

Maintains



Research supporting social
services to adapt to shocks

Bangladesh: Social protection

Research plan

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About Maintains


This five-year (2018–2023) operational research programme is building a strong evidence base on how health, education, nutrition, and social protection systems can respond more quickly, reliably, and effectively to changing needs during and after shocks, whilst also maintaining existing services. Maintains is working in six focal countries—Bangladesh, Ethiopia, Kenya, Pakistan, Sierra Leone, and Uganda—undertaking research to build evidence and providing technical assistance to support practical implementation. Lessons from this work will be used to inform policy and practice at both national and global levels.

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List of abbreviations and acronyms

BMD	Bangladesh Meteorological Department
DFID	Department for International Development
EGPP	Employment Guarantee Programme for the Poor
EM-DAT	International Disasters Database
EWS	Early warning system
FFP	Food Friendly Programme
FFWC	Flood Forecasting and Warning Centre
FGD	Focus group discussion
GR	Gratuitous Relief
G2P	Government to Person
KII	Key informant interview
Maintains	Maintaining Essential Services After Natural Disasters
MIS	Management information system
MFS	Mobile financial services
MoDMR	Ministry of Disaster Management and Relief
MSW	Ministry of Social Welfare
NGO	Non-governmental organisation
NID	National identification
NSSS	National Social Security Strategy
OMS	Open Market Sales
OPM	Oxford Policy Management
SPFMSP	Strengthening Public Financial Management for Social Protection
SSNP	Social safety net programme
TLABs	Transformation labs
VGD	Vulnerable Group Development
VGf	Vulnerable Group Feeding
UP	Union Parishad

WFP

World Food Programme

1 Background

Maintaining Essential Services after Natural Disasters (Maintains) is a five-year research programme that aims to develop an improved evidence base on how education, health, social protection, nutrition, and water and sanitation services can adapt and expand in response to shocks such as floods, droughts, cyclones, and disease outbreaks. Maintains will generate evidence from six focal countries: Bangladesh, Ethiopia, Kenya, Pakistan, Sierra Leone, and Uganda. The overall objective of the programme is to deliver, and maximise uptake of, new operationally relevant evidence on:

- how shocks impact on essential services in low-income countries;
- the extent to which essential services can flex and respond as a system rather than as independent parts; and
- how essential services can prepare for, and better respond to, natural disasters.

Maintains will deliver demand-led and highly applied research in collaboration with the Government of Bangladesh, the UK Department for International Development (DFID) Bangladesh, and in-country development partners. Maintains' Theory of Change has three components that ensure research is translated into practice

- Component 1: Research activities to build a robust base of empirical evidence. In Bangladesh the focus is specifically on the social protection sector, with Maintains research contributing to the evidence base to inform the development of adaptive, shock-responsive social protection systems in the country.
- Component 2: Targeted support to focal countries to help programmes to learn from the Maintains research.
- Component 3: Research uptake activities to ensure that findings lead to maximum impact.

This research plan focuses on Component 1. It develops a framework to guide the development of the research questions and provides an overview of the research design, methods, and workplan underpinning this agenda. This research plan expands on an earlier research concept note presented to DFID in March 2020, drawing on evidence gaps identified in the rapid literature review of shock-responsive social protection systems in Bangladesh (Oxford Policy Management (OPM), forthcoming). The research design is adapted to take account of COVID-19, both in terms of content (i.e. incorporating research activities to support the COVID-19 response) and workplan (i.e. revising the sequencing of activities to offset imminent delays due to the lockdown).

1.1 Research objective and rationale

Maintains research in Bangladesh will inform the debate as to the performance and enablers of, and constraints on, different institutional models of using social protection to respond to shocks, including responding through scaling up long-term or seasonal programmes and implementing short-term safety net programmes, or a combination of each.

In Bangladesh, Maintains research is being undertaken in a context where there is now live debate about *how* the social protection system can best be used to respond to shocks. Social protection in the country has its origins in the 1970s, to address transient poverty in the face of different shocks, starting with famines. The institutional model that the Government of Bangladesh has long adopted is to implement particular short-term safety net programmes (SSNPs) for affected areas and people. This approach contrasts with the focus of many international agencies on examining how long-term programmes can be scaled up to respond to shocks. With COVID-19, the Government of Bangladesh has, for the first time, committed to scaling up certain long-term programmes to meet additional needs, alongside implementing short-term programmes. This opens a space to engage with policymakers and international agencies on the enablers of, and constraints on, using different social protection institutional responses, and if, and how, a combination of these responses could improve the shock response performance of the social protection system.

Maintains research in Bangladesh aims to fill several key evidence gaps identified both during the rapid literature review and through speaking to a variety of stakeholders. The three overarching research questions are:

1. What are the enablers and constraints that affect the performance of different institutional models of social protection shock response?
2. How do financing arrangements enable or constrain the shock performance of social protection responses?
3. What are the enablers of and constraints on systematically adopting an institutional model of using long-term SSNPs to meet expansions in need, and under what conditions might this be desirable?

The remainder of this document is structured as follows:

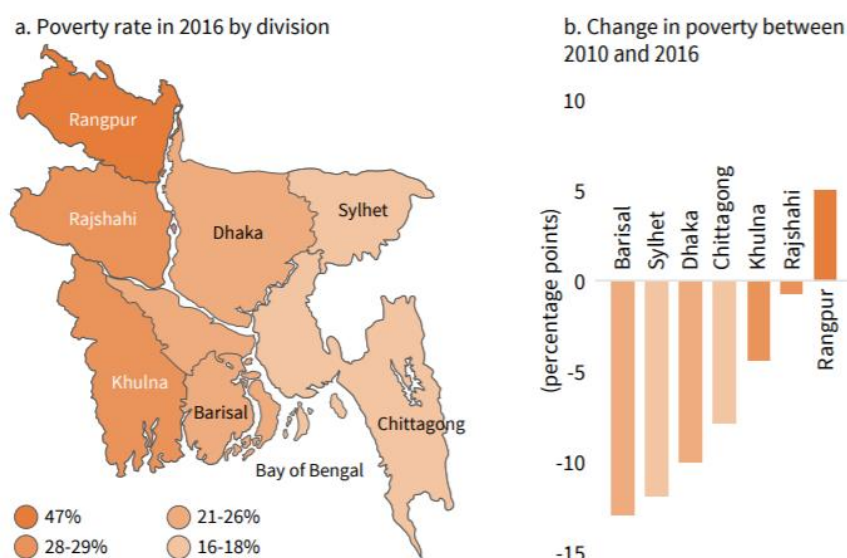
- Section 2 provides an overview of the context for the research;
- Section 3 presents the research framework;
- Section 4 introduces the research questions and describes the research design ; and
- Section 5 presents the workplan.

2 Context

2.1 Poverty

While Bangladesh has made remarkable strides in alleviating poverty, poverty and vulnerability still remain high. In 2016, 25% of the Bangladeshi population was poor, and 13% was extremely poor, a decline from 49% and 34% in 2000, respectively (Hill and Genoni, 2019). Although rural poverty (27%) is higher than urban poverty (19%), much of this progress has been driven by rural areas. However, the transition out of poverty cannot be viewed as permanent, as more than half the population above the poverty line is vulnerable to poverty, as their levels of consumption are close to the poverty threshold. There is considerable disparity across divisions, both in terms of poverty levels and trends in reduction (Figure 1). While most regions recorded improvements between 2010 and 2016 – albeit unevenly – the historically poorer Rangpur region deteriorated further.

Figure 1: Division-wise variation in poverty



Source: Hill and Genoni, 2019. Based on data from Household Income and Expenditure Survey 2016/17. Note that a new division, Mymensingh, was carved out of Dhaka region in 2015; this is not illustrated in the figure above.

2.2 Shocks

The range of shocks that a country is prone to, and the characteristics of these shocks, determine the extent to which the social protection system can be flexed during shocks. This section discusses the main types of shocks to which Bangladesh is exposed.

2.2.1 Natural hazards

A low-lying deltaic country formed by the Ganga, the Brahmaputra, and the Meghna rivers, Bangladesh is highly prone to natural hazards. Bangladesh ranks 10th on the World Risk Index, which measures disaster risk for 180 countries globally (Bündnis

Entwicklung Hilft and IFHV, 2019).¹ Between 1980 and 2019, the country faced 252 weather- and climate-related disasters, resulting in 163,758 deaths and affecting nearly 60 million lives.² The Climate Risk Index, which analyses long-term exposure and vulnerability to extreme weather events, estimates that Bangladesh suffered a loss of US\$ 1,686 million (in purchasing power parity) induced by disasters between 1999 and 2018 alone (Germanwatch, 2020).

Bangladesh is affected by both rapid- and slow-onset disasters, although the former tend to dominate. Storms and floods collectively account for 83% of the 252 disasters that occurred between 1980 and 2019.³ There is considerable geographical variation in the nature of hazards to which specific regions of the country are exposed (Figure 2).

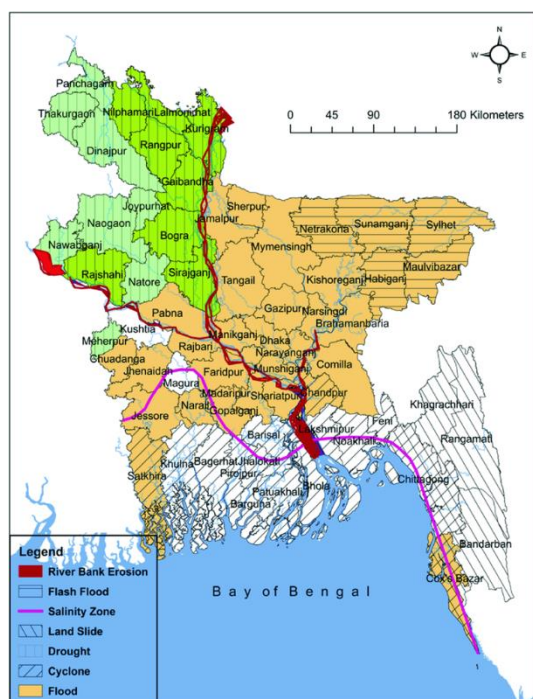
Table 1: The geographic distribution of natural hazards

Type of shock	Regions
Cyclones and resultant storm surges, waterlogging <i>Onset: rapid</i> <i>Frequency: recurrent</i> <i>Predictable: varies</i>	Coastal areas
Urban waterlogging <i>Onset: rapid</i> <i>Frequency: recurrent</i> <i>Predictable: varies</i>	Urban areas in the Ganga Brahmaputra Delta, comprising the cities of Dhaka, Chittagong, and Khulna
(Flash) Floods <i>Onset: rapid</i> <i>Frequency: recurrent</i> <i>Predictable: no</i>	Northeastern flash floods occur regularly from April to May, and as late as June, and are often accompanied by landslides, river erosion, river flooding, soil degradation, and the loss of fishing grounds due to siltation of riverbeds and other bodies of water. The southwestern parts of the country are also exposed to flash floods
Droughts <i>Onset: rapid</i> <i>Frequency: seasonal</i> <i>Predictable: yes</i>	The Greater Rangpur region in the northwestern part of the country, directly affecting the agricultural sector and the livelihoods of rice farmers

¹ The World Risk Index is a composite measure of the following factors: risk, hazard/exposure, vulnerability, susceptibility, lack of coping capacity, and lack of adaptive capacity.

² The International Disasters Database (EM-DAT), www.emdat.be/

³ EM-DAT database. These figures must be interpreted bearing in mind that the EM-DAT database does not capture more recurrent, seasonal, and localised phenomena.

Figure 2: Multi-hazard map of Bangladesh

Source: Huq *et al.* (2016)

2.2.2 Economic shocks

Economic shocks in Bangladesh can be attributed to three factors. First, increasing exposure to global markets implies external inflationary pressures. For instance, the global economic downturn and the simultaneous food price crisis worsened food insecurity in rural Bangladesh between 2007 and 2009 (Aker and Basher, 2014). Second, the knock-on economic impacts of natural disasters can be significant, as households deplete their savings and assets to cope with them, and livelihood opportunities are disrupted, as seen during Cyclone Aila and Cyclone Sidr. Third, a key economic aspect of agro-climatic vulnerability in Bangladesh is the seasonal hunger and unemployment arising from the seasonality of the agricultural crop cycles. Households are affected both by the lack of earning opportunities during the lean season, i.e. the period between the sowing and the harvest, and the pre-harvest increase in food prices. Termed *monga*, this seasonal food insecurity is an important aspect of vulnerability in the Greater Rangpur region in the northwestern part of the country.

2.3 Social protection context

The social protection system in Bangladesh is closely linked to disaster management, having emerged from disaster response programmes. While the initial focus, in the 1970s, was on poor relief, the 1980s were characterised by SSNPs aimed at disaster response and rehabilitation. Since the 1990s the social protection landscape has gradually expanded through various categorical programmes (i.e. programmes targeted at the elderly, widows, and people with disabilities), conditional cash transfers (such as school stipends), public works programmes, and graduation programmes.

While there is a long history of SSNPs, the social protection architecture is quite fragmented, and limited progress has been made on consolidation. Currently, there are 125 social protection programmes, accounting for 2.5% of the national GDP. The 125 programmes are spread across 23 ministries/divisions. However, the top 10 programmes alone account for 59% of the total social protection budget (Winstanley, 2019).

In 2015, Bangladesh initiated a series of reforms through the adoption of the National Social Security Strategy (NSSS) to build an inclusive social protection system which, among other objectives, aims to consolidate these programmes. The NSSS is embedded in the lifecycle approach to social protection, reflecting an understanding that social protection should cover risks and vulnerabilities over the lifecycle of an individual from childhood to old age (Government of Bangladesh, 2015). The two major areas of reform under the NSSS are outlined in Box 1. The NSSS runs until 2025 and a mid-term progress review has just been completed. Discussions on revising the strategy are likely to start in 2022/23 and Maintains research will feed into those.

Box 1: Two major areas of NSSS reform

The NSSS outlines a series of major reforms, including the following:

- **Programme reforms** that: consolidate programmes into four core lifecycle programmes for (i) children, (ii) those of working age, (iii) the elderly, and (iv) people with disabilities; consolidate food transfer programmes; and strengthen programmes to address climate change and disaster prevention, and that reach out to the urban and socially excluded populations.
- **Institutional reforms** that: introduce a cluster approach for the ministerial implementation of different SSNPs; establish a single management information system (MIS); strengthen government to person (G2P) payment systems; strength processes for beneficiary selection; and establish grievance and complaints mechanisms and a results-based monitoring and evaluation system.

Unlike many other countries where social protection and disaster management are conceptualised as distinctive policy issues, in Bangladesh the Ministry of Disaster Management and Relief (MoDMR) is an integral part of the SSNP delivery. The cash and in-kind transfers made by the ministry to support disaster-affected households are classified as SSNPs or as a form of social protection. In fact, the MoDMR had the second highest share of the SSNP budget allocation in 2018/19, at 20%, after the Ministry of Finance (with 26% allocated to civil service pensions). The conceptualisation of disaster response as a form of social protection is interesting because globally many countries distinguish between the two, with the former addressing transient poverty whereas the latter is aimed at chronic poverty. Other key ministries – with a budget allocation of at least 3% of the SSNP budget – include: the Ministry of Social Welfare (MSW); the Ministry of Local Development, Rural Development and Cooperatives; the Ministry of Health and Family Welfare; the Ministry of Food; the Ministry of Primary and Mass Education; and the Ministry of Women and Children Affairs. One of the main goals of the NSSS is to rationalise the number of actors involved, to enhance the efficiency of implementation; for instance, it aims to transition all lifecycle-related programmes to MSW by 2026.

Social protection responses in Bangladesh are structured around the two key sources of risks: idiosyncratic and covariate. Idiosyncratic risks include life-course vulnerabilities (childhood, motherhood, old age, disability, widowhood, etc) while covariate

risks span agro-climatic and economic shocks (storms, floods, drought, lean season, price shocks, etc). **Long-term SSNPs**, or those that offer support throughout the year, are designed to address life-course vulnerabilities, while another set of SSNPs are used to respond to specific covariate shocks and are **short-term, either seasonal stressors or non-seasonal** (Khandker and Mahmud 2012).

The Maintains research programme organises SSNPs into three main categories, based on the regularity of support that they provide and their primary objectives. These are as follows:

- **Long-term programmes** – These provide regular and predictable support to beneficiaries throughout the year during their period of programme membership. Beneficiaries are selected on the basis of either categorical targeting or poverty targeting, or a combination of the two. The underpinning objective of these programmes is to address chronic poverty at different stages of the lifecycle, or for particular categories of household. At the same time, these programmes may contribute to building household resilience and so improve the ability of households to adapt in the face of, and cope during and after, different shocks, including natural hazards. Resilience-building objectives, however, are largely secondary.
- **Seasonal programmes** – These are safety nets for cyclical needs, particularly for preventing hunger during seasonal lean periods. Lean season programmes follow a set schedule, with the predominant lean season lasting from September to November, preceding the *aman* harvest.
- **Emergency programmes** – These are for emergency needs in the face of particular covariate shocks. These programmes are originally conceived as relief or humanitarian programmes and are rolled out on a discretionary basis in response to covariate shocks. These are categorised under the NSSS as a form of social safety net programme. In contrast to long-term programmes, all the short-term programmes are designed with the objective of assisting households to smooth their consumption during shocks.

Table 2 below provides an overview of the top SSNPs across these categories. In regard to the 125 SSNPs:

- 33% of the budget is allocated to programmes that are not typically classified as social protection in the international literature (e.g. health infrastructure and services, water supply, block-level grants);
- 36% of the budget is allocated to pensions for retired government employees, and to another programme, which is not the focus of this research; and
- the remaining 31% of the budget is allocated to the core non-contributory social assistance instruments, such as social pensions, poverty-targeted unconditional cash transfers, conditional cash transfers, food transfers, food subsidies, and public works. Large programmes that account for 77% of this core non-contributory social assistance budget are presented in the table below.

Table 2: SSNPs – key features

SSNP	Expected number of beneficiaries (million)	Allocated budget (BDT million)	Ministry	Fund allocation based on Upazila poverty rate	Categorically targeted	Poverty-targeted	Transfer value	Delivery mechanism	Delivery frequency	Rural/urban
LONG-TERM PROGRAMMES										
Old-Age Allowance	4.4	26,400.00	MSW	×	✓	✓	BDT 500 per month	Bank account, paid quarterly	Quarterly	Both
Vulnerable Group Development (VGD)	14.25	16,989.10	Ministry of Women and Children Affairs	✓	✓	✓	30 kg wheat or rice (VGD) or 30 kg fortified rice and one-time cash grant of BDT 15,000 (investment component)	Bank transfer (in case of investment component); in-person transfer of in-kind transfers	Monthly	Rural
Allowances for the Financially Insolvent Disabled	1.55	13,905.00	MSW	×	✓	✓	BDT 700 per month	Bank account	Monthly	Both
Income Support Programme for the Poorest	1.08	7,781.00	Ministry of Local Government, Rural Development, and Cooperatives	×	✓	✓	BDT 500 per visit plus additional benefits upon meeting the requirements	Cash cards issued to the beneficiaries	Quarterly	Rural
Maternity Allowance Programme for the Poor	0.77	7,632.70	Ministry of Women and Children Affairs	✓	✓	✓	800 per month for three years	Bank account	Every six months	Both
Primary School Stipend	14.4	7,223.60	Ministry of Primary and Mass Education	×	✓	×	BDT 100 per month, 200 (two children), 250 (three children), 400 (four children)	Mobile financial services (MFS) and bank accounts	Quarterly	Both
School Feeding Programme	2.5	4,745.90	Ministry of Primary and Mass Education	✓	✓	×	In kind (food)	NA	Daily	Both

SSNP	Expected number of beneficiaries (million)	Allocated budget (BDT million)	Ministry	Fund allocation based on Upazila poverty rate	Categorically targeted	Poverty-targeted	Transfer value	Delivery mechanism	Delivery frequency	Rural/urban
Secondary Education Stipend	0	1,048.60	Ministry of Education	×	✓	✓	Rate varies by class and programme from yearly BDT 1,380 to 3,510	MFS	Yearly	Both
Stipend for Disabled Students	10	956.4	MSW	×	✓	✓	BDT 500 (primary), 600 (secondary), 700 (higher secondary), 1,200 (university)	MFS	Quarterly	Both
SEASONAL PROGRAMMES										
Food Friendly Programme (FFP)	0.05	26,240.00	Ministry of Food	✓	×	✓	30 kg of rice per month	In-kind transfer; runs twice a year during the Boro pre-harvest season (Mar-April) and <i>aman</i> pre-harvest season (Sept–Nov)	One-off	Rural
Employment Generation Programme for the Poor*	0.83	16,500.00	MoDMR	✓	×	✓	BDT 200 per day	Bank accounts Runs between Oct and Nov and Mar and Apr	Weekly	Rural
EMERGENCY PROGRAMMES ACTIVATED IN RESPONSE TO SHOCKS										
Vulnerable Group Feeding (VGF)	8.34	19,569.10	MoDMR	✓	×	✓	10–30 kg of rice	In-person	Monthly	Rural
Test Relief Cash	2.1	15,300.00	MoDMR	✓	×	✓	8 kg of rice for seven hours of work	In-person	Daily/weekly	Rural
Food For Work	1.71	12,040.80	MoDMR	✓	×	✓	8 kg of rice for four hours of work	In-person	Normally twice yearly	Rural

SSNP	Expected number of beneficiaries (million)	Allocated budget (BDT million)	Ministry	Fund allocation based on Upazila poverty rate	Categorically targeted	Poverty-targeted	Transfer value	Delivery mechanism	Delivery frequency	Rural/urban
Open Market Sales (OMS)	8.94	9,495.20	Ministry of Food	×			10–20 kg of rice	In-person	Weekly/monthly	Urban
Work For Money	1.58	7,500.00	MoDMR	✓	×	✓	BDT 200 per day	In-person	Weekly	Rural
Gratuitous Relief (GR)	5.68	5,435.90	MoDMR	✓	×	✓	<i>Ad hoc</i>	In-person	One-off	Rural

2.4 Social protection and shock response

While much of the global literature on shock-responsive social protection has emerged from countries that have leveraged long-term programmes for responding to catastrophic shocks, Bangladesh has a dedicated set of emergency SSNPs that are implemented in response to shocks covering both seasonal stressors and non-seasonal disasters. As shown in Table 2 above, these short-term SSNPs account for a substantial portion of the overall SSNP budget – as defined by the Government of Bangladesh – at 53%. For instance, to address the impacts of the recent Cyclone Amphan, the government activated GR and allocated BDT 5 million through GR cash and 31 metric tonnes through GR rice (HCTT, 2020). Similarly, the government has activated OMS and VGF to address the price shocks of COVID-19.

The evidence base around many of these programmes is limited and, more importantly, the comparative strengths and weaknesses of these disparate responses in achieving a common underlying objective are not well understood. Two of the lean season programmes – Employment Guarantee Programme for the Poor (EGPP) and the FFP – are relatively new and their early implementation has been evaluated. Chowdhury *et al.* (2020) examine the targeting effectiveness of the FFP and find that the programme performs well, as for every 1 BDT spent by the government under the FFP, about 0.88 BDT, on average, reaches those deemed eligible as per the programme’s qualifying criteria. However, in terms of benefit incidence to the poor, they find that the sub-optimal allocation of funds based on district poverty rates leads to an exclusion error of 22%. The EGPP is also relatively pro-poor, as 67% of its beneficiaries are in the bottom two quintiles of wealth (Cho and Anwar, 2016). Sharif and Rutbah (2017) find that although the EGPP supports poorer households in consumption smoothing during the lean season, the use of discretionary targeting methods when the programme is oversubscribed implies that access to local politicians is a significant determinant for programme participation, particularly for minority households. Among other short-term SSNPs, there is dated evidence that a combination of rationing – as needs exceed supply – and political patronage during local-level targeting has led to considerable inclusion and exclusion errors (Strengthening Public Financial Management for Social Protection (SPFMSP), 2018). Operationally, the lack of a digital MIS implies a lack of transparency and accountability controls within the programme (SPFMSP, 2017).

The NSSS acknowledges the role that social protection can play in building the resilience of poor households in advance of shocks, as well as in supporting households to cope during and following a shock. In the medium term, the NSSS envisages developing the country’s social security system to support an effective disaster response system, and establishing mechanisms to identify the geographic areas most hit by crises so that the government knows when and where to increase social protection support. Maintains research will provide evidence and insights to support the Government of Bangladesh to improve the shock performance of the social safety net system.

While emergency SSNPs have historically been activated during disasters, with COVID-19, the government is expressing greater interest both in strengthening emergency SSNPs as well as in leveraging long term SSNPs to respond to shocks. For instance, the government is planning for the horizontal expansion of long-term cash

allowances under MSW as a means to reach more households affected by COVID-19, in addition to rolling out emergency SSNPs. Table 3 provides an overview of the types of institutional response that the government is intending to use for COVID-19 to meet additional demand.

Table 3: Examples of how different categories of SSNP are being used in response to COVID-19

Example of programme category	Programme examples: COVID-19	Details: COVID-19	Lead ministry	Is this response model used for natural hazards?
Short-term SSNPs	Implementation of GR and VGF – in-kind and cash transfers	Expansion using old systems GR to reach 4.9 million families	MoDMR	Yes
Seasonal SSNPs	EGPP	Coverage expanded Work requirement waived	MoDMR	Yes
Long-term SSNPs	Horizontal expansion of old-age, widows and deserted women, and disability allowances	Expansion using newly improved systems in 100 poorest Upazila. Expected increase in caseloads: - 500,000 senior citizens - 350,000 widows and deserted women - 255,000 disabled	MSW	No
Emergency cash transfer programmes	New cash transfer for poor and vulnerable informal workers	New programme to be rolled out using <i>ad hoc</i> systems For 5 million poor and new poor who have lost their livelihoods as a result of COVID-19	Office of the Prime Minister	No

Maintains research will organise SSNPs into two institutional models for shock response:

Model 1: Continuing the operational delivery of, and scaling up, regular social safety nets

This model involves using either long-term or seasonal SSNPs to respond to shocks. The primary objective of both of these categories of programmes is not to respond to shocks, but rather to address regular or predictable needs. The institutional context underpinning both these types of programme, therefore, is not one that has primarily been designed to flex or to be operational during unexpected shocks. Meanwhile both of these types of programme are budgeted with a fixed, or known, caseload.

Model 2: Implementing short-term emergency response programmes

This model, the primary one used by the government to date, involves implementing emergency programmes in response to specific covariate shocks. These emergency programmes are short-term – implemented in response to a shock and then scaled back in its aftermath.

By organising SSNPs into these two institutional models of response, Maintains will be able to assess the extent to which these institutional response models, with their different designs, operational modalities, and institutional contexts, can best complement each other during shocks, to support poor and vulnerable households.

This context in Bangladesh provides the opportunity to contribute to the global literature, as well as the policy discourse in Bangladesh, by answering the following questions:

- Given the existence of different programmes that rely on common institutions, systems, and sources of finance in some respects, but that diverge in other aspects, what are the enablers of, and constraints on, implementing effective social protection responses to shocks?
- Given that long-term programmes have never been leveraged before in responding to shocks, what is the desirability, feasibility, and effectiveness of scaling up these programmes in response to shocks?

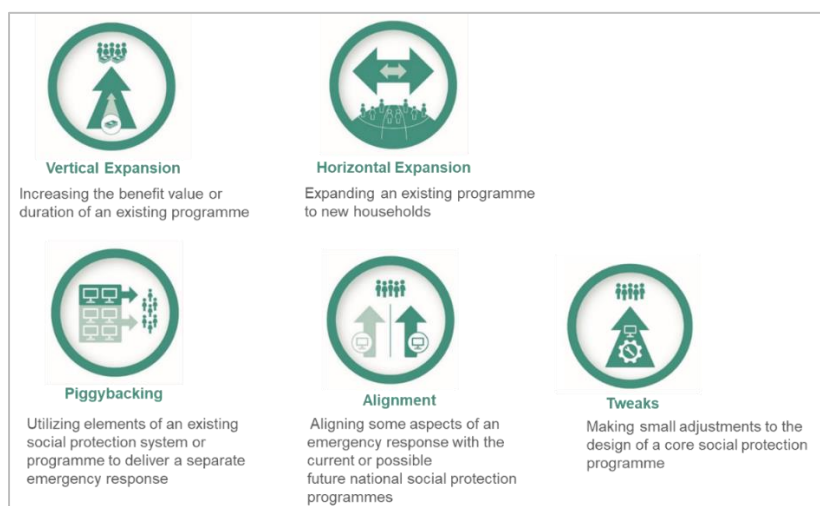
3 Research framework

The framework for Maintains research in Bangladesh will build on the ‘shock-readiness’ concept, developed by McCord (2013). Because Bangladesh already has a well-developed social protection system, with its origins specifically in supporting vulnerable households in the face of shocks, Maintains research will instead examine the ‘shock performance’ of the social protection sector and the enablers of, and constraints on, this performance. Shock performance here is viewed as, the ‘extent to which existing or planned social protection provision can [respond to] meet the anticipated needs of vulnerable populations’ due to covariate shocks (McCord, 2013). In particular, the research will investigate the ability of social protection to adapt to meet expansions in need and to ensure operational continuity, as the two main forms of shock response.

Meeting expansions in need refers to the ways in which existing social protection systems and programmes can flex to address new needs and cover new caseloads arising from shocks. Depending on the nature of existing social protection systems and programmes, there are a number of strategies that may be employed to flex the overall level of support that a routine system provides to vulnerable people, as shown below (O’Brien *et al.*, 2018).

Box 2: Examples of how long-term programmes can flex to meet expansions in need

- The Pantawid Conditional Cash Transfer programme was vertically expanded in the **Philippines** – with World Food Programme (WFP) support to provide a top-up of US\$ 30 to 105,000 existing beneficiaries in response to Typhoon Haiyuan between 2013 and 2014 (Smith *et al.*, 2017).
- **Cambodia, Lao PDR, and Malaysia** provided additional resources to school meals programmes in response to the food price crisis and the global financial crisis in 2008/2009 (OPM, 2018)
- The Child Development Grant Programme in **Lesotho** provided top-ups to 27,000 existing beneficiaries in response to the El Nino crisis in 2016 (Kardan *et al.*, 2017)
- The Public Assistance Programme in **Dominica** was scaled up both vertically and horizontally to provide unconditional cash transfers to 25,000 households following Hurricane Maria (Beazley, 2018).

Figure 3: Typology of using social protection to scale up to meet expansions in need

Source: O'Brien *et al.*, 2018

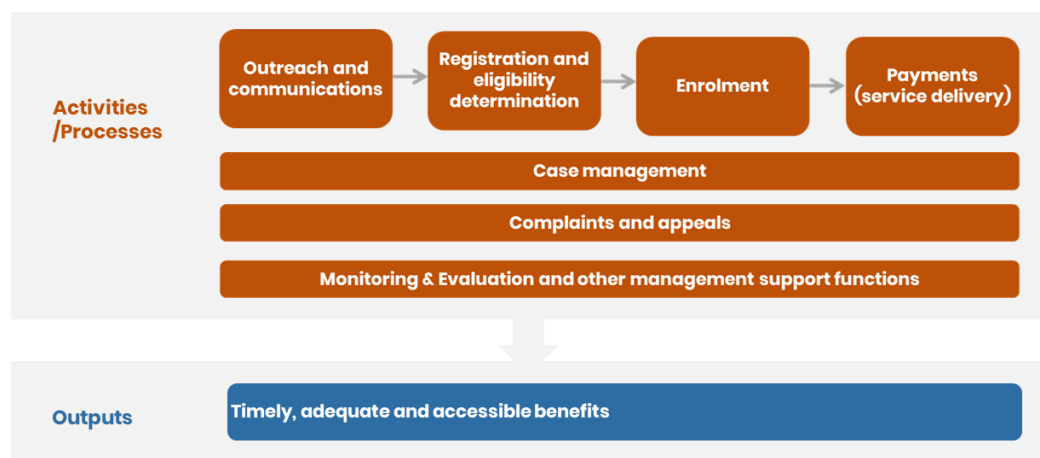
Operational continuity: The shock itself can pose problems for operational continuity, or the ongoing functioning of the system – staff may not be able to get to work, payment infrastructure may be damaged, or funds diverted. This implies ensuring that routine programmes and their underlying processes do not collapse during shocks – or that they are resilient. Depending on the magnitude and type of shock, the social protection delivery system can be disrupted at several points, and therefore it is important that contingency plans are in place to adapt programmes to ensure continuity of delivery during different types of shock (Smith, 2018).

We shall appraise the shock performance of the system, in terms of both operational continuity, or resilience, and meeting expansions in need, through examining four areas, each of which plays a key role in determining the ability of, or enabling or constraining, the social protection system to meet the anticipated needs of vulnerable people resulting from a shock (McCord, 2013):

- 1. Political factors** – assesses political and development partners' incentives and preferences for using, and how to use, social protection as a component of shock response. This includes an understanding of the preferred objectives of social protection and so what this means for who is covered.
- 2. The institutional context** – assesses existing institutional capacity, mandates, and coordination (across both government and non-governmental organisation (NGOs)), including in terms of national registries and also early warning, triggers, and shock response pre-planning.
- 3. Financing arrangements** – the fiscal space for social protection responsiveness, and whether there are measures in place to: i) protect existing social protection budget allocations in the context of a crisis, or ii) provide countercyclical financing for scaling up or expanding provision.
- 4. Programme technical design** – spanning the social protection delivery system (see Figure 4) from outreach and communications, targeting, conditionality, and eligibility criteria, through to payment mechanisms as well as monitoring. Here it is important to

understand the extent to which the design specifications are consistent with enabling continued delivery during, or rapid expansion and scale-up for, a shock.

Figure 4: The delivery system for social protection programmes



Source: Authors' representation based on Lindert *et al.* (2016) and Rubio (2011).

3.1 Applying the research framework

This section applies and illustrates the above framework, drawing on both the global literature as well as highlighting important research findings and evidence gaps from Bangladesh.

While there is some evidence of the effectiveness of expanding existing social protection programmes to meet additional needs during shocks, gaps in knowledge remain both globally as well as in Bangladesh. Globally, shock-responsive social protection approaches are being increasingly used to provide support to affected households. For instance, of the 494 social protection responses to COVID-19 globally, 68 have increased the level of benefits for existing beneficiaries, 22 have extended the programme to non-beneficiaries, 391 new programmes have been introduced, and 13 programmes have increased the existing level of benefits, as well as expanding to new beneficiaries (Gentilini *et al.*, 2020).

Despite being operational for many decades, there is relatively little documentation regarding the shock performance of the institutional model of implementing short-term emergency response programmes in Bangladesh. In particular, very little is understood about the enablers of, and constraints on, using GR and Test Relief, as well as their relative shock performance, with relatively more being known about VGF (e.g. SPPFMU, 2017).

The ability to ensure operational continuity for social protection during shocks, or the extent to which the system is resilient, is an understudied topic. While much has been written about the importance of social protection during disasters, the impacts of the disaster on the system itself are not well documented. In fact, system resilience is a prerequisite for scaling up programmes during shocks, as a social protection system whose core programmes are not resilient to shocks is unlikely to be able to absorb shock-related expansions. The global literature shows that rapid-onset shocks can extensively displace

beneficiaries and lead to loss of identification documents, necessitating that programmes modify their outreach and enrolment processes. For instance, in the case of Typhoon Haiyan in the Philippines, extensive outreach and a large-scale revalidation exercise was needed to ensure the continuity of a cash transfer programme (Smith *et al.*, 2017; International Social Security Association, 2020). Similar tweaks are being seen in the case of COVID-19 crises, where social distancing norms have led to a transition from physical offices to digital channels for outreach and enrolment for existing programmes in many countries. Many countries have had to introduce vouchers, cash transfers, or take-home rations in lieu of school feeding programmes, although such programmes continue to be disrupted in other countries where such adaptations have not been feasible yet (Hebbar and Phelps, 2020; WFP, 2020). Depending on the context (e.g. type of shock, maturity of the social protection system), programme infrastructure – offices, systems, and staff – may be compromised by disasters such as storms and floods, affecting the ability to ensure such adjustments for continuity of services. For instance, an assessment of the impact of the Wenchuan earthquake in Beichuan, the hardest hit county in China, found that that 21% of the frontline cadres of the social protection system were killed or left severely disabled; 74% reported that their office buildings were destroyed; and 15% reported that archived files and data were missing; and the average working hours of the cadres increased from eight hours to 13 hours in the first month after the earthquake (Salazar *et al.*, 2011).

While systematic evidence on the resilience, or operational continuity, of SSNPs during shocks in Bangladesh is scarce, some insights can be gleaned from the COVID-19 crisis. While OMS, the programme that provides subsidised grains during shocks, was activated during the COVID-19 lockdown, the programme had to be suspended due to widespread allegations of corruption and leakage during local-level implementation (Dailystar, 2020). Among long-term programmes, 52% of the beneficiaries of the old-age allowance and widows allowance in a sample survey reported that their payments were unaffected by the crisis, whereas 23% were able to access only half their entitlement and 17% were not able to access any of it (a2i and IPA, 2020). This therefore remains an area of active inquiry.

3.1.1 Political factors

How politicians understand social protection, and its role, has implications for the likelihood of social protection being used to meet expansions in need. A synthesis of shock-responsive approaches in six sites (Pakistan, Philippines, Mozambique, Lesotho, Mali, and a regional study of the Sahel) finds that effective responses are mediated by several factors (O'Brien *et al.*, 2018). In particular, in countries where social protection is seen as a handout which creates dependency (e.g. Mozambique) the appetite for shock-related expansions, or using long-term programmes to meet expansions in need, may be lower than in other contexts where social protection is seen as an efficient alternative to annual 'emergency responses' (e.g. Mali).

Some research suggests that political factors play a strong role in the effective coverage of the poor by SSNPs in Bangladesh. There is some evidence to suggest that the low coverage of the poor by many programmes is attributable to low coverage of the poor regions (Mahmud and Mahmud, 2014). In other words, programmes are poor in their targeting of poor villages and areas, but once the villages do have access to these

programmes, the relatively more vulnerable among the poor households are likely to benefit more. One explanation for this is that ‘the centralized administration of such allocations as well as the relative strength of lobbying by the political elite, such as those Members of the Parliament belonging to the ruling party. In contrast, beneficiary selection, which is fairly decentralized, involving local government institutions, seems to work better’ (Mahmud and Mahmud, 2014). While this does not necessarily mean an absence of local patronage politics, exclusion due to local patronage politics may be harder to disentangle from that arising from the inevitable programme rationing to accommodate limited budgets.

3.1.2 Financing

Globally, countries have faced challenges with the triggering of funding to use social protection to meet expanded needs. Both Lesotho and Mali, for instance, have faced challenges in releasing the funds pledged to interventions. In the Philippines, too, despite the existence of contingency financing mechanisms for disaster response, there were administrative delays in releasing the emergency funding allocated to the department overseeing disaster response after Typhoon Haiyan (UNICEF, 2019).

Research in Bangladesh points to the challenges, following fund release, of local government using that finance to meet expansions in needs. Local governments have a role in delivering key shock-responsive SSNPs in Bangladesh. However, as recognised in the government public financial management reform strategy, they have limited financial autonomy, with a ‘lengthy centralized processes to purchase even small items’ reducing their ability to be responsive (Ministry of Finance, 2016). Even if budgets for SSNPs are prepared centrally and released on time, limits in the fiscal autonomy of local government can impact their ability to absorb this funding and deliver the services. For example, the diagnostic report on the VGF programme suggests that a ‘common complaint’ about MoDMR allocations is that there is insufficient budget for the transportation of supplies, and that officials either use their own funding or deliver fewer supplies than intended (SPFMSP, 2017). The current local government funding model effectively constrains the ability of local government to rapidly address this relatively small funding shortfall, through using their own funding sources, or through rapidly securing additional funding from central sources.

3.1.3 Institutional context

Shock-responsive social protection intersects social protection, humanitarian response, and disaster risk reduction thematic areas within governments, donors, and NGOs, which have traditionally operated as separate technical disciplines, drawn on distinct lines of funding, focused on different sets of risks and target groups, and (within government) have reported to different and uncoordinated line ministries (O’Brien *et al.*, 2018). This raises issues of competition for resources and power, as well as challenges of institutional coordination – both horizontally across different actors at the same administrative levels, as well as vertically, including across different administrative levels within the same ministry. Meanwhile, in a global study of shock-responsive approaches, across almost all countries were found to have a shortage of staff, and skills gaps, which can be accentuated by shock-responsive approaches (O’Brien *et al.*, 2018).

In general, the institutional context and capacity underpinning SSNPs in Bangladesh is weak, with several issues creating challenges, including the ‘ineffectiveness of local level committees, a lack of a consistent committee structure, weak coordination among implementing agencies, absence of monitoring and evaluation to feed the programme, and shortage of manpower in all the implementing agencies’ (Hossain and Rahman, 2017). Research also highlights existing weaknesses in terms of the coordination of disaster risk management activities, including at the local level, with a range of different institutions and committees having technical knowledge and managing disaster information at the local level (Ahmed *et al.*, 2016) If long-term SSNPs, which are the mandate of ministries beyond MoDMR, are to be used to meet expansions in need then the challenges of institutional coordination may increase.

3.1.4 Technical design

The programme delivery system, including systems for targeting, registration, and payments, are a likely constraint on using social protection to meet expansions in need (O’Brien *et al.*, 2018). Scaling up social protection quickly and effectively in an emergency requires that key components of the delivery system, including targeting, registration, and payment systems, can quickly identify and make payments, or deliver other necessary services rapidly to groups affected by a shock. A study on shock-responsive social protection across six countries finds that, while payment mechanisms vary widely, there is no consistent relationship between approaches adopted and their appropriateness to the type of shock (O’Brien *et al.*, 2018).

The delivery system that underpins social protection programmes in Bangladesh varies. Recent positive developments include the strengthening of G2P payments. More than 2 million beneficiaries of a number of programmes, including the maternity and lactating mothers allowance, old-age allowance, widows allowance, and disability allowance, now receive their allowances directly at near zero cost on a regular basis through a newly developed G2P payment system. Under this system, money is transferred directly from the Government Exchequer (Treasury) to the centralised MIS hosted at the Social Protection Budget Management Division at the Ministry of Finance, and then into beneficiary accounts with different payment service providers such as banks, the Post Office, and mobile financial service providers (Bhatnagar, 2019; Government of Bangladesh, 2018). However, most programmes, including VGD, rely on paper-based data management systems (Mansur and Khondker, 2017), and therefore are unlikely to support a speedy response in the context of disasters.

The Government of Bangladesh has introduced a number of reforms to improve the delivery system for long-term SSNPs, but the extent to which these have supported the use of long-term programmes to meet expansions in need is unclear. These reforms have largely been supported through the SPFMSP programme. Reforms introduced through this and other programmes, such as digital payments and the G2P payment systems, are aimed at decreasing many of the bottlenecks, such as the absorptive capacity of the delivery mechanism and delays in transferring funds to the local level (SPFMSP, 2017).

4 Research questions and design

4.1 Research questions

The overall objective of Maintains research in Bangladesh is to understand the relative merits and shortcomings of using different institutional models of social protection to respond to shocks, and then how they can best be aligned and coordinated to complement each other and improve the shock performance of the social protection system.

Maintains research will do this through examining three key research questions:

1. What are the enablers and constraints that affect the performance of different institutional models of social protection shock response?
2. How do financing arrangements enable or constrain the shock performance of emergency and seasonal social protection responses?
3. What are the enablers of, and constraints on, systematically adopting an institutional model of using long-term SSNPs to meet expansions in need, and under what conditions might this be desirable?

RQ1: What are the enablers and constraints that affect the performance of different institutional models of social protection shock response?

The objective of this research question is to better understand the enablers of, and constraints on, the shock performance of different institutional models of shock response – in particular, the scale-up of short-term programmes and the use of long-term programmes and the interactions between these two approaches. In doing this, this research question will provide evidence to inform recommendations as to how the different institutional models could themselves be tweaked to improve performance, as well as how they could be better coordinated or aligned to maximise synergies, or minimise duplications, across them.

As framed above, shock performance is understood as the ability of the social protection system to meet the anticipated needs of vulnerable people resulting from a shock, either through adapting to ensure operational continuity, or ongoing system functioning, or to meet expansions in need. This research question will investigate the political incentives, institutional context, and technical design of the different approaches to shock response and what they mean for shock performance. Research Question 2 focuses specifically on finance: on the triggers for releasing finance and investigating how finance flows to the sub-national level, and what this means for the timeliness and adequacy of the shock response.

Building on the literature about the characteristics of effective social protection systems, both in normal times and in terms of shock response, this research question will investigate shock performance in relation to four main areas:

Adequacy: Effective shock response needs to ensure adequate levels of support both in relation to coverage of the affected population, as well as in terms of ensuring that the support received by households is sufficient, or adequate, for their needs.

Accessibility: This reflects the extent to which inclusion in either short- or long-term programmes is inclusive and equitable

Harmonisation: The extent to which different institutional models of response are able to rely on the same features of the social protection system and use existing, or the same, institutions and delivery systems.

Timeliness (of scaled-up responses) and predictability (of ongoing delivery):

Households need to be able to plan their expenditure around their income sources, including from social protection. That support is timely and predictable is critical for them to be able to avoid having to adopt erosive coping strategies.

This research question will investigate both the enablers of, and constraints on, the shock performance of the two different institutional models of shock response, as well as the interactions between these two models. For instance, there could be trade-offs in terms of the capacity to deliver both long- and short-term SSNPs. In Bangladesh, as in many other countries, responsibilities for delivering different social protection programmes, as you go down through different levels of authority to the local level, increasingly concentrate around particular individual roles and committees. This research question will therefore also investigate the extent to which there may be trade-offs, or opportunities, to ensure business continuity of long-term SSNPs in the context of other SSNPs are scaled up.

Table 4: Key questions for investigating the enablers of, and constraints on, shock performance

Enablers and constraints	Meeting expanded needs	Ongoing system functioning
Political economy	<ul style="list-style-type: none"> How, and why, are decisions made about using different institutional models of social protection to meet expansions in need, and, within those models, how and why are choices made to use particular programmes? 	<ul style="list-style-type: none"> To what extent, and how, are sub-national decision makers able to adapt programme implementation to ensure they can deliver ongoing support during a shock. What are the incentives for making local-level adaptations and to what extent can these adaptations be institutionalised to evolve over time?
Institutional context	<ul style="list-style-type: none"> How is surge capacity organised to implement the scaled-up responses? How are different types of social protection response coordinated, including those under programmes beyond MoDMR, and what are the challenges and opportunities for improving coordination? 	<ul style="list-style-type: none"> What does the implementation of short-term programmes mean for the capacity to continue to deliver long-term programmes? To what extent are contingency plans able to be implemented during shocks to ensure continued operation of SSNPs, and what are their strengths and weaknesses?
Technical design	<ul style="list-style-type: none"> What are the strengths and weaknesses of the design and implementation of the 	<ul style="list-style-type: none"> What factors enable resilience in programme delivery (e.g. adjustments in processes, local-

	administrative processes, spanning identification, registration, enrolment, and payments for supporting scale-up?	level adaptations, availability of digitised data, etc.)? <ul style="list-style-type: none"> To what extent is the continuity of the SSNPs affected – what administrative functions are most impacted? What are the strengths and weaknesses of the current delivery and payment mechanisms for enabling business continuity?
Shock performance		
Timeliness/ predictability	<ul style="list-style-type: none"> How timely are the scaled-up responses? 	<ul style="list-style-type: none"> During and after a shock how predictable is the support received, whether through long- or short-term programmes?
Adequacy	<ul style="list-style-type: none"> To what extent is the support received adequate, in terms of both coverage and also for those people who are benefiting? 	
Accessibility	<ul style="list-style-type: none"> How inclusive is the shock response and are there any groups that are being systematically excluded? 	
Harmonisation	<ul style="list-style-type: none"> Have particular aspects of programme delivery systems or the institutional context enabled greater effective alignment across short- and long-term programmes? 	

Approach

These research questions will be examined in the context of three different types of shocks in the form of three case studies. Much of the current evidence on the use of social protection during shocks is lumps together different types of shocks, although the type of shock has implications on the range of strategies feasible. For instance, a rapid-onset shock (e.g. cyclone) or an economic shock is more likely to affect both poor and non-poor households, whereas a slow-onset shock (e.g. drought) is likely to affect chronically poor households. An economic shock or a pandemic may permanently push people – both poor and non-poor – into poverty as long-term work opportunities are impacted, unlike natural hazards which result in transient poverty (TRANSFORM, forthcoming; Barca and Beazley, 2019).

Our three proposed shock cases will also generate insights into different approaches to using social protection to respond to shocks. Through using a case study approach, we will undertake a comparative analysis of different institutional models and options for shock response. We know, for instance, that in response to COVID-19 the Government of Bangladesh is intending to meet expansions in need through horizontally expanding cash transfer programmes, initiating an emergency cash transfer, and scaling up in-kind short-term SSNPs, alongside continued operation of long-term programmes. Meanwhile, for natural hazards, including droughts and storms, the government normally meets expansions

in need through using two types of short-term SSNPs: in-kind and public works programmes, while long-term cash and in-kind transfers also continue to operate.

We currently intend to use relatively real-time case studies to avoid recall bias, given the ongoing COVID-19 pandemic (one of our proposed shocks) and the regular occurrence of natural hazards in Bangladesh. However, in the event that ‘typical’ natural hazards and associated responses do not occur during the period of Maintains research we shall investigate this research question using retrospective shocks.

Following a case study approach, the system response to three types of shocks will be examined:

COVID-19 (short- to medium-term economic impacts of the pandemic): The COVID-19 outbreak is still ongoing in Bangladesh, with staggering economic impacts. As at 1 June 2020, there are 49,534 confirmed cases, with 239 cases per million population and a total of 672 deaths.⁴ The disease incidence is largely concentrated in Dhaka city (56%), followed Dhaka District (20%) and Chattogram Division (10%). The lockdown measures introduced on 26 March 2020 to contain the outbreak are estimated to be among the most stringent in the world (University of Oxford, 2020). Early evidence shows the devastating economic impacts of the lockdown. A survey of 5,471 households in urban and rural areas reports substantial decline in daily per capita income in April 2020 – regardless of household wealth status – ranging from 65% to 75% (BRAC Institute of Governance and Development, 2020)⁵ Both urban and rural households are resorting to negative coping strategies, although the impacts are more pronounced on the former; this includes depletion of savings (67% in urban slums and 83% in rural areas), borrowing (52% in urban slums and 35% in rural areas), and declines in food consumption (47% in urban slums and 32% in rural areas). Another study estimates that the poverty rate in Bangladesh could potentially double from the current 20.4% to 40.9%, with severe impacts in the northern districts, such as Maymensingh, Sunamganj, Nilphamari, Netrokona, Chuadanga, Sherpur, and others (TBS Report, 2020). Although lockdown measures have been eased since June 2020, the economic impacts are expected to worsen as the readymade garments industry and international remittances, the two major drivers of economic growth in Bangladesh, are severely hit. The growth rate is predicted to contract to 3%, from the previous projection of 8%, and the simultaneous increase in government expenditure is predicted to deepen the budget deficit (World Bank, 2020).

More information on the envisaged COVID-19 response is provided below.

⁴ WHO, 2020 ‘Covid-19 Status Bangladesh’. Institute of Epidemiology, Disease Control and Research (IEDCR). The real incidence is predicted to be much higher given the comparatively low levels of testing, at 90 per million population as at 18 April 2020.

⁵ The study was conducted between 4 and 12 April. The sample size was 12,000 households from both urban slums and rural areas. ‘Sample Source: Urban: from a census in 2016-2017 of 24,283 slum HHs in 35 slums across 9 districts in Dhaka, Chattogram, Khulna, Barisal and Rangpur; Rural: from a nationally representative (divisional level) survey of 26,925 HHs across 64 districts.’

Box 3: Social protection measures proposed in Bangladesh in response to COVID-19

The Government of Bangladesh, as part of its COVID-19 economic stimulus package, has announced a series of social protection measures; however, many of these have yet to be rolled out. Table 5 provides a partial list of measures. A study finds that only 14% of urban slum dwellers surveyed and 4% of the rural respondents reported receipt of government support.⁶ Early reports show significant challenges in the operationalisation of some of these responses. Disproportional distribution of relief vis-à-vis districts' poverty status has been a cause for concern.⁷ Leakages in food distribution at the union level led to the temporary discontinuation of food aid under OMS.⁸ While the government has initiated the digitisation of food transfers under GR FFP, VGF, and VGD, through smartcards that are linked to the National Identification (NID), this process has been slow as the ownership of NID and cell phones among the poor is low^{9,10}. The process of beneficiary registration for a new cash transfer has been marred by corruption at the local level as beneficiary lists are determined by political patronage.¹¹ According to one estimate, only 14% (0.7 million out of 5 million) of the names submitted to MoDMR are genuine beneficiaries.¹²

Table 5: List of social protection responses to COVID-19 in Bangladesh

Programme	Target group	Targeted no. of beneficiaries	Geographical coverage	Cash/food	Duration of support	Current status
Allowance for elderly, widowed, and deserted women	Vulnerable women	Unknown	100 poorest Upazilas	Cash	Monthly	Yet to be rolled out
Food aid (FFP)	Vulnerable low-income population	Unknown	National	Food (total 0.5 metric tons of rice and 0.1 million metric tons of wheat costing BDT 2,503 crore)	One time	Ongoing
OMS	Poor people in urban areas	Unknown	National	Food (20 kg rice each per month) for 3 months, costing BDT 251 crore.		Ongoing

⁶ https://bigd.bracu.ac.bd/wp-content/uploads/2020/05/Updated_19_May_PPRC-BIGD-Final.pdf

⁷ <https://tbsnews.net/coronavirus-chronicle/covid-19-bangladesh/poorest-receive-least-amount-relief-82186>

⁸ www.dhakatribune.com/bangladesh/government-affairs/2020/04/15/pm-irregularities-in-relief-distribution-won-t-be-tolerated

⁹ There are about 110 million NID cards according to Wikipedia.

¹⁰ 'There were 97.28 mobile subscriptions registered for every 100 people in 2018' (source: www.statista.com).

¹¹ www.dhakatribune.com/feature/2020/04/13/here-s-how-the-pm-can-stop-the-rice-thieves

¹² www.prothomalo.com/bangladesh/article/1657248/%E0%A7%AB%E0%A7%A6-%E0%A6%B2%E0%A6%BE%E0%A6%96%E0%A7%87%E0%A6%B0-%E0%A6%A4%E0%A6%BE%E0%A6%B2%E0%A6%BF%E0%A6%95%E0%A6%BE%E0%A7%9F-%E0%A6%AA%E0%A7%8D%E0%A6%B0%E0%A6%B6%E0%A7%8D%E0%A6%A8%E0%A7%87%E0%A6%B0-%E0%A6%8A%E0%A6%B0%E0%A7%8D%E0%A6%A7%E0%A7%8D%E0%A6%AC%E0%A7%87-%E0%A6%B8%E0%A6%BE%E0%A7%9C%E0%A7%87-%E0%A7%AD-%E0%A6%B2%E0%A6%BE%E0%A6%96-%E0%A6%A8%E0%A6%BE%E0%A6%AE

Social assistance (cash transfer programme for daily wage earners)	Poor and 'new poor' who have lost their livelihoods	5 million	National	Cash (BDT 2,500 each costing total 12,500)	One time	Yet to be rolled out
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In parallel, standalone humanitarian cash responses are being implemented. BRAC has provided one-time BDT 1,500 cash support to 300,000 families from the urban slums, semi-urban areas, *haors*, and remote char islands whose livelihoods are affected by COVID-19, piggybacking upon its database of beneficiaries from existing programmes, such as the Ultra-Poor Graduation Programme, the Integrated Development Programme, and the Humanitarian Programme (BRAC, 2020). Early evidence points to the effectiveness of an MFS provider named BKash as regards making timely payments to over 80% of the households. Plan International Bangladesh has also provided unconditional cash transfers to approximately 5,000 households that belonged to their 'sponsorship programme' in Barishal, Dhaka, and Rangpur.¹³ WFP has stepped up its support to half a million individuals, providing both in-kind and cash support to the most vulnerable population across Cox's Bazar district, which is the Rohingya host community (WFP, 2020).

Drought (slow-onset, recurrent natural hazard): Every year, Bangladesh experiences drought for six to seven months, from November to May, when rainfall is normally low. The agricultural drought, related to soil moisture deficiency, occurs at various stages of crop growth. Monsoon failure often brings yield reduction and famine to the affected regions. northwestern region is particularly vulnerable to droughts. A severe drought can cause more than 40% damage to broadcast aus. Each year, during the *khari* season, drought causes significant damage to the aman crop in about 2.32 million hectares. In the *rabi* season, 1.2 million hectares of cropland face droughts of various magnitudes. Apart from loss to agriculture, droughts have a significant effect on land degradation, livestock population, employment, and health (Food and Agriculture Organization (FAO), 2007).

Cyclones and storm surges (rapid-onset, recurrent natural hazard): Tropical cyclones, accompanied by storm surges, are one of the major disasters in Bangladesh. Between 1970 and 2019, Bangladesh faced 149 storms. In coastal regions, the damage is mainly due to storm surges, particularly over the low-elevation coastal margins.

Table 6: Proposed shock case studies

Type of shock	Shock	Anticipated models of institutional response	Timing of the shock	Timing of data collection
Pandemic (health shock with direct economic impacts)	COVID-19	Regular programmes: Operational continuity of long-term programmes Horizontal expansion of long-term cash allowances Implementation of emergency programmes:	Ongoing	July 2020 – Dec 2020

¹³ www.facebook.com/planinbangladesh/photos/pcb.2834863306562335/2834850603230272/

		Short-term in-kind and cash support		
Slow-onset natural hazard	Drought	Regular programmes: Operational continuity of long-term programmes Implementation of seasonal public works Implementation of seasonal food transfers	Jan 2021 – May 2021 (expected)	May 2021 – Jul 2021
Rapid-onset natural hazard	Storm	Regular programmes: Operational continuity of long-term programmes Implementation of emergency programmes: Short-term in-kind and cash support	Oct 2021 – Nov 2021	Dec 2021 – Feb 2022

The unit of study will be shock-affected Upazilas – purposively sampled on the basis of occurrence of a particular shock. We will follow publicly available bulletins that draw on early warning system (EWS) information to understand when a shock has occurred and if/when emergency SSNPs, or other SSNP responses, have been scaled up to particular affected areas. Annex C provides more information on how we will select the shock case studies.

Methods

A combination of methods will be used, according to the magnitude and the duration of the shocks, and their type. The table below maps these methods against the types of enabler and constraint, and in relation to assessing measures of overall shock performance. More information about these methods follow the table.

Table 7: Research methods vis-à-vis themes

Enablers and constraints	Methods
Political economy	<ul style="list-style-type: none"> Key informant interviews (KIIs)
Institutional context	<ul style="list-style-type: none"> Desk-based assessment of response protocols, programme design, and operational manuals KIIs Transformation labs (TLabs)
Technical design	<ul style="list-style-type: none"> Desk-based assessment of programme design and operational manuals KIIs TLabs
Shock performance	
Timeliness/predictability	<ul style="list-style-type: none"> Programme administrative information KIIs Focus group discussions (FGDs)

Adequacy	<ul style="list-style-type: none"> • Programme administrative information
Accessibility	<ul style="list-style-type: none"> • Programme administrative information • FGDs
Duplication	<ul style="list-style-type: none"> • KIIs

Desk-based review: We will develop a template to track shocks using existing EWS information, and system responses, as outlined on the website of MoDMR. Initially, these data will aid the swift selection of data collection sites and will also enable us to understand more about:

- the scale and geographical coverage of the shock; and
- the coverage, timing, and nature of short-term responses.

We will also review programme design, operational manuals, and administrative information to understand:

- the coverage of long-term programmes within the shock area;
- the delivery systems of the different long- and short-term programmes in operation and contingency plans in place; and
- the institutional context within which short- and long-term responses are operationalised.

KIIs: KIIs will be conducted with programme administrators at a range of administrative levels (see Table 8 for examples), with a focus on those at the district level and below, to explore issues relating to programme design, institutional mandates, and capacity, as well as to understand the reasons behind decisions to use particular institutional response models and certain social protection programmes for shock response.

Table 8: KIIs

Programme type	Ministry	Department	Division	District	Upazila	Union
Long-term cash allowances	MSW	Department of Social Services	Office of the Divisional Commissioner	Office of the Deputy Director, Department of Social Services	Upazila Social Services Officer	Union Parishad (UP) for targeting
Long-term in-kind support (VGD)	Ministry of Women and Children Affairs	Department of Women and Children Affairs	Office of Women and Children Affairs	Office of Women and Children Affairs	Office of Women and Children Affairs	UP for targeting NGO implementation
Seasonal responses (FFP)	Ministry of Food					

Emergency and seasonal responses (public works and in-kind)	MoDMR	Directorate of Relief and Rehabilitation	Office of the Divisional Commissioner	District Relief and Rehabilitation Office	Project Implementation Officer	UP
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FGDs: We will use FGDs to understand the accessibility and timeliness/predictability of responses from the perspectives of different households, investigating barriers to them accessing benefits, as well as understanding the extent to which they perceive these to be reliable.

TLabs: TLabs collaboratively co-create and work towards solutions to challenges highlighted by the research findings. For Maintains, TLabs would: (a) provide an opportunity to validate some of the results drawn from the data collection; (b) identify problems raised by community members in the delivery and provision of the target SSNPs; (c) assist in mapping out the interconnection and dependencies between community members and how this relates to SSNP delivery; and (d) identify potential solutions to the problems that can subsequently be tested.

TLabs are a participatory process that bring together stakeholders related to a particular set of problems in a workshop setting. The first step is to identify a problem or set of problems, in this case related to the Maintains research questions, and to draw on the data collected from the community. Secondly, a set of participants are identified through a community mapping process, where all the stakeholders related to a particular system, and their interconnections, are mapped out.

The workshops are structured to ensure that different stakeholders co-produce an assessment of the current situation, as well as engage in co-designing options and solutions to address the problems they identify. Additionally, the researchers and data collectors for the study will also be participating in the TLabs to observe, gather insights, and validate fieldwork findings. A strong moderator will manage the discussion and ensure appropriate engagement from stakeholders. We aim to conduct a workshop after each case study has been completed.

RQ2: How do financing arrangements enable or constrain the shock performance of emergency and seasonal social protection responses?

This research question focuses specifically on finance – an important determinant in the research framework for enabling both the business continuity of social protection and its expansion to meet expansions in need. This question investigates this through examining two sub-areas, both of which we have been unable to locate existing literature on:

1. triggers for releasing funds for short-term social protection responses; and
2. sources of finance for models of institutional response that use short-term emergency programmes, and the mechanisms and process through which this finance flows down to the union level.

This research question will primarily assess performance in terms of timeliness as well as adequacy, and will identify specific recommendations for how the existing system could be tweaked to improve performance.

This work package will focus on the comparison of funding modalities for the short-term emergency programmes under MoDMR (including VGF, GR, and Test Relief), as well as for seasonal programmes under MoDMR (EGPP) and the Ministry of Food (FFP). In contrast to Research Question 1, which intends to focus on current shock case studies, this research question analyses historical responses to shocks, due to the difficulties in accessing information around financing in relative real-time.

Sub-Question 1: How do EWSs support the timeliness of short-term social protection responses?

This work package will examine the availability of triggers within the EWS to activate an early response to slow-onset and rapid-onset shocks. Triggers for rapid action (e.g. index-based triggers) can be built using the data generated by existing EWS and climate forecasts (O'Brien *et al.*, 2018; Bastagli and Harman, 2015).

Triggers are typically designed to release funds and initiate early actions when pre-established thresholds are met. These triggers can lead to automatic responses, which implies front-loading the decision-making process and directly linking climate forecasts to their potential consequences, or otherwise they can be used to inform an *ex-post* decision-making process to trigger early action (Wilkinson *et al.*, 2018). Stakeholders in Bangladesh consulted for the research design expressed concerns about the ability of the EWS to activate and trigger responses to medium and small-scale shocks, particularly those that are relatively localised (see Box 4 for a description of the EWS landscape in Bangladesh). The Start Fund, co-funded by DFID, is designed to address this gap in terms of response triggers, using bottom-up mechanisms through NGO reports to trigger an emergency response for specific geographical areas affected.

Effective EWSs comprise four components: (1) detection, monitoring, and forecasting of hazards; (2) analysis of the risks involved; (3) dissemination of timely warnings, which should carry the authority of the government; and (4) activation of emergency plans to prepare and respond (World Meteorological Organization, 2017). This work package will focus on the intersection between the first three components and the fourth one – or if, and how, EWS information is used to activate an SSNP response.

The work package will document the processes and procedures through which EWS information is used to trigger the scale-up of short-term SSNPs, and the strengths and weaknesses of these triggers in relation to using short-term SSNPs to respond to different types of natural hazard.

Specific questions that this work package will investigate are the following:

- What are the triggers for rolling out short-term SSNPs, and how do these triggers vary according to type of natural hazard? What do these triggers mean for the timeliness of a response?
- How is EWS information shared with decision makers within the social protection system and what are the processes through which this information is used to trigger an SSNP

response? What are the key bottlenecks in this process, in terms of enabling a timely response?

- At what geographic level do EWSs activate SSNPs response and do they enable responses for specific shocks at the level of divisions, districts, Upazilas, or unions?
- In the absence of an EWS trigger (e.g. for localised shocks) are there other bottom-up triggers and mechanisms through which short-term SSNPs are rolled out to respond to other, potentially more localised, natural hazards?
- What are the key ways in which triggers could be adapted to increase the timeliness of the scale-up of short-term SSNPs?

The approach to this work package will be desk-based, drawing on reviews of policies, operational documents, and international practices, in addition to KIIs.

Box 4: EWS landscape in Bangladesh

Cyclones: The Bangladesh Meteorological Department (BMD), under the Ministry of Defence, is responsible for weather forecasts and cyclone hazard warnings. The Storm Warning Centre, a specialised unit of the BMD, is primarily responsible for issuing forecasts and warnings for cyclones. The BMD has 35 ground-based, 10 weather balloon, five radar, and three radiosonde stations, that it uses to collect meteorological data from around the country (Ferdous, 2017). Additionally, the BMD receives meteorological data and forecasts from other national and regional meteorological offices as a member of the World Meteorological Organization. Cyclone early warnings have significantly decreased the number of cyclone-related fatalities over the last two decades but still several challenges remain for existing EWSs, particularly with regard to the quality of the Storm Warning Centre's cyclone forecast: a) data updates from the Bay of Bengal are infrequent¹⁴; b) there is a lack of meteorological expertise to produce reliable forecast; c) there is a lack of computing capacity to run advanced numeric atmospheric models; d) and there is lack of ability to verify the accuracy of the predictions and to include the precision level in the warning message (Tanner *et al.*, 2019).

Floods: The Flood Forecasting and Warning Centre (FFWC) under the Bangladesh Water Development Board manages the EWS for floods. During the months of April to October, the peak time of flood occurrences, the hydrological measurements division collects the data on the ground and provides them to the forecasting centre for necessary forecasting. Currently, there are 59 rain gauges and 90 hydrological stations to measure the water level, discharge, sediment, or water quality across the country. These stations collect water level and rainfall data and feed them into the central database for forecasting. FFWC provides deterministic forecasts with a five-day lead time based on real-time observation and data, and also probabilistic forecasts with a 10-day lead time based on ensemble discharge forecasts. For flash floods, FFWC provides 48-hour lead time warnings at 12-hour intervals based on the Weather Research and Forecasting method, an advanced numerical weather prediction system designed for both atmospheric research and operational forecasting applications. The BMD has set up 25 flash flood forecasting stations covering nine vulnerable districts of northeastern Bangladesh, and it plans to upgrade the existing manual hydrological stations. However, the flash flood forecasting has been complicated as accurate forecasts require quantitative rainfall forecasts at the level of small basins and from cross-border sources. For flash flood warnings, an experimental qualitative forecast method has been developed and is now in use, based on hydrological, meteorological, and satellite images (Bhuyan and Tarannum, 2018).

Riverbank erosion: The formal authority for riverbank erosion forecasting and warning does not yet lie with any entity. However, since 2004 the Center for Environmental and Geographic Information

¹⁴ The more recent and frequent the data are, the more accurate the forecast is likely to be. However, ground-level and upper-level atmospheric data over the Bay of Bengal are often missing, so forecasts are made based on 12-hour-old data and interpolated values of wind direction and speed over the Bay of Bengal.

Services has been making predictions and morphological change forecasts using time-series satellite images, GIS, and remote sensing techniques.

Droughts: The BMD, under the Ministry of Defence, and the Department of Agriculture Extension, under the Ministry of Agriculture, are responsible for drought monitoring, forecast, and warning. But neither the BMD nor the Department of Agriculture Extension have a structured functional drought EWS. In the drought monitoring section of the BMD website, a Standardised Precipitation Index and temperature deviations for various areas of Bangladesh are published but no information on warnings or dissemination is available. There is an ongoing effort led by International Centre for Integrated Mountain Development and International Maize and Wheat Improvement Center, with support from the US Agency for International Development and NASA, to produce drought monitoring and warning information for the Hindu Kush Himalaya region, with a special focus on Afghanistan, Bangladesh, and Nepal.

Sub-Question 2: How are decisions made about the amount of funding for short-term social protection responses and how does this finance flow to the union level?

Appropriate financing system for shock-responsive social protection has three core components: (a) it is appropriately costed; (b) appropriate funding is pre-planned; and (c) there exist appropriate payment and disbursement mechanisms to ensure funding reaches the target populations in a timely manner (World Bank, 2020). Even if appropriate funding is in place, timely delivery of support to beneficiaries depends on effective disbursement mechanisms. Core areas where delays can occur in the funding release mechanisms are: in the release of funding from central government sources; delays due to the absorptive capacity of the disbursement mechanisms; challenges in the transfer of funds to the local level; and delays in reconsolidation (World Bank, 2020).

There are two key objectives of the work under this research workstream:

1. to map the administrative structures involved in fund/resource flow to the short-term programmes under MoDMR, and to summarise funding arrangements; and
2. to map the processes by which resource allocation decisions are made for short-term programmes, across all administrative levels of government, in order to understand the opportunities for, and bottlenecks to, increasing the timeliness of response for these three programmes.

The resources required for the delivery of shock-responsive social protection (financial resources, human resources, and in-kind transfers) can originate from several sources (central government, decentralised administrative levels, bilateral and multilateral donors, NGOs), and can take various paths in the organisational system. This research will start with identifying the key actors within this process, determining the stage at which they are involved, and identifying the points where money/resources change hand – the key ‘decision points’. To the extent possible, it will also conduct a brief review of funding levels of these programmes (budget vs outturn) and identify sources (national vs foreign sources, on-budget vs off-budget). Of particular importance, in relation to sources, is whether funds are being diverted from long-term social protection programmes in order to finance short-term responses.

Once the various institutions and key ‘decision points’ have been identified, it is important to understand how funding/resource allocation decisions have been made by these institutions, at these different decision points. This study will follow the chain of decisions – starting from

the Ministry of Finance and down to union level – that lead to resources ending up where they do.

At the different levels of government, flows are generally governed by different laws, allocation rules, administrative processes, recording and accounting procedures, etc. A thorough institutional analysis is therefore required to capture an accurate picture of these processes and to detect the idiosyncratic elements at each stage. It is essential that the mapping reflects an accurate picture of the existing circuit and approval system for resource flows, rather than simply detailing the official by-the-book rules.

Particular research questions that this workstream will explore are the following:

- How are the ‘scalable’ funds budgeted for in the national budget under MoDMR, given the unpredictability of disasters (and thus resource demand)? If a disaster occurs mid-year, what sources of funds does the Ministry of Finance draw on to enable the three programmes to scale up? Are contingency reserves built into the budget?
- When putting in budget proposals, how does MoDMR estimate the cost of shock-responsive programmes?
- When in the budget year are funds/resources allocated and disbursed to districts/Upazilas/unions, given their scalable nature? How timely is this process?
- For in-kind support, at which level of government is procurement conducted? How timely is this process?
- Does the in-kind support reach unions at the same time as associated budgetary allocations (for transport, logistics, staff costs etc)? Which level of government is responsible for the distribution of in-kind support?
- How are funds/resources allocated from MoDMR/districts to Upazilas? What criteria are used? How timely is this process?
- Once funds/resources are received by Upazilas, how are they then allocated and disbursed to unions? What criteria are used? How timely is this process?
- In disbursing funds/resources to beneficiaries, do unions have/follow guidance on allocation per person?
- Do any of the above processes differ when a disaster is more severe? Do timelines/allocations/coverage change?
- Are/can resources be topped up by sub-national governments as they move between administrative levels?
- Do donors top up funds or resources/have donors considered topping up funds or resources in the past?
- How do MoDMR/districts/Upazilas/unions report on the funds/resources disbursed? Are there any feedback loops to the national government?

These questions will be answered through desk-based research and KIIs with key officials from the institutions identified. This study has a procedural focus and thus will not examine the levels of funding/resources received at each key decision point (i.e. where money changes hand).

RQ3: What are the enablers of, and constraints on, systematically adopting an institutional model of using regular SSNPs to meet expansions in need, and under what condition might this be desirable?

This research area will examine whether long-term social protection programmes should, or could, be used to meet expansions in need resulting from shocks. It will assess this in the context of certain cash allowances under MSW being horizontally expanded in response to COVID-19, and an increasingly live debate about whether this institutional model of response should be adopted to meet spikes in demand due to other shocks, and what role this model could play alongside using short-term responses. It will assess this through three main avenues of enquiry:

1. investigating the characteristics of vulnerable households that have been excluded from the scale-out of short-term programmes, and to understand whether these characteristics overlap with the categorical eligibility criteria for the three long-term cash allowances;
2. examining beneficiaries' experience of the performance of long-term cash allowances to understand better the extent to which programme delivery systems would be overburdened by the addition of a shock response objective; and
3. exploring the political economy of using long-term cash allowances to meet expansions in need.

Sub-Question 1: What are the incentives for different actors around different institutional models for meeting spikes in demand due to shocks?

Research in Bangladesh highlights the importance of local patronage politics in influencing who benefits from both short-term and long-term social protection programmes. While the guidelines for many programmes have outlined criteria for eligibility determination, there is evidence that the final selection of beneficiaries is influenced by local patronage politics. Across programmes, the local committees at the union and Upazila levels play a strong discretionary role in beneficiary selection, especially in the presence of oversubscription and lack of clear parameters for beneficiary prioritisation. An assessment of the food-for-work programme concludes that 'the programme is not effective in terms of the stated objectives of reducing poverty, but rather serves the interest of political elites' (Kundo *et al.*, 2018). The old-age allowance suffers from similar problems, as the UP chairman exerts a strong discretionary influence on the beneficiary selection (Begum and Wesumperuma, 2013). The beneficiary selection process for VGD is also fraught with issues of political interference and bribery (Maxwell Stamp PLC, 2018; Mannan and Ahmed, 2012). A number of other studies (Choudhury and Haque, 2016; Islam *et al.*, 2017; Mahmud and Prowse, 2012) have also identified that corruption, nepotism, and politicisation act as major deterrents in operationalising an effective and functional disaster risk management system in Bangladesh.

Aligning with local power politics is viewed as important to enable the effective delivery of SSNPs. Debates about using MFS to deliver cash support in response to the COVID-19 pandemic, for instance, highlight the importance of not entirely bypassing UP structures in identifying eligible households. Rather, commentators point to the importance of combining 'new' tools (e.g. mobile phones for identification and payment delivery),

alongside an understanding of the context, or of combining ‘high-tech’ approaches with those that work with the existing government structures and the individuals within those structures at the local-level.¹⁵

An important reason for the limited progress in rationalising SSNPs is ministries being unwilling to reduce their mandates and associated budgets. The 2015 NSSS proposed that SSNPs with similar objectives be grouped into five thematic clusters, each with a lead coordinating ministry. This would include a thematic programmatic cluster of social allowances to be coordinated by MSW; a cluster of food security and disaster assistance, with the Ministry of Food as the lead coordinating ministry and including select MoDMR and MSW programmes; and a thematic programme cluster of labour and livelihoods interventions with MoDMR as the lead coordinating ministry. Key informants explained how the structure of thematic clusters was felt to be more politically acceptable and so more likely to be implemented than a proposal to consolidate programmes, which would lead to some ministries losing budgets. However, there has been limited progress on this so far.

Politics and power therefore play an important role in shaping the social protection system. This research area will further investigate the political economy around different institutional models of social protection to meet expansions in need in response to shocks. In particular, it will examine the extent to which the development of the social protection sector has challenged, or been consistent with, the existing political settlement (or ‘the balance or distribution of power between contending social groups and social classes, on which any state is based’ (in Wanyama and McCord, 2017)), and the distributional regime (the existing mechanisms for distributing resources within society (Seekings and Natrass, 2015; in Wanyama and McCord 2017)). In doing this, the Maintains research acknowledges that social programmes, and adaptations to them – for instance to meet shock response objectives – are likely to be adopted and expanded where they do not threaten the structures of power in the existing ‘political settlement’ (Wanyama and McCord, 2017).

This research area will seek to answer questions such as the following:

- What are the preferences across different government ministries for the different institutional models of shock response, and why are these preferences held?
- What is the role of development partners in framing the debate and preferences around models of shock response?
- What is the level of interest in combining, or seeking to complement, the different institutional models?
- What are the institutional barriers to using long-term programmes to meet expansions in need?
- What is the political economy around financing by both the Government of Bangladesh and development partners? Are there certain types of disasters and types of institutional models that are prioritised and preferred? Why can some ministries leverage funds more easily than others? Is there competition for shock response funds?

¹⁵ www.odi.org/events/16913-targeting-covid-19-relief-payments-in-bangladesh

Sub-Question 2: To what extent would the scale-out of long-term cash allowances reach vulnerable households not covered by short-term emergency responses, and would such a scale-out overburden the delivery system and the institutional context?

Emergency and long-term programme responses have different target groups. This is due to their inherent differences in objectives, in terms of addressing chronic as opposed to acute deprivation, as well as the fact that emergency responses also likely require quick processes of beneficiary identification (Schnitzer, 2019). In Bangladesh, commentators note that there are no programmes that identify beneficiaries – either geographically or at the household level – on the basis of their vulnerability to natural hazards (Rashid and Baboyan 2018). Rather, long-term SSNPs identify beneficiaries on the basis of poverty and/ or categorical characteristics, such as age, while short-term SSNPs identify beneficiaries on the basis of geographic exposure to particular hazards or losses already incurred.

While poverty is a core determinant of exposure to disasters, other features intersect with poverty that drive vulnerability to shocks and their negative impacts – notably context, demography, gender, disability, and social status. Crucially, the overall impacts are defined by the type and magnitude of shocks. Many of the long-term SSNPs in Bangladesh are poverty-targeted, but a shortcoming of this method for shock response is that it is ‘not appropriate for measuring rapid changes in welfare due to sudden shocks and [it] may be less relevant ... for identifying households in need of transitory support’ (Kuriakose *et al.*, 2013, p. 28).

Current targeting approaches for long-term SSNPs do not account for vulnerability to natural hazards (Policy Research Institute of Bangladesh, 2019). As a result, the extent of overlap between the measures of poverty and the underlying vulnerability to natural hazards is unclear. This is for two main reasons: (i) spending on long-term programmes is currently allocated on the basis of Upazila poverty levels, without incorporating geographical exposure to natural hazards; and (ii) at the household level it is unclear if the eligibility conditions overlap with vulnerability in the face of natural hazards (Rashid and Baboyan, 2018).

It is therefore crucial to understand the overlaps between vulnerability in the face of shocks, access to short-term social protection responses, and particular household categorical characteristics, to understand better whether using long-term cash allowances to meet expansions in need would enable greater coverage of vulnerable groups.

At the most fundamental level, if the capacity to implement programmes, even in the absence of a shock, is extremely limited then there is both a risk of ‘premature loadbearing’ of the current system, as well as a high likelihood that there will be capacity-related limitations for shock response (Ulrichs and Slater, 2016). This research area will therefore also investigate, based on the experience and from the perspective of both beneficiaries and local-level implementers, the ongoing performance of the programmes, and what this means in terms of their ability to be used to meet expansions in need. In other words, it will test the gap between programme design and implementation, and will assess what the strengths, weaknesses, opportunities, and threats that emerge from this mean for the future potential of long-term programmes to be scaled out to meet expanded needs.

Approach and methods

Research Question 3 will be examined using a range of methods.

Sub-Question 1, on political economy, will be examined through a literature review, a review of legislation and policies, and KIIs. It will aim to focus on the same historical shocks that are being investigated under Research Question 2 around financing.

Sub-Question 2, on coverage, target groups, and the experience of the ongoing implementation of long-term programmes, will be investigated using mixed methods. As well as reviewing operational manuals, it will undertake a combination of a household survey and local-level KIIs and FGDs.

These methods will be used in three Upazilas, purposively sampled on the basis of: (i) all three long-term cash allowances currently operating; and (ii) historical occurrence of a particular type of shock and of short-term programmes being scaled out to meet expansions in need due to that shock. Given that the number of beneficiaries of long-term cash allowances are allocated at the Upazila on the basis of poverty maps, a secondary sampling criterion will be the number of beneficiaries of these two programmes in the Upazila. The three types of shock will be as follows:

- Upazila 1: recent occurrence of storm surge.
- Upazila 2: recent occurrence of drought.
- Upazila 3: recent occurrence of seasonal flooding.

We shall also draw on programme administrative and MIS data where possible. However, we are currently uncertain about the extent to which we will be able to access this information. The research will be sequenced: first, preliminary KIIs and a review of administrative data, where possible, to inform the development of survey tools; second, the household survey; and third, further qualitative investigation.

The household survey will seek to answer a range of questions on: (i) vulnerability, coverage, and the characteristics of households excluded from short-term responses; and (ii) administration systems, including in relation to programme experience of beneficiaries, and barriers to programme access. These questions will include the following:

- What are the main indicators of household-level vulnerability in the face of different types of natural hazard and how do these compare with indicators of poverty and lifecycle characteristics?
- What are the characteristics of vulnerable households that have been excluded from previous short-term responses?
- What is the level of overlap of coverage of long-term SSNPs in relation to household vulnerability to different natural hazards? Which groups are omitted?
- What are the main barriers that different households face in accessing programmes at different stages of the SSNP delivery chain?
- What is the programme experience of beneficiaries of long-term cash allowances and what would this mean for the ability of these programmes to provide an adequate and timely response to shocks?

Annex C outlines the household-level sampling strategy for the household survey. The sample will be weighted towards beneficiaries, given that a set of questions are around beneficiary programme experience, and will be stratified on the basis of: (i) old-age allowance beneficiary; (ii) deserted and destitute women allowance beneficiary; (iii) disability allowance beneficiary; and (iv) non-beneficiaries. We anticipate being able to compare the performance of the same programme across the three Upazilas, and so in relation to different shocks. However, with our proposed sample sizes it is unlikely that we will be able, quantitatively, to assess the performance of each programme in relation to the same Upazila-level shock.

This research will conceptualise vulnerability in terms of the effect that different shocks on households have, not just merely in relation to shock exposure. More specifically, in our definition and measurement of vulnerability we draw on a conceptual framework developed by Ibok *et al.* (2019), initially used to assess food vulnerability. This conceptual framework envisages vulnerability as a composite of exposure to shocks, the accumulative experience of vulnerability and poverty (sensitivity), and the household's coping ability (adaptive capacity). These dimensions are defined as follows:

- **Exposure** refers to shocks that can affect households: in our context, floods, droughts, and mudslides.
- **Adaptive capacity** refers to the ability of a household to manage the stress induced by shocks. This is the set of strategies households initiate to maintain adequate living standards in the event of shocks. Households with more assets, with better or diversified livelihood opportunities, and households with better access to infrastructure are better placed to respond to shocks.
- **Sensitivity** refers to the accumulative experience of poverty. Chronically poor households are likely to have depleted their adaptive capacity, and therefore are more likely to employ more desperate coping mechanisms.

We will adapt this framework to develop an index of vulnerability for our survey sample using particular indicators. We will also collect retrospective information on household-level coping strategies.

KIIs and FGDs, meanwhile, will interrogate the reasons why certain households may not be receiving predictable support.

4.2 Synthesis

We will undertake a comparative analysis of the performance, and enablers of and constraints on, the different institutional models in relation to different types of shock, drawing on findings from each of the three research questions.

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Annex A Shock calendar

	Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Types of shocks													
Flash flood	Haor region/ Greater Sylhet division			■	■	■							
Monsoon flood	Low-lying areas the most						■	■	■				
Tropical storm season	Entire BD but coastal part the most			■	■	■	■	■	■	■	■	■	
Drought	Northwest				■	■	■	■					
Cold wave	Northwest	■											■
Salinity intrusion	South	<i>Not seasonal</i>											
Earthquake	Entire country	<i>Not seasonal</i>											
Lean season	Northwest/Greater Rangpur Division			■	■					■	■		
Seasons													
Season	n.a.	Winter		Summer			Rainy/monsoon		Autumn		Winter		
Crop season	n.a.	Boro Rice	Aush Rice	Aman Rice					Boro rice, wheat, potato				

Annex B Sampling protocol for the shock case studies

The cases will be shock-affected Upazilas, purposively sampled on the basis of occurrence of a particular shock. We will follow publicly available bulletins that draw on EWS information to understand when a shock has occurred and if/ when emergency SSNPs, or other SSNP responses, have been scaled out to particular affected areas.

The desk-based study under Research Question 3 that will investigate how EWSs function will help us to understand better the timeliness and availability of EWS information in relation to different natural hazards.

Our preference, for both droughts and storm surges, is to revisit those Upazilas where the mixed methods research under Research Question 3 took place. However, our study design is not contingent on the occurrence of shocks in those specific Upazilas.

For each shock case study we will undertake research at three different levels. More details on the sampling for this are provided below.

Stage 1: Sampling Upazila

On the basis of occurrence of a particular shock.

Stage 2: Sampling UP

UPs will be purposively sampled on the basis of: (i) occurrence of the same single shock that informed the selection of the Upazila; and (ii) operation of emergency SSNPs, or other means of using SSNPs to respond. We are unaware of EWS data providing information on shock occurrence at the UP level and so will identify UPs through discussions with Upazila officials.

Stage 3: Sampling villages

Villages will again be identified on the basis of their propensity to a particular shock – based on discussions with Upazila and UP officials. Within each UP we will also purposively sample villages to cover a spectrum of remoteness – a key variable given that one focus of our research is on the timeliness of response. Remoteness at the village level will be defined on the basis of distance from the UP office, as it is these officials who are the link between the social protection system and community members. The village will be our case, and it is at this level that we will concentrate our qualitative research.

APP ONE

Check list of key questions (McCord, 2013)

Technical design

What are the design specifications of the major instruments in place and are they consistent with rapid scale-up and expansion (taking into account targeting approaches, payment modalities, conditionalities, extent of contributions-based provision)?

Institutional context

What institutions are planning shock-responsive social protection programming? Are EWSs in place, linked to triggers for action? Are there coordinated plans and is there a division of labour across agencies for shock response?

Political economy

What are the preferred approaches to shock response by different donors and the government? How might government policy priorities affect the nature of shock responses? Do planned responses cover the groups potentially affected by different crises equitably or do they prioritise the needs of certain groups over others? Are institutional priorities and funding sources driving their interpretation of needs and their selection of response instruments? Are agencies that are mandated to deliver ongoing social protection for the chronic poor also expected to allocate financial and human resources to shock response provision, and do social protection agencies accept this mandate?

Fiscal

Is financing in the social sectors ring-fenced against spending reductions in situations of fiscal contraction? Are national government or donor contingency plans in place to ensure access to countercyclical spending on social sector provision? How do available resources compare to the cost of expanding provision in the sector in line with scenarios outlined above?

Annex C Sampling design for the household survey

C.1 Sampling strategy

Within each purposively selected Upazila, we propose to implement a multi-stage random sampling strategy, in order to provide results regarding how poor and vulnerable households respond to shocks, and the role of SSNPs in supporting them. This will be implemented in the following stages:

- **Stage 1 – Random selection of villages:** Using the full list of enumeration areas¹⁶ used by the Bangladesh Bureau of Statistics in order to conduct the Census as a sample frame, we will randomly select a set of villages in each purposively selected Upazila. Following sign-off on this design document, fieldwork will be budgeted for and the exact sample size confirmed.
- **Stage 2 – Household listing in each randomly selected village:** In order to achieve the purpose of understanding both how poor and vulnerable households respond to shocks, as well as how these households access SSNPs, it will be necessary to sample both beneficiary and non-beneficiary households. As such, prior to Round 1 of research, a household listing exercise will be conducted in each randomly selected village, in which a short listing questionnaire will be applied to every household, asking very basic information, to allow us to re-contact the household, as well as to identify whether or not that household is a beneficiary of an SSNP or not.
- **Stage 3 – Random selection of households:** Using the household listing in each village as a sampling frame we will then randomly select 20 households in each village. Within the village we propose to stratify the sample such that we randomly select 15 beneficiary households and five non-beneficiary households per village.

C.2 Sample precision

In order to assess the appropriateness of a given sample size for any piece of research it is important to consider a number of factors:

- **The desired level of precision**, or margin of error, which is usually expressed in percentage points. For example, if we find that 60% of households have access to a SSNP but our given sample size only allows for a margin of error of +/-15% points then we can conclude that between 45% and 75% of households have access to a SSNP.
- **The overall sample size**, with the level of precision improving as the sample size increases.
- **The study design** – in any research design there is a balance between what would be most efficient from a sampling and analysis perspective (in this case a random sample of all households from any village in a given Upazila) and both the practicalities of

¹⁶ Enumeration areas are defined blocks, usually villages in rural areas, or are defined by population in urban areas.

delivering fieldwork within a budget which necessitates the clustered approach to sampling described above, where households are clustered within randomly selected villages.

As the detailed research design proposed in this document has not yet been signed off by DFID, we have not yet confirmed the exact sample size. However, we want to present an indication of what this would look like and the level of precision this would yield. As such, we have for now assumed a sample size of 3,000 households, which we think is broadly realistic. The exact sample size will be confirmed following the acceptance of the research design.

In order to assess the sample precision of the assumed sample size we follow Cochran (1963) and use the following sample size calculation:

$$n_0 = \frac{z^2 p(1-p)}{d^2} * DEFF$$

Where:

- N_0 is the sample size of households
- $Z = 1.96$, providing a level of statistical confidence of 95%
- d = precision or margin of error
- p = baseline proportion for indicators of interest. Here we assume $p = 0.5$ (50%)
- $DEFF$ = design effect

The design effects increase the required sample size for a given desired level of precision due to the clustered nature of the sampling strategy relative to the use of a simple random sampling strategy.

$$DEFF = 1 + \rho * (m - 1)$$

Where:

ρ = intraclass correlation (ICC) of the indicator being measured

m = weighted average cluster size

Figure 5 reports the sample precision for given sample sizes. For example, with a total household sample of 3,000 households, or 1,000 households per purposively selected Upazila, the margin of error would be +/-5% points. This means that if, for example, 50% of households had access to a given SSNP within an Upazila, we could conclude with confidence that between 45% and 55% of households had access to the SSNP given the sample size of 1,000 households per Upazila.

The level of sample precision is important for this research, given the desire to explore differences across Upazilas with different shock profiles. If the margin of error is too high it will be difficult to draw conclusions. To consider the implications it is important to realise that

in order to claim statistically significant differences in key indicators of interest the margin of error must not overlap for estimates for each Upazila. The higher the margin of error the more likely that the margin of error for estimates across Upazilas will overlap, and the more likely that the research would not be able to detect differences across Upazilas even if there are true differences in the population.

Figure 5: Sample precision

