.3.1
Strategy 3.3. Optimise food utilization through provision of safe water, healthy diets and improved food hygiene and sanitation	3 5	AoI 3.3.2. Strengthen the implementation of NNS delivery integrated with community clinics targeting children and women suffering from persistent weakness and micronutrient deficiencies	Programme III.6. NNS delivery and early childcare practices to promote maternal and child nutrition	3.3.2
	3 6	AoI 3.3.3. Scale up the supply of safe water for consumption and domestic use	Programme III.7. Supply of safe water for consumption and domestic use enhanced, improved sanitary facilities and hygiene practices to better impact food utilization and nutrition outcomes	3.3.3, 3.3.4
		OBJECTIVE 4: To increase access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	PILLAR IV: Access to nutrition-sensitive social protection and safety nets across life cycle with a focus on vulnerable groups and regions	PoA AoI covered
Strategy 4.1 Improve management of the public food stock and distribution system	3 7	AoI 4.1.1. Inform decision-making and improve planning for price support to farmers, market stabilization and public food distribution		4.1.1; 4.1.2; 4.1.3
	3 8	AoI 4.1.2. Enhance the management of procurement, public food stocks and prices stabilization activities and implement a nutrition sensitive PFDS	Programme IV.1. Improved management of the public food stock and distribution system	
	3 9	AoI 4.1.3. Ensure adequate storage of food grain maintaining quality and prevent deterioration of stored foodstuffs in the PFDS		
Strategy 4.2. Improve disaster preparedness, responses, rehabilitation and mitigation	4 0	AoI 4.2.1. Increase the resilience of agriculture systems through various mechanisms notably climate-smart technologies, adoption of stress-tolerant crop varieties and implementation of good agriculture, animal husbandry and fisheries practices for the production of healthy foods	Programme IV.2. Increased resilience of agriculture systems	4.2.1
	4 1	AoI 4.2.2. Increase the disaster-coping ability of poor farming families, support home-based farming especially through “Amar Bari Amar Khamar” (My Home My Farm), and protect poultry, livestock and other assets	Programme IV.3. Disaster-coping ability of vulnerable families	4.2.2; 4.2.3
	4 2	AoI 4.2.3. Ensure operation of emergency shelters with nutritious and safe food, safe drinking water, sanitation and healthcare for		

	disaster-affected people, especially for women, elderly, disabled and children	
4	AoI 4.2.4. Facilitate and coordinate disaster response, mitigation and rehabilitation through timely and strategic storage of public food stock, rapid distribution to disaster-affected people, and effective mobilization through various modalities including public-private partnerships	Programme IV.4. Facilitation and coordination of disaster response, mitigation and rehabilitation 4.2.4
4	AoI 4.3.1. Strengthen social protection in disadvantaged areas and for disadvantaged groups	Programme IV.5. Strengthened social protection in disadvantaged areas and for disadvantaged groups with particular attention to nutrition sensitivity 4.3.1; 4.3.3
4	AoI 4.3.2. Ensure safety nets for the poorest and nutritionally vulnerable, especially female-headed households, during periods of seasonal crises and food shortages	Programme IV.6. Safety nets in place during periods of seasonal crises and food shortages 4.3.2
4	AoI 4.3.3. Develop and implement nutrition-sensitive social protection programs, including food fortification, nutrition education, and behaviour change communications	Programme IV.7. Coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development 4.3.4
4	AoI 4.3.4. Ensure proper coordination and co-operation to integrate social protection with agricultural development, income generation, and micro-entrepreneurship development	PILLAR V: Cross-sectoral issues PoA AoI covered
Strategy 5.1. Improve food safety, quality control, and awareness of food safety and hygiene	OBJECTIVE 5: To strengthen cross-sectoral food and nutrition security governance, coordination, capacity building and partnership for effective policy implementation	
4	AoI 5.1.1. Ensure conformity and compliance of food safety policies (laws, standards and regulations)	<i>Food safety marker: Improved food safety, quality control, and awareness of food safety and hygiene</i> 5.1.1; 5.1.2; 5.1.3
4	AoI 5.1.2. Develop, improve, and establish traceability mechanisms and enforce regulatory frameworks to control food hazards within the food supply chain	
5	AoI 5.1.3. Develop and promote education and consumer awareness on food safety	
5	AoI 5.2.1. Minimise on-farm food losses	<i>FLW marker: Minimised on-farm and off-farm food losses, and waste</i> 5.2.1; 5.2.2; 5.2.3
5	AoI 5.2.2. Reduce off-farm losses	
5	AoI 5.2.3. Tackle food waste	
5	AoI 5.3.1. Produce/generate, disseminate and ensure access to reliable and timely FNS data and information by setting up an inter-agency FNS data sharing mechanism	Programme V.1. Generation, dissemination and access to reliable and timely FNS data and information including Big Data 5.3.1; 5.3.2
5	AoI 5.3.2. Develop and implement a big data analytics ecosystem for the food system	
5	AoI 5.3.3. Operationalise the implementation of the NFNSP, its Plan of Action and Country Investment Plan for FNS through an effective M&E system	Programme V.2. Operationalisation of the implementation of the NFNSP, its Plan of Action and Country Investment Plan and integration with other FNS development efforts 5.3.3.; 5.3.4
5	AoI 5.3.4. Ensure the cross-sectoral integration of the NFNSP, PoA and its investment plan with other FNS-related initiatives and its coherence with national socio-economic development efforts	
5	AoI 5.4.1. Develop and implement effective regulatory instruments and guidelines for priority issues	Programme V.3. Effective regulatory instruments and guidelines 5.4.1

	5 9	AoI 5.4.2 Strengthen gender mainstreaming for food and nutrition security	<i>Gender marker: Gender mainstreamed for food and nutrition security</i>	5.4.2
	6 0	AoI 5.4.3. Develop and promote climate-resilient food systems	<i>Climate resilience marker: Climate-resilient food system</i>	5.4.3
Strategy 5.5. Strengthen FNS governance, policy coherence, capacity strengthening and leadership across stakeholders	6 1	AoI 5.5.1 Strengthen policy uptake, nutrition leadership and institutional capacity of relevant secretariats and public institutions	Programme V.4 Strengthened policy uptake, nutrition leadership and institutional capacity at national and subnational level of government	5.5.1; 5.5.2
	6 2	AoI 5.5.2. Strengthen the capacities at subnational level including local government, non-state actors and consumer associations by facilitating knowledge exchange and partnerships		
	6 3	AoI 5.5.3. Strengthen private sector capacity by promoting the transfer of technologies and knowledge	Programme V.5. Strengthened FNS governance through enhanced participation of private sector and other non-State actors	5.5.3; 5.5.4
	6 4	AoI 5.5.4. Establish frameworks for national and subnational FNS stakeholder partnerships to ensure mutual accountability, transparency and effectiveness and operationalise an umbrella organization for the active engagement of stakeholders, especially youth		