

Maintains



Research supporting social
services to adapt to shocks

Initial COVID-19 responses in Bangladesh, Kenya, Pakistan, Sierra Leone and Uganda: Documentation and learning from March to May 2020

COVID-19 Series: Synthesis Report

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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

ADB	Asian Development Bank
BISP	Benazir Income Support Program
CDC	Centers for Disease Control
CHWs	Community health workers
CSSE	Center for Systems Science and Engineering
DFID	Department for International Development
DRC	Democratic Republic of Congo
DRF	Disaster risk financing
EOC	Emergency Operations Centre
GBV	Gender-based violence
IDPs	Internally displaced persons
IEDCR	Institute of Epidemiology, Disease Control and Research
IMF	International Monetary Fund
IPC	Infection prevention and control
KICD	Kenya Institute of Curriculum Development
LICs	Low-income countries
LMICs	Lower-middle-income countries
MoH	Ministry of Health
MSI	Marie Stopes International
NERC	National Emergency Response Committee
NSSF	National Social Security Fund
OMS	Open Market Sale
PHEOC	Public Health Emergency Operations Centre
PPE	Personal protective equipment
PWD	People with disabilities
SRH	Sexual and reproductive healthcare
UNHCR	United Nations High Commission for Refugees

WFP World Food Programme
WHO World Health Organization

Executive summary

Introduction and approach

COVID-19 has been an unprecedented challenge globally. This is an executive summary of the [full report](#) that documents the experiences and challenges of scaling up the response to COVID-19 in the first three months of the outbreak – March to May 2020 – in five countries: Bangladesh, Kenya, Pakistan, Sierra Leone, and Uganda.

This work was undertaken under the DFID-funded Maintains programme, to inform Maintains' research, technical assistance, and learning agendas. The primary objective was to see what Maintains can learn around the national ability to scale up in response to a shock. This will consider the governance of the outbreak and its impacts across social sectors, with a focus on the health sector.

Rapid analyses were undertaken by country teams who reviewed documentation issued by government and other stakeholders, and interviewed a range of government and partner organisations (to the extent feasible under lockdown conditions), following a pre-designed standardised research framework. This was further strengthened by secondary data collection and the findings synthesised into this report to support comparability and identify key themes and learning. This work was undertaken in a rapid fashion, in a fast-moving context, and attempts to summarise a broad array of impacts into a concise analysis; it therefore cannot tell the full story in all its complexity but rather seeks to provide pointers and early lessons.

The pandemic has played out differently in the five countries. Pakistan and Bangladesh were hit first (26 February and 8 March respectively) and hard (with the highest number of both confirmed cases – 72,000 and 47,000 by 31 May respectively – and cases per capita). Lockdowns were imposed, but then significantly eased due to economic pressure after about two months, during May, even whilst daily cases were continuing to rise.

The first cases were confirmed slightly later in Kenya, Uganda, and Sierra Leone (13, 21, and 31 March respectively) and all three of these countries have far fewer confirmed cases – all below 2,000 by the end of May. They all took swifter response measures – with hand-washing at Freetown airport from January and Uganda going into lockdown even before the first case – and lockdowns in Uganda and Kenya have been slower to ease. Sierra Leone's response has been severely limited by resources, and it has the highest fatalities per capita. In all countries, cases per capita have measured highest in the capital city.

An analytical framework has been developed for this report that will be further tested and developed during the life of the Maintains programme. The framework analyses the response through three broad domains, as follows, which are further broken down into response attributes and key factors and summarised in the table below:

1. The overarching **governance** of the response, across all sectors, which includes leadership, plans, legal frameworks, partnerships, financing, trust, and accountability.
2. **Mitigation of secondary impacts.** We have focused on how the social systems that are core to Maintains – social protection, nutrition, and education – can respond to the

secondary impacts of the pandemic, and take a particular look at impacts on gender equality and social inclusion (GESI). This section also considers the impact and implementation of movement restrictions, which affect every other part of the response.

- How the **health system** has been able to maintain existing essential health services, as well as scale up to respond to the epidemic with stringent infection prevention and control. Other key aspects of the health response include the health workforce, information systems and surveillance, supplies and logistics – all of which require strong surge components – as well as genuine community engagement.

Table 1: Analytical framework for the report: response attributes and key factors

Governance		
	Response attributes	Key factors
	Competent leadership and multi-disciplinary team	✓ Competent, flexible leadership, clear roles and responsibilities, multi-disciplinary team with capacity to deliver with good representation of women, including in senior positions.
		✓ Close and effective coordination at national, provincial, district, and local levels
	Adaptive plans and solid policy and legal framework	✓ Prior to the outbreak, strong public health planning, policy, and preparedness actions have been undertaken
		✓ A flexible operational plan with estimated resource requirements, surge capacity, and regular operational reviews
		✓ Existence of applicable, up-to-date legal framework
	Collaboration, coordination, and partnerships	✓ National government agencies partner with: ✓ Development partners, donors, UN agencies, and international stakeholders; ✓ Private sector – health and non-health; ✓ Scientific bodies, institutions of learning, traditional leaders and local influencers, non-governmental and faith-based organisations, civil society, and women's rights groups
	Timely, flexible, and adequate access to crisis financing	✓ Swift, flexible access to additional financing
		✓ COVID-19-related financing and expenditure are subject to accountability mechanisms and public scrutiny by the legislature
	Trust, transparency, and accountability	✓ Being seen to implement a proportionate and accountable response, with public health above all other agendas
		✓ Evidence-based, transparent communication to garner public consent and build trust in the response

Mitigating secondary impacts		
	Response attributes	Key factors
		✓ Clear guiding principles on movement restrictions are in place; frequent, transparent reviews; and a special focus on vulnerable groups

	Pro-poor implementation of movement restrictions	✓ Movement restrictions are implemented consistently and enforced with proportionality ✓ Basic needs of those subjected to lockdown – including access to food, water, and essential health care – are met
	Ensuring gender equality and social inclusion (GESI)	✓ GESI is mainstreamed within all COVID-19 approaches and interventions, with an explicit GESI analysis, disaggregated data, and extra support provided for women and girls and the most vulnerable groups ✓ Specific additional strategies are established to protect women and girls from physical, sexual or psychological violence, with a particular focus on increased vulnerabilities due to movement restrictions ✓ Stigma, discrimination, racism, and xenophobia are not tolerated and transgressions are publicly dealt with, including state-supported legal redress
	Providing social protection	✓ Social assistance cash and in-kind schemes are expanded and adapted swiftly, with new delivery and enrolment modalities as necessary to successfully target and support vulnerable people ✓ Market-based interventions are put in place to further protect both households and small businesses
	Adequate nutrition and food security for all	✓ Cash and in-kind social protection systems are expanded and adapted swiftly, to successfully meet the immediate food and nutrition needs of vulnerable people ✓ Introduction of stimulus and support packages for food production and supply ✓ The health system response for malnutrition prevention and treatment is strengthened
	Accessible, equitable, and inclusive education	✓ A policy to oversee education at all levels while institutions of learning are closed ✓ Distance learning should be provided in ways that optimise accessibility, equity, and inclusion ✓ Educational institutions should work with the government to ensure that other services provided by them (e.g. school feeding programmes) are provided in other ways

Health systems		
	Response attributes	Key factors
	Service delivery: Quarantine, testing, isolation, treatment, and contact tracing	✓ Dedicated quarantine processes have been set up for international arrivals and are achieving high coverage and compliance ✓ Standardised, routine protocols for free testing of suspected and confirmed COVID-19 patients are in force ✓ An effective isolation policy is in place for confirmed cases (either institutional or at home) and is achieving high coverage and compliance; high-dependency care capacity has been augmented ✓ Contract tracing systems and institutional or self-quarantine procedures for identified contacts established and achieving high coverage and compliance
	Maintaining delivery of essential services	✓ Essential routine healthcare services are sustained throughout a public health emergency ✓ An infection prevention and control risk assessment has been conducted at all levels of the healthcare system and high-risk community spaces, leading to application of additional protection guidelines.
	Dedicated health workforce with surge capacity	✓ Human resource provisions are in place to provide surge capacity, and to adjust roles and actions as needed, assisted by ongoing capacity building. ✓ Health workers are motivated and supported by occupational health programmes, training, remuneration and insurance, and psychosocial support, leading to high levels of interpersonal trust; the differentiated needs of women and men are taken into account.
	Efficient information systems and surveillance	✓ Robust and timely data analysis supports risk assessment and operational decision-making; daily situation reports and data are made available to all government levels, international partners, and the general public ✓ Health system actors have successfully applied risk communication protocols through traditional and social media, and health advisory hotlines
	High-quality supplies, logistics, and infrastructure	✓ All COVID-19 healthcare facilities have continued access to essential equipment, drugs, reagents, and supplies, including personal protective equipment (PPE) and respiratory support, in accordance with their designated level of care.
	Genuine community engagement	✓ Health system actors have successfully engaged recognised local authorities, leaders, and influencers, including women leaders, to enhance the community uptake of culturally appropriate preventive community and individual health and hygiene practices in line with national public health recommendations

Governance

COVID-19 is a highly complex challenge for all governments, especially those with limited state capability. It requires a coordinated and adaptive ‘whole of government’ and ‘whole of society’ approach.

Different countries have enacted different **leadership** and structures: only Bangladesh continues to lead its response from the health ministry. In Uganda, emergency responses are led by the Department of Disaster Preparedness. Sierra Leone’s response is now led by the Ministry of Defence, which stakeholders felt had created tensions and divided

opinion as to whether this weakened or strengthened national coordination. In Kenya, the National Emergency Response Committee, a highly centralised body accessible only by top government officials, has public health in an advisory role only, and there are disconnects between national and county levels. Pakistan's leadership has been disjointed, with different approaches being advocated by the federal government, provincial governments, military actors, and religious leaders. Leadership of women in the response is low – in Kenya, Pakistan, and Uganda, women make up 29%, 8%, and 22.5% of key response committees respectively, often with men holding the most influential positions. Thus, these committees are less likely to consider women's and men's different experiences when shaping responses, which is expected to deepen gender inequality.

Most countries created national **response plans** to govern the response. Kenya had a head start, producing its first COVID-19 preparedness plan in December 2019, but by May the response plan seemed to be still under preparation. Bangladesh and Sierra Leone based their response plans on existing pandemic influenza response plans and Sierra Leone utilised its existing Emergency Operations structure. Uganda is the only country to not have a publicly available response plan. A strong response requires an up-to-date **legal framework** – this is in place for Bangladesh and Kenya, Pakistan has had to use disaster rather than public health legislation, Uganda's legislation is old but functional, and Sierra Leone's public health legislation is outdated. **Preparedness** can support response; Uganda and Sierra Leone have the most experience of managing major outbreaks, have recently undertaken Ebola simulation exercises, have active One Health approaches, have national action plans for health security, and final or draft pandemic influenza preparedness plans. Uganda's strengths have been seen in case management and surveillance, and less so in terms of mitigating secondary impacts.

In terms of **partnerships**, so far the role of development partners has been more focused on financial support than on technical and logistical capacity. In Kenya, donor engagement was initially strong, but reduced substantially when the COVID-19 response was re-routed through the new government structure. All Maintains governments are working with their private sectors, with particularly strong engagement from the vibrant private sector in Kenya. And whilst most countries have recognised the role of civil society, which is crucial for communicating epidemic risks and achieving behaviour change, its potential is not yet fully realised, particularly that of women's rights organisations. In Bangladesh, Kenya, and Uganda, religious leaders have played a very positive role, but in Pakistan religious leaders made unilateral statements about mosques opening, against government lockdown orders, creating confusion.

To meet the substantial **financing** needs to cover the direct response measures and reduce the economic and social impacts, all countries have obtained additional financing. There has been a heavy reliance on substantial soft loans from development institutions (principally the Asian Development Bank, International Monetary Fund, and World Bank), which has provided valuable quick funds but will increase debt levels. Budget reallocations have also been swiftly implemented, but they will leave gaps elsewhere, and Sierra Leone has seen some debt restructuring. It is hard to ascertain whether the available financing is sufficient to meet the needs. There are also concerns as to whether there are sufficient expenditure controls to manage the fiduciary risks that are exacerbated by emergency procurement.

Finally, institutional **trust** between communities and government is crucial in pandemics to ensure cooperation and behaviour change. This has been challenged due to perceptions that some governments have exploited the pandemic for political gains, that Kenya took an enforcement rather than public health approach to quarantine,¹ and that Bangladesh has repressed freedom of speech and protest.² The strictly enforced curfews in Kenya and Uganda not only punished transgressors, but also collectively reinforced people's fears of state caprice and coercion.

Mitigating secondary impacts

It has been particularly challenging for countries to balance the trade-offs inherent in **movement restrictions** required to slow the spread of COVID-19 with the related multi-layered economic, educational, social, and health-related risks and Maintains countries have taken different approaches to these trade-offs. Uganda quickly imposed a strictly enforced nationwide lockdown and curfew, which was still ongoing as at the end of May, whereas Sierra Leone implemented partial restrictions and just two three-day lockdowns, in recognition of the precarious economic situation of poor households.

Lockdowns have had a range of severe consequences. Initial enforcement of the curfew in Kenya led to 12 deaths and in Uganda there were multiple reports of beatings, the use of live ammunition, and arbitrary arrests of rule breakers. Meeting basic needs has been difficult, as many people living in informal settlements in Sierra Leone do not have either savings or storage facilities for water and food for three days. In Bangladesh, people's savings were estimated to last just 1–2 weeks. Humanitarian aid staff in refugee camps in Cox's Bazar report that the drastic reduction in operations capacity has affected their ability to perform even those services deemed 'critical'. The strictly enforced lockdown in Uganda has led to reports of women bleeding to death, attempting to get to hospital.

In the race to respond, inequities in needs, impacts, and access to services have been overlooked, deepening structural **inequalities**. There has been an increase in violence against women and girls, amplified by movement restrictions and lockdowns, school closures, and transactional sex. There are reports of significant rises in gender-based violence among refugees in Bangladesh's camps and across Uganda, while Kenya has reported a tripling of gender-based violence. Stigma, discrimination, racism, and xenophobia arising from, or exacerbated by, COVID-19 have also increased.

For most Maintains countries, the COVID-19 response plan refers to vulnerable groups, with Pakistan providing a strong example, but implementation is weak across all countries. Bangladesh, Kenya, and Pakistan have not provided any funding or made any policy commitment for gender-based violence, sexual and reproductive health services, provision of childcare, or support to mitigate the economic effects on women. There are also major gaps in the response to vulnerable groups including children, refugees, displaced people, and prisoners. Systematic monitoring is also missing, as well as on-the-ground task forces

¹ African Arguments (2020) 'Kenya: We cannot police ourselves out of the pandemic', <https://africanarguments.org/2020/06/03/kenya-we-cannot-police-ourselves-out-of-the-pandemic/>

² Taiwan News (2020) 'Bangladeshi lecturer arrested over Facebook coronavirus post', www.taiwannews.com.tw/en/news/3947954

to mitigate domestic crime; courts in all countries have stopped or reduced hearings with wide impacts, particularly for the vulnerable.

Increasing **social protection** has been a key strategy to protect vulnerable people from economic impacts. In all Maintains countries, over 80% of workers are employed in the informal sector, going up to 93.7% in Uganda, with mostly higher rates for women, meaning that protecting informal livelihoods needs to be a high priority. However, targeting has been a challenge, as countries do not have up-to-date social registries or sufficient socio-economic information about large sections of their populations.

Pakistan delivered the fastest scale-up: by 25 April 2020, the government had disbursed US\$ 411 million to 5.7 million beneficiaries across the country. Meanwhile the scale-up of social protection coverage in Bangladesh has been remarkable, with a further 24.7 million people now receiving protection for COVID-19, covering 15.3% of the population.³ Kenya, Uganda and Sierra Leone have also provided support, but at a slower pace and smaller scale. Kenya is the only country globally to have targeted a scheme specifically to urban slums. For all countries, there remain challenges around targeting processes, adequacy of transfer values, regularity and proposed length of planned transfers, and complaints and accountability mechanisms. It is not clear what analysis has been given to GESI, where timing, targeting, and modality of cash transfers are key.

Most countries have developed specific social protection interventions targeted at **food security**, including food distribution and rice subsidies in Bangladesh and food distribution through public 'utility stores' in Pakistan. However, access to these provisions has been a challenge. COVID-19 has not led to food production problems yet, and the food supply chain is relatively robust in most countries, apart from in Uganda and elsewhere for perishable foods. Across the Maintains countries, local markets have been shut (some intermittently) and there are some reports of increasing food inflation, which will exacerbate the impacts on nutrition. Some 8.3 million children have not received food via school feeding programmes; only Bangladesh has replaced this with high-energy biscuit provision. These issues, combined with major reductions in household income and the reduction in immunisation and child health services, means that we would expect to see a significant increase in the prevalence of under-five acute malnutrition in the coming months.

The COVID-19 pandemic has disrupted **education** provision at an unprecedented scale. Schools in all Maintains countries remain closed, likely leading to a reduction in educational outcomes, reversal in literacy gains, and particularly poor outcomes for girls, in relation to re-enrolment, gender-based violence, teenage pregnancy, and early marriage. While progressive education policies have been produced in all countries, implementation remains weak. All Maintains countries have developed new approaches to be able to continue education provision during the pandemic, with Pakistan and Bangladesh focusing on TV, Sierra Leone focusing on radio, Uganda combining online and radio, and Kenya mainly online. However, many children cannot effectively access distance learning approaches, particularly in rural areas, halting their education for months, significantly affecting their life chances, and deepening inequality.

³ Gentilini, U. *et al.* (2020) 'Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures –"Living paper" version 11'.

Health system

In order to slow the spread of COVID-19, to reduce pressure on health services and buy more time for preparedness, Maintains countries have tried – with varying degrees of success – to follow World Health Organization (WHO) guidelines to isolate or quarantine international arrivals, institute widespread testing, isolate mild and moderate cases (either in facilities or at home) whilst hospitalising moderate and severe cases, and trace and quarantine secondary contacts. Countries have relied upon institutional **isolation** (often using repurposed schools to supplement dedicated isolation and treatment centres) rather than self-isolation at home. However, this has been hampered by limited availability, high charges, and poor quality of facilities, leading to limited compliance. As COVID-19 spreads to rural areas, self-isolation may become more feasible. All five countries have attempted to increase their **testing** rates but per capita testing rates remain low, at under 2.5 tests per 1,000 people compared to over 40 in developed countries, particularly due to lack of key supplies. Countries with experience of contact tracing, such as for polio in Pakistan, have been able to institute systems at the community level.

The scale of COVID-19 is making it extremely difficult for health systems to maintain equitable access to quality **essential health services**. Essential services have been severely restricted, far more so than expected under WHO guidelines during the early stages of the pandemic, as limited health system resources are pivoted for the COVID-19 response and movement restrictions and fear of infection introduce barriers to access. There have already been examples of outbreaks due to suspended immunisation campaigns, such as measles in Pakistan, and immunisation remains suspended in Bangladesh. In Kenya, outreach services were down by two-thirds in March, institutional deliveries down by over half, and maternal mortality had risen. Routine services were down in Sierra Leone even before the first COVID-19 case had been established, while in Uganda all elective medical procedures have been postponed. Indirect effects on mortality and morbidity are likely to be high.

All countries have been working to increase the capacity of the health system in anticipation of an increased caseload, from a low base. In the face of low density of **health workers**, there has been rapid recruitment, leave cancellation, and the mobilisation of retired professionals, combined with initiatives such as special allowances and insurance to motivate and reward health workers. Domestic production of **supplies and equipment** has been started. Yet it appears that limited import availability of crucial items such as ventilators and PPE, combined with the limited capacity of treatment facilities, means that it seems likely that Maintains countries will face supply-side shortages if caseloads increase.

All countries have developed comprehensive and timely **data systems** and dashboards, mostly leveraging government-run health management information systems, displaying real-time data on cases, tests, and availability of beds, medical supplies, and PPE. However, these have not been made public in all countries, undermining the ability to help the population understand risk, influence behaviours, and build trust. In Sierra Leone, key statistics stopped being publicly reported in mid-May. In all countries, telephone hotlines have been established – often building upon existing hotlines such as for polio in Pakistan and Ebola in Sierra Leone – to spread information and provide guidance without risking in person contact.

Health systems need to **engage with communities** as active participants of health response efforts, not just passive recipients. Overall, it was found that the types of community engagement that worked well in Ebola (such as mobilising community surveillance teams, positive engagement with community leaders, and working with women and women's organisations) were not yet instituted in Maintains countries, including in Sierra Leone. Specific difficulties were also identified, including opposition to social distancing by faith groups in Pakistan, low levels of institutional trust in Kenya, and disinformation in Sierra Leone. Such problems will continue to compromise response effectiveness.

Conclusions and implications for Maintains

Governments have directed focus and resources to managing COVID-19 but the complexity of the issues and their multi-sectoral nature has challenged often limited state capability. In particular, it is a clear challenge to balance strategies to contain COVID-19 infection with the secondary effects caused by these strategies. COVID-19 will be a factor for all countries for a long time. A crucial course-correction is needed now to improve the future for vulnerable and disadvantaged groups.

This investigation has illuminated areas and issues to be examined and considered how to deliver a well-coordinated and balanced response to a major shock across social services. Maintains, in keeping with its multi-sectoral mandate, will continue to work with others to refine and strengthen the **analytical framework** used for this report, and address some of the knowledge gaps about shock responsiveness against this framework.

Governance

Countries have had different governance challenges – for some this has been decentralisation, others have not had the benefit of pre-existing public health policies and preparedness, some have squandered community trust, and all have struggled with multi-layered coordination. The gap left by the government responses has led to a range of community schemes, local solutions, and private sector innovations.

Further analysis is required on how different **leadership** approaches (e.g. centralising control through the Ministry of Health, or military, or disaster management agency) affect coherency and coordination, and how the informal rules, values, and norms that shape relationships and interactions among actors underpin the speed and effectiveness of an emergency response. Maintains is currently undertaking a short study to explore the role of traditional leaders in supporting the government's response in Sierra Leone.

The need to increase **availability of financing** to respond quickly to a shock is highlighted by this study. Maintains is undertaking one in-depth study of health shock costs and financing in Sierra Leone, as well as exploring shock financing approaches in other countries. This work, undertaken with close links to the Centre for Disaster Protection, will be synthesised for cross-country and cross-sector learnings.

Mitigation of secondary impacts

The evidence presented in this report suggests that the secondary effects will be substantial and long-lasting, particularly for vulnerable and disadvantaged groups.

Economic consequences are particularly severe due to extremely high rates of informal employment, especially for women. **Social protection** has been the key tool to meet some of these needs, with successes in rapid disbursement and increased coverage in Pakistan and Bangladesh respectively. It is clear that countries with reasonably well-established safety nets for vulnerable populations have found it much easier to expand, adapt, and innovate, pointing to the need for further investment in social protection programmes and social registries for the next crisis. However, even in these countries, social protection schemes are not achieving the effective coverage required to mitigate the disruptive effects of COVID-19.

Maintains has commissioned a study looking across all of its six countries, to explore, document, and evaluate the different social protection approaches taken to COVID-19. In addition, Maintains is undertaking longer-term research in Bangladesh, Kenya, and Pakistan looking at the enablers and constraints for effective shock-responsive social protection in long-term social protection programmes, how social registries can be used for shock scale-up, and how social protection can support nutritional outcomes.

A major gap identified in this report, across countries and sectors, has been mainstreaming **gender and inclusion**. Significant gaps have been seen in leadership, engagement at community level, and in interventions to mitigate impact that will have very long-term impacts and deepen inequalities. Bangladesh, Kenya, and Pakistan have not provided any funding or made any policy commitment for gender-based violence, sexual and reproductive health services, provision of childcare, or support to mitigate the economic effects on women. Women's health, safety, and livelihoods have been severely compromised – some will never recover. Governments should put in place immediate measures to address this significant gap, including the involvement of women's groups in the design, development, and delivery of services.

Maintains is committed to full incorporation of GESI into research plans and methodologies, and has launched new research to assess the impact of COVID-19 and associated government responses on food security, livelihoods, access to and utilisation of health services, education, and awareness and practice related to COVID-19 among poor urban communities in Ethiopia.

Scaling up effective distance learning has been a major challenge, which will exacerbate inequalities of **educational** outcomes and reduce life prospects, particularly for girls. Efforts are required now to strengthen both the content quality and reach, and to invest in catch-up programmes. Maintains will use its research programme in Uganda to develop a better understanding of the impacts of school closures on refugees, particularly girls and those with disabilities.

Finally, no countries appear to be getting ready for the expected increase in **malnutrition** that is just around the corner. Nutrition programmes, services, and screening need to be ramped up now, and school feeding programmes swiftly replaced. In Kenya and Uganda,

Maintains is researching how lessons from scaling up community management of acute malnutrition, primarily in situations of drought, can be applied in other shock contexts.

Health system

In pivoting to provide COVID-19-related services, **health** systems have been majorly disrupted, with essential services including antenatal care, immunisation, and institutional delivery severely restricted or suspended – against WHO recommendations. This is likely to cause very high secondary effects on morbidity and mortality.

Whilst countries have been working to expand treatment capacity within national health systems, supply-side constraints mean that it seems unlikely that countries will be able to manage a large number of cases requiring hospitalisation, resulting in high mortality rates. This would also compromise the ability to restart and maintain essential service delivery. It is therefore imperative that countries find ways to minimise the reproduction rate of COVID-19, whilst also mitigating the secondary consequences of these actions. Improving testing rates and adopting community engagement strategies that proved effective in Ebola are urgent priorities.

It will be important to continue to document the emergent strategies as countries try to both recover from and respond to COVID-19 at the same time – particularly those related to essential service delivery. This will expand our understanding of how low-resource social systems can deal with long-lasting shocks like pandemics, which have such widespread direct and indirect primary and secondary effects, and improve our ability to support countries to learn from COVID-19 and prepare for future shocks.

Health is a primary entry point for Maintains shock-responsive research and Maintains will continue to develop the conceptual framework for a shock-responsive health system that underpins this work.⁴ In Ethiopia, Maintains is researching how community-based health workers can support preparedness and strengthen shock responses; in Kenya, Uganda, Pakistan, and Sierra Leone, Maintains is seeking to explore in detail how health systems can better respond to shocks, looking at early warning systems, financing, and the provision of existing services alongside shock scale-up.

⁴ Newton-Lewis, T., Witter, S., Fortnam, M., Seal, A., Hailey, P., Nair, R., and Hillier, D. (2020) 'What is a shock-responsive health system?' Maintains Working Paper. Oxford Policy Management, Oxford, <https://maintainsprogramme.org/rc/working-paper-what-is-a-shock-responsive-health-system/>

1 Introduction

This report synthesises the findings from a series of rapid situation analyses on the initial response to COVID-19 in the first few months of the outbreak – March to May 2020 – in five countries: Bangladesh, Kenya, Pakistan, Sierra Leone, and Uganda.

This work is being undertaken under the UK Department for International Development (DFID)-funded Maintaining Essential Services After Natural Disasters (Maintains) programme. The Maintains programme delivers operational research across six countries (also including Ethiopia) on what it takes for national public service delivery systems to be more responsive to shocks, whether natural hazards, epidemics, or population displacement. A shock-responsive system is one that is able to scale up to address needs that arise due to a shock, whilst, as far as possible, maintaining routine service delivery and avoiding indirect effects from service disruption. Maintains will seek to draw policy and practice lessons for national and global impact through the operational research.

COVID-19 has emerged as a huge shock that will affect all public social systems directly and indirectly. Maintains is uniquely positioned to engage with the pandemic given its objectives in regard to shock-responsive programming, its mandate for operational research, and its cross-sectoral focus. Flexibility within the programme provides an opportunity to study in real time how countries are able to adapt and respond to the pandemic. The country and thematic teams of Maintains are in discussions with their DFID and country government counterparts on how the programme can support their efforts in dealing with the COVID-19 pandemic.

To systematically inform these discussions about the optimal short-, medium-, and long-term role of Maintains, rapid situational analyses were undertaken in each country to document response activities. The primary objective was to see what Maintains can learn around the national ability to respond to shocks. This work used a ‘systems’ lens in line with Maintains’ mandate, rather than specifically focusing on the technical response to the pandemic. As such, the study takes a whole-of-government approach, considering leadership and governance, including its impact across social sectors and of course on the health sector. A secondary objective was to identify whether additional research or technical assistance from Maintains would add value.

This report synthesises the documentation from country-level reports and supplementary information and takes a comparative and analytical approach. This will inform the broader agenda of Maintains about how to scale up national systems to respond to a multi-sectoral shock. Lessons coming out of this will support the longer-term work of Maintains and may identify gaps and opportunities for further work to support pandemic management to be delivered under Maintains technical assistance or beyond.

This report attempts to pinpoint strengths and challenges, with the opportunity to identify information that can help strengthen the ongoing response. It is important to remember that not all strengths and challenges identified in the process are under the control of the government concerned. Resultantly, any assessment of positioning is descriptive and does not imply any blame or cause.

This work was undertaken in a rapid fashion, in a fast-moving context. This report attempts to provide a useful contribution to the debate around scaling up a response to an extreme shock but it cannot tell the whole story. Omissions may be due to the rapid nature of this work, the relative difficulty of accessing key figures during the emergency, the need for a concise analysis, or the fault of the authors. There are certainly important aspects of the COVID-19 response and impacts that should be explored in future work.

The rest of this report is organised as follows: section 2 briefly describes the analytical framework and methodology for the report; section 3 provides an overview of the COVID-19 infection rates and government response measures on country-specific timelines; sections 4, 5, and 6 explore response measures in each country from the governance, secondary impacts, and health sector perspectives respectively.

2 Methodology

2.1 Analytical framework for this report

For the overall Maintains programme, a conceptual model for shock-responsive health systems has been developed and published as a working paper (Newton-Lewis *et al.*, 2020). Maintains is actively seeking input from practitioners, policymakers, and others to strengthen the model and is using the COVID-19 outbreak to stress-test its various components. A brief summary of the model, which was used as a starting point for this research, is found in Annex A (Figure 8).

In this report, we have developed the conceptual framework further, developing core attributes for an effective response and key factors that support scale-up. The attributes and key factors have been drawn and adapted from a range of different sources to develop a practical and workable analytical framework for this research.⁵

These attributes and factors have been developed as a means of distilling core aspects of shock-responsiveness, in order to provide a digestible snapshot of each country's progress. It is recognised that the social systems addressed in this report are complex, adaptive, and interdependent; thus, compartmentalisation into attributes and factors will unavoidably obscure this complexity and interconnectedness. Nonetheless we hope it provides some illumination of the challenges facing countries as they attempt to scale up to an unprecedented shock. Moreover, we look forward to working with others to develop this analytical framework further in due course.

All of the response attributes and key factors are crucial for an effective scaled-up response. None could be described as optional and achieving them all to the fullest extent would set a high bar and be a challenge for any country. Nonetheless, they represent the desired end point and thus ambition has not been reduced.

The analytical framework and chosen attributes are focused on core Maintains areas of interest – the social sectors of health, nutrition, social protection, and education, and cross-cutting themes of gender equality and social inclusion (GESI), disaster risk financing (DRF), and governance.

As this is a rapid study, we have not had the opportunity to address all areas comprehensively. In particular, there was limited scope to study the role of intangible software – the informal rules, values, and norms that shape relationships and interactions among actors, and which are themselves shaped by the socio-political context in which the system operates. This is clearly a crucial factor underpinning the speed and effectiveness of an emergency response, especially in an unprecedented situation, with no tried-and-tested rule book to follow. This may be an area worthy of longer-term study under Maintains. Also note that this work focuses on the early response phase of the COVID-19 pandemic; it does not address preparedness, recovery and reform.

⁵ Particularly important sources used were Nuzzo *et al.* (2019), WHO (2020a), WHO (2020b), Palagyi *et al.* (2019), OECD (2020), UNDS (2020), FAO (2020), World Bank (2020a), and International Development Partners Group (2017).

The following table summarises the COVID-19 response attributes and key factors that are used to structure the report. The analytical framework has been divided into three core domains as follows:

1. **Governance:** This looks at the overarching governance of the response, across all sectors, and includes leadership, plans, legal frameworks, partnerships, financing, trust, and accountability.
2. **Mitigating secondary impacts:** There is clearly a large range of secondary impacts of COVID-19; we have focused on how the social systems that are core to Maintains – social protection, food security and nutrition, and education – can respond to secondary impacts, and we take a particular look at the impacts of the pandemic on vulnerable groups. This section also considers implementation of movement restrictions and lockdown measures that affect every other part of the response.
3. **The health system:** This includes the ability to maintain existing essential health services, as well as scale up to respond to the pandemic with stringent infection prevention and control (IPC). Other key aspects of a response include the health workforce, information systems and surveillance, supplies, and logistics – all of which require strong surge components – as well as genuine community engagement.

The analytical framework has been developed for this report and will be further tested and developed during the life of the Maintains programme.

Table 2: Analytical framework: domains, response attributes, and key factors

<i>Governance</i>		
	Response attributes	Key factors
	Competent leadership and multi-disciplinary team	✓ Competent, flexible leadership, clear roles and responsibilities, multi-disciplinary team with capacity to deliver with good representation of women, including in senior positions
		✓ Close and effective coordination at national, provincial, district, and local levels
	Adaptive plans and solid policy and legal framework	✓ Prior to the outbreak, strong public health planning, policy, and preparedness actions have been undertaken
		✓ A flexible operational plan with estimated resource requirements, surge capacity, and regular operational reviews
		✓ Existence of an applicable, up-to-date legal framework

	Collaboration, coordination, and partnerships	✓ National government agencies partner with: ✓ Development partners, donors, UN agencies, and international stakeholders; ✓ Private sector – health and non-health; ✓ Scientific bodies, institutions of learning, traditional leaders and local influencers, non-governmental and faith-based organisations, and civil society and women's rights groups
	Timely, flexible, and adequate access to crisis financing	✓ Swift, flexible access to additional financing ✓ COVID-19-related financing and expenditure are subject to accountability mechanisms and public scrutiny by the legislature
	Trust, transparency, and accountability	✓ Being seen to implement a proportionate and accountable response, with public health above all other agendas ✓ Evidence-based, transparent communication to garner public consent and build trust in the response

Mitigating secondary impacts

	Response attributes	Key factors
	Pro-poor implementation of movement restrictions	✓ Clear guiding principles on movement restrictions are in place; frequent, transparent reviews; and a special focus on vulnerable groups ✓ Movement restrictions are implemented consistently and enforced with proportionality ✓ Basic needs of those subjected to lockdown – including access to food, water, and essential healthcare – are met
	Ensuring gender equality and social inclusion (GESI)	✓ GESI is mainstreamed within all COVID-19 approaches and interventions, with an explicit GESI analysis, disaggregated data, and extra support provided for women and girls and the most vulnerable groups ✓ Specific additional strategies are established to protect women and girls from physical, sexual, or psychological violence, with a particular focus on increased vulnerabilities due to movement restrictions ✓ Stigma, discrimination, racism, and xenophobia are not tolerated and transgressions are publicly dealt with, including state-supported legal redress
	Providing social protection	✓ Social assistance cash and in-kind schemes are expanded and adapted swiftly, with new delivery and enrolment modalities as necessary to successfully target and support vulnerable people ✓ Market-based interventions are put in place to further protect both households and small businesses
	Adequate nutrition and food security for all	✓ Cash and in-kind social protection systems are expanded and adapted swiftly, to successfully meet the immediate food and nutrition needs of vulnerable people ✓ Introduction of stimulus and support packages for food production and supply ✓ The health system response for malnutrition prevention and treatment is strengthened

	Accessible, equitable, and inclusive education	✓ A policy to oversee education at all levels while institutions of learning are closed
		✓ Distance learning should be provided in ways that optimise accessibility, equity, and inclusion
		✓ Educational institutions should work with the government to ensure that other services provided by them (e.g. school feeding programmes) are provided in other ways

Health systems

	Response attributes	Key factors
	Service delivery: Quarantine, testing, isolation, treatment, and contact tracing	✓ Dedicated quarantine processes have been set up for international arrivals and are achieving high coverage and compliance ✓ Standardised, routine protocols for free testing of suspected and confirmed COVID-19 patients are in force ✓ An effective isolation policy is in place for confirmed cases (either institutional or at home) and is achieving high coverage and compliance; high-dependency care capacity has been augmented ✓ Contact tracing systems and institutional or self-quarantine procedures for identified contacts established and achieving high coverage and compliance
	Maintaining delivery of essential services	✓ Essential routine healthcare services are sustained throughout a public health emergency ✓ An IPC risk assessment has been conducted at all levels of the healthcare system and high-risk community spaces, leading to application of additional protection guidelines
	Dedicated health workforce with surge capacity	✓ Human resource provisions are in place to provide surge capacity, and to adjust roles and actions as needed, assisted by ongoing capacity building ✓ Health workers are motivated and supported by occupational health programmes, training, remuneration and insurance, and psychosocial support, leading to high levels of interpersonal trust; the differentiated needs of women and men are taken into account
	Efficient information systems and surveillance	✓ Robust and timely data analysis supports risk assessment and operational decision making; daily situation reports and data are made available to all government levels, international partners, and the general public ✓ Health system actors have successfully applied risk communication protocols through traditional and social media, and health advisory hotlines
	High-quality supplies, logistics, and infrastructure	✓ All COVID-19 healthcare facilities have continued access to essential equipment, drugs, reagents, and supplies, including personal protective equipment (PPE) and respiratory support, in accordance with their designated level of care
	Genuine community engagement	✓ Health system actors have successfully engaged recognised local authorities, leaders, and influencers, including women leaders, to enhance the community uptake of culturally appropriate preventive community and individual health and hygiene practices in line with national public health recommendations

2.2 Data collection

This is a wholly qualitative piece of work, as – at this stage in the response – there is no or insufficient data to analyse. Work was undertaken in country by teams who conducted in-depth reviews of relevant documentation issued by government and other stakeholders.

Key national planning documents were reviewed, including Emergency Operations Centre (EOC) situation reports, presidential statements and addresses by Ministry of Health (MoH) officials, national plans for COVID-19, related health planning documents (including the National Health Policy, National Pandemic Influenza Preparedness and Response Plan, Ebola After Action Review, National Action Plan for Health Security, and National Non-COVID Health Response Plan) and other national plans (including national education plans). Further, a detailed desk review was carried out of journal publications including recent peer-reviewed articles, opinion editorials, directives, and reports from the World Health Organization (WHO) and media articles.

Likewise, each country team approached a wide range of relevant government and partner organisations for remotely conducted interviews. The interviews followed a pre-designed standardised research framework that permitted the flexible deployment of subsections based on the interlocutor's expertise.⁶

Obtaining interviews was easier in some contexts than others: in Sierra Leone, the respective country team had a chance to attend, physically and virtually, daily sessions led by the national EOC. However, in other places, given the ongoing crisis, some key stakeholders showed limited availability, while others, given the potentially political nature of some questions, were less inclined to be interviewed.

A total of 52 key informant interviews took place, as well as a range of other more informal interactions. Interviewees included senior officials in the government, including those on the COVID-19 task force/EOC, and particularly represented by those in the MoH (including Director General of Health Services, Director of Planning and Research, and officials from the provincial government structures in Pakistan). Other interviewees were from the United States Centers for Disease Control and Prevention (CDC), DFID, World Bank, the United Nations Population Fund (UNFPA), WHO, Wellcome Trust, and Rising Academies. The Sierra Leone team also interviewed selected members of the community.

Further information has been added from other sources to supplement the interviews and country-based research. In this way, information on all subsections of the research framework was collected in an incremental fashion, as reflected by the sections of this synthesis report. Insights obtained via the above interviews have not been referenced, whereas other sources of information have been cited accordingly.

2.3 Scope and limitations

This synthesis report provides an overview of rapid in-country assessments of government responses to the COVID-19 pandemic in Bangladesh, Kenya, Pakistan, Sierra Leone, and

⁶ The interview tool is not included in this document due to its length, but is available to review. Please contact maintains@opml.co.uk.

Uganda. The full terms of reference for this study is provided in Annex B. The intention is to capture, as much as feasible, key emergency response interventions, as well as health and non-health outputs and outcomes for each country. This in turn will help identify success stories as well as areas that may benefit from targeted collaboration with partners, including DFID's Maintains programme.

It is the very nature of rapid assessments to be incomplete and in this case to be focused on Maintains' core domains of health, nutrition, education, and social protection, alongside Maintains' cross-cutting issues of GESI, DRF, and governance. The synthesis report follows the purpose of the individual country reports with a focus on documentation and comparison, and provides a starting point for further discussions within and among individual country contexts.

The COVID-19 context and response is highly dynamic. This report considers the response up until the end of May 2020 and it is recognised that some aspects may evolve.

3 Overview of COVID-19 in Maintains countries

3.1 Progress of the pandemic

COVID-19, a hitherto unknown disease caused by the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was declared a Public Health Emergency of International Concern on 30 January 2020 (WHO, 2020c) and a Global Pandemic on 11 March 2020 (WHO, 2020d).

Pakistan registered its first case on 26 February 2020. Bangladesh and Kenya did so on 8 and 13 March 2020 respectively, while Uganda reported the same on 21 March 2020. Sierra Leone was the last country to record a case on 31 March 2020.

Figure 1 and Figure 2 below show the number of confirmed cases and deaths as a proportion of population. This is particularly revealing as, although Sierra Leone has one of the lowest number of cases, the 'attack rate' – cases per population – is high and deaths per population are extremely high.

Box 1: Important note on data and information

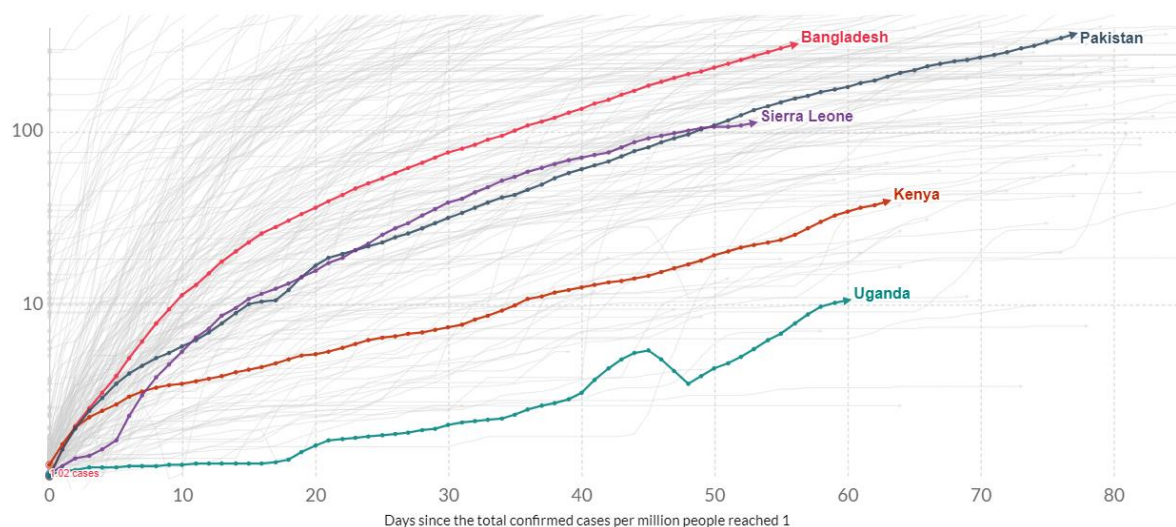
A significant body of epidemiological and research data has been created and is constantly updated, expanded and strengthened, and used by countries and the international community. However, there is an obvious lack of pre-existing knowledge of this virus and knowledge and information is constantly evolving.

Further, not all data are equally robust; any analysis can only be as good and valid as the underlying data. The report uses internationally acclaimed data sources, such as WHO (2020e) and Johns Hopkins University (2020) as primary as well as <https://ourworldindata.org> and Worldometer (2020) as secondary sources, but any such evidence should be taken with caution.

In practice, the number of cases and deaths due to COVID-19 will be higher than published figures due to limited testing and problems in the attribution of the cause of death.

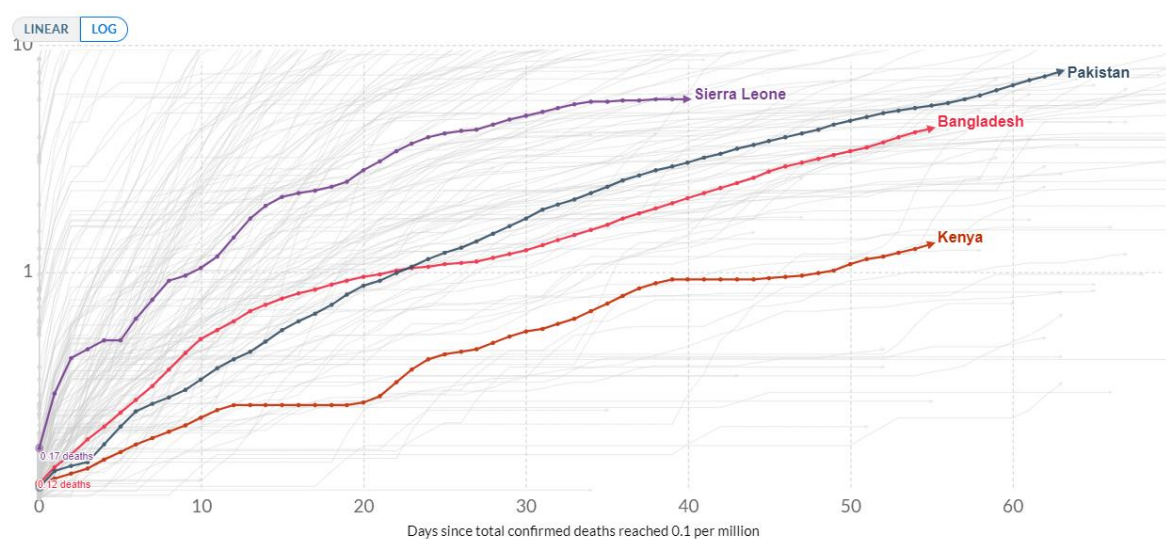
Also note that comparison of country figures should be done with caution as:

- countries have different testing protocols (e.g. random, targeted at high-risk groups, or for those who are highly symptomatic);
- how COVID-19 deaths are recorded may differ between countries (e.g. some countries may only count hospital deaths, whilst others include deaths at home); and
- the number of tests may be recorded differently: some countries report the number of people tested, while others report the number of tests, which can be higher if the same person is tested more than once.

Figure 1: Confirmed COVID-19 cases by population size

Note: Data is shown as a three-day rolling average, cases per million people, shown on a log scale

Source: <https://ourworldindata.org/coronavirus>

Figure 2: Confirmed COVID-19 deaths by population size

Note: Data is shown as a three-day rolling average, deaths per million people, shown on a log scale

Source: <https://ourworldindata.org/coronavirus>

As at the end of May, the infection had reached across almost all areas of the countries:

- **Bangladesh** – As at early May, 95% of districts had reported cases, with the highest attack rates in Dhaka City, Narayanganj City, and Mymensingh City. It is worth noting that 64% of cases were from Dhaka.
- **Kenya** – 34 of 47 (72%) of counties in Kenya have cases, with Mombasa and Nairobi city counties having the highest attack rates at 47 and 24 per 100,000 population respectively when compared to 4/100,000 for the whole country (MoH Kenya, 2020a).

- **Pakistan** – The highest numbers of cases are in Sindh and Punjab, but the attack rates are the highest in Islamabad (129 cases/100,000 population) followed by Sindh at 59 and Gilgit-Baltistan at 57.⁷
- **Sierra Leone** – All districts bar one (Karene) reported cases, with 61% of cases in Western Area Urban (Freetown and surroundings) with an attack rate of 50; Western Area Rural is next with an attack rate of 31.
- **Uganda** – Information on the distribution of cases across Uganda is not publicly available.

3.2 Country timelines

Figure 3, Figure 4, Figure 5, Figure 6, and Figure 7 are timelines for Bangladesh, Kenya, Pakistan, Sierra Leone, and Uganda respectively, providing a country-specific overview over the evolving outbreak. They detail case numbers, doubling times, and test rates, as well as key response interventions tagged by restrictions, surveillance, and relief interventions.

Data included on the timelines is as follows:

- **Key preventive and mitigating measures** taken by the respective governments, as seen in the bottom half of each graph. Those interventions that involve a serious restriction with a high likelihood of affecting vulnerable populations have been flagged **red**, while those that act on a more manageable preventive side have been highlighted **yellow**. Those actions that present a lightening of restrictions are marked **green**.
- The graph in the upper half of the timeline displays the evolving **number of confirmed cases** and **deaths** attributed to COVID-19, with the logarithmic number scale displayed on the left of the graph.
- The graph, using a logarithmic scale, also displays the **doubling time** for cases in days as an expression of success in ‘flattening the curve’. Note that, the higher the doubling time, the longer it will take for the number of confirmed cases to double.
- The current **case fatality rate**, calculated as COVID-19-related deaths over confirmed cases is shown in the upper left, next to an index, which measures **tests done per confirmed case**. These figures are also included in the table below to aid comparison.

⁷ This is from data up to 31 May; it should be noted that the situation has worsened markedly since then, with the attack rate in Islamabad reaching 497 on 18 June.

Table 3: Key figures on tests, case fatality rates, and doubling times

	Tests/confirmed case	Case fatality rate	Doubling time for deaths*
<i>Global average**</i>	43	3.83	46.4 days
 Bangladesh	6.66	1.4	16 days
 Kenya	40.76	3.3	27 days
 Pakistan	8.01	2.1	17 days
 Sierra Leone ⁸	7.5	5.3	28 days
 Uganda	288.72	0	n/a

* Source: <https://ourworldindata.org>. This measures the number of days required for the number of confirmed deaths to double. It is measured over slightly different timelines, from mid/end of May until 11 June.

** Source: <https://ourworldindata.org>. The global averages have been calculated across data from January to June 2020.

Sources for other data: Johns Hopkins University of Medicine (2020); WHO (2020e)

The figures in Table 3 above raise some interesting questions. They attempt to capture to what extent case finding and contact tracing have access to efficient testing and therefore provide some pointers around the accuracy of the data.

In terms of the **number of tests per confirmed case**, the WHO has suggested around 10–30 tests per confirmed case as a general benchmark of adequate testing.⁹ A low figure suggests that the case numbers are not a reflection of reality and actual case numbers are much higher. This is because the tests/confirmed case is a reflection of how many tests the case finding and tracking team has at hand. If the number of tests is limited, it is logical that only those suspected cases or contacts are tested that display tale-telling symptoms. Likewise, if there are several symptomatic patients to be tested, yet the number of tests is limited, clinical ethics impose that those with the most severe symptoms are to be tested, in order to provide swift access to appropriate care. As a consequence, the overall number of confirmed cases remains falsely low and only (highly) symptomatic cases are registered. By contrast, the higher the number of tests done per confirmed case, the higher is the probability that the number of confirmed cases correlates with the reality of the outbreak. With limited testing capacity, the very endeavour to care for the sickest tier of suspected COVID-19 patients unavoidably creates a systematic bias towards inflated case fatality rates.

Sierra Leone has a low test/confirmed case ratio matched with a high case fatality rate. These two things together suggest that the testing regime is biased towards severely ill cases leaving out the majority of mild or asymptomatic cases; thus, the numbers of cases should be taken with some caution.

While no single country in this report achieves the exemplary testing rate found, for instance, in South Korea, others, like **Kenya** or **Uganda**, report significantly higher test rates per confirmed case, so it is reasonable to assume that the infection rate reported there is more realistic, and includes a higher proportion of cases with mild or no symptoms.

⁸ Data taken from Ministry of Health and Sanitation (2020a).

⁹ As reported on <https://ourworldindata.org>

Consequently, there are fewer deaths per confirmed total number. Yet it does not go unnoticed that **Bangladesh** and **Pakistan** boast low case fatality rates *despite* low testing ratio per confirmed cases; explanations for this abound and range from improved case management (Daily Sun, 2020) to under-reporting (Daily Star, 2020a), highlighting the need for further studies.

Even countries with good testing data, such as **Uganda**, are not immune to questions: while the comparably slow rise in confirmed cases can be explained with the strict nationwide lockdown imposed early on, the question remains as to how Uganda has managed to avoid any COVID-19-related deaths to date, despite its resource-strapped health system.

While the epidemiological figures provide hints and encourage comparisons of country data, they are essentially descriptive and do not provide the ability to establish cause–effect relationships by themselves. The case figures given in any of the timelines should therefore be regarded with appropriate caution.

Figure 3: Timeline and cases in Bangladesh

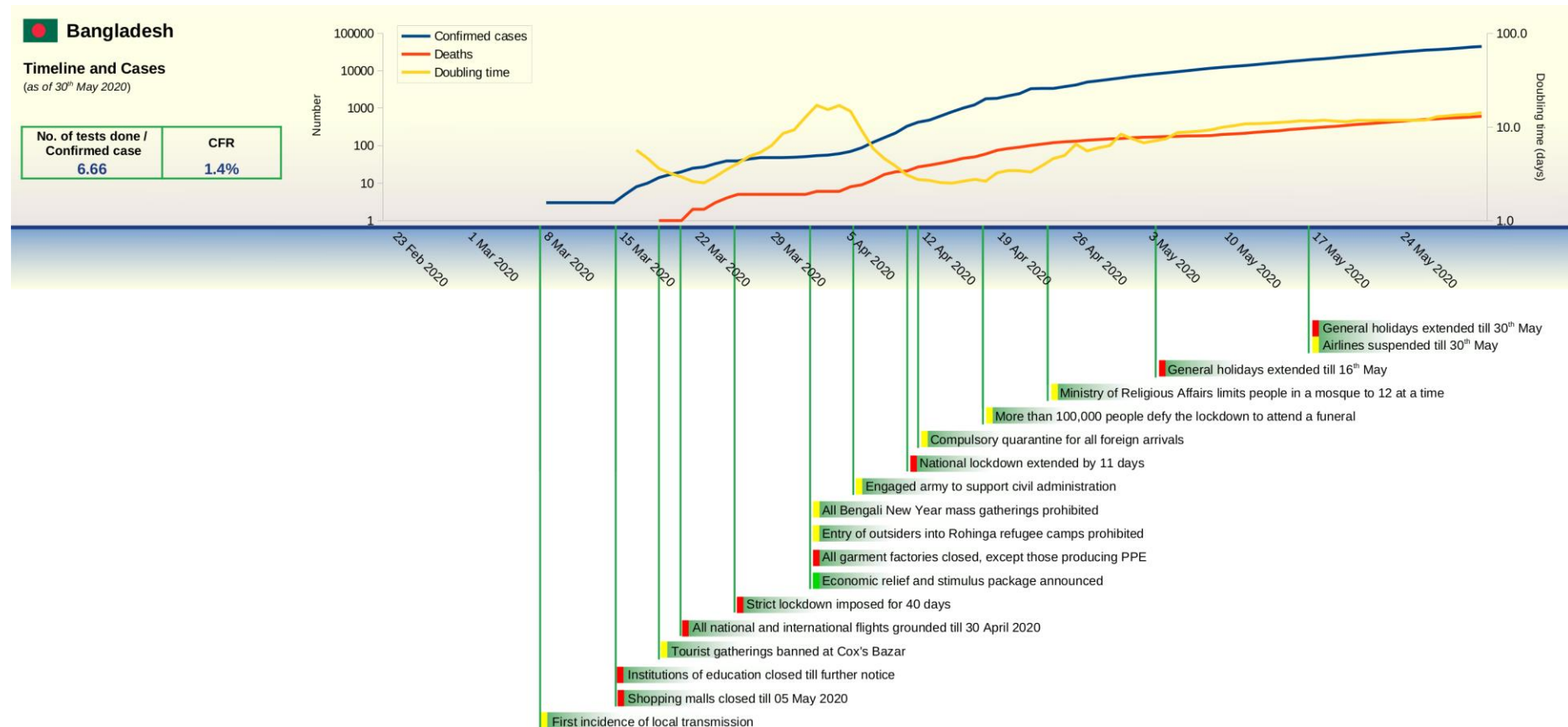


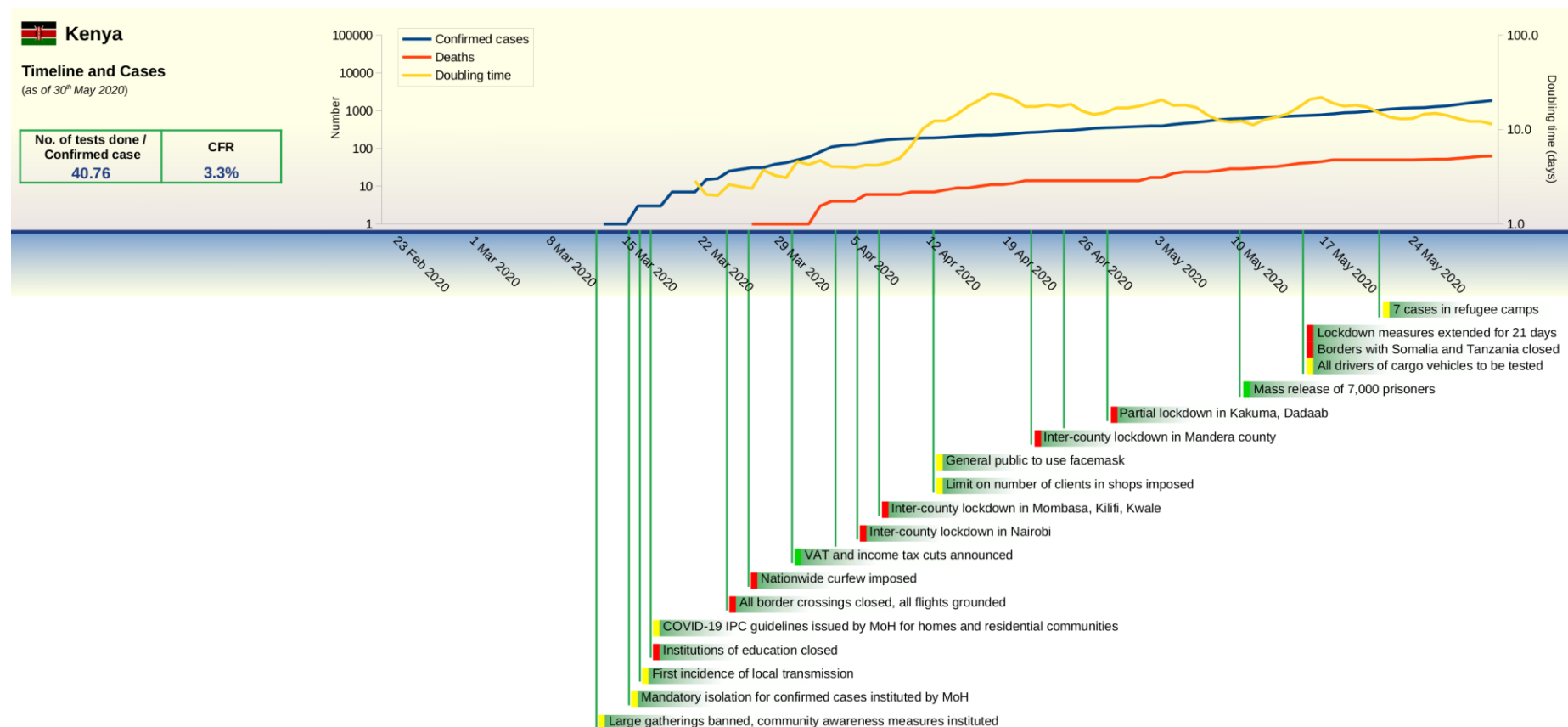
Figure 4: Timeline and cases in Kenya

Figure 5: Timeline and cases in Pakistan

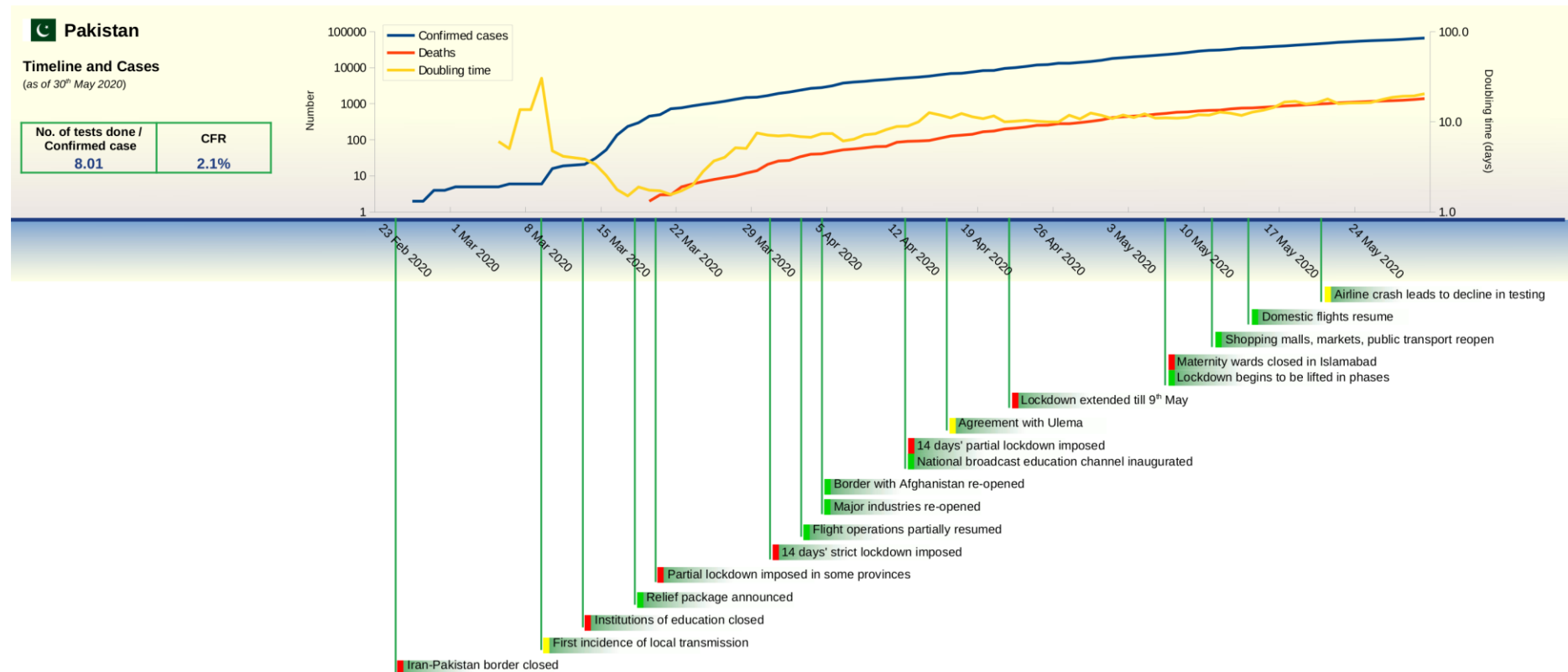


Figure 6: Timeline and cases in Sierra Leone

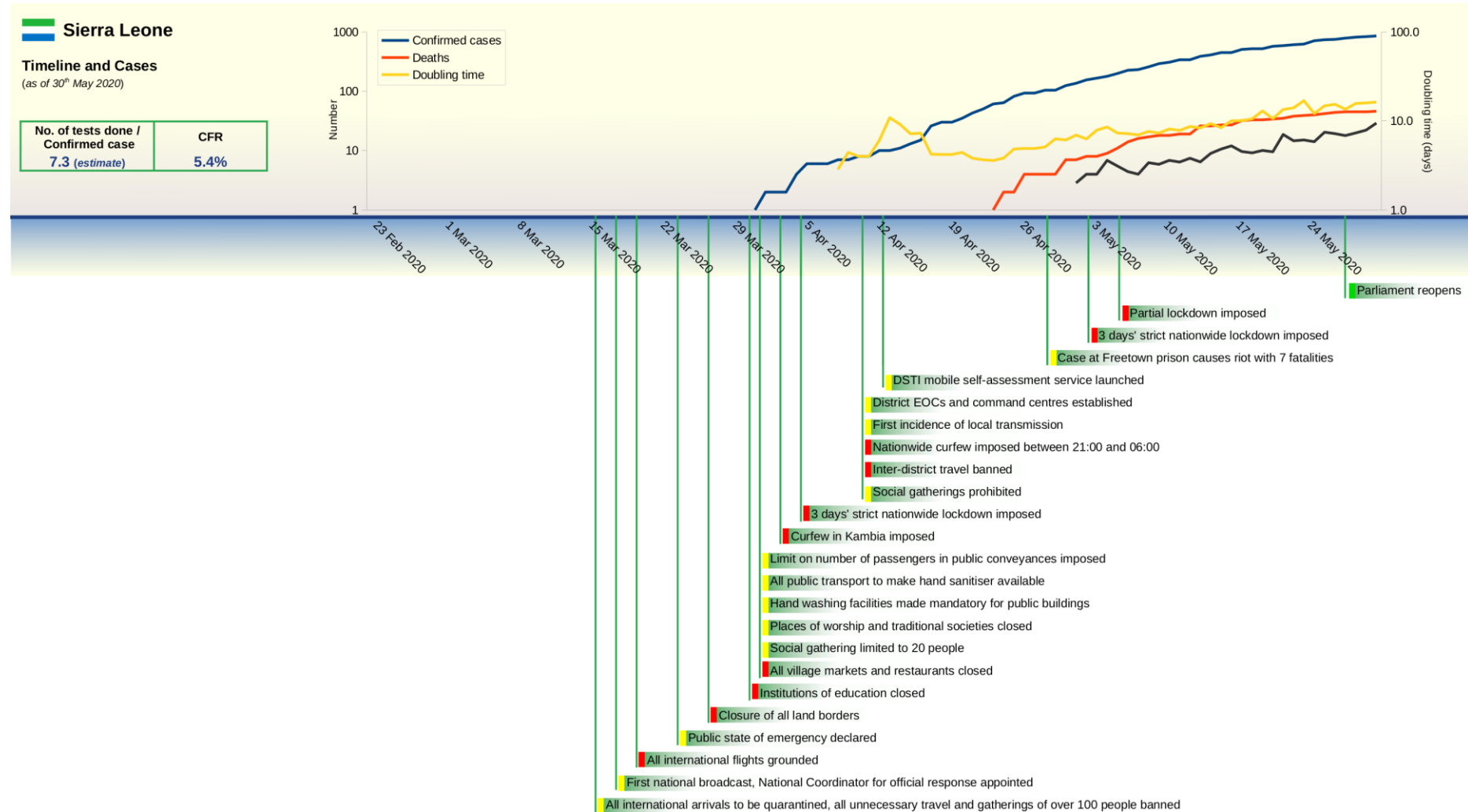
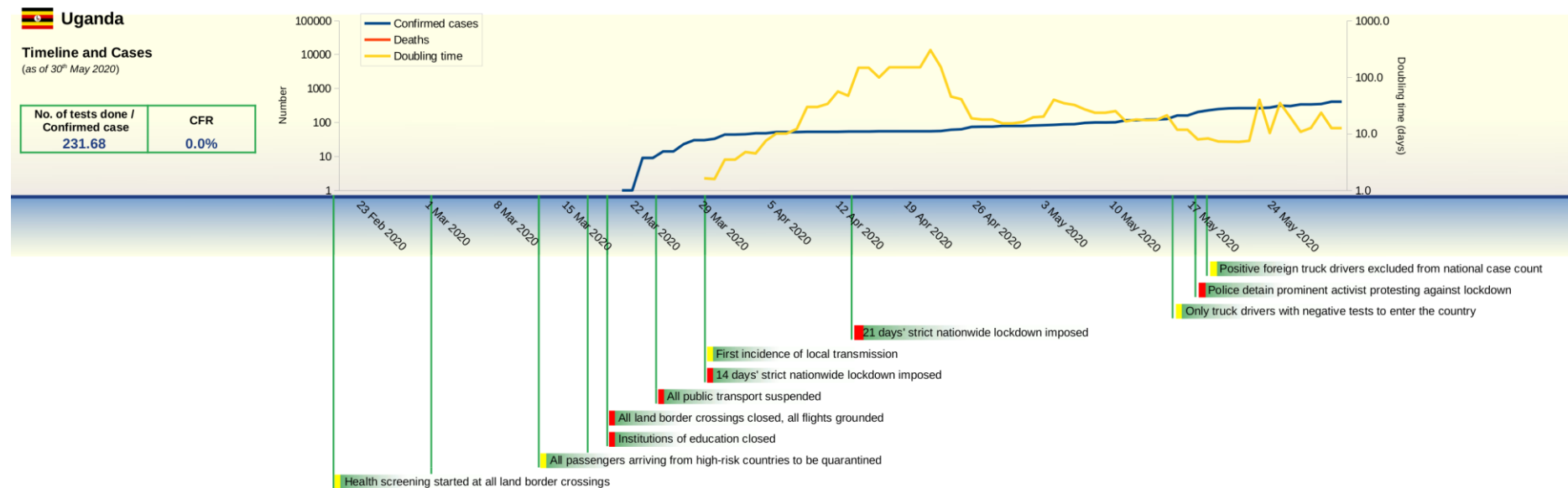


Figure 7: Timeline and cases in Uganda



4 Governance

COVID-19 is a national crisis and requires a whole-of-government approach, with joint activities and coherent decision making across diverse ministries, public administrations, and agencies in order to provide a common solution. More than this, it requires a ‘whole-of-society’ response, where multiple levels of government work with the private sector, non-governmental organisations, and civil society in collaborative governance that emphasises cooperation, transparent decision making, building of trust, and resource sharing. Responding to an unforeseen crisis such as COVID-19 amounts to an exercise in mass adaptive learning – structures which enable and encourage learning respond to crises better.

This section of the report looks at issues across the whole response, rather than in any particular sector. It underscores the importance of establishing a clear and flexible leadership structure, ideally prior to an event, where roles and responsibilities are clear and leads are empowered to lead and respond within their field of expertise. Best practice prescribes a dispersed and distributed leadership that incentivises the emergence of positive adaptations throughout a system, to cope with rapidly evolving circumstances, rather than relying on prescriptive solutions from above. Effective leadership will rely on collaboration, coordination, and partnerships within and outside of the health system and a proactive approach to building institutional and political trust.

4.1 Competent leadership and multi-disciplinary team

The institution of the state is most important at times of crisis, when citizens look to their governments for help and to deploy authority and resources to respond to and manage the situation. This can be a challenge for governments that have low capability or are in the process of trying to build capability. Crises involve threats that can easily overwhelm state capability, especially where such capability is already weak (Center for International Development, Harvard, n.d.).

A major crisis like COVID-19 requires emergency structures to manage the response. Lessons from experience (for example the SARS and MERS crises and the more recent Dengue Epidemic Control in Pakistan) have shown that using existing institutional structures and coordination mechanisms can work, but it depends on the scale of a crisis. In the 2014/15 West Africa Ebola crisis, entirely new structures had to be put in place. The CDC ‘Incident Management System’ is the best known of the different models for rapidly created coordination structures. Once the acute crisis response phase has passed, pre-existing structures can be the best place to handle the recovery phase.

Whatever structure is used to manage the crisis response, widespread experience has shown that distributed leadership models are more effective than command and control. Distributed leadership means using a ‘snowflake’ organising principle, with a relatively flat and interconnected series of adaptive teams solving problems dynamically. This model is intended to allow for the dynamic learning and adaptation that a rigid command-and-control model cannot manage. The role of the centre in this snowflake model is to act as a coordinator and decision maker only when decisions cannot be made closer to the ground.

The rest of this section refers to leadership at national level, but it is worth noting regional efforts at coordination and leadership too – the South Asian Association for Regional Cooperation held a virtual summit in mid-March, has launched a regional fund, and aims to centralise the acquisition of hospital supplies, medical equipment, and medicines (Campos, 2020).

At a minimum, the following factors should be in place to support effective leadership in a pandemic:

- Competent, flexible leadership, clear roles and responsibilities, and a strong multi-disciplinary team with capacity to deliver, with good representation of women, including in senior positions; and
- Close and effective coordination at national, provincial, district, and local levels.

These are covered in turn below, assessing to what extent these factors are present in the five Maintains countries covered in this report.

4.1.1 Competent, flexible leadership, clear roles and responsibilities, and a strong multi-disciplinary team with capacity to deliver, with good representation of women, including in senior positions

National leadership is likely to be held by the president/prime minister and cabinet, but crisis management should be delegated, with clear single leadership for national crisis coordination and clear roles within technical functions.

In parallel to flat structures (the ‘snowflake’ referred to above), effective crisis responses tend to develop an explicit culture of distributed leadership and ‘subsidiarity’ in decision making. This means encouraging people at every level of the response to exercise judgement and take decisions. This is in contrast to a command-and-control approach whereby all decisions are referred upwards leading to paralysis, and is designed to encourage learning and trial and error, which are essential in being adaptive in the face of huge complexity and uncertainty.

In response to COVID-19, all Maintains countries established an incident management team within a public health emergency operation centre or similar, with technical leadership distributed across relevant key sectors to accelerate access to relevant expertise and authority for consensual evidence-based decision making. All countries are also working to bring in representatives of the health system, the community, national stakeholders, and partner organisations to support the EOC. The degree to which this coordination is taking place through existing or new structures varies by country.

In Uganda and Bangladesh, existing, functional governance structures are being used to lead and coordinate the government COVID-19 response. In **Uganda**, existing governance structures led by the Department of Disaster Preparedness have been redeployed and bolstered by additional technical and operational support through key line ministries and agencies, and cascaded down to district level. In **Bangladesh**, the pandemic preparedness and outbreak response governance mechanism continues to stay within the realms of the Ministry of Health and Family Welfare, albeit with a newly created committee, technical adviser, and substructures addressing each level of care.

In **Kenya**, the existing structures, in the form of the National Public Health Emergency Operations Centre (PHEOC), were initially used to coordinate the COVID-19 response, involving collaboration with donors and partners. In mid-February, a major reshuffle took place that resulted in the creation of the National Emergency Response Committee (NERC), a centralised body accessible only by top government officials, to take leadership in the pandemic response. As a result, the PHEOC was reduced to a purely advisory role; the NERC receives briefings from the PHEOC but is under no obligation to follow any recommendations. First-level decision making takes place at the National Command Centre, which comprises all cabinet secretaries and the head of civil service and is chaired by the cabinet secretary for the interior and coordination of national government who reports to the president.

Pakistan's federal structure complicates pandemic response. Health service delivery, including emergency preparedness and response, are provincial matters, with the federal government playing a coordination and regulatory role. Thus, initially, response committees were constituted at all provincial levels. However, the surge of cases prompted the National Security Committee to review the situation and to formulate a unified national response, designating the National Disaster Management Agency as the operational lead and a range of other committees and bodies formed. The provincial governments have complained of being hampered in making timely decisions due to the assertive role of the federal government.

This federal structure is complicated further by the role of military and religious actors who have given announcements that have not always been in step with the government. For example, the Director General of the information and communications arm of the military shared guidelines of the lockdown in a news conference a day after Prime Minister Imran Khan categorically ruled out lockdown.

In **Sierra Leone**, the response began under the Ministry of Health and Sanitation, but at the end of the March this was changed to a new structure created with leadership from the Ministry of Defence. The swift reassignment of leadership has not been straightforward – some have pointed to tensions among the technical and non-technical key players, and coordination at national level remains weak.

As the COVID-19 crisis disproportionately affects women and girls (see Section 5.2 on GESI), the response needs to be gendered and women and girls should participate in the decisions that affect them, as is their right. Although women are on the frontlines of the crisis in their homes, communities, and healthcare facilities, they are often excluded from national and community decision-making processes and governance structures that determine the response. Research finds that women leaders have been more successful in reducing transmission than their male counterparts (Social Europe, 2020) yet female leadership is low globally. We do not have full information for the Maintains countries, but in Kenya there are six women in the 21-person NERC on Coronavirus (29%), in Pakistan there is one woman in the 13-person Emergency Core Committee (8%), and in Uganda an analysis of four district-level COVID-19 task forces found that women made up 22.5% of members on average, and that men held the most influential positions. This low level of representation means that these committees are less likely to consider women's and men's different experiences when shaping responses which is expected to deepen gender inequality.

4.1.2 Close and effective coordination at national, provincial, district, and local levels

While clear direction, policy choices, and central management of the crisis are paramount, delivery can only occur at local level. Local institutions and structures provide additional structures, networks, and relationships with which to reach the population, and important resources which can be critical in implementing key policies – such as quarantine and ensuring that those in quarantine have access to food. It is essential that they are closely connected to, coordinated by, and supported by national technical teams. In addition to this, local structures need to take account of local specificities and contexts; they play an important role in translating and adapting national policies into locally palatable and effective measures and represent a crucial connective resource especially in countries with multiple ethnicities and local languages.

For countries that deal with a range of endemic health challenges – such as TB, HIV/AIDS, and malaria – a network of health workers and community-level infrastructure exists. These networks are incredibly powerful ways to implement a response because they channel the response through trusting relationships that pre-existed the crisis. The literature on health crisis response shows that trust is the single most important currency during a crisis.

Experience from the Ebola response finds that it is effective to replicate the crisis management structure that is used at the national level down to province or district levels, something that is happening in all Maintains countries.

Crisis management offers a challenge to highly decentralised governance systems. Early findings suggest that countries with a high degree of delegated authority have found it harder to coordinate a coherent response and this certainly seems to be the case in Pakistan and Kenya.

In **Kenya**, collaboration between national and county level remains patchy. The Council of Governors, representing county governments, has been channelling county requests to the national government. However, the latter has done little to ensure effective integration of these sub-national priorities into national plans, or to communicate clearly to counties the processes for planning, coordination, fund transfers from treasury, procurement, distribution, alignment with county plans, etc. To improve collaboration, a meeting of the national and county governments was convened by the president on 11 June to agree response measures ahead of the gradual reopening of the economy (Citizen Digital, 2020).

In **Pakistan**, as described above, approaches at provincial level have not always been supported by the federal government (e.g. the desire of provinces such as Sindh to implement a tough lockdown). This has sometime led to open disagreement. It has been further complicated by poor cooperation by religious leaders who refused to accept the closure of mosques.

Crisis management is also a challenge to resource-poor governments. In **Sierra Leone**, the state's governance infrastructure does not extend into much of the country's rural areas. The lowest level of local government, District Council, sits in District Headquarter town, and officials rely on 'local authorities' (paramount chiefs and traditional leaders including section chiefs, mammy queens, youth leaders, etc.) to communicate health messages to citizens and implement/enforce policy in their territory. However, until 31 May there was no specific

plan for incorporating these leaders into district-level response and it is not clear how funding is being dispersed to the regions; for example, Kono District has reported that it has not received any financial support.

4.2 Adaptive plans and solid policy and legal framework

A national response plan is necessary to set out roles and responsibilities, lay out how information and decision making is coordinated, highlight priorities, describe planning assumptions, develop an activity plan, and highlight technical and financial gaps. Without sound rules in place, ad hoc measures are at risk of being ineffective or unjust, failing to respect human rights, and worsening the impact of the outbreak. Such a plan will be stronger when based on preparedness activities, pre-existing policy, and an up-to-date legal framework.

At a minimum, the following factors should be in place to support adaptive planning:

- Prior to the outbreak, strong public health planning, policy, and preparedness actions have been undertaken;
- A flexible operational plan with estimated resource requirements, surge capacity, and regular operational reviews; and
- Existence of an applicable, up-to-date legal framework.

These are covered in turn below, assessing to what extent these factors are present in the five Maintains countries covered in this report.

4.2.1 Prior to the outbreak, strong public health planning, policy, and preparedness actions have been undertaken

The COVID-19 pandemic has shown that the relationship between outbreak preparedness and emergency response is not always straightforward; superb levels of preparedness have sometimes been followed by responses compromised by fragmented leadership, poor risk communication, or poor funds allocation. Nonetheless, where lessons are learned from simulation exercises or previous outbreaks, preparedness can offer significant reward.

The Global Health Security Index, which was first published in 2019, is a recognised tool to assess global health security capabilities, combining six factors. Table 4 below summarises key scores for the Maintains countries – the response index scores the ability of a country to respond to and mitigate an epidemic's spread, while the health index scores whether the health sector is sufficient and robust enough to treat the sick and protect health workers. It is possible to drill down into these indexes to see results for all the subsections. It is obviously of major concern that all countries score poorly on the capacity of the health sector.

Table 4: Key figures from the Global Health Security Index

	Overall index¹⁰ (six factors)	Response index¹¹ Ability to respond to a pandemic	Health index¹² Ability of health sector to cope
<i>Global average</i>	40.2	38.4	26.4
 Bangladesh	35.0	23.1	14.7
 Kenya	47.1	37.1	20.7
 Pakistan	35.5	38.7	19.9
 Sierra Leone	38.2	44.8	25.3
 Uganda	44.3	56.5	11.6

Notes: All scores are out of 100. Green scores are above the global average, while red scores are below.

The strong response scores of Uganda and Sierra Leone reflect the multiple opportunities they have had to build and deploy their respective emergency preparedness, outbreak response, and case management mechanisms: **Uganda** experienced several small outbreaks of Ebola virus disease in 2000/01, 2007/08, and 2012, and was affected by cross-border spill-over of the major 2018/20 outbreak in the Democratic Republic of Congo (DRC). Uganda also saw minor outbreaks of Marburg viral disease in 2007, 2012, 2014, and 2017, which is similar to Ebola virus disease, albeit with a higher case fatality rate. **Sierra Leone** was deeply affected by the massive Ebola outbreak from 2013 to 2016, and continues to handle endemic cases of Lassa fever, a rat-borne viral haemorrhagic fever not dissimilar to Ebola. **Bangladesh** as well as **Pakistan** have managed endemic outbreaks of avian influenza in 2007 and 2008 and dengue fever in 2019, as well as sporadic cases of Chikungunya and Nipah virus infections in the recent past. Likewise, **Kenya** has experienced sporadic outbreaks of Rift Valley fever in 2007 and Chikungunya virus infections as recently as 2018, yet has otherwise taken a largely preventive role, either through border controls or contact tracing and surveillance information exchange with other directly affected countries.

Thus, all five countries have had to face epidemics before, with Uganda and Sierra Leone being impacted most and therefore having the most experience. However, none of the countries has been confronted with an influenza-like illness that, as seen with COVID-19, boasts a long, highly infectious incubation time.

These scores also reflect the work done on policy frameworks and planning:

- Uganda and Sierra Leone have both undertaken Ebola simulation exercises recently;

¹⁰ See www.ghsindex.org/. Overall index combines scores for prevention, detection and reporting, response, health system capacity, compliance with international norms, and risk environment.

¹¹ Response index includes: Emergency preparedness and response planning; Exercising response plans; Emergency response operation; Linking public health and security authorities; Risk communication; Access to communications infrastructure; Trade and travel restrictions

¹² Health index includes: Health capacity in clinics, hospitals, and community care centres; Medical countermeasures and personnel deployment; Healthcare access; Communications with healthcare workers during a public health emergency; Infection control practices and availability of equipment; Capacity to test and approve new medical countermeasures.

- Bangladesh and Sierra Leone have pandemic influenza response plans, while Uganda started work on a Pandemic Influenza Preparedness Plan and a National Deployment and Vaccination Plan in 2019;
- Uganda and Sierra Leone have strong and recent national action plans for health security, while Pakistan also has such a plan; and
- Uganda and Sierra Leone also have active One Health approaches and Bangladesh has a strong legacy of interest and leadership in One Health efforts.

Scholars have previously noted Uganda's strengths in case management and surveillance, but less success in the mitigation of the impact of epidemics (Sengooba *et al.*, 2017), and this appears to be playing out in COVID-19.

4.2.2 A flexible operational plan with estimated resource requirements, surge capacity, and regular operational reviews

An operational plan represents a road map for the government and facilitates engagement of public and private agencies and organisations. The process should build on existing public health emergency contingency, preparedness, and response plans, including for pandemic influenza, One Health approaches, and guidance provided by the WHO. Due to high levels of uncertainty and unclear scientific evidence, these plans and the teams put in place to deliver them need to be adaptable. During a pandemic, leaders have to make decisions based on imperfect information and hence will need to revisit those decisions quickly as new evidence emerges and the context changes.

The crux of an adaptive response is to create a response system where the structures, processes, and culture promote learning and sharing. As well as a flatter, less hierarchical structure, multiple teams should work on parallel problems, coordinated from the centre. Effective data is crucial here and significant resources need to be invested in making data gathering and modelling as effective as possible. That data needs to be shared on a daily basis so that different teams can align themselves. Furthermore, regular (usually early morning) briefings need to cascade information and share updates.

Adaptive operational planning requires the swift development of an operational response plan with estimated resource requirements, close monitoring of the evolving situation to support learning and decision making, and frequent operational reviews to assess implementation and the epidemiological situation. Transparency around those decisions will support the engagement of different stakeholders.

Of course, COVID-19 does not exist in isolation and must be managed alongside other crises. All countries are already under pressure from existing crises or vulnerable to future ones. Current compounding crises include infestations of desert locusts in both Kenya and Pakistan and unusually heavy rainfalls in Kenya in late April 2020, which caused extensive flooding and landslides. Likely future impacts include monsoon and rainy seasons in Bangladesh, Pakistan, and Sierra Leone, usually from June till September, and Indian Ocean cyclones peaking in May, October, and November. These other hazards will have compounding impacts that pose major challenges to planners and responders (see Box 2) and which require a highly adaptive approach.

Box 2: Compounding impacts of COVID-19 and other crises

Countries will have to deal with a range of other crises during the pandemic, particularly natural hazard such as flooding, desert locusts and cyclones. The compounding impacts of natural hazards and other crises can:

- Increase hardship and need – for example, food security will be worse for populations suffering both locust infestations and lockdowns.
- Increase infection rates – for example, flood water contaminated by human faeces can spread COVID-19.
- Increase health service demand and diagnostic problems. Rainy seasons tend to increase numbers of patients with coughs and respiratory problems, which would normally be considered for bronchitis or pneumonia; now COVID-19 will also be a possibility, introducing both a diagnostic dilemma and infection control problem.
- Reduce the ability of national services to prepare and respond, as the efforts of emergency planners and responders are focused on COVID-19.
- Require new emergency protocols. There may be a contradiction between COVID-19 and emergency responses – for example, people would normally be evacuated and gather in cyclone shelters to avoid the worst of a storm, but this cannot be implemented as standard due to social distancing protocols. New approaches will be required, which balance the risk of COVID-19 with the risk of the hazard.

Cyclone Amphan caused widespread damage in Bangladesh in late May 2020. The government turned 7,000 school and college buildings into extra cyclone shelters, to ease crowding in the existing 5,000 shelters, and evacuated around 2 million people. There were efforts at COVID-19 prevention measures, including masks, sanitisers, and handwashing facilities and soap (United Nations Office for the Coordination of Humanitarian Affairs, 2020). Nonetheless, many people refused to go to shelters or leave their livestock, as they were afraid of contracting COVID-19 (DW, 2020) and social distancing was impossible, so some are expecting a surge in COVID-19 cases as a result of the cyclone.

The **Bangladesh** Preparedness and Response Plan developed with support from different development partners explicitly states that the strategy and actions will have to be continuously reviewed and adjusted as necessary, but the process is slow and the budget was not finalised by the end of May. In contrast, the **Sierra Leone** COVID-19 Preparedness Response Plan was produced in early March, three weeks before the country's first case was confirmed.

In **Pakistan**, the National Action Plan (Ministry of National Health Services, Regulations and Coordination, 2020) was developed on 13 March, supplemented by the Pakistan Preparedness and Response Plan (Government of Pakistan, 2020), which aims to coordinate international support and was formulated jointly by the Government of Pakistan, UN agencies, and other partners. It was launched by the Minister of Foreign Affairs on 27 April 2020. These are both federal plans, which need to be developed into operational plans at provincial level. **Kenya** seemed to have a head start: as early as December 2019, the WHO and other partners worked with the MoH to develop the national preparedness plan, which was updated in January 2020 into the 'Novel Coronavirus Contingency (Readiness and Early Response) Plan, February–April 2020' (MoH Kenya, 2020b). However, by May, it seemed that this plan was still under development to fully reflect response components.

Uganda's national response plan for COVID-19 is not publicly available; this is surprising given the country's active programme of health security.

It is apparent that all Maintains countries are adapting their strategies as the situation changes. As this is still relatively early in the outbreak, it is too early to review whether countries are undertaking formal operational reviews.

4.2.3 Existence of an applicable, up-to-date legal framework

Disease outbreaks require a wide range of actions – such as disease reporting, surveillance, quarantine, social distancing, curfews, importing of medical supplies and personnel, and vector control – all of which are effected through, or subject to, national laws. As such, an outbreak requires regulatory strategies, social contract principles, and human rights norms to be embodied in the written laws of a country, and for those laws to be implemented to guide action (Marks-Sultan *et al.*, 2016).

Further, all WHO member states are legally bound by the International Health Regulations of 2005, which set out key principles to guide national preparedness and response. Thus, countries should have an appropriate legal framework (legislation, laws, regulation, administrative requirements, policies, or other government instruments) to enable efficient and effective implementation. WHO provides guidance and support to develop and implement these legal frameworks.

Unfortunately, national laws are not always up to date or accessible and in the midst of a health crisis decision-makers need an immediate understanding of the legal situation without waiting for lawyers to search for the relevant legal texts.

An applicable up-to-date legal framework includes both up-to-date legislation to authorise agencies to respond to an emergency and up-to-date legal guidance that governs the roles and responsibilities of different agencies during an emergency, including governmental ministries, departments, and agencies at national and sub-national levels and other agencies (partners, non-governmental and faith-based organisations, the private sector, and civil society).

Within the Maintains countries, **Bangladesh** has the most up-to-date legal framework, with its 2018 Infectious Diseases (Prevention, Control and Elimination) Act. This has empowered the government in notification, isolation, quarantine, sample collection, and testing for emerging diseases. **Kenya** also has a relatively recent law – the Public Health Act (2012) – that provides the basis for wide-ranging emergency legislation at national level. However, counties are independent due to the devolution of health services, thus creating a delicate relationship between the two governance levels and requiring cooperation.

The other three countries have old or no legislation. The only national law public health law in **Pakistan** is the short and outdated Epidemic Diseases Act 1958, which does not provide the legal support required. Provinces have their own infectious disease ordinance (including Punjab's, which was agreed on 27 March), but according to one legal reviewer they do not appear to be adequate (Anadolu Agency, 2020). All provinces have used their disaster management legal framework – for example, Khyber Pakhtunkhwa declared a health emergency under Section 16(A)(1) of the National Disaster Management Authority (Khyber Pakhtunkhwa) Act (The Nation, 2020a).

Sierra Leone's legislation dates back to 1960 and **Uganda's** to 1935 – both require updating (International Monetary Fund (IMF), 2019; Kasimbazi and Kabwa, 2013). However, it is recognised that Uganda's law is fairly robust, empowering the Minister of Health to take measures to combat the spread of an infectious disease, and so far four statutory instruments have been published to implement various measures announced by Presidential Directive; local authorities can enforce such public health regulations and may make their own (Karugaba, 2020). Further, the National Policy for Disaster Preparedness and Management Response 2011 specifically refers to policy actions related to epidemic control, and the involvement and role of different institutions.

4.3 Collaboration, coordination, and partnerships

COVID-19 will affect every aspect of life and every sector of the economy. It requires a whole-of-society governance model, incorporating the different actors that work at different levels and within different sectors, ensuring that interconnected problems and feedback loops are addressed from multiple angles. This is a significant challenge for coordination and meta-governance.

The response requires effective partnerships with, and listening to, the civil society organisations and mutual aid groups that have the trust of citizens. As one example, after struggling to respond effectively to the 2003 SARS outbreak resulting in a loss of trust, Taiwan has built 'whole-of-society' collaborative approaches involving coordination across government, as well as between state and non-state actors, that build trust, reflect understanding of local conditions, and more effectively allocate resources for pandemic response. Central to the Taiwanese approach is the local community 'warden', a locally elected and unsalaried position, which is well positioned to provide strong links between the state and community (Schwartz and Yen, 2017).

Below we examine the extent to which, for each Maintains country, collaboration and coordination is taking place at the following three levels:

- Development partners, donors, UN agencies, and international stakeholders;
- Private sector, health and non-health; and
- Scientific bodies, institutions of learning, traditional leaders and local influencers, non-governmental and faith-based organisations, and civil society and women's rights groups.

4.3.1 Development partners, donors, UN agencies, and international stakeholders

These partners are able to provide technical and financial input to augment and support nationally led efforts. During the West Africa Ebola outbreak, international agencies provided significant operational capacity too. Most development partners stand ready to support government responses and are actively seeking clarity from government counterparts on which are the most high-priority aspects – both technical and financial – that they can support. So far, the role of development partners has been mostly limited to financial support, rather than a more active engagement providing technical and logistical capacity.

In **Uganda**, as well as providing financial support, development partners have worked jointly to support the MoH in risk communication, training of laboratory staff, expert support to the COVID-19 task force and its sub-committees, supply chain management, and the establishment of a toll-free COVID-19 hotline.

In **Pakistan**, donors jointly formulated the National COVID-19 Response Plan with government; however, there is little evidence of concerted partner interaction.

In **Kenya**, engagement from partner agencies, such as CDC, DFID, Japan International Cooperation Agency (JICA), Médecins Sans Frontières (MSF), UNFPA, the US Agency for International Development (USAID), WHO, and the World Food Programme (WFP), was initially strong, but reduced substantially when the COVID-19 response was re-routed through a new government structure (see Section 4.1.1). It is difficult for partners to penetrate to senior policymakers, as the newly introduced NERC structure announces its decisions by means of daily press conferences that take place on national TV. The Development Partners in Health in Kenya network have now scaled up their internal coordination activities, but linkages with government decision-makers remain weak.

In Sierra Leone and Bangladesh, donor involvement so far has mostly been limited to providing financial support. In **Sierra Leone**, the president reached out to donors on 21 May, calling for co-leadership on driving coordination among various pillars, support to and strengthening of specific pillars within the EOC, support for local research and development, and support for surveillance and contact tracing to provide consistent and real-time data. In **Bangladesh**, although different ministries and development partners have taken multiple and diverse initiatives to contain COVID-19, there has been a lack of coordination among the stakeholders since the start of the pandemic. A comprehensive, coordinated, multi-sectoral pandemic management response is not yet in place.

4.3.2 Private sector – health and non-health

During a pandemic, the private sector is operating under many of the same operational constraints as government, but it has an existing infrastructure, can be nimble, and can help to diversify the response. It can play a direct role in, for example, supporting the supply chain for medical supplies, treatment through private hospitals and clinics, and in manufacturing new products such as alcohol-based hand rub. It may need financial incentives for this.

In the Maintains countries, all governments are engaging with the private sector, albeit in different ways. For example, recognising the key role of private health services in **Bangladesh**, two representatives of these services are on the National Committee for Prevention and Control of COVID-19, while in **Uganda** a special fund has been created for the COVID-19 response that is managed by a 15-person task force, including members from the private sector.

The strongest engagement appears to be in **Kenya**, where the vibrant private sector is engaging in many different ways with the COVID-19 response, including through the Kenyan National Business Compact on Coronavirus. As a few examples:

- The private sector and donor communities are working with the Ministry of Trade and Industry in providing oxygen and PPE. Plans are already underway to manufacture some

of these materials locally for self-sustainability. Sub-nationally, county governments such as Kitui and Mombasa have worked with garment manufacturers to reorient production towards PPE equipment like face masks (Tyce, 2020).

- AMREF Enterprises is supporting remote training of community health workers (CHWs) and dissemination of information to households. An application called 'Leap' delivers learning content to CHWs by mobile phone, and has trained 53,000 CHWs in Kenya and reached over 1 million households with messages on COVID-19 (UHC2030, 2020).
- Kenya's tech community has developed software to aid laboratory testing and a digital dashboard to monitor supplies, allowing existing HIV testing infrastructure to increase capacity to a point where it can test upwards of 37,000 coronavirus samples in 12 hours.
- The Kenya Pipeline Company is manufacturing hand sanitiser that is to be distributed to all the 47 counties in 20,000 litre batches per county per week, as well as a different batches targeting public places including markets and bus stations across the country (Daily Nation, 2020a).
- Launched by a coalition of community groups and businesses, Safe Hands Kenya is using existing tech-enabled supply chains to hand out items such as sanitiser, masks, soap, and surface disinfectant, particularly in poor, densely populated areas. Firms have stitched together their retail datasets with population surveys to build a geospatial demand map, and are asking local producers to supply at cost. Distribution of 1 million bars of soap is already under way, and a media-based education campaign has been launched (Al Jazeera, 2020a).

4.3.3 Scientific bodies, institutions of learning, traditional leaders and local influencers, non-governmental and faith-based organisations, and civil society and women's rights groups

People often have greater trust in religious and traditional leaders than in their state's formal executive institutions, which can be perceived to be corrupt or self-serving, and thus these leaders and organisations are crucial for communicating epidemic risks and achieving behaviour change.

Public messages aimed at behaviour change in West Africa in 2014 during Ebola only became effective when they were dramatically simplified, made consistent, and most importantly delivered via a large network of 'social mobilisers' who were able to leverage local relationships, as well as via local leaders who enjoyed the trust of their community.

Most governments recognise the role of these actors but their potential is likely not yet fully realised. There are few examples of a concerted effort on the part of the government to work with them, but many examples of civil society organisations taking the initiative and not waiting for government direction.

The most comprehensive approach, at least on paper, is in **Bangladesh**, where the response plan underscores the roles of a range of actors – including key influencers at national and local level (community leaders, religious leaders, health workers, community volunteers, etc.) and local networks (women's groups, youth groups, business groups, traditional healers, etc.) – particularly on communication of key messages, with the need to 'speak with one voice' to avoid panic.

The role of **religious leaders** has been important and varied, with a very positive role played by them in Bangladesh, Kenya, and Uganda. In **Uganda**, religious leaders have actively supported the government's lockdown, banning church and mosque gatherings for a month and instead providing services over the radio. The situation is similar in **Kenya**, where Muslim leaders are actively supporting the response – even by shutting Nairobi's biggest mosque, Jamia Mosque, during Ramadan, the first time it has been shut in the 95 years of the mosque's history – and establishing guidelines on safe burials (WHO Regional Office for Africa (AFRO), 2020). In **Bangladesh**, about 500,000 Imams and religious leaders are disseminating information about COVID-19 nationwide. They help spread key messages focusing on hygiene and infection prevention, including handwashing using soap, social distancing, and how to benefit from the Koran when in lockdown at home. This is particularly important in rural and hard-to-reach areas where people do not have access to radio, television, or newspapers, so the mosque megaphone can play a critically important role (UNICEF, 2020).

In **Pakistan** – where religion is central to public life and national identity but does not have a formalised role within state structures – the situation is more difficult due to the complex interplay of political and social power. On 14 April, an alliance of religious leaders from across the Pakistani Muslim sectarian spectrum came together to declare that they were unilaterally reopening mosques for congregational prayers, in defiance of government lockdown orders. This prompted the government to negotiate with a committee of religious leaders, agreeing to a 20-point plan for reopening mosques from late April, for Ramadan. The steps included enforcing physical distancing guidelines between worshippers, discouraging the sick and elderly from attending prayers, providing hand sanitiser to congregants, and discouraging socialising within the mosque. The Pakistan Medical Association denounced the decision to permit congregations, saying that requirements for worshippers to remain six feet apart and complete ablutions at home were unlikely to be implemented; certainly, social distancing within the mosques has not been enforced (Shah, 2020).

As stated above, women's participation is necessary at every level and in every arena, from national crisis committees to the local communities on the frontlines of responses: **women's rights organisations** have a crucial part to play but we could find little evidence that this is happening systematically. In Bangladesh's Cox's Bazar District, women's networks and self-organised groups have led community outreach and awareness-raising sessions on COVID-19 and worked with women in the communities to produce and distribute face coverings, in both Rohingya and host communities. Yet also in Bangladesh, women's rights organisations report being left out of local and national consultations on the COVID-19 response (CARE, 2020).

4.4 **Timely, flexible, and adequate access to crisis financing**

Clearly, financing is a critical part of any crisis response. Funding should not only be available swiftly – via national or international sources – but also be used in a legitimate and transparent way.

There is increasing momentum around better financial planning for emergencies, known as disaster risk financing (DRF). Put simply, DRF is planning ahead to put in place budgetary

and financial mechanisms to pay for disasters *before* they occur. Pre-arranging financing solutions carries large benefits, including that necessary funding is available swiftly and cheaply. Unfortunately, DRF remains relatively new among low-income countries (LICs) and lower-middle-income countries (LMICs). Of the Maintains countries, only Kenya has a finalised DRF strategy, although Pakistan, Bangladesh, and Uganda have done considerable work on this.

The primary options to mobilise the funds to respond to a disaster, which each have different pros and cons (Lung, 2020), are as follows:

- **Contingency** budget lines or revolving contingency funds. The WHO's Joint External Evaluation recognises the presence of contingency funding as good practice (WHO, 2018). However, they are rare in LICs and LMICs as they require ring-fencing scarce funding for 'a rainy day'. On paper, Kenya has a Contingency Fund (Government of Kenya, 2011) for which an annual allocation of up to 2% of the total budget should be set aside for disaster response; however, it is not operational. Similarly, Pakistan established disaster contingency funds at the national and provincial levels but none of them were operationalised.
- **Budget reallocations:** shifting funds from one part of the budget to another to accommodate changing priorities can be relatively quick (via virements, where no legislative approval is required) but will lead to missing funding elsewhere.
- **Debt instruments:** countries can assume new lines of credit and, if done on commercial terms, this can be relatively expensive. Existing debt can be restructured – several LICs are benefiting from this, including Sierra Leone (Shalal and Thomas, 2020).
- **Risk transfer** via a range of insurance-type instruments. The World Bank's Pandemic Emergency Financing Facility was designed to provide response financing in the face of a pandemic. It has announced a payout of US\$ 194 million to more than 60 LICs; it is not yet clear whether/how much Maintains countries will benefit, but payouts will be relatively small (in the range US\$ 1–15 million).¹³
- **International aid:** direct from donor to government or implementing agency in country, or via a pooling mechanism (such as to UN agencies via the UN COVID-19 Response and Recovery Multi-Partner Trust Fund). Aid is 'free' to the recipient, unlike the options listed above, but the size and timing of contributions are highly unpredictable. There have been fears that donor funding would drop because of the global nature of both the pandemic and economic crisis, but so far this has not been the case. UN humanitarian appeals have raised more than US\$ 1.3 billion¹⁴ since March (this may be reallocated rather than additional funding), and some charities have seen record-breaking successes in their COVID-19 fundraising campaigns.¹⁵ The vast majority – about 74% – has gone to UN agencies, rather than governments or local organisations (Center for Global Development, 2020).

¹³ Specific funding allocations will be determined by population size and reported cases, with a minimum of US\$ 1 million and maximum of US\$ 15 million going to each country, and a heavier weight given to countries classified as fragile or conflict-affected (see World Bank, 2020b).

¹⁴ See <https://fts.unocha.org/appeals/952/summary>

¹⁵ The Organisation for Economic Co-operation and Development says it sees no indication of any decreases so far, and the largest providers of aid have said they will strive to protect ODA budgets. Note that after the economic crisis of 2008, ODA did not drop (see The New Humanitarian, 2020).

With regard to financing, at a minimum, the following factors should be in place:

- Swift, flexible access to additional financing; and
- COVID-19-related financing and expenditure are subject to accountability mechanisms and public scrutiny by the legislature.

These are covered in turn below, assessing to what extent these factors are present in the five Maintains countries covered in this report.

4.4.1 Swift, flexible access to additional financing

All Maintains countries have set up or are in the process of setting up national response budgets, and have accessed extra funds through some of the options outlined above.

Table 5: National response budgets and major international funding

US\$ million	Government response budget	Major grants received*	Major loans received**	UN COVID-19 Appeal***
 Bangladesh	385	360.5	932	117.2
 Kenya	Pending	115.9	1,739	
 Pakistan	595	200	2,936	126.8
 Sierra Leone	63	49.4	143	60.5
 Uganda	126	63.5	680.5	

Note: Data is correct as of 31 May

* This includes grants provided by the World Bank, USAID, DFID, Team Europe, and the Rockefeller Foundation.

** This includes loans provided by the IMF, the World Bank, Team Europe, and the Asian Development Bank.

*** The UN appeal for Bangladesh is related to Rohingya refugee camps. Pakistan and Sierra Leone are multi-sectoral national appeals. Kenya and Uganda do not yet have UN COVID-19 appeals.

<https://fts.unocha.org/appeals/952/summary>

Obtaining detailed information on funding sources has been difficult, but the key funding source by far is **soft loans** (i.e. loans on concessional terms) from development institutions. These include Bangladesh from the ADB, Pakistan from the IMF and the ADB, Kenya from the World Bank, Uganda from the IMF, and Sierra Leone is seeking additional credit financing from the IMF. Further, Kenya has a pre-arranged contingent line of credit with the World Bank, known as a 'Catastrophe Deferred Drawdown Option'; Kenya drew down US\$ 70 million in late 2019 to respond to floods (Business Daily, 2020) and is in negotiations to draw down an additional US\$ 130 million for COVID-19 (World Bank, 2020c).

Other significant sources of funding for the response include **budget reallocations** and donor support. In the current crisis, Pakistan has reallocated funds from eight existing development programmes as well as an ADB loan; the World Bank has reallocated funding in Sierra Leone; the UNDP has reallocated funding in Uganda. Meanwhile, Kenya and Uganda have already agreed supplementary budgets. All the Maintains countries have received significant **donor support**. One mechanism to collect donor contributions from all donors – international, national government, private sector, and individuals – can be via the creation of a dedicated trust fund, as has been done in Uganda, Kenya, and Sierra Leone.

It is hard to match the full costs of the pandemic (the response plan does not include them all) and acquired funding, and thus to ascertain the size of the funding gap. In all countries, the loans are significant, but of course this increases already high debt levels. Similarly, as mentioned previously, budget reallocations will leave gaps elsewhere.

4.4.2 COVID-19-related financing and expenditure are subject to accountability mechanisms and public scrutiny by the legislature

As well as obtaining funding, countries also need to disburse COVID-19 resources swiftly, effectively, and fairly. This will determine how many lives are saved, the depth of the secondary impacts, and whether inequality deepens. These important choices require openness and public input. The goal therefore is to balance rapid disbursement of funds while maintaining effective transparency and controls. The IMF summarised its advice for a rapid and accountable response in a single sentence: ‘Do whatever it takes but keep the receipts’ (Public Financial Management Blog, IMF, 2020a). This is challenging for many LICs and LMICs (Schiavo-Campo and Tommasi, 2007), as expenditure controls are explicit weak points even during normal times. Emergency procurement (e.g. single-source procurement) can accelerate the purchase of required response equipment but this can also exacerbate leakage risks (Steingrüber *et al.*, 2020). For example, evidence from the Ebola crisis of 2014–2016 has shown that procurement rules were mostly not adhered to (Divjak and Dupuy, 2015).

In **Pakistan**, reforms have been made under the Public Financial Management Act of 2019 but the government has not been able to roll out the establishment of the ‘Chief Internal Auditor’ positions required, posing substantial risks to the transparency and efficiency of transfer payments and the streamlined procurement processes. Further, no guidelines have been issued on the criteria to be used in fast-tracking procurements for crisis-related spending (Public Financial Management Blog, IMF, 2020b).

Questions have also been raised about transparency and accountability in all other countries. In **Uganda**, MPs awarded themselves €2.4 million – €5,000 each – for ‘community sensitisation’: the High Court has ordered them to pay back this money or transfer it to national or district COVID-19 taskforces (Africanews, 2020). In **Bangladesh**, after suggestions of aid diversion and corruption in procurement of medical supplies, the government has committed to carry out an audit of COVID-19-related expenditures within 12 months of the end of the crisis and to amend existing rules in order to provide information on the ownership of companies that are awarded procurement contracts (IMF, 2020a). Sierra Leone has set up a Coronavirus Disease Response Transparency Task Force, with the primary role of ensuring and instilling ‘integrity, accountability and transparency’ in the utilisation and management of funds meant for the COVID-19 response, to try and avoid the widescale fund diversion that occurred during the Ebola response.

4.5 Trust, transparency, and accountability

Public health depends upon participation, and this is even more true for epidemics which cannot be overcome without rapid behaviour change of the population. As such, trust is critical. This includes trust in the government and the health authorities – i.e. political and institutional trust. Without it, people will be reluctant to cooperate and may actively conceal

information; they certainly will not be willing to make sacrifices or take unusual steps to protect the greater good. Where trust is lacking, it can delay the effectiveness of a healthcare response and result in unnecessary deaths. (Note that social trust is also required – if people do not believe that most others are going to abide by novel and restrictive rules, they are unlikely to adhere to them themselves. However, this report does not go into this.)

This was a lesson learned the hard way in the 2014 Ebola outbreak. Low trust in authorities led to widespread conspiracy theories about Ebola virus disease that directly contributed to its spread due to low reporting, low attendance at treatment units, and continuation of traditional burial practices. Later in the epidemic, steps taken to mitigate disease transmission, such as the imposition of quarantines and curfews by security forces, were viewed with suspicion by segments of the public and by political opposition leaders. Political tensions were amplified as the ruling party was accused of using the crisis to secure political control, while opposition leaders were accused of hampering disease response efforts (International Crisis Group, 2015). While these tensions did not lead to large-scale political violence or instability, they did complicate health response efforts. The situation was much worse in the Ebola outbreak in the conflict zone of Eastern DRC in 2018/19, where widespread mistrust in the authorities significantly derailed the response.

Communication is important for a variety of reasons. First and foremost, it is essential to guide human behaviour change, which is the single most important factor in cutting transmission chains. It is also vital to ensure understanding of and compliance with public health measures, and to maintain the trust of the public.

Trust is a fundamental element of social capital. Combatting the pandemic requires strengthening accountability and the social contract between the state and its vulnerable citizens. Table 6 shows that trust in the government in Maintains countries is higher than the global average, particularly in Bangladesh, but trust in doctors and nurses is worryingly low in several countries. These figures conceal a complex web of social, political, economic, and cultural dynamics; it is worth noting that Pakistan has struggled with managing far less infectious diseases like polio.

Table 6: Trust in the government, and in doctors and nurses

	Trust in the government*	Trust in doctors and nurses**
Global average	51.9	81.0
 Bangladesh	85.6	89.7
 Kenya	64.5	78.4
 Pakistan	57.7	85.4
 Sierra Leone	63.8	71.7
 Uganda	55.5	79.6

Source: <https://ourworldindata.org/trust#all-charts-preview> (data from 2018)

* The share of respondents who answered 'a lot' or 'some' to the question: 'How much do you trust your national government?'

** The share of respondents who answered 'a lot' or 'some' to the question: 'How much do you trust doctors and nurses?'

Building trust in the response and its architects requires many things; at a minimum, this should include:

- Being seen to implement a proportionate and accountable response, with public health above all other agendas; and
- Effective risk communication to garner public consent and build trust in the response.

These are covered in turn below, assessing to what extent these factors are present in the five Maintains countries covered in this report.

4.5.1 Being seen to implement a proportionate and accountable response, with public health above all other agendas

Governments have a range of objectives and agendas. In a major crisis like the current COVID-19 situation, party politics and other agendas need to come second to public health concerns.

Public health agenda. Emergency powers should not be used for anything other than the pandemic. According to the United Nations High Commissioner for Human Rights Michelle Bachelet: ‘Emergency powers should not be a weapon governments can wield to quash dissent, control the population, and even perpetuate their time in power. They should be used to cope effectively with the pandemic – nothing more, nothing less’ (Office of the United Nations High Commissioner for Human Rights, 2020).

In **Kenya** however, the public health need for quarantine was confused when it was also initially used as a punishment. The government said that those found contravening lockdown measures would be assumed to have interacted with infected persons and be sent to state quarantine centres for 14 days, for which they would have to foot the bill themselves. This has now changed, but vital trust has been lost (African Arguments, 2020a).

In **Uganda**, 19 LGBT+ people were jailed for almost 50 days for risking spreading the new coronavirus – until public prosecutors withdrew the charges. Many believe that this was a targeted attack on LGBT+ people with little to do with COVID-19 (Reuters, 2020b).

Political parties need to work together, as public health emergencies should not be exploited for political gain. In response to violent clashes in late April/early May in **Sierra Leone**, which left over a dozen people dead, many hospitalised, and property destroyed (Politico SL, 2020), the president tried to send a warning to the opposition party while at the same time not wanting to be accused of divisive speech. On the one hand he accused the main opposition party of ‘inciting, planning, financing, mobilising, and in some cases actively participating’ in recent violence which he termed ‘violent terrorist attacks’ in order to ‘make the state ungovernable’. On the other hand, he initiated a dialogue on ‘national cohesion and peacebuilding’ that would engage with the opposition party, urging support for this from development partners, and appointed the vice-president to work closely with civil society and international partners to open up democratic and civic spaces of dialogue to ensure peace (Sierra Leone Telegraph, 2020a; Mail and Guardian, 2020).

Proportionate and accountable. Severe enforcement of lockdowns and suppression of protests, as seen in Kenya and Uganda, not only punished transgressors but also collectively reinforced people’s fears of state caprice and coercion. In Kenya, it has stoked deep-seated distrust, especially within informal settlements. In response to the public outcry in **Uganda** over enforcement of curfew/lockdown, the defence forces chief apologised and

some personnel have already been convicted. The president directed the head of the anti-corruption unit to deal with this, sharing her mobile phone number with the public and calling upon affected citizens to report any violations by the security forces (The Conversation, 2020a). In **Kenya**, President Uhuru Kenyatta apologised generally about police use of force, but did not instruct the police to end the abuses (HRW, 2020a).

4.5.2 Effective risk communication to garner public consent and build trust in the response

Governments must regularly communicate accurate and contextual information to prevent speculation and build confidence. Distrust is created when senior government officials and responders provide different information. Moreover, if people find out they have been misled or purposefully misinformed, this can undermine the response. The public need to know what is required, and to know in real time what is happening.

A huge amount has been learned from previous health crises about communications, and generated a dedicated field known as ‘Risk Communication’ with specialised methods aimed at maximising trust and behaviour change while taking into account human psychology and crisis psychology. Risk communication emphasises:

- Clear, simple, and consistent messages;
- Transparent, factual information based in science;
- Empathy and engaging with legitimate public anxiety and loss;
- A clear forward plan and pathway; and
- Tools for effective communications that enhance public understanding, engagement, and compliance.

Experience and literature in previous health crises showed that, because trust is so vital, the messenger matters as much as the message. As noted above local leaders and faith leaders can play a vital role to deliver trusted messages which lead to behaviour change.

Section 6.4 provides more detail on information sharing, but more than this governments should uphold free speech. In **Bangladesh**, the authorities have arrested at least 44 people for allegedly spreading rumour and propaganda amid the coronavirus pandemic using its widely criticised digital security law, which has proven to be harmful towards the country’s journalists. This is working to silence anyone commenting on the situation in the country, from opposition activists to healthcare workers, suppressing dissent and targeting those who criticise the government’s handling of COVID-19 (Taiwan News, 2020).

Further, experience from other outbreaks points to the importance of community engagement in building trust in the state and health system response; this requires working *with* communities, treating them as active participants in – not passive recipients of – the response. See section 6.6 for more detail on effective community involvement.

5 Mitigating secondary impacts

A pandemic will have serious long-lasting impacts that go beyond the direct impact of the disease, to include secondary social, economic, health, and political impacts. These impacts can result from response and control measures such as quarantines, travel restrictions, and social distancing, and can be short or longer term. Coordination and partnerships between the health system and other sectors are important in ensuring positive interdependencies and convergence in pandemic response.

This chapter focuses on how social systems that are core to Maintains – social protection, food security and nutrition, and education – can respond to the secondary impacts of the pandemic, and takes a particular look at the impacts on women and all vulnerable groups. It starts by looking at movement restrictions which affect all other aspects of life.

5.1 Pro-poor implementation of movement restrictions

Due to the lack of any known prophylactic and cure, non-pharmaceutical interventions have played a key role in community-based prevention and control of COVID-19; most governments have imposed various degrees of limitation to movement, in terms of social distancing, quarantine, curfews, and lockdowns. The resulting reduction in transmission must be balanced against the related, multi-layered impacts.

Balancing the different objectives of minimising mortality and morbidity from COVID-19, minimising mortality and morbidity from other causes, and minimising secondary impacts, both social and economic, is clearly difficult. Accurately quantifying these trade-offs is not possible due to high levels of uncertainty around the disease's transmission and lack of widespread testing. As such, decisions on movement restrictions must be made on the highly imperfect information available and will be political judgements around how to balance the different objectives. The following considerations are therefore not normative, and make no judgement around whether movement restrictions are the right response, but rather consider the processes around their implementation and impacts.

So far, Maintains countries have taken a range of responses from full to partial lockdown. Uganda quickly imposed a strictly enforced nationwide lockdown and curfew, which is ongoing as of the end of May. In contrast, Sierra Leone has implemented only partial restrictions and just two three-day lockdowns, in recognition of the extremely precarious economic situation of poor households and the state to provide significant support. Timing has also varied: while Uganda's lockdown occurred even before its first confirmed case, in Pakistan it was 24 days after the first confirmed case (see table 6)

Table 7: Different approaches to movement restrictions

	Start			Geographical coverage	Coverage	Easing
	Date of first measures	# of days from first case	# of cases			
	26 Mar	18	33	Nationwide	'Stay at home' 8pm–8am All offices and business centres were closed with restriction of movement	4 May – the ready-made garment sector reopened, although all non-essential businesses remain closed Bangladesh continued with lockdown extensions through May, with restrictions eased from 1 June
	15 Mar – work at home 27 Mar – curfew 6 April – Lockdown	2	1	Nationwide – curfew and some restrictions Affected districts only – prevention of movement into and out	7pm–5am curfew Closed: large markets, shopping malls, restaurants, schools and offices No social gatherings Social distancing on public transport No movement into or out of affected districts	On 7 June - Curfew changed to 9pm–4am - Movement restrictions eased in Kilifi and Kwale - Restaurants and businesses resumed operations Schools, places of worship, and large social gatherings remain closed
	14 Mar	24	31	Nationwide but varying per province	Closed: large markets, shopping malls, restaurants, schools and offices, public transport, inter-provincial and inter-city transport Factories, banks, and the financial sector directed to reduce work hours	Phased lifting from 8 May Reopened construction-related industries and shopping centres, Monday to Friday, and outpatient departments in hospitals Almost all markets and businesses opened, and other restrictions lifted, after a Supreme Court decision on 18 May Educational institutions to remain closed till August
	5 Apr	5	4	Nationwide	2 x 3 day lockdowns. 9pm curfew, inter-district travel ban, social gatherings banned	
	20 Mar	-3	0	Nationwide	7pm–6.30am curfew	Lockdown began to be eased from 2 June

In order to implement movement restrictions in an effective way that minimises unintended side effects, there should be:

- clear guiding principles for the movement restrictions; frequent, transparent reviews; and a special focus on vulnerable groups;
- consistent implementation and proportionate enforcement of the restrictions; and
- basic needs of those in subjected to lockdown – including access to food, water, and essential health care – are met.

The degree to which these conditions were met varied across Maintains countries, as described below.

5.1.1 Clear guiding principles on movement restrictions are in place; frequent, transparent reviews; and a special focus on vulnerable groups

Most countries have provided clear guidance on what the restrictions do and do not cover. The one exception is **Pakistan**, where there has been a lack of clarity and mixed messaging due firstly to the federal nature of Pakistan – with national and provincial governments sometimes publicly disagreeing on approach – and secondly to the strong influence of religious leaders who have made their own independent announcements on the opening of mosques.

This is an evolving context, where providing clarity on the extent and timing of movement restrictions is difficult. Countries have therefore had to adapt accordingly. In response, some have explicitly not given an end date and others have done this but then revised and extended the lockdown several times (in Bangladesh's case, six times). In **Bangladesh**, the first lockdown was announced for two weeks and many people went back to their village, returning to the capital two weeks later expecting to go back to work but finding the lockdown extended.

Kenya and **Bangladesh** both have major refugee camp populations, which are highly vulnerable to the virus, and both banned movement in and out of camps to try and prevent the virus entering. Despite this, the Dadaab camp in eastern Kenya, which is home to 217,000 people, and Cox's Bazar, which is home to nearly 1 million people, registered their first cases in mid-May. The number of cases in Cox's Bazar remain small so far, but it is expected that fear of being put in quarantine is preventing people coming forwards for testing; two people fled quarantine because they believed they would be sent to centres far from their families (The Guardian, 2020a). Other countries also have high populations of refugees – particularly Pakistan with up to 2 million registered or undocumented Afghan refugees – living in towns and communities, who are likely to be particularly vulnerable and overlooked by official systems.

The language used around COVID-19 measures is also pertinent; for example, Bangladesh is not using the words 'curfew' or 'lockdown' for fear of creating panic but there are 'stay at home' restrictions from 8pm to 8am and the nationwide lockdown was initially termed a 'general holiday'. This is in stark contrast to Cox's Bazar, where the government has been very direct in imposing a 'complete lockdown' with 'no entry, no exit – until the situation improves'.

5.1.2 Movement restrictions are implemented consistently and enforced with proportionality

There are concerns over the potential for harm in the use or enforcement of lockdowns, as described above. Enforcement in Kenya and Uganda has been extremely strict, particularly in the initial stages. In **Uganda**, the lockdown and curfew are enforced by the Uganda Peoples' Defence Force, the Uganda Police Force, and the local defence units. There have been multiple reports of beatings, the use of live ammunition, use of excessive force, and arbitrary arrests of rule breakers (Human Rights Watch (HRW), 2020b).

In **Kenya**, police killed at least 12 people while enforcing a dusk-to-dawn curfew, making Kenya's lockdown one of the deadliest in the world. This led to a protest by the Law Society of Kenya; on 30 March, the High Court of Kenya upheld the curfew itself but barred police from using excessive force to enforce it and demanded the police provide guidelines for observing the curfew (The Standard, 2020a). Since then, there have been fewer reports of violent enforcement.

In the other three countries, enforcement has been less robust. In **Sierra Leone**, restrictions on the number of people using public transport are not being observed, though the inter-district travel ban is being enforced. In **Bangladesh**, many people have openly flouted restrictions and gathered in public, especially during the evenings as people celebrated the holy month of Ramadan. In **Pakistan**, although Article 245 has been invoked allowing for the military to aid civil authorities, which can then take any measures necessary, the government has, so far, preferred to work in a consensual manner instead of using force. While police have been stationed at mosques, they have generally not enforced social distancing rules.

5.1.3 Basic needs of those subjected to lockdown – including access to food, water, and essential healthcare – are met

Clearly, people's basic needs must be met, otherwise they cannot be expected to remain in lockdown. **Sierra Leone** has not implemented a strict lockdown precisely because it was not able to ensure access to basic services. A rapid survey of communities in Freetown for Maintains found that the challenge of accessing water and food during lockdown was mentioned by all respondents. Most community members do not have either savings or storage facilities for water and food for three days. During the first strict lockdown on 3 April, a major problem was that many people that relied on wells for water could not obtain it. In an attempt to address this, the authorities distributed water in some communities, but this led to overcrowding. Furthermore, there were reports of police stealing water that people had stored before lockdown, accusing them of 'hoarding' water.

The long, strict lockdown in **Uganda** has been criticised, as it deprives those most vulnerable of any source of income, has resulted in inflated prices of essential goods, especially in more remote areas, and leaves no realistic provision to access emergency medical care. Anyone in need of medical attention is required to call the local authorities for assistance, yet calls often go unanswered and vehicles for emergency transport are limited (Reuters, 2020a). At the same time, anyone driving without a permit can be arrested (RFI, 2020). According to official statistics, there has already been an increase in the number of maternal deaths across the country, with women miscarrying or bleeding to death trying to reach hospitals on foot (Al Jazeera, 2020b). Moreover, non-maternity sexual health services

are not considered essential, and related services have thus been shut down (Akina Mama, 2020).

As described above, on 9 April **Bangladesh** imposed a 'complete lockdown' on the Cox's Bazar District where nearly 1 million Rohingya refugees live in camps. Access for humanitarian aid staff was reduced by 80%, with only emergency food and medical services to continue. According to aid workers, the drastic reduction in operations capacity has affected their ability to perform even those services deemed 'critical.' Moreover, an internet blackout is causing rumour and fear amongst the camps' inhabitants (HRW, 2020c). A rapid gender analysis of COVID-19 in Cox's Bazaar warns that: 'Confinement, a rise in tensions and restrictions on services and access for humanitarian workers will increase levels of gender-based violence, child abuse and neglect, and sexual exploitation and abuse (ISCG Gender Hub, 2020).

5.2 Ensuring gender equality and social inclusion

The COVID-19 pandemic, as with previous epidemics, has begun to expose social, political, and economic gaps in the response to curtail it. This pandemic requires a rapid, multi-sectoral, and integrated response and, in the race to respond, inequities in direct and indirect impacts and in access to services, are often overlooked. This will likely deepen the structural inequalities that Maintains countries already face.

Gender equality and social inclusion (GESI) is mainstreamed across all sections of this report, particularly social protection and health services. This section provides an overview of effects across the response, and looks in particular at violence against women and girls.

The pandemic's primary impacts on health and secondary impacts across a range of sectors will be experienced in very varied ways between different people. Their impacts are complex and intersectional, defying easy summaries; what is offered here is a broad brush approach, and further nuancing and disaggregation will be required.

Direct health impacts will impact more on the elderly, those with disabilities, and the chronically ill. By contrast, economic impacts will be felt more by low wage workers, poor households with limited access to savings, and those without access to sick pay and job security, such as those who comprise the majority of the populations in Maintains countries. Groups made vulnerable by recent or ongoing crises such as the forcibly displaced, migrants, and those recovering from humanitarian crises will be vulnerable to both primary and secondary impacts.

Age and sex are key determinants of infection and mortality rates (see Table 8). Most Maintains countries report higher numbers of cases in **men** (with an extremely marked difference in Uganda); however, this is in contrast to the global average, with almost equal infection rates amongst men and women (50.7% of cases are men). This suggests that men are getting tested more often than women, so the infection rate in women is underreported. In terms of mortality, the majority of people dying globally from COVID-19 are men due to

factors relating to both gender and sex,¹⁶ and this trend is reflected in the Maintains countries.

Table 8: COVID-19 infection and mortality rates by sex and age

Country	% of cases and deaths that are men		Cases by age		Deaths by age
	Cases	Deaths	Biggest age bracket	Other	Biggest age bracket
 Bangladesh	68% ¹⁷	73% ¹⁸	27% are 21–40 years ¹⁹		42% are 60 and above ²⁰
 Kenya ²¹	65%	78%	32% are 30–39 years	74% are 20–49 years	51% are 60 and above
 Pakistan	78% ²²	76% ²³	23% are 30–39 years	61% are 20–49 ²⁴ years	54% are 60 and above
 Sierra Leone ²⁵	49%	61%	25–34 years	75% are less than 45 years	Mean age of death is 59.6 years
 Uganda ²⁶	82%	0	37% are 30–39 years	78% are 20–49 years	0

Older adults, aged 60 and above, have a higher fatality rate and **adults of working age**, 20–50 years old, are most vulnerable to infection. As this latter age bracket covers the main breadwinners of households, this trend has serious implications for livelihoods, especially as COVID-19 impacts can be long-lasting. One in 10 people still have symptoms after three weeks, and one in 20 experience long-term symptoms – ranging from strange pains and fevers to debilitating headaches and exhaustion – for at least a month, sometimes longer (Telegraph, 2020). This means that the main breadwinners of the household may be less able to work for several months, affecting the earning potential of the household. When these are women who are also doing the bulk of childcare and domestic work, the consequences may be severe.

While death rates are higher for men, **women** are vulnerable in many other ways:

- Women are more likely than men to work in insecure, lower-paid, and part-time employment (UN Women, 2020) such as hospitality, domestic labour, education, and services, all of which have suffered shut-downs due to COVID-19.
- They are over-represented in the affected sectors and in occupations that are at the front line of dealing with the pandemic, forming 70% of the healthcare workforce.

¹⁶ See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

¹⁷ See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

¹⁸ See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

¹⁹ See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

²⁰ Data taken from WHO Bangladesh (2020).

²¹ Data taken from MoH Kenya (2020a).

²² See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

²³ See <https://globalhealth5050.org/covid19/sex-disaggregated-data-tracker/>

²⁴ See <http://covid.gov.pk/stats/pakistan>. Data extracted 3 June 2020.

²⁵ Data taken from Ministry of Health And Sanitation (2020a).

²⁶ See <https://covid19.gou.go.ug/>. Data extracted 3 June 2020: 24 female cases, 203 male cases.

- Women already take on the bulk of unpaid care work (for children but also the elderly who are most susceptible to die of COVID-19) and domestic work. This is exacerbated during lockdown, leading to negative effects on physical and mental health. They also bear a disproportionate burden in delivering care at home and in the community in the case of closure of schools or care systems.
- There is clear evidence of an increase in domestic violence since the start of the COVID-19 pandemic, with increased calls to helplines and to the police (UN Women, 2020). Many women are in lockdown at home with their abusers without normal support such as extended family and social or community-based support networks.
- Women's health and contraception services are often reduced during pandemics, with catastrophic impacts for women and their children. Marie Stopes International (MSI) has estimated that 9.5 million out of 15 million vulnerable women and girls in 37 countries will risk losing access to contraception and safe abortion services in 2020 as a result of the COVID-19 pandemic, translating into 1.3 to 3 million unwanted pregnancies, 1.2 to 2.7 million unsafe abortions, and 5,000 to 11,000 additional pregnancy-related deaths (MSI, 2020). Unplanned pregnancies from transactional sex also introduce additional health risks (Kelly, 2020).
- Previous shocks have resulted in girls being more vulnerable to child marriage and harmful traditional practices and UNFPA is warning of the same effects under COVID-19 (UNFPA, 2020).
- Transactional sex was common during the Ebola outbreak; women exchanged sex for money to meet basic needs for themselves and their families (Kelly, 2020) or to receive other benefits such as jobs (Kapur, 2020). Coercive sex is also common in epidemic contexts due to an unequal power dynamic – those responsible for providing services such as aid workers, taxi drivers, and burial teams enter into sexual relationships with vulnerable women in exchange for vaccines, cash, food, and transport (O'Donnell *et al.*, 2020).

However, it is important that women are not only viewed in terms of vulnerability. Evidence from past shocks shows that not only are women key to ensuring that families are fed and healthy and households continue to run, but that they play a key role in the community during and after a shock. Indeed, they make up the bulk of CHWs in most countries, while women's groups have played a key role in essential services, violence prevention and mitigation, and information dissemination.

Closure of schools and lockdown measures place **children** at greater risk of neglect as well as physical, emotional, sexual, and domestic abuse. Schools offer not just education but a safe haven for the emotional, mental, and cognitive development of children, so their closure will have broader impacts than simply those affecting educational outcomes. In the Ebola outbreak, there were negative impacts on children's physical and mental health (Brooks *et al.*, 2019; Wang *et al.*, 2020), greater levels of corporal punishment from parents (Alliance for Child Protection in Humanitarian Action, 2018), and increased instance of rape, sexual assault, and violence against children (Caspani, 2015; Korkoyah and Wreh, 2015).

Poor urban communities and displaced populations face a higher risk from COVID-19. They face intersecting challenges that make them susceptible to crisis, where a dense population is found alongside high rates of health, class, race, gender, and socioeconomic

inequality. First, physical conditions facilitate disease spread due to intense social mixing between the young and elderly and overcrowded living conditions. Second, there is a higher prevalence of malnutrition and co-morbidities such as TB. Third, there is extreme pressure on the already inadequate preventive and curative health services. Finally, many live and work in 'extra-legal' informal settlements; they will thus be the last to receive formal support as they officially do not exist (The Conversation, 2020b).

Ensuring GESI is a broad topic, requiring a wide-ranging and multi-sectoral approach. At a minimum, the following three factors should be in place to minimise the effect of COVID-19 on GESI:

- GESI is mainstreamed within all COVID-19 approaches and interventions, with an explicit GESI analysis, disaggregated data, and extra support provided for women and girls and most vulnerable groups.
- Specific additional strategies are established to protect women and girls from physical, sexual, or psychological violence, with a particular focus on increased vulnerabilities during movement restrictions.
- Stigma, discrimination, racism, and xenophobia are not tolerated and transgressions are publicly dealt with, including state-supported redress.

5.2.1 No GESI is mainstreamed within all COVID-19 approaches and interventions, with an explicit GESI analysis, disaggregated data, and extra support provided for the most vulnerable

For most Maintains countries, the COVID-19 response plan refers to vulnerable groups (with Pakistan providing a particularly strong example²⁷) and social protection measures have been announced (see Section 5.3). However, there remain concerns over actual implementation levels and the speed and sufficiency of these measures, and there has not been an effective approach to provide for the socially isolated such as prisoners, internally displaced persons (IDPs), refugees and minorities, and malnourished children, or to ensure that women are safe and their needs adequately met.

The safety of **women**, including reproductive healthcare and family planning services, has taken a back seat, and vulnerable women have been denied access to contraception, safe abortions, and treatment of sexually transmitted infections. Gender research by CARE (2020) across 30 countries including Bangladesh, Kenya, and Pakistan has revealed real weaknesses across the response, with these three countries performing particularly poorly. They are three of the seven countries that have not provided any funding or made any policy commitment for gender-based violence (GBV), SRH services, provision of childcare, or support to mitigate the economic effects on women. Indeed, Pakistan and Uganda have reported more than 100 closures of clinics and/or community-based service outlets that deliver sexual and reproductive healthcare (SRH) (International Planned Parenthood

²⁷ The COVID-19 National Action Plan from early March made no reference to vulnerability, but the COVID-19 response plan from late April recognised the need to map vulnerable areas/population segments, conduct a socio-economic impact assessment on vulnerable populations, collect sex, age, and disability disaggregated data on COVID-19, and run communication campaigns that address harmful gender norms, discriminatory practices, and inequalities. This recognises that social, cultural and gender norms, roles, and relations influence women's and men's vulnerability to infection, exposure, and treatment differently (see Government of Pakistan, 2020).

Association, 2020). Further, none of the Maintains countries are amongst the 59 countries that have signed up to the joint press statement 'Protecting Sexual and Reproductive Health and Rights and Promoting Gender-responsiveness in the COVID-19 Crisis' (Ministry of Foreign Affairs, Government of Sweden, 2020).

Table 9: Lack of a gendered COVID-19 response

<i>Country</i>	Bangladesh	Kenya	Pakistan
<i>Name of COVID-19 response team</i>	National Coordination Committee for Prevention & Control of COVID-19	NERC	Emergency Core Committee
<i>Gender equality in response team</i>	n/a	15 M; 6 F	12 M; 1 F
<i>Gender equality in response team (%)</i>	n/a	28.57	7.69
<i>Funding for GBV</i>	N	N	N
<i>Policy announcement on or commitment to GBV</i>	N	N	N
<i>Funding for SRH</i>	N	N	N
<i>Policy announcement on or commitment to SRH</i>	N	N	N
<i>Childcare support</i>	N	N	N
<i>Support to mitigate the economic effects on women</i>	N	N	N
<i>Assistance for vulnerable groups and/or low-income groups</i>	Y	Y	Y

Source: CARE (2020)

In **Sierra Leone**, financial constraints leave the country unable to finance substantial social protection measures or services capable of protecting its vulnerable citizens. However, DFID has been working with the Ministry for Gender and Children's Affairs to support gender mainstreaming across the COVID-19 response and policy recommendations are forthcoming in this regard. One DFID programme uses text messages to address gendered dimensions of the crisis, including encouraging women to continue to address their maternal healthcare and family planning needs and setting up a freephone number to support individuals experiencing sexual, physical, or emotional violence.

In **Bangladesh**, the major stimulus package announced at the end of March/early April initially focused almost entirely on industries, particularly exporting ones, with little detail or clarity on support for those who are vulnerable to loss of income, including the country's many thousands of young female garment workers (Atlantic Council, 2020). Further details are now emerging, however, and Bangladesh is aiming to reach millions of newly vulnerable

informal workers, setting up a new system in order to do so, but it is not clear when the first payments will be made.²⁸

Further support is needed for **refugees, IDPs, and undocumented migrants**; those living outside camps are often particularly vulnerable due to lack of any support. In the six Maintains countries there are more than 5 million refugees and around 4.26 million IDPs, with Bangladesh, Uganda, and Kenya hosting some of the largest refugee camps in the world. In **Bangladesh**, the camps are under strict lockdown and services have been reduced; the lack of information, closely packed housing, and lack of clean water, sanitation, and washing facilities mean that people are living in fear. Women and girls suffer from a lack of gender-responsive facilities and services, restrictive gender norms, and violence (ISCG Gender Hub, 2020). Many people have underlying health conditions; 30% of the patients treated by Médecins Sans Frontières (MSF) have respiratory tract symptoms, making them very vulnerable (MSF, 2020).

In **Uganda**, new arrivals in refugee settlements have critically high Global Acute Malnutrition rates and rely on aid, which was reduced by 30% due to a lack of funding for WFP (Ventures Africa, 2020). Many also move between refugee settlements and towns as part of a coping strategy but food prices in urban areas have increased exponentially, remittances from relatives abroad have declined, and refugees in towns have been ineligible to receive government assistance reserved for nationals (African Arguments, 2020b). Refugees who opt to live outside designated settlements are expected to be self-reliant and do not receive regular humanitarian assistance, in line with the government's urban refugee policy. In a survey of refugees in Kampala, households had lost over 75% of household income, and the proportion of households without an income earner increased from 31% before the pandemic to 72% at the time of the survey (UNHCR, 2020a). In **Pakistan**, the United Nations High Commission for Refugees is distributing cash to 36,000 Afghan refugee families, particularly those living in 52 shelter camps across the country (UNHCR, 2020b).

Extra support is needed for those individuals in institutions such as **prisons and other correctional facilities**. These institutions are often overcrowded, unsanitary, and under resourced – serving to increase the chances of a COVID-19 outbreak. In **Sierra Leone**, five inmates and two prison officers died in a riot in the Pademba Road Correctional Centre; prisoners were concerned about getting enough food after the prohibition on visits, as well as about their ability to take preventive measures against COVID-19. In **Pakistan**, there has been no reporting of the number of COVID-19 cases or deaths in prisons since April 2020 (Amnesty International, 2020).

²⁸ Stimulus measures declared on 25 March and 5 April by Bangladesh's Prime Minister Sheikh Hasina include working capital for affected industries (approximately US\$ 3.5 billion) and SMEs (US\$ 2.36 billion), additions to the size of the central bank's export development fund (US\$ 1.5 billion), the central bank's new credit facility (US\$ 590 million), and emergency incentives for export oriented industries (US\$ 590 million). In addition, the government declared the expansion of the Vulnerable Group Feeding and Vulnerable Group Development programmes, open market sales of rice at lower prices, and expansion of social safety net programmes – but with no details on these.

5.2.2 Specific additional strategies are established to protect women and girls from physical, sexual, or psychological violence, with a particular focus on increased vulnerabilities due to movement restrictions

Most countries around the world, including the Maintains countries, have reported that GBV has been amplified by the COVID-19 lockdown. There has been a significant rise in such violence among refugees in **Bangladesh's** camps and across **Uganda**, often perpetrated by existing partners. **Kenya** also saw a tripling of GBV in the wake of the ongoing outbreak. **Pakistan** has seen a surge of reports in child abuse cases in recent months (New Indian Express, 2020) and increased tensions within the household (UN Women, 2020).

We can find little evidence of national programmes to prevent and protect individuals at risk of physical, sexual, or psychological violence, although **Uganda** and **Kenya** have strong public awareness campaigns through television, radio, social media, and print media. The governments of **Kenya** and **Sierra Leone** have activated helplines for reporting crimes against women but ways also need to be found to enable women to safely access these helplines. Systematic monitoring is also missing, as well as on-the-ground task forces to mitigate domestic crime; courts in all countries have stopped or reduced hearings with wide impacts, particularly for the vulnerable.

Research has found that independent women's groups are key to addressing violence against women and girls. Such groups should be involved in the development and delivery of services to prevent and mitigate violence during COVID-19. In addition, new initiatives are needed to work with men and boys to reduce gender violence, offering initiatives to improve gender equality and prevent violence from occurring.

5.2.3 Stigma, discrimination, racism, and xenophobia are not tolerated and transgressions are publicly dealt with, including state-supported legal redress

The COVID-19 pandemic has been used by some to discriminate against those from certain ethnic backgrounds and stigmatise those who have been infected with the virus, and even against health workers and others who are working to treat and take care of others. **Uganda** and **Kenya** have put in place strong public awareness campaigns through television, radio, social media, and print media to discourage such racism and discrimination.

In Kenya, Pakistan, and Uganda there have been several reports of racism and discrimination against minority ethnic groups and foreigners. A **Kenyan** Member of Parliament called for his constituency residents to avoid interaction with Chinese nationals (BBC, 2020), while reports from **Pakistan** have mentioned the targeting and scapegoating of the Hazara Shi'a community for the spread of the virus. In the provincial capital Quetta, the Pakistani government completely sealed off two Hazara Shi'a areas – Hazara Town and Marriabad – as part of a lockdown in the city, forbade government employees from travelling into Hazara Shi'a neighbourhoods, and reportedly forced Hazara Shi'a policemen to go on leave under suspicion they are infected by relatives (Business Standard, 2020). **Uganda** also continues to bear witness to acts of discrimination and xenophobia against foreigners and those of Asian descent (The Observer, 2020).

5.3 Providing social protection

This section briefly addresses the social protection programmes that will have an integral role in mitigating the welfare impacts of this global shock on households and businesses.

The multi-sectoral direct and secondary impacts of COVID-19 will exacerbate pre-existing vulnerabilities, making poor people poorer, creating new vulnerabilities, and pushing more people into poverty. The World Bank's revised estimate is that 71–100 million people globally will fall into extreme poverty due to COVID-19 (Mahler *et al*, 2020). Those not covered by existing social protection programmes, particularly social assistance which typically targets poor and vulnerable groups, will need assistance. In addition, the framing of social protection needs to position women not only as mothers and carers but as recipients of social protection in their own right (Overseas Development Institute, 2019).

One particularly important vulnerable group are adults working in the informal sector (e.g. domestic workers, market traders, and daily labourers in cities or on farms etc., many of whom are women), who make no social insurance contributions, have no protection against temporary job loss, and limited or no savings and often debt. Informal social protection such as is provided by family, kinship, and community ties is a vital safety net, but as the pandemic has affected everyone either directly or indirectly these sources of support have limitations.

Women-headed households are also likely to be vulnerable, as they are dealing with loss of livelihoods as well as additional care loads. Government social protection schemes need to find ways of giving them immediate economic support, for example by making direct transfers of cash to ensure that women have access to resources.

Expanding the coverage of social protection schemes is crucial, as most existing programmes only cover a small proportion of the population – either those belonging to a particular category (e.g. people with disabilities or those over a certain age) or those often considered to be the poorest of the poor. However, obtaining information on who are the most vulnerable as a result of the pandemic is a major challenge; micro simulations can be done to identify the groups to be targeted, but many countries do not have social registries or detailed socioeconomic information about large sections of their populations to support swift household identification and targeting. Pakistan has a social registry covering 85% of the population but this is well known to be out of date and is currently being updated. Those working in the informal cash-based economy, particularly women and marginalised groups, are likely to be very difficult to identify and reach.

Social distancing brought in for COVID-19 offers practical challenges to delivery too. Outreach, registration, and enrolment typically involve physical interface between frontline service providers and potential beneficiaries. Moreover, the last-mile delivery of cash to beneficiaries is adversely affected by movement restrictions if made through pay points such as government offices, banks, ATMs, etc. The COVID-19 crisis has provided impetus to cashless payments in contexts where mobile money is widespread, but this will not be as available to women or to marginalised groups. The nature and scope of digital payments depends on the level of development of the digital payment ecosystem and financial inclusion in the country. In some countries, online and mobile platforms have been utilised to transfer funds to individuals. For instance, Kenya has mandated waiving transaction fees by

mobile money operators for three months – especially for small value transactions – to encourage contactless transactions and thereby reduce the risks of transmission during cash-out (Ng'weno, 2020).

Non-cash schemes also need to be adapted. As schools have closed, school feeding programmes have also halted, critically impacting the food security of poor children. Some countries have adapted their school feeding programmes (e.g. providing a take-home ration at distribution sites or delivered to pupils' homes, which introduces risks to service providers, or providing a cash transfer or vouchers in lieu of rations) but four of the five Maintains countries covered in this report have simply closed their programmes. Furthermore, public works programmes potentially increase the risk of infection. Some countries, such as India, have provided handwashing facilities and masks for workers and mandated social distancing (Government of India, 2020). Other schemes, such as the Urban Productive Safety Net Project in Ethiopia have suspended the public works side but provided three months of advance wages (Gentilini *et al.*, 2020).

Not all countries may be financially or technically able to expand and adapt their programmes, and cash or in-kind support may need to be delivered through humanitarian actors rather than government systems, as was the case during the Ebola crisis in West Africa. This will likely be the primary approach taken in Sierra Leone, which does not have established social protection programmes.

Needs across Maintains countries

The economic impacts across the five countries are enormous and below we offer a snapshot of these needs:

- In **Bangladesh**, the incomes of the very-poor, moderately poor, and vulnerable non-poor have fallen by 70% due to the pandemic. Economic activity has come down by 71% in urban areas and 55% in rural areas. People depend heavily on overseas remittances, which have hugely reduced. As a result of abrupt loss of buyer contracts, 58% of ready-made garment factories had to shut down most or all of their operations, affecting at least 1.2 million garment workers directly, most of whom are women (Forbes, 2020). The impact on the urban poor, who often have only 1–2 weeks of savings, is severe, with most cutting back on food consumption.
- In **Kenya**, the pandemic has resulted in cash flow constraints for an estimated 79% of manufacturers in Kenya, meaning a reduction of 40% for casual labourers and 17% of permanent workers (Kenyan Wall Street, 2020). As all flights are banned, tourism (representing 9% of GDP) has ceased, as has the cut flower industry (1% of GDP) where women make up the majority of workers (Dolan *et al.*, 2020).
- In **Pakistan**, the Ministry of Planning has estimated that between 12.3 and 18.5 million people will lose their jobs and the economy will sustain losses of PKR 2–2.5 trillion in just three months. This will have serious impacts when coupled with reductions in income from remittances – losses of US\$ 2 billion are expected.
- In **Uganda**, a survey in mid-May found that lockdown measures have reduced business activity by more than half and 75% of businesses have laid off employees (Brookings, 2020). Another found that up to '4.4 million informal sector workers will see their earning falling below the poverty line or totally drying up' (UNCDF, 2020). Tourism is the number-

one source of foreign exchange in Uganda, constituting 7.7% of the country's GDP and employing close to 700,000 people. The World Bank estimates that 3.15 million Ugandans could fall below the poverty line due to the pandemic (World Bank, 2020d).

- In **Sierra Leone**, a national survey in mid-May found that 68% of business owners have reported a drop in weekly income; on average, weekly income is half of what they made in a typical week in March 2020. Some 57% of businesses have had to temporarily lay-off workers, and 37% reduced the number of working hours, with a greater reduction for women. More than half of people have used their savings to cover living costs, and nearly a quarter are borrowing money (Meriggi *et al.*, 2020).

A reduction in remittance flows will affect all countries. In 2020, they are projected to fall by 23.1% in sub-Saharan Africa and 2.2.1% in South Asia – one of the sharpest declines in recent history, largely due to the economic crisis caused by the COVID-19 pandemic (World Bank, 2020e).

A key issue in the Maintains countries is the number of people working in the informal sector, which is shown in Table 10; for all countries, this is higher than the average across developing and emerging economies of 70%, and very different from the 18% in developed economies. Due to their population size, Pakistan and Bangladesh have extremely high numbers of people whose incomes are dependent on informal employment. Sierra Leone has acutely vulnerable populations, with 70% of people already living below the national poverty line and 90% of people dependent on the informal sector. Women's incomes are particularly vulnerable.

Table 10: Some key factors concerning vulnerability

	National population (million)	Living below national poverty line (million people, % of population)	Informal employment as % of total employment		
			Total	Men	Women
 Bangladesh	161.4	39.2 (24.3%)	89%	87.2%	93.5%
 Kenya	51.4	18.5 (36.1%)	83.8%*		
 Pakistan	212.2	62.5 (29.5%)	82.4%	79.6%	92.1%
 Sierra Leone	7.7	5.4 (70.2%)	92.5%	92.9%	92.1%
 Uganda	42.7	9.1 (21.4%)	93.7%	92%	95.6%

* Comparable figures for Kenya are not available. This is from a different source (Donovan and Zhu, 2020). Source for non-Kenyan informal employment figures: International Labour Organization (2018)

Social protection responses

Social protection is made up of social insurance, social assistance, and labour market interventions; different types of social protection interventions can be used to respond to and

support different groups. Social assistance aims to meet the minimum needs of the poorest and most vulnerable households, social insurance protects those who are in regular and often formal work, and labour market interventions apply to both formal and informal labour.

Globally, social assistance programmes are used most widely to respond to COVID-19 – both existing and ‘newly’ vulnerable – accounting for almost 60% of measures; cash transfer programmes account for half of these. In response to COVID-19, social assistance interventions have been adapted by expanding coverage, increasing benefits, and making administrative requirements simpler and more user-friendly.²⁹

below outlines the interventions introduced as a result of the pandemic in the Maintains countries, and more information can be found by country in Annex C.

²⁹ See OPM (2015) for a typology of scale-up measures.

Table 11: Types of social protection measures introduced in response to COVID-19

	SOCIAL ASSISTANCE				SOCIAL INSURANCE				LABOUR MARKETS			
	Cash-based transfer	Public works	In-kind	Utility and financial support	Paid leave/unemployment	Health insurance support	Pension and disability benefits	Social security contributions (waiver/subsidy)	Wage subsidy	Activation (training)	Labour regulation change	Reduced work time subsidy
	✓		✓						✓			
	✓	✓		✓								
	✓			✓								
	✓		✓									
	✓		✓					✓				

Source: Gentilini *et al.* (2020)

Social protection is a key response to mitigate the impacts of COVID-19. At a minimum:

- Social assistance cash and in-kind schemes should be expanded and adapted swiftly, with new delivery and enrolment modalities as necessary to successfully target and support vulnerable people; and
- Market-based interventions should be put in place to further protect both households and small businesses.

The following sections explore the extent to which this was achieved in the Maintains countries.

5.3.1 Social assistance cash and in-kind schemes are expanded and adapted swiftly, with new delivery and enrolment modalities as necessary to successfully target and support vulnerable people

Pakistan has delivered the fastest social assistance scale-up to date (by 25 April 2020, the government had disbursed US\$ 411 million to 5.7 million beneficiaries across the country; The News, 2020). Meanwhile, the scale-up of social protection coverage in **Bangladesh** has been remarkable: with a further 24.7 million people now receiving protection for COVID-19, covering 15.3% of the population (Gentilini *et al.*, 2020). Kenya, Uganda, and Sierra Leone have also provided support, but at a slower pace and smaller scale. **Kenya** is the only country globally to have targeted a scheme to urban slums. Although this tells a positive story, for all of countries, there remain significant challenges around targeting, adequacy of transfer values, regularity and proposed length of planned transfers, and complaints and accountability mechanisms.

A number of countries have introduced policy changes to simplify digital cash transfers to households. For example, in **Bangladesh** the government has introduced remote registration, simplified its due diligence process, introduced an SMS platform for communication, and waived fees for transactions with account holders, using basic accounts and increasing transaction limits. **Pakistan** has introduced an SMS campaign to reach new beneficiaries and a web portal to assist enrolment. In **Kenya**, fee waivers on person-to-person mobile money transactions on M-Pesa were approved in order to support increased use of this non-contact service. These changes have sped up processes and improved access to social assistance in times of social distancing.

Implementation details on timing, targeting, and modality – as well as potential tweaks to packages – can ensure that women and girls are not left behind. Targeting cash transfers at women can help to promote small businesses, reduce intimate partner violence, and encourage more equitable sharing of household labour and resources. Bundling cash transfers with the provision of mobile phones can potentially address multiple issues that women might face in a COVID-19 context, including access to mobile money transfers, other banking services, and information (Gender Innovation Lab, 2020).

All Maintains countries have activated their partnerships with UN humanitarian agencies for technical and financial assistance, and some have also reached out to private and non-governmental stakeholders to distribute and decentralise response measures. For example, the **Kenyan** government has tasked the Kenya Red Cross to coordinate with UN agencies to effect the regular distribution of emergency food and non-food items, hygiene articles, and essential drugs to slum dwellers and refugees. **Pakistan** has been relying on humanitarian

and international organisations to support its Afghan refugee population. **Sierra Leone** has been completely dependent on external support with respect to both immediate financial and technical assistance.

On 24 March, **Pakistan** unveiled a US\$ 6.76 billion rescue and stimulus package including a major response via Pakistan's main cash transfer programme, the Benazir Income Support Program (BISP). This normally makes regular transfers of US\$ 24.5–34.3 per month to 4.7 million families. The Ehsaas Emergency Cash Program was launched in early April 2020 to respond to COVID-19 and has disbursed about US\$ 0.9 billion among 12 million families,³⁰ providing a one-off transfer of US\$ 73.5 per family which amounts to almost 70% of the minimum legal monthly wage for three months and is designed to meet minimum needs. Those receiving the payout include 6.7 million existing beneficiaries, an additional 4 million vulnerable households identified through the national socioeconomic database (the eligibility threshold has been relaxed upwards), and those with income below PKR 20,000. Targeting will be carried out by relaxing the inclusion criteria to provide assistance to informal sector workers including daily labourers, street vendors, and rickshaw drivers.

All existing BISP and new beneficiaries receive their emergency cash through the existing biometric payment system. This mechanism has been enhanced by asking provincial governments to provide open public spaces for setting up fully secure cash disbursement centres. COVID-19-specific safety measures (safe distancing, provision of hand sanitisers, regular cleaning of biometric devices, wearing of masks, etc.) have been adopted at all payment points.

Provincial governments are also introducing new assistance measures. For example, the Government of Sindh is providing relief in cash and in kind through a mechanism of self-targeting where the needy call a designated telephone line. The process to determine eligibility is being refined alongside the roll-out.

As mentioned above, the scale-up of social protection coverage in **Bangladesh** has been a success story – a further 24.7 million people are now receiving protection under COVID-19, covering 15.3% of the population (Gentilini *et al.*, 2020). In mid-April, it was announced that an emergency cash transfer programme will transfer BTK 2,000 (approx. US\$ 24) per month to about 4 million urban poor families across the country through mobile money. This will target vulnerable groups like rickshaw pullers, transport workers, construction workers, hotel workers, street hawkers, agricultural and day labourers, porters, and domestic workers. The total budget allocation for this will be around US\$ 356.6 million. In addition, the governmental old age, widow, and husband-abandoned woman allowance has been expanded to cover 100 vulnerable sub-districts, and an additional 5 million people will receive free food assistance.

Kenya's National Safety Net Programme provides regular cash transfers to nearly 1 million households. For the COVID-19 response, the Kenyan National Treasury has appropriated an additional US\$ 100 million for cash transfers to vulnerable people. A range of schemes have been introduced, which include:

³⁰ See www.pass.gov.pk/ecs/uct_all.html

- 1,094,238 beneficiaries of the Inua Jamii programme (orphans and vulnerable children, the elderly, people with severe disabilities, and people living in the arid northern counties) received four months' worth of payments (US\$ 80) (CGAP, 2020).
- As part of 'Kazi Mtaani' (Jobs in the Neighbourhood), a public works programme, 10,600 youths living in Nairobi's slums (Mathare, Kibera, Mukuru, and Korogocho) have been enlisted for street cleaning, fumigation, disinfection, garbage collection, bush clearance, and drainage unclogging services. The daily wage is about US\$ 6 per day and is delivered via M-Pesa mobile payments.
- 250,000 vulnerable households in low-income informal settlement areas in urban centres will receive KSH 1,000 per week to help them meet basic needs (Capital News, 2020).

Despite the harsh lockdown, the **Uganda** social protection response has been slow, with a commitment to deliver food packages to 1.5 million vulnerable people in Kampala and Wasiko districts. Further, payment of Senior Citizens Grants stopped, as did enrolment, due to infection concerns (the programme restarted in early June) (Ministry of Gender, Labour and Social Development, Republic of Uganda, 2020). In late June, further commitments were announced, with World Bank funding (World Bank, 2020d), some of which is continued development of Uganda's ongoing social protection programme (Government of Uganda, 2020): farmers will be supported to access high-quality agricultural inputs, seeds, and fertilisers using e-vouchers to boost nutrition and food security; the senior citizen grant will enrol people in an additional 71 districts; and expansion of cash for work programmes to benefit 500,000 individuals.

Sierra Leone has few existing social protection programmes. Initially, Sierra Leone provided a limited distribution of in-kind transfers: 25 kg bags of rice, SLL 250,000 (US\$ 25.77), Veronica buckets, and other items to 1,891 groups and people with disabilities (PWD) with the aim of reaching approximately 10,000 PWD (500 per district and 2,500 in the Western Area), for a cost of SLL 4 billion. In early June, the government announced cash transfers of US\$ 25 to 6,000 vulnerable citizens, including PWD, amputees, orphans, and autistic children requiring institutional care, and a one-off emergency cash transfer to 29,000 vulnerable urban workers of US\$ 120, with World Bank funding (Sierra Leone Telegraph, 2020b). Targeting and enrolment are ongoing for the 35,000 new households but there have been challenges in validating pre-lists of beneficiaries, causing delays in implementation.

5.3.2 Market-based interventions are put in place to further protect both households and small businesses

In **Pakistan**, the remainder of the stimulus package involves accelerated tax refunds to the export industry, financial support to SMEs, and accelerated procurement of wheat, the local staple (Jinnah Institute, 2020). In addition, the authorities have launched a programme for the construction sector to address the acute employment needs generated by the lockdown.

In **Bangladesh**, the government has announced a US\$ 11 billion stimulus package targeting different sectors, including BTK 20,000 crore for cottage, micro, small, and medium enterprises, as well as loans and subsidies for farmers and loans for exporting industries to be used to pay worker salaries.

Kenya has cancelled all income tax for those earning US\$ 220 per month or less, reduced income and corporate tax from 30% to 25%, and decreased value added tax from 16% to 14% (IMF, 2020b), while senior public servants have taken pay cuts (Daily Nation, 2020b). A 100% tax relief for persons earning less than KSH 24,000 (US\$ 240) is also planned.

The Government of **Uganda** has announced a range of measures to mitigate the economic impact. These include: fast-tracked repayment of domestic government arrears to the private sector; boosting of state-owned lending capacity to help companies reorient their production towards emergency response-related items; the deferment of tax payment obligations; tax exemptions for medical equipment and supplies; and water and electricity subsidies (IMF, 2020c). Furthermore, the National Social Security Fund (NSSF) has announced measures that allow businesses/employers facing economic distress due to COVID-19 to reschedule NSSF contributions for the next three months without accumulating a penalty.

There are no known market-based interventions for **Sierra Leone**.

5.4 Adequate nutrition and food security for all

According to the UN, the COVID-19 pandemic is a crisis threatening the food security and nutrition of millions of people. In the longer term, the combined effects of the pandemic, mitigation measures, and the emerging global recession could disrupt the functioning of food systems, with consequences for health and nutrition of a severity and scale unseen for more than half a century. Each percentage point drop in global GDP is expected to result in an additional 0.7 million stunted children (United Nations, 2020).

Globally, then, the impacts will be huge. Even before COVID-19, more than 820 million people – one in every nine – did not have enough to eat and of these 135 million are coping with hunger so severe that it poses a threat to life and livelihoods. That number could nearly double before the end of 2020 due to the impacts of COVID-19. As at late May, 368 million schoolchildren were missing out on the daily school meals on which they depend.

Response measures such as movement restrictions and border, market, and business closures are disrupting the production, supply, and importing of produce and reduce access to markets. This impact on the economy, food systems, and health systems will affect household and individual food and nutrition security and access to services. An increase in market prices and reduced access to markets has affected access to adequate diverse foods, especially fresh produce, with the trade in perishable food products disproportionately affected. Ultimately this will exacerbate basic, underlying, and immediate causes of malnutrition.

The immediate impact on the economy, income security, food production, and access to markets and services (including prevention and treatment of malnutrition), compounded by overburdened public health services and inadequate water and sanitation, will have both direct and indirect impacts on food and nutrition security, resulting in a predicted increase in morbidity and mortality.

Malnutrition is a threat multiplier. It is by far the biggest driver of ill health and premature mortality across the world. There is a vicious cycle between undernutrition and immunity, whereby undernutrition can heighten the severity and duration of several diseases,

especially pneumonia, and ill health can exacerbate undernutrition in several ways, including the compromised absorption of nutrients.

Particularly vulnerable people include those living in fragile and conflict-affected contexts, where there is already difficulty accessing markets and services without morbidity and social distancing, and those affected by natural hazards or other crises – for example, due to droughts, the coming monsoon and hurricane seasons, and the current locust plague, the worst in decades, which is severely impacting food security in East Africa and beyond. In such situations, the disruption in supply chains and movement restrictions will affect humanitarian programmes and impact the delivery of humanitarian operations, including the distribution of micronutrients to children and pregnant and lactating women, treatment of acutely malnourished children, and distribution of fortified foods.

There are challenges in both urban and rural settings. The urban poor, relying on the cash economy, are particularly vulnerable to the reduction in labour opportunities. Moreover, urban areas are likely to have higher rates of infection and therefore suffer greater strains on their health systems. Rural areas will be affected by a reduction in demand for certain commodities (particularly cash crops), which will affect poorer households who are heavily reliant on labour; in some places, planting and harvesting may be affected, which had disastrous impacts during the 2014–2016 Ebola outbreak.

A decline in food production, growing food insecurity, increasing poverty, the possible loss of caregivers, and reduced access to services for children under five could repeat a pattern seen during and after the Ebola outbreak, requiring preventive measures, including nutritional programmes, to pre-empt such effects (Kamara *et al.*, 2017).

An analysis undertaken for Maintains predicts that, under a reasonable worst case scenario, there will be a substantial rise in the under-five mortality rate later in 2020, due to a spike in childhood malnutrition followed by increasing outbreaks of vaccine-preventable diseases such as measles and diseases such as cholera that are associated with a degradation in water, sanitation, and hygiene systems and services. Under this scenario, it is likely that the adult mortality rate will be falling but the under-five death rate will continue to rise (Phelps, 2020).

This pattern is likely to be realised in the Maintains countries, as each country has a baseline vulnerability to malnutrition indicated by a prevalence of stunting higher than the average for developing countries (25%). In Bangladesh, wasting is at 14.4% compared to the developing country average of 8.9% – see Table 12 below. These national rates of stunting and wasting are much higher in poorer parts of the country, especially those at risk of natural hazards such as flooding or drought and where many children under five years of age are both stunted and wasted, elevating the risks associated with malnutrition. Pakistan and Sierra Leone have a very high proportion of the population categorised as food-insecure.

Table 12: Key food security and malnutrition statistics

	Stunting >5 ³¹	Wasting >5 ³²	Food insecurity	Number of children receiving school meals ³³
 Bangladesh	36.2%	14.4%	25% ³⁴	2.964 m
 Kenya	26.2%	4.2%	19% ³⁵	1.754 m
 Pakistan	37.6%	7.1%	37% ³⁶	2.078 m
 Sierra Leone	37.6%	7.1%	48% ³⁷	0.836 m
 Uganda	28.9%	3.5%	11% ³⁸	3.651 m

Ensuring food security and nutrition is a broad topic, requiring a wide-ranging and multi-sectoral approach. At a minimum, the following three factors should be in place:

- Cash and in-kind social protection programmes are expanded and adapted swiftly, to meet the immediate food and nutrition needs of vulnerable people;
- Introduction of stimulus and support packages for food production and supply; and
- The health system response for malnutrition prevention and treatment is strengthened.

The following sections explore the extent to which this has been achieved in the Maintains countries.

5.4.1 Cash and in-kind social protection programmes are expanded and adapted swiftly to meet the immediate food and nutrition needs of vulnerable people

All of the Maintains countries have developed a social protection response to this outbreak (see Section 5.3). As well as cash transfers, four countries have **social protection interventions specifically focused on food**:

- In **Bangladesh**, the largest food assistance response is through Gratuitous Relief, an emergency humanitarian response programme. As at the end of May 2020, 18 distributions of food had taken place in all 64 districts. During the initial stage of the lockdown, local government institutes also distributed 10 kgs of rice via the Vulnerable Group Feeding programme, covering five times more beneficiaries than before. Rice subsidies have also been provided through its Open Market Sale (OMS) stores; a family can buy a maximum of 5 kg rice for a week, at a price of BTK 10/kg rather than BTK 30/kg. This is available to all those already identified as vulnerable (5 million) and the government has since asked district officials to put together lists for a further 5 million vulnerable people (bdnews24.com, 2020a). There have been some challenges related to corruption, mismanagement, and crowd control during distribution (New Age

³¹ See Global Nutrition Report (2018).

³² See Global Nutrition Report (2018).

³³ See <https://cdn.wfp.org/2020/school-feeding-map/index.html>

³⁴ See USAID (2020).

³⁵ See Roser and Ritchie (2013).

³⁶ See www.wfp.org/countries/pakistan

³⁷ See WFP (2020).

³⁸ See Roser and Ritchie (2013).

Bangladesh, 2020). The government has improved access for the poorest people living in the urban slums by not requiring them to have an identity card/food card, making it more inclusive, and launched special OMS sales for those outside poor urban areas.

- In **Pakistan**, US\$ 298.94 million has been earmarked for government-run 'utility stores' to ensure the constant availability of food and other necessities (Shaikh, 2020). However, utility stores across the country went on strike on 24 April, despite the lockdown, in relation to unpaid wages and the future of these stores.
- The Government of **Sierra Leone** has been distributing rice to PWD and is aiming to reach 10,000 people.
- The Government of **Uganda** aims to provide food packages to 1.5 million vulnerable people in Kampala and Wasiko districts, comprised of 6 kg of maize flour and 3 kg of beans and salt per head. Lactating mothers and the sick will additionally receive 2 kg of powdered milk and 2 kg of sugar. The government has also decreed that all food distributions must go through the national or district task force, with any direct, unsolicited food relief being punished by imprisonment.

However, access to these provisions has been a challenge. Lockdown conditions, movement restrictions, and a general lack of awareness about response mechanisms has further reduced access to services for marginalised communities, thus risking greater food and nutrition insecurity.

All Maintains countries have major **school feeding** programmes (see Table 12) but these have now closed. Bangladesh is the only country that has announced a replacement programme – nearly 3 million children are receiving two months' worth of high-energy biscuits instead of their school meals (WFP, 2020).

Lack of donor funding is also threatening the food security of dependent populations such as refugees and IDPs; for example, the WFP has been forced to put into effect a 30% reduction to the food rations distributed to **refugees** in Uganda, effective from 1 April 2020.

5.4.2 Introduction of stimulus and support packages for food production and supply

Maintains countries are facing a mismatch between purchasing power-backed demand and the overall supply of food. While food is currently available, the ability to purchase has fallen drastically as incomes have plummeted, and access to food has been affected by the closure of food markets and lockdowns/curfews. Managing the mismatch will be critical for ensuring food security for all. This section will look first at production, then at the supply chain, markets, and finally at monitoring.

Production: COVID-19 has not led to widespread production problems as yet, but there are major production problems due to locusts and flooding in Kenya and Pakistan. Locusts arrived in **Pakistan** in June 2019 and destroyed cotton, wheat, maize, and other crops, causing the government to declare a national emergency in February 2020. In **Kenya**, the food supply side has remained generally stable and predictable so far with limited movement restrictions in rural areas and favourable production expected. However, flooding and the desert locust upsurge are of concern in certain areas.

There have been a few response measures focused specifically on production: for example, the **Bangladesh** government has announced three schemes that affect production – agricultural loans for farmers (BTK 5,000 crore), subsidies for farmers (BTK 9,500 crore), and that it would buy 1.15 million tonnes of rice and 800,000 tonnes of paddy from local farmers in the current harvesting season to secure supplies. Similarly in **Pakistan**, the US\$ 7.5 billion relief package includes US\$ 1.7 million to effect accelerated procurement of wheat, the local staple, to secure adequate supplies in an effort that benefits local farmers by furthering local demand (Tribune, 2020a).

Nakuru County, one of the breadbaskets of **Kenya**, launched an Agricultural Enterprises Support Programme to ensure continued production of staple food crops such as maize, wheat, and vegetables, by providing financial support to farmers to acquire farm inputs and materials during the current season. This goes alongside a second scheme to provide financial support to those who have lost their jobs – particularly in tourism and horticultural firms after the exports of flowers, fruits, and vegetables were halted (Kenya News Agency, 2020).

Supply chains: For most countries, farmers and those working in the food supply chain have been designated as essential workers and therefore their movement is not restricted by lockdowns and curfews. Imports have been little affected, with most imports of essential food items still coming in according to schedule.

The exception is **Uganda**, where farmers are regarded as essential workers but are not permitted to use any vehicle, which effectively kills off the value chain. Rising concerns about infection rates amongst truck drivers have led to supply trucks being delayed and this has created a ripple effect across the food supply situation in the country. Indeed, agricultural businesses report the largest constraints in access to both inputs and markets for outputs due to control measures such as transport restrictions, quarantine, social distancing, and bans on weekly markets (Brookings, 2020).

In **Kenya**, the movement of food supplies and other critical goods and services into and out of the areas under lockdown remains largely unhindered, albeit with transport operators subject to physical distancing, mask-wearing, and other measures to curb virus transmission. Delivery of supplies to wholesale distributors and supermarkets continues as normal and the essential railway cargo link between the port of Mombasa and Nairobi has been upgraded to several trains per day, thanks to the banning of passenger transport. Inter-county road cargo services have, by and large, been able to continue during daytime hours. Thus, food supply chains – at least those of domestically produced foods – have remained relatively undisrupted, so far preserving food supplies to both suburbs and informal settlements in urban areas and minimising price increases (Logan, 2020).

In **Bangladesh**, farming and cargo are considered essential activities, but there have been reports of vegetables, milk, fish, chicken, and eggs produced in villages not getting to cities/markets as transport owners are hiking transport fares. In response, farmers are either abandoning their produce or selling them at a minimal price (Daily Star, 2020b).

In **Pakistan**, while there were some disruptions at the start of the lockdown period, by and large wholesale agriculture markets have been functioning as normal. Nonetheless, individual market participants may still face transport and logistical issues that have an

impact on price, quality, and quantity of produce reaching markets and consumers (Ahmad *et al.*, 2020). Fruit and vegetable growers are especially vulnerable as these perishable items cannot be stored.

Markets: Markets have been badly affected by the outbreak. Most countries initially closed most informal trading and smaller markets, only keeping major markets open. In **Uganda**, only the major supermarkets were kept open. In **Kenya**, the closure of many informal food markets in urban and peri-urban areas has disrupted food supply systems, especially for fresh produce (The Conversation, 2020c). In **Sierra Leone**, while Freetown strives to restrict informal street trading, city food markets are currently operating more or less as before. The Freetown City Council has taken steps to reduce risk in some markets by: a) making hand washing mandatory; b) making the wearing of facemasks mandatory for buyers and traders; c) applying a one-way flow of person traffic and dedicated entry and exit points; d) ensuring similar commodities are sold in the same area to enhance the one-directional flow of people; and f) forbidding mobile trading.

Prices: Close monitoring of food prices and import and export volumes is important to ensure food supply. The Government of **Kenya** is reportedly monitoring stock levels and quality to project future food requirements. It has also mandated guidelines with respect to the operation of local markets, prompting law enforcement measures in cases where individual traders have hiked up their prices. However, despite such oversight, neither Kenya nor any other country has been able to prevent the sudden rise in cost of fruits and vegetables. In a few cases in **Uganda** and Kenya, prices for essential goods were hiked by individual traders until this came to the attention of the authorities. **Sierra Leone** has reportedly seen a 32% increase in the price of rice despite the Freetown City Council integrating food marketing issues into their COVID-19 Preparedness and Response Plan (Foodtank, 2020).

5.4.3 The health system response for malnutrition prevention and treatment is strengthened

In previous outbreaks such as Ebola, malnutrition screening rates reduced during the outbreak and there was an increased prevalence of acute malnutrition post-outbreak (Kamara *et al.*, 2017). To prevent this, it is important that malnutrition prevention and treatment work is maintained or strengthened, particularly the early detection and management of acute malnutrition and the promotion of infant and young child feeding, as well as related maternal nutrition programmes.

We have not been able to find information on measures taken to ensure the continuation of vaccination and micronutrient supplementation programmes, or new interventions to tackle acute malnutrition arising out of the pandemic. Indeed, it appears that attention and resources have been taken away from nutrition programmes as well as reproductive care. Plans to provide increased malnutrition treatment services should be put in place now due to the expected increase in cases in the coming months.

5.5 Accessible, equitable, and inclusive education

The COVID-19 pandemic has disrupted education provision at an unprecedented scale, affecting more than 1.5 billion learners globally (UNESCO Institute of Statistics, 2020). Schools in all Maintains countries are closed and will be closed for several months at least, and for nearly a year in Kenya and Uganda.³⁹ Pakistan had its first case on 26 February, but only shut schools on 14 March (17 days later); Bangladesh waited seven days after its first case to shut schools; Kenya waited two days; Sierra Leone shut schools on the same day; and Uganda shut schools the day *before* COVID-19 was confirmed in country.

School closures of several months entail serious challenges for educational outcomes. Closures during the Ebola outbreak led to knowledge loss, reversal in literacy, and interruption of the development of children (ACAPS, 2016). These impacts continued to be felt after the Ebola crisis, as school re-enrolment rates were reduced by increased poverty, fear of infection, and stigmatisation of survivors and pregnant girls (Government of Sierra Leone, 2015; Minor, 2017).

Epidemics contribute significantly to worsening gender inequality and have disproportionate effects on the educational outcomes of female pupils. Girls may face greater expectations of caregiving at home, such that prolonged closures are likely to exacerbate inequalities, and a lot of girls will find it difficult to balance schoolwork and their increased domestic responsibilities (UN Women, 2020). Studies have shown that in cases where schools remained closed for a significant period of time (such as a full academic year), as happened in Sierra Leone, girls and young women found it harder to re-enrol even after schools reopened, with enrolment rates falling close to 16% in the most disrupted villages (Rohwerder, 2020).

Not only do girls tend to be the last ones returning to school after reopening, they are also commonly exposed to GBV during closures (see Section 5.2). During Ebola and other disease outbreaks, increases in sexual exploitation, sexual abuse, teenage pregnancy, and early marriage occurred (Denny *et al.*, 2015; Fraser, 2020; United Nations Development Programme (UNDP), 2015; Archibong and Annan, 2020). Teenage mothers are significantly less likely to return to school after birth and therefore less likely to catch up with their peers (Kate, 2012).

In the face of significant health and economic challenges due to epidemics, education is rarely prioritised and education funding may be diverted to the response (Rohwerder, 2020). For example, many teachers' roles were diverted towards disease control and social mobilisation activities during the Ebola outbreak and schools were used as focal points and data points to address and understand the infection rates (Azzi-Huck and Shmis, 2020). We have already seen in this outbreak that boarding schools are being used for temporary isolation centres in **Kenya**, and educational establishments in **Pakistan** used for isolation and quarantine centres. These establishments will require refurbishment post-outbreak.

³⁹ There is no clarity on when schools will fully reopen – some classes (those doing exams) restarted in Sierra Leone in early July, in Pakistan it will be 15 July at the earliest, in Bangladesh it is mooted for September, and both Kenya and Uganda have recently announced that they will restart in early 2021.

COVID-19 has resulted in an explosion in distance learning across the world. As just one example of many, Rising Academies is repurposing existing curriculum content into radio-ready scripts for nationwide broadcasts in Sierra Leone, and have put their scripts online under a creative commons licence.⁴⁰ While distance learning may not be able to achieve the same curriculum goals, continuing education is important and at the very least it serves a very important function for children to maintain a connection with education, and thus support re-enrolment post crisis.

However, distance learning poses a real challenge for equity. Learning mediated through ed-tech remains out of reach if electricity does not reach households, if families do not have computers or smartphones, or if internet access is not available (at appropriate bandwidth and speed) or is prohibitively expensive. Where limited access is available, boys are likely to be prioritised over girls. The digital gender divide means that there are multiple factors leading to gender-based digital exclusion. These include access-based challenges, affordability, lack of or lower levels of education, skills, and technological literacy, and inherent gender biases and socio-cultural norms (OECD, 2018). While smartphone use has grown rapidly, the GSMA found that in 2018 only 23% of sub-Saharan Africa's population used mobile internet regularly; as incomes are threatened, the cost of data may also become prohibitive (GSMA, 2019). Further, children without a safe and quiet space to study, or parents/carers who support educational learning, will be further disadvantaged.

This provides real challenges for learners who will have to compete with their more privileged peers during national examinations. These factors are likely to deepen inequality unless specific strategies are put in place to address them, and failure in this regard could increase the already high numbers of children who are permanently out of school.

The ability to provide continuing education despite the COVID-19 pandemic depends on the following factors being in place:

- A policy to oversee education at all levels while institutions of learning are closed;
- Distance learning that is provided in ways that optimise accessibility, equity, and inclusion; and
- Educational institutions working with the government to ensure that other services provided by them are filled in other ways.

The following sections explore the extent to which this has been achieved in the Maintains countries.

5.5.1 A policy to oversee education at all levels while institutions of learning are closed

New national policies are needed to ensure that educational goals are clear while institutions of learning remain closed. This requires defining curriculum goals, addressing the needs of vulnerable students, and providing clarity on graduation and grade transition.

⁴⁰ See www.risingacademies.com/onair

All countries produced national education plans or frameworks in early May.⁴¹ In the main, these plans are impressive, detailing impacts on girls and other vulnerable groups, and approaches and strategies to meet the needs of all; some also consider how to support students who will have been left behind, to ensure that they are able to catch up. Most provide some indication of costing, and several governments have reached out to development partners for financial and technical support. At the time of writing, however, there remain significant gaps in the realisation of these plans. Indeed, in Pakistan the national plan provides policy only and will need to be implemented at provincial level.

The policy on graduation and grade transition also needs to be clarified. In all countries key school exams have been cancelled or postponed. However, it is less clear what this means for grade transition and amended curriculum goals. Kenya and Uganda clarified in early July that schools would reopen in January 2021 at the beginning of the new school year, representing a 'lost year' of education, such that children would go back into the same school year.

Just as students are new to distance learning, most teachers are also novices in being distance coaches and require support to deliver this. Teachers and educational establishments should receive professional advice and support to enable them to optimise educational outcomes for distance learning. In **Bangladesh**, the government is working alongside development partners and NGOs in four working groups to develop remote learning content and roll out lessons through electronic media, mobile phones, radio, and internet; UNICEF has helped produce guides to assist teachers that are giving remote classes. In **Kenya** the Institute of Curriculum Development (KICD) has developed materials for dissemination through radio (KICD, 2020a), television (KICD, 2020b), and the internet (KICD, 2020c). However, it is not clear whether teachers are receiving support on this material.

5.5.2 Distance learning should be provided in ways that optimise accessibility, equity, and inclusion

All Maintains countries have worked hard to develop distance learning to be able to continue education provision during the pandemic, with **Pakistan** and **Bangladesh** focusing on TV, **Sierra Leone** focusing on radio, **Uganda** combining online and radio, and **Kenya** working across TV, radio, and online platforms. Kenya moved fastest, publishing a concept note and starting distance learning on 23 March, just 10 days after lockdown began and a week after schools closed.

In order to ensure that differential access to distance learning materials does not have equity effects on educational outcomes, particular efforts need to be made to disseminate distance learning content widely, as well as to identify students that are not able to access distance learning content and provide extra resources. Several efforts have been made in Maintains countries to optimise accessibility, equity, and inclusion in education access and these are explored below.

⁴¹ See <https://planipolis.iiep.unesco.org/en> for all plans.

In the **Pakistan** National Education Plan for COVID-19, there is a clear delineation of modalities of learning in relation to access to technology (no-tech, low-tech, and high tech/online) and learning facilitation needs (i.e. self-learning or guided learning). On 14 April, the Ministry of Federal Education and Professional Training launched an educational television channel, providing one hour of curriculum per day for each grade from 1 to 12, so students can watch in shifts. As television viewership amounts to 140 million in the country, a significant but by no means inclusive proportion of learners can be expected to be reached via this method (Ministry of Planning, Development & Reform Planning Commission, 2018).

In **Bangladesh**, 56% of households have access to television, 37.6% to the internet, 5.6% to a computer, and only 0.6% for radio (although 95% of people have mobile phones, and may be able to access the radio that way). Thus, the initial education response focused on delivering classes on TV, with the national television channel broadcasting daily lessons to all secondary school students from 29 March. Access in rural areas will be highly constrained as 41% of rural areas in Bangladesh are not connected to the power grid (International Food Policy Research Institute, 2019). Furthermore, children in refugee camps are very unlikely to have access to a television set.

From 23 March, the **Kenyan** Ministry of Education started delivering educational programmes through: a) radio programmes broadcast on weekdays on multiple radio channels; b) television broadcasts on the Edu Channel TV, which is owned by KICD; c) television programming made available as a live stream as well as on-demand content via KICD's EduTV Kenya YouTube channel; and d) accessing digital learning resources from the Kenya Education Cloud (KICD, 2020a; 2020b; 2020c). However, there are reports that radio and TV only offer guidelines on how to access web-based lessons, not actual lessons, and web-based lessons are mainly PDFs that have to be printed out. Many primary students are therefore not accessing education.

KICD estimates that 47% of learners are accessing lessons through these channels, meaning that over half of Kenyan students are not able to access remote lessons, either because they are outside of broadcast range or do not have the necessary equipment or skills. To address this, UNICEF is mapping areas without radio and exploring ways to reach those currently unsupported. Additionally, Eneza Education has partnered with Safaricom to deliver free learning materials through even the simplest of mobile phones (Al Jazeera, 2020a).

In **Sierra Leone**, 62% of households have a radio, 58% a mobile phone, 14% a TV, and less than 3% have a computer - this situation is worse for the poorest households, where only 32% own a radio and 19% a mobile phone. Thus, the Ministry of Education opted for radio education, with qualified teachers delivering structured lessons in core subjects. Currently, only a limited set of subjects is covered and coverage is incomplete – there is poor connectivity or no reception in many districts outside Freetown.

In **Uganda**, a free digital learning platform called Kolibri has been introduced, with education content approved by the National Curriculum Development Centre. As this requires internet connectivity and technology, radio is also now being explored, since radio reaches more than 80% of Ugandans. Television lessons have also been explored as a channel for online learning. When it was announced that schools would not reopen as originally planned on 2 June, President Museveni also announced that two television sets would be given to each

village (140,000 TV sets across the country) to allow learners to continue studying through televised lessons. No arrangements have been made for tertiary education at college or university level.

5.5.3 Educational institutions should work with the government to ensure that other services normally provided by them (e.g. school feeding programmes) are provided in other ways

School closures and lockdown measures place children at greater risk of neglect as well as physical, emotional, sexual, and domestic abuse (see Section 5.2). Provisions thus need to be made to also provide services that had previously been provided through schools, such as school feeding programmes, psychosocial support, reproductive and sexual health education, and safety and protection for girls.

The provision of free meals at school is a critical lifeline for vulnerable children, which is no longer being provided; only Bangladesh has recently provided a replacement. It is not known to what extent provisions are being made to deliver other services (such as sexual health education) through other means while schools remain closed. **Pakistan's** National Education Plan during COVID-19 recognises school feeding, psychosocial support, and other services provided by schools, but does not outline how these services will be provided while schools remain closed. Coordination across sectors is a core element of a resilient response to a pandemic (see Section 4.3).

6 Health system

A shock-responsive health system is one that is able to maintain equitable access to quality essential health services throughout a shock, whilst dealing with the needs arising from the shock, limiting direct and avoiding indirect mortality and morbidity. COVID-19 makes balancing these competing demands extremely challenging due to risk of infection at service delivery points – particularly in the Maintains countries where baseline standards of IPC were already poor.

To be able to maintain essential service delivery while dealing with the demands of COVID-19, health systems need to have adequate ‘hardware’ and ‘software’ components. Hardware components include the six ‘building blocks’ within the traditional model of a health system: the health workforce; health information systems; supplies and infrastructure; finance; governance, leadership, and management;⁴² and service delivery (WHO, 2010). Software relates to the people within the system. The performance of health systems depends on the behaviour and decisions of the people within it, which are shaped by both tangible software (their capacity and the formal processes by which people act) and intangible software (the informal rules, values, and norms that shape relationships and interactions among actors, and which are themselves shaped by the socio-political context in which the health system operates) (Sheikh *et al.*, 2011).

The literature shows that both the hardware and software components of a formal health system are important in determining how well that system can be responsive to a shock (Kruk *et al.*, 2015). Dealing with a shock requires adequate hardware – so that there are sufficient resources to deliver services – but also the software that enables people within the health system to draw upon hardware and deploy absorptive, adaptive, and transformative strategies. This requires high levels of trust within the health system and between the health system and the communities that it serves, as well as staff who are infused with pro-social values and appropriate levels of delegated authority and decision-making autonomy. Many of these factors have already been identified as underpinning the success of the health systems of Hong Kong, Singapore, and Japan in dealing with COVID-19 (Legido-Quigley *et al.*, 2020).

In this study, we have focused on resilience attributes related to hardware. It is difficult in a rapid assessment to adequately capture the subtleties of software considerations, although their relevance to some of the hardware factors (e.g. the motivation of the health workforce and the success of community engagement strategies) is explored in the relevant sections. As COVID-19 is a cross-sectoral shock, issues of governance and finance are explored in the ‘whole-of-government’ chapter and not repeated here. Therefore, this chapter focuses on the extent to which countries have managed to be shock-responsive (in terms of maintaining existing essential services, as well as scaling up to respond to the epidemic with stringent IPC), and then examines components of this response: the health workforce, information systems with surveillance and early warning systems, supplies, logistics, equipment and infrastructure, and community health systems.

⁴² Although leadership and governance is sometimes defined as a software component.

6.1 Service delivery: Quarantine, testing, isolation, treatment, and contact tracing

In line with WHO guidelines, to try and prevent and then reduce imported cases, countries have adopted strategies to detect and isolate ill travellers at international entry points, in some cases quarantining all arrivals (WHO, 2020g). To slow the transmission of COVID-19, in order to save lives, and provide more time to prepare, countries have tried to follow WHO guidance on testing suspected cases, isolating mild and moderate cases (either in health facilities, community facilities, or through self-isolation at home) whilst hospitalising moderate and severe cases (WHO, 2020h), tracing contacts exposed to confirmed cases, and ensuring their quarantine to avoid secondary transmission (WHO, 2020i). The aim of these strategies is to slow the spread of COVID-19 and so give countries time to increase capacity for the high-dependency care required when cases rise.

These factors can be summarised as follows:

- Dedicated quarantine processes have been set up for international arrivals and are achieving high coverage and compliance;
- Standardised, routine protocols for free testing of suspected and confirmed COVID-19 patients are in force;
- An effective isolation policy is in place for confirmed cases (either institutional or at home) and is achieving high coverage and compliance; high-dependency care capacity has been augmented; and
- Contact tracing systems and institutional or self-quarantine procedures for identified contacts established and achieving high coverage and compliance.

The following sections explore the extent to which this has been achieved in the Maintains countries.

6.1.1 **Dedicated quarantine centres have been set up for international arrivals and are achieving high coverage and compliance**

To try and prevent the introduction of COVID-19, all countries attempted to quarantine international arrivals rather than just detect and manage ill travellers (although Sierra Leone went further and shut its border). However, operational issues in all countries undermined the effectiveness of this approach, including limited availability and poor quality of institutional quarantine facilities and limited compliance. This inability to prevent import means that all countries now have community transmission.

In **Bangladesh**, rates of quarantine were initially high, with all 312 workers repatriated from Wuhan on 1 February institutionally quarantined. As the pandemic evolved, however, only about 10% of international returnees were quarantined, either in institutions or registered for self-quarantine. The remainder, mostly from upcoming hotspots in the Middle East and Europe, were able to enter freely, reflecting the considerable challenges of quarantining all international arrivals. As a result, the first confirmed case of COVID-19 was due to local transmission, indicating that COVID-19 must have entered the country without detection.

Any international travellers arriving in **Kenya** from 16 March onwards were obliged to undergo institutional quarantine for 14 days. Initially, institutional quarantine at government facilities received technical support from the CDC and other donors, and was to be free of charge for those quarantined. However, with the governmental response undergoing restructuring, as discussed in earlier chapters, there was no more donor involvement and all quarantine was payable, at costs ranging from US\$ 20 per night for repurposed mass governmental facilities to applicable hotel rates for government-designated guesthouses and hotels. As affordable accommodation filled up rapidly, incoming travellers were forcibly assigned to increasingly expensive facilities (up to US\$ 100 per night). This high, unforeseen, and compulsory cost, as well as overcrowding and unsanitary conditions in the affordable mass facilities, prompted a flood of complaints by the Kenyan public (The East African, 2020). There have been complaints over a lack of bedding, water, food, and cleaning supplies, including soaps and detergents, and reports that staff did not adhere to the government's own protocols, such as wearing face masks or other protective equipment, to ensure that those quarantined do not become exposed to the virus (HRW, 2020d). No action was taken until 6 May 2020, by which time most large quarantine facilities had closed and a free modality was introduced (Daily Nation, 2020c).

In **Pakistan**, quarantine centres have also been established, particularly along the border with Iran which was an initial COVID-19 hotspot and from where large numbers of religious pilgrims return. However, provision of adequate facilities has been challenging. Key issues have included unclean living conditions, overcrowded accommodation, lack of safe gender segregation, and lack of medical oversight, creating a situation that was not conducive to preventing the spread of infection (Al Jazeera, 2020c). Given this situation, the Islamabad High Court ruled that private guest houses and hotels could be appropriated for use as quarantine centres (Gulf News, 2020).

In **Sierra Leone**, the government suspended all flights to and from Freetown International Airport effective 21 March for a period of 90 days. The government has also closed land borders. Prior to this, travellers arriving from countries affected by COVID-19 were required to be placed in government-run quarantine facilities for 14 days. There have been many criticisms of these facilities; people report that they are not gender separated, that toilets are overflowing, that meals do not arrive on time or at all, and that there is no running water.

In **Uganda**, starting 13 March 2020, all international arrivals had to submit themselves to mandatory quarantine at hotels designated by the government in Entebbe, paid for by the traveller. Those who could not afford the hotel bill for at least 14 days had to stay at the airport, sleep in the hotel lobby, or share a room with others, resulting in overcrowding and increased risk of infection (HRW, 2020e).

6.1.2 Standardised, routine protocols for free testing of suspected and confirmed COVID-19 patients are in force

The ability to test for COVID-19 is key for countries' ability to manage and slow its spread. All five countries have attempted to increase their testing rates but per capita testing rates remain low by global standards. In Pakistan, for example, as at 31 May 2020 there have cumulatively been 2.5 tests per 1,000 people, 1.9 in Bangladesh, 2.1 in Uganda, and 1.5 in Kenya (Roser *et al.*, 2020). Comparable data is not available in Sierra Leone. For

comparison, countries like Ghana (6.6) and Thailand (6.0) are well ahead of the Maintains countries.

In **Bangladesh**, laboratory surveillance initially met challenges due to insufficient capacity to perform reverse transcription polymerase chain reactions at the required quantity. The current testing rate per confirmed case remains comparatively low (Directorate General of Health Services (DGHS), 2020a).

In **Kenya**, the CDC supported the MoH to digitise the National Influenza Laboratory, which was accredited as the national COVID-19 reference laboratory on 5 February 2020, the day the first WHO standard COVID-19 test kit arrived in the country. Kenya has strong expertise in the high-quality reverse transcriptase polymerase chain reactions required to run the standard WHO COVID-19 assay, thanks to experience of viral load diagnostic activities for antiretroviral treatment. COVID-19 test kit supplies, though initially unreliable, have stabilised. Initially, only symptomatic cases were tested but this has moved to an increasingly proactive case finding strategy fully supported by laboratory surveillance in order to limit spread from hotspots. Free, voluntary testing has been introduced, further reflecting the evolving testing capacity. However, uptake of voluntary testing has been limited by community fear of enforced quarantine in poor conditions.

In **Pakistan**, hospitals and laboratories in major cities have been trained in safe sample collection, handling, and transport, including IPC and triple packaging. COVID-19 samples are sent to one of 15 designated laboratories, including the National Reference Laboratory. Private diagnostic providers have been engaged and provide testing for a fee. Testing facilities remain limited in rural areas and smaller towns. At the end of April 2020, Pakistan had a testing capacity of 11,000 tests per day, which is low given the incidence.

Sierra Leone has significant experience of surveillance for Ebola from the 2013 to 2016 West African outbreak but this has had limited relevance for COVID-19. Ebola has a relatively clear case definition, clearer demarcation of onset by symptoms, and transmission requires close and direct contact. In contrast, for COVID-19 the case definition remains imprecise, there is a long, highly infectious asymptomatic incubation period, and airborne transmission increases spread. These differences mean a surveillance system previously based on relatively clear-cut decisions and assessments now requires consideration of probabilities, while uncertainty about likely infection extends the requirements for and consequent costs of containment. Combined with limited supply of test kits and minimal testing capacity, this has limited the country's ability to respond.

In **Uganda**, there have been documented challenges in ensuring sufficient testing kits and the supplies needed to make them effective, thus hindering testing (The Monitor, 2020).

6.1.3 An effective isolation policy is in place for confirmed cases (either institutional or at home) and is achieving high coverage and compliance; high-dependency care capacity has been augmented

After community transition has become established, recommended guidance is that those with confirmed infection isolate (either at home or in institutional facilities) (WHO, 2020j). In general, countries have relied upon institutional isolation using repurposed boarding schools, dormitories, etc., supplementing the dedicated isolation and treatment centres that have

been established. There has been limited reliance on self-isolation due to the difficulties of implementing this in congested urban settlements where it is unrealistic for a person to be kept separate from others. However, similar issues have arisen as for quarantining international arrivals, with gaps in the quality and capacity of isolation facilities limiting effectiveness. As COVID-19 spreads to rural areas, self-isolation may become more feasible because there is more space. Some countries have sought to boost capacity through mobilising the private sector, although in some cases the private sector has been unwilling to engage due to fear of infection.

In **Bangladesh**, the government established six dedicated isolation and treatment centres at national level, supplemented by two army-run units. In addition, each district has instituted a minimum of one COVID-19 treatment and isolation centre. Five to six isolation beds have been prepared at each sub-district (*upazila*) health complex. As most treatment centres have been repurposed from other uses, they face a number of logistic and human resource constraints. Bashundhara, a private company, has added significant resources, such as 2,000 isolation beds in the biggest international convention centre in the country. However, the role of the private health sector remains limited, as most private hospitals have significantly reduced their services and declined to share intensive care capacity with the public sector for fear of infection (Al Jazeera, 2020d). As at 10 May 2020, over 7,000 isolation beds were available in the country (DGHS, 2020a).

Suspected and confirmed cases are admitted to institutional isolation and monitored by law enforcement agencies after initial isolation at a sub-district (*upazila*) health complex, while their contacts are traced and quarantined at home. Local authorities monitor affected neighbourhoods for emerging clusters. Positive cases with severe symptoms are referred to COVID-19 treatment centres for critical care. The availability of adequately equipped intensive care units is limited, with a capacity of 250 places as at 24 April 2020 (DGHS, 2020b). The vast majority of facilities have established separated outpatient areas to assess and treat respiratory tract infections (DGHS, 2020a).

In **Kenya**, as at early May 2020, specialised isolation and treatment centres have been established in Nairobi at Mbagathi Hospital, Kenyatta National Hospital, and the recently opened Kenyatta University Teaching, Referral & Research Hospital, all providing free COVID-19 care. However, facilities are overcrowded. In Mombasa, there are 409 beds in free public facilities, 30% of which are already occupied (The Star, 2020), while other provincial hospitals are being upgraded in line with the geographic spread and increasing case load. The private sector provides specialist care at Nairobi Hospital, Aga Khan University Hospital, Avenue Hospital, and Meghji Pethraj Shah Hospital in Nairobi, and at Aga Khan Hospital and Premier Hospital in Mombasa, all of which are only accessible to those with adequate financial means. A free, dedicated isolation facility for infected healthcare workers has been launched at Kenyatta National Hospital (Pulse, 2020a). For non-critical cases, boarding schools have been recruited as candidate isolation centres for suspected and confirmed patients and are currently being equipped.

In **Pakistan**, provincial governments have been setting up numerous isolation units to accommodate suspected COVID-19 cases. A total of 217 isolation facilities with 119,778 beds have been designated for case management in Pakistan. Further expansion is ongoing in collaboration with the private health sector (Dawn, 2020a) and businesses: the provincial government in Sindh is converting the Karachi International Exposition Centre into a 10,000-

bed isolation centre (Tribune, 2020b). However, implementation of isolation has been inadequate, and poor conditions in some isolation centres have made families unwilling to leave their relatives at the centres. Lack of isolation beds has prompted facilities to refuse admission of confirmed cases with no or mild symptoms. Medical guidelines provided for self-isolation were often not followed by households or impractical in crowded living conditions, leading to family members becoming infected. Spread of infection from isolation centres to the community has also been increased through poor in-patient compliance and lax supervision and monitoring (Dawn, 2020b).

In **Sierra Leone**, as at 19 May, there were 10 operational treatment centres country wide, with a total capacity of 577 beds, 309 (53.5%) of which were filled (Ministry of Health and Sanitation, 2020b). Confirmed cases may request to self-isolate in their homes; those whose homes are not suitable for self-isolation are taken to treatment centres. 34 Military Hospital and Fourah Bay College are two prominent COVID-19 isolation and treatment centres in Freetown.

In **Uganda**, all COVID-19-related illnesses are to be treated by the government at no cost to the patient. This will include testing, treatment, and hospital admissions, as well as meals for the duration of the patient's illness. The MoH also caters for transport to and from the patient's home. Private health insurance companies registered in Uganda have been ordered to cover COVID-19. Isolation and treatment centres have been set up at Entebbe Grade B Hospital, Mulago National Specialist Hospital, and Adjumani and Hoima Hospitals, and are to accept any positive cases from lower-level/catchment healthcare facilities. Additional treatment capacity is provided by the private sector, but this option is only open to those with insurance or other financial means. Should more capacity become necessary, a temporary treatment centre has been envisaged in proximity to a military hospital, under the guidance of the Ugandan army.

6.1.4 Contract tracing systems and institutional or self-quarantine procedures for identified contacts established and achieving high coverage and compliance

To further reduce community transmission, countries across the globe have been instituting processes to trace the contacts of confirmed cases who are expected to quarantine and be tested (WHO, 2020i). Countries with experience of contact tracing, such as for polio in Pakistan, have been able to institute contact tracing at the community level, although this is embryonic in most Maintains countries at the time of writing and the effectiveness of this is not yet known. Contract tracing is mostly decentralised but has not yet engaged cadres of CHWs.

Contact tracing in **Bangladesh** is mainly monitored centrally by the Institute of Epidemiology, Disease Control and Research (IEDCR) of the Government of Bangladesh. Within Dhaka, contact tracing is done by health professionals from IEDCR. Outside the capital, contact tracing is done by rapid response teams at district and sub-district levels. There is ongoing debate about the potential role of CHWs in delivering decentralised contract tracing (Homaira *et al.*, 2020). Bangladesh has also recently rolled out a contact tracing mobile phone application to warn users if they have been near someone who later tested positive for COVID-19 (Daily Star, 2020c).

In **Kenya**, rapid response teams linked to the MoH's EOC are responsible for tracking down potential transmissions in a patient's contact history.

Pakistan is building on its substantial experience of fighting polio. Case finding, contact tracing, and related monitoring are done manually through interviews with the community and healthcare facilities. When suspected cases are reported, whole neighbourhoods are commonly cordoned off by the police for up to two weeks while residents are tested. The provincial departments of health use mobile technology to monitor suspected cases and to track contacts.

Sierra Leone has limited scope for mobile contact tracing, leading to gaps in surveillance and contact tracing, including failure to connect the first three fatalities that were only diagnosed post-mortem to any suspected or confirmed contact. These challenges mean that despite the political assurance of 20 April 2020 that all primary and secondary contacts shall be tested, secondary contacts continue to go untested. Primary contacts are either quarantined at a free government-managed quarantine centre or are approved for self-quarantine within their homes. However, quarantine centres have inadequate IPC, lack of medical follow-up and provision for non-COVID-19 conditions, substandard quantity and quality of meals, unreliable water supplies, and lack of gender separation. These ongoing challenges may lead to bottlenecks in case management, as the COVID-19 case load increases over time. As at 8 May 2020, 1,792 people were quarantined, and the government is investigating the appropriation of private sites to secure surge capacity.

In **Uganda**, a robust sub-national contact tracing process is in place. According to official data, as at 18 April 89% of all contacts were tested within 10 days of the contact tracing process (MoH Uganda, 2020b).

6.2 Maintaining delivery of essential services

According to the WHO (2020j), a well-organised and well-prepared health system has the capacity to maintain equitable access to high-quality essential health services throughout an emergency, limiting direct mortality and avoiding indirect mortality. In the early phases of the COVID-19 outbreak, many health systems have been able to maintain routine service delivery in addition to managing a relatively limited COVID-19 case load. As demands on systems have surged and health workers themselves have increasingly been affected by COVID-19 infection and the indirect consequences of the pandemic, strategic adaptations have become urgent to ensure that limited public and private sector resources provide the maximum benefit for populations.

Countries are making difficult decisions to balance the demands of responding directly to the COVID-19 pandemic with the need to maintain the delivery of other essential health services. Establishing safe and effective patient flow (including screening for COVID-19, triage, and targeted referral) remains critical at all levels. Many routine and elective services have been suspended, and existing delivery approaches are being adapted to the evolving pandemic context as the risk–benefit analysis for any given activity changes. When the delivery of essential health services comes under threat, effective governance and coordination mechanisms, as well as protocols for service prioritisation and adaptation, can mitigate the risk of outright system failure.

As the outbreak is brought under control and restrictive public health measures are gradually eased, some adaptations in service delivery may need to be reversed, others continued for a limited time, and yet others that are found to be effective, safe and beneficial incorporated into routine post-pandemic practice. The course of the outbreak is likely to wax and wane, and the strategic response will need to be dynamic and calibrated. Decision-makers should anticipate the need to start, stop, and restart adaptations. Decisions should be aligned with relevant national and sub-national policies and should be re-evaluated at regular intervals. Successful implementation of these strategic shifts will require the active engagement of communities and public and private stakeholders, specific measures to ensure access for socially vulnerable populations, transparency and frequent communication with the public, and a high degree of cooperation from individuals.

All adaptations should be made in accordance with ethical principles, such as equity in the allocation of resources and access, self-determination, non-abandonment, and respect for dignity and human rights. Overall, the failure to protect vulnerable groups subjects them to higher risk and undermines the COVID-19 response and broader public health goals. In all cases, IPC measures should be strictly followed based on up-to-date guidance and relevant policies.

The Maintains countries have all faced secondary health impacts during previous shocks. This risk of vaccine-preventable disease outbreaks due to disruption of routine immunisation was seen in West Africa during the Ebola outbreak, where diseases such as measles led to increased morbidity and mortality among vulnerable populations (Madhav *et al.*, 2017). Additionally, lack of routine care for malaria, HIV/AIDS, and TB led to a nearly equal number of deaths to those directly caused by Ebola (Madhav *et al.*, 2017).

The impact on routine services involves both supply and demand. In relation to supply, health systems often lack resources to provide routine care as well as reorganise routine care when responding to an outbreak, and their capacity may be reduced through disruptions related to the outbreak. On the demand side, uptake of services may be affected by trust and acceptability as well as physical and financial barriers to access. Sierra Leone saw a decrease in utilisation of health services during the Ebola outbreak, which translated to 3,600 additional maternal, neonatal, and stillbirth deaths between 2014 and 2015 (Evans, 2020).

There is increasing evidence of dramatic reductions in essential public health and clinical interventions around the globe (Lancet, 2020). Data from the Maintains countries match this trend. This general decline also applies for sexual health services: modelling by MSI predicts an over 60% reduction of sexual health service provision (MSI, 2020), a figure supported by numbers from the Maintains countries.

The next sections explore the extent to which Maintains countries have been able to respond to the following factors:

- Essential routine healthcare services are sustained throughout a public health emergency; and
- An infection prevention and control risk assessment has been conducted at all levels of the healthcare system and high-risk community spaces, leading to application of additional protection guidelines.

6.2.1 Essential routine healthcare services are sustained throughout a public health emergency

While full data is not available, there have been numerous reports of disrupted access to services in Maintains countries ranging from maternal and child health to HIV and TB care, dialysis, and cancer treatment – most notably in countries with strict lockdowns. Models predict a worrying picture. Unless countries minimise the disruption to their key health services, they risk facing as much if not more illness and death from the indirect effects of the pandemic as from COVID-19 itself. Balancing these trade-offs is a major challenge.

In **Bangladesh**, in order to reduce community-based transmission, government childhood immunisation campaigns have been temporarily suspended throughout the country. Non-outreach essential routine medical services continue to operate (MSI, 2020), but it is anticipated that the reduction of community outreach will affect vulnerable populations significantly.

In **Kenya**, usage rates for essential routine medical services have been severely affected, even at this comparatively early stage of the outbreak. For example, in March 2020 immunisation, family planning, and HIV prevention and treatment services were down to 30 to 35% of their normal levels, while in-hospital delivery rates are reportedly down by over 50% (Global Citizen, 2020). Perceived reasons for reduced use of health facility services include community fear of facility-acquired infection, curfew and movement restrictions, and fear of police harassment. The supply of routine services has been limited by concern among health workers providing non-COVID-19 services about lack of protection, given that PPE is being prioritised for COVID-19 activities. Strategic decisions and prioritisation have also limited supply, including efforts to decongest facilities by seeing patients by appointment only, or solely for critical cases, suspension of all elective procedures by the MoH, and reallocation of healthcare staff from essential routine care to COVID-19. The MoH also released guidelines for health workers on how to continue providing quality preventive and clinical services in light of the COVID-19 pandemic (MoH Kenya, 2020c).

Maternal mortality has increased due to the curfew. Although medical emergencies are permitted to override curfew restrictions, there have been reports of police harassing and arresting private transport providers (Daily Nation, 2020d). In Kilifi county, unnecessary maternal deaths have led to the establishment of an emergency hotline and UNFPA providing fuel for ambulance transport.

The need for continued action on other services was highlighted by a cholera outbreak in Marsabit county in April, which killed seven people (Pulse, 2020b).

In **Pakistan**, COVID-19 has severely affected health service delivery across the country. All provincial governments have announced closure of all hospital outpatient services for 'routine' or planned surgical procedures for varying periods of time. However, services deemed 'essential' are still being provided in all hospitals. Nonetheless, the number of doctors available in hospitals for non-emergency outpatient visits or surgical procedures is low.

Instructions from provincial and district officials regarding service provision in private hospitals caused some confusion, with information understood and communicated differently

at different levels. Some private hospitals started offering services and then were asked to shut down by district-level administration.

Even before COVID-19, Pakistan's routine immunisation coverage was low at 66%. With COVID-19, the national immunisation programme has been facing international supply issues, compounded by lockdowns and diversion of supply efforts to the ongoing pandemic at national and provincial levels. This appears to be reflected in an increase in vaccine-preventable diseases in the country: the first quarter of 2020 saw 5,000 suspected cases of measles in Pakistan, compared to 9,000 suspected cases during the whole of 2019 (Dawn, 2020c). Similar outcomes are likely for maternal and neonatal services, as well as reproductive healthcare, leaving vulnerable girls and women the most severely affected (World Economic Forum (WEF), 2020).

In **Sierra Leone**, the government has redeployed hospital staff and CHWs to be trained in case management and contact tracing. Health system resources were already strained, so this reassignment of staff is likely to significantly reduce the availability of non-COVID-19 services. In early March, even before the first case was confirmed in the country, the EOC registered reduced patient attendance at routine services. Similar effects were seen during the Ebola outbreak in 2013 to 2016, with disastrous effects on maternal and neonatal health (Sochas *et al.*, 2017), as well as malaria, TB, and HIV treatment (Parpla *et al.*, 2016). Similar effects on non-maternity reproductive health services have been examined earlier; routine childhood immunisation is also expected to fall due to lack of remaining staff and resources, compounded by international supply bottlenecks. As well as staff shortages, use of services may have been reduced by patient fear of acquiring COVID-19 and by health staff reducing patient attendance in an attempt to decongest facilities. The EOC has sought to reassure the public of the safety of routine services.

In **Uganda**, all elective medical procedures have been postponed, with detrimental effects in the case of malignancies. Movement restrictions have also curtailed access to essential routine medical services. Pregnant women were exempted from the total transport ban in April after a series of maternal deaths, but there is concern that this exemption does not address the health needs of children and people living with HIV, TB, diabetes, cancer, and other chronic conditions (HGA, 2020).

6.2.2 An IPC risk assessment has been conducted at all levels of the healthcare system and high-risk community spaces, leading to application of additional protection guidelines

The WHO emphasises the importance of IPC strategies to ensure the maximum effectiveness of the COVID-19 response (WHO, 2020f). In countries where IPC is limited or inexistent, it is deemed critical to start by ensuring that at least minimum requirements for IPC are instituted at the national and facility level, and to gradually progress to the full achievement of all requirements. IPC strategies to prevent or limit transmission in healthcare settings include ensuring triage, early recognition, and source control (isolating patients with suspected COVID-19), applying standard precautions for all patients, implementing empiric additional precautions, implementing administrative controls, and using environmental and engineering controls.

All of the Maintains countries had made progress in putting in place procedures and training health staff, although in many the baseline standards of IPC were poor.

In **Bangladesh**, an IPC risk assessment has been conducted at designated hospitals at national and district levels. Health workers at the selected hospitals were trained following a specifically designed IPC training module, based on the national IPC strategic framework. However, compliance with relevant IPC guidelines remains unsatisfactory due to lack of effective monitoring and, in some cases, inadequate quality and quantity of supplies. General precautions were advocated in peripheral health centres and community clinics, including washing hands before and after all patient or specimen contact, wearing PPE correctly, and following proper waste-disposal practices. However, compliance is inadequate even at national and district hospitals, with lack of understanding among healthcare staff compounded by shortages of PPE.

In **Pakistan**, IPC steering committees have been notified. There are plans that all acute centres will have IPC teams or a lead who can follow up any staff exposures to confirmed cases as well as advise on patient isolation and other measures. Hospital-based risk assessments will be undertaken to ensure the protection of staff and other vulnerable patients and to prevent unnecessary interactions with confirmed or suspected patients. However, there were major gaps in infection control measures before COVID-19, and substantial effort will be required to raise standards to the required level.

In **Kenya**, IPC recommendations for use at health facilities were developed in March 2020. The recommendations provide guidance for home-based care, outpatients, urgent care, emergency room, or hospitalised patients. Key concepts include reducing infection rates by limiting points of entry and reducing visitors. Isolation of symptomatic patients is outlined as well as protecting healthcare personnel by encouraging proper hand hygiene, implementing strict triage procedures, limiting numbers of staff, and equipping isolation rooms (MoH Kenya, 2020d).

In **Uganda** and **Sierra Leone**, IPC guidelines were in place but we were not able to access information on how well they were being followed.

6.3 Dedicated health workforce with surge capacity

Effective response requires a strong, committed, well-distributed, and skilled workforce that is supported, protected, recognised, and encouraged, particularly given the emotional strain during emergencies. Support is particularly important for female health workers, who make up an estimated 70% of the world's global health and social sector workforce (WEF, 2020). Many often have to balance increased family pressures as well as the increased workload related to pandemic response (O'Donnell *et al.*, 2020). In addition, their safety may be compromised by a combination of high-risk environments and a lack of PPE (WEF, 2020). For COVID-19, requirements include provision for surge capacity, adjusting roles and actions as needed, and ongoing capacity building. Countries also need to be aware of the differentiated needs of female and male health workers and ensure they are motivated and supported through occupational health programmes, remuneration, insurance, childcare if needed, and psychosocial support. This can promote the institutional trust that is crucial to the performance of the health system.

The next sections explore the extent to which Maintains countries have been able to respond to the following factors:

- Human resource provisions are in place to provide surge capacity, and to adjust roles and actions as needed, assisted by ongoing capacity building; and
- Health workers are motivated and supported by occupational health programmes, training, remuneration and insurance, and psychosocial support, leading to high levels of interpersonal trust; the differentiated needs of women and men are taken into account.

6.3.1 Human resource provisions are in place to provide surge capacity, and to adjust roles and actions as needed, assisted by ongoing capacity building

All countries under study started with a low density of health workers; compared to the WHO recommendation of more than 10, Bangladesh has 5.8 doctors per 10,000 population, Kenya 1.6, Pakistan 9.8, Sierra Leone 0.3, and Uganda 1.7 (WHO Global Health Workforce Statistics⁴³). As such, countries have had to reallocate existing health workers to focus on COVID-19 (reinforcing the negative consequences for routine service delivery), whilst trying to rapidly boost the effective availability of the health workforce through strategies such as rapid recruitment, cancelling leave, and mobilising retired professionals. Some countries have pivoted the roles of CHWs to support the COVID-19 response on the front line.

In **Bangladesh**, as at 10 May 2020, close to 900 doctors and 750 nurses and joint support staff have been transferred from routine medical care to COVID-19 treatment centres (DGHS, 2020a). The Ministry of Health and Family Welfare recruited 2,000 medical officers and 5,600 nurses in the first week of May 2020, and a further 2,000 doctors and 3,000 health workers in late May, as part of ‘the biggest recruitment drive Bangladesh has ever seen’ (bdnews24.com, 2020b). The government has also cancelled all leave including weekly holidays for the health workforce, but there are presently no plans to deploy undergraduates and retired health workers. CHWs have been heavily engaged in case identification and monitoring home quarantine, although there are ongoing challenges surrounding adequate PPE.

Kenya has long-standing gaps in human resources for health, with only 60% of all public sector healthcare positions filled prior to the outbreak. Shortages reflect lack of prioritisation in budgets, limited training needs assessments to inform decision making, unequal distribution of health workers, and lack of adequate planning for staff deployment in counties (Taddese and Lehman, 2017).

Although the Kenyan Treasury has made US\$ 10 million available to hire extra staff, it is not clear how staff will be scaled up in the counties. As an interim step, the Ministry of Education appealed to universities on 21 April 2020 to release health staff to attend to the COVID-19 response. County governors have asked the national government for 6,000 to 7,000 extra health workers; however, funding has been declined.

⁴³ See www.who.int/hrh/statistics/hwfstats/en/

Pakistan also has a shortage of human resources. Ministerial estimates assume an extra 60,000 doctors, 160,000 nurses, 105,000 paramedics, and 25,000 laboratory technicians will be needed to adequately staff treatment centres, isolation and high-dependency units, and makeshift hospitals for the next three to six months. Provincial and federal governments have ongoing joint efforts to recruit essential health cadres on a short-term basis to enhance surge capacity. However, social distancing and the absence of virtual training methodologies make it difficult to provide appropriate training to newly recruited staff. Appropriate fast-track training approaches are pending. This training is expected to pay special attention to IPC, including waste management, as IPC is a recognised area of weakness in public health facilities.

In **Sierra Leone**, several hundred CHWs have been retrained to work as contact tracers. Several hundred clinicians have been trained for case management in Greater Freetown alone, and similar redeployments are expected in all affected districts.

In **Uganda**, the Uganda People's Defence Forces Directorate of Medical Services has seconded a specialist to support the Director General of Health Services, supported by an interdisciplinary team of specialists to direct the response (MoH Uganda, 2020b). An additional 220 health workers are being recruited to provide surge capacity at the national and district levels, including epidemiologists, medical officers, nurses, laboratory technologists, and psychosocial counsellors. CHWs have been ordered to report any events that are suggestive of a COVID-19 infection to district health teams for further action.

6.3.2 Health workers are motivated and supported by occupational health programmes, training, remuneration and insurance, and psychosocial support, leading to high levels of interpersonal trust; the differentiated needs of women and men are taken into account

In most countries, initiatives have been introduced to motivate and reward health workers, including the provision of insurance, reflecting the political salience of COVID-19. However, in some countries such as Kenya and Sierra Leone, low levels of trust have undermined the ability of the health workforce to play an adapted role during COVID-19.

In **Bangladesh**, the Directorate General of Health Services signed an agreement with selected hotels in all districts to furnish accommodation and food for frontline healthcare workers, in an effort to avoid further transmission to their families (something that is clearly difficult for those with childcare responsibilities). Likewise, vehicles were appropriated from the public and private sectors to facilitate transportation for frontline health workers. The government has also introduced special allowances and health and life insurance for all government employees that are professionally exposed to COVID-19, including healthcare workers and members of law enforcement agencies.

Healthcare staff in **Kenya** are mostly well trained, but have a history of significant management issues, as evidenced by a long history of strikes (The Conversation, 2017). A threatened nationwide strike of health workers due to lack of PPE in May did not take place, but doctors, nurses, and clinical officers in Kisumu county went on strike on 10 June citing delayed salaries, delayed promotions, and delayed COVID-19 allowances (The Standard, 2020b). Unrest is likely to increase if frontline healthcare providers do not receive adequate PPE and other critical supplies. As of 15 April 2020, governors of affected counties have

been taking steps to provide enhanced allowances for frontline medical staff (Daily Nation, 2020e).

Doctors have also been on strike in Balochistan in **Pakistan**, when promised PPE finally arrived but was of the wrong type (instead of N-95 masks, they were K-95 masks – a type mostly used in haircutting salons). Protesting doctors were beaten and arrested (The Guardian, 2020b). To improve staff retention, provincial governments have announced tax relief and additional health spending that includes increased compensation for healthcare workers (IMF, 2020d).

In **Sierra Leone**, there are reports of healthcare workers refusing to report for work given fears around COVID-19. This not only puts further strain on the healthcare system but also endangers staff who do attend work by increasing their level of patient contact and consequent chance of encountering an infected person. To improve retention, the government announced on 22 April 2020 incentives for healthcare workers, including a risk allowance, life insurance, and per diems when in the field, as part of an improved human resources for health response.

6.4 Efficient information systems and surveillance

The literature on shock-responsive and resilient health systems emphasises the importance of information systems. In particular, effective response requires: surveillance and early warning systems that integrate health management information systems with data from other sectors; support for informal and local data sources that can overcome the inherent delays in producing formal data; clear channels of communication between health system actors and other sectors; risk communication protocols; and robust engagement with patient populations.

For COVID-19, robust and timely data analysis is needed to support risk assessment and operational decision making during daily situation room meetings and health system actors need to successfully apply risk communication protocols and establish robust, empathic engagement with patient populations through traditional and social media. The next sections explore the extent to which Maintains countries have been able to respond to the following factors:

- Robust and timely data analysis supports risk assessment and operational decision-making; daily situation reports and data are made available to all government levels, international partners, and the general public; and
- Health system actors have successfully applied risk communication protocols through traditional and social media, and health advisory hotlines.

6.4.1 Robust and timely data analysis supports risk assessment and operational decision making; daily situation room meetings; daily

situation reports and data are made available to all government levels, international partners, and the public

In all countries, data systems were established to create dashboards on COVID-19, mostly leveraging DHIS-2⁴⁴, but these dashboards have only been made public in some countries.

In **Bangladesh**, the Directorate General of Health Services provides public access to real-time health information, using the standard DHIS-2 data warehouse infrastructure (DGHS, 2020c). A dedicated COVID-19 dashboard has been established, alongside other key topics like floods, Rohingya refugees, and dengue fever (DGHS, 2020d). The publicly accessible COVID-19 dashboard provides up-to-date indices on testing, passengers screened, quarantine, isolation facilities and beds, hospital and medical team preparedness, and PPE logistics by district (DGHS, 2020a). Daily situation reports are made publicly available (DGHS, 2020b). The government has deployed a publicly available mobile COVID-19 screening application to support the community-based surveillance system.

Kenya relies on a well-established disease surveillance system that is monitored by MoH officials with data verified on a daily basis. The EOC has a centralised dashboard that is updated once new cases are confirmed, cases recover, or cases decrease. Access to the above data is restricted to those immediately involved in the response (i.e. implementing partners and donors). Daily situation reports are issued to those in need of the information and are not made available to the general public. Instead, there is a daily press conference hosted by the NERC, where key findings and measures are announced. The daily press briefings are uploaded on the Ministry of Foreign Affairs website.⁴⁵

In **Pakistan**, standard operational procedures require that test results be shared with the surveillance team in charge, the Ministry of National Health Services, Regulations and Coordination, and with a unified national and provincial COVID-19 information management system that is open to access by the public (COVID-19 Health Advisory Platform, 2020). The same website offers a self-assessment tool to assess the likelihood of a COVID-19 infection.

Sierra Leone operates a health data warehouse using DHIS-2 and follows routine integrated disease surveillance and response guidelines for case reporting and data aggregation (WHO AFRO, 2019). The government provides the public with regular updates through a variety of channels. Key announcements from the president are televised, with press briefings circulated afterwards. The Ministry of Information and Communication maintains a Facebook site with regularly updated epidemiological information. The daily situation reports issued by the EOC and some important statistics such as the disaggregation of deaths by gender and reported number of tests, are no longer made publicly available.

Uganda has robust and functional surveillance and information management systems in place and uses DHIS-2 as a national health data warehouse. The country is taking advantage of these systems, at both national and sub-national levels, to guide the COVID-19 response. A publicly accessible dashboard has been set up on the MoH website (MoH Uganda, 2020a) and shares up-to-date information in real time.

⁴⁴ District Health Information Software 2 (DHIS2) is the world's largest health management information system.

⁴⁵ See www.mfa.go.ke/?page_id=3127

6.4.2 Health system actors have successfully applied risk communication protocols through traditional and social media, and health advisory hotlines

In all countries, telephone hotlines have been established – often building upon existing hotlines – to spread information on COVID-19 and provide guidance without risking in-person contact and transmission.

In **Bangladesh**, the Directorate General of Health Services has scaled up the National Health Call Centre as a national COVID-19 helpline assisted by over 3,800 qualified clinicians and counsellors. From 8 March to 24 April 2020, the helpline served over 23,000 callers, providing access to medical advice without physical contact (DGHS, 2020b). In **Kenya**, the MoH has set up a national toll-free number and short message service to facilitate access to relevant medical information and offer advice to anyone with relevant signs and symptoms. In **Pakistan**, the existing national polio eradication helpline has been redesigned as a COVID-19 hotline and receives an average of 70,000 calls a day. There are numerous established telemedicine services in Pakistan, and many have added COVID-19 risk screen capacity. Like the national helpline, they are becoming an increasingly important platform to respond to queries, provide correct information, and connect clients to a service provider when needed. In **Sierra Leone**, the nationwide 117 hotline⁴⁶ set up during the Ebola outbreak has been repurposed to serve as a unified alert notification and medical helpline, in an effort to maximise efficiency and reduce physical overcrowding at healthcare facilities. In **Uganda**, supported by partners, the two biggest telecommunications companies have provided the MoH with technical assistance to establish a set of toll-free COVID-19 numbers capable of handling the expected call volume from the general public. These hotlines provide information and are also intended to assist with reporting suspected cases in the community.

6.5 High-quality supplies, logistics, and infrastructure

An effective health system response requires sufficient supplies, logistics, equipment, and infrastructure, with emergency stocks, procurement plans, and plans to weather interruptions in critical infrastructure and transportation. For COVID-19, it is imperative that essential equipment, drugs, reagents, and supplies such as PPE have been stockpiled and pre-positioned to optimise surge capacity. All COVID-19 healthcare facilities need continued access to essential equipment, drugs, reagents, and supplies, including PPE and respiratory support, in accordance with their designated level of care. High-dependency care capacity needs to be augmented in anticipation of demand, backed by appropriate case referral protocols.

⁴⁶ While there does seem to be an upward trend in the use of this 117 number, the hotline still only receives about 20 COVID-19 related calls per day (data from Ministry of Health and Sanitation, 2020b).

6.5.1 All COVID-19 healthcare facilities have continued access to essential equipment, drugs, reagents, and supplies, including PPE and respiratory support, in accordance with their designated level of care

Each of the five countries has reported significant shortages of PPE. This reflects the global trend, with international markets unable to meet the unforeseen and rapidly increasing demand, particularly with the prolonged shutdown of production facilities in mainland China. When governments have to procure supplies themselves, they are fully exposed to international market forces. In some cases, international donors assist and organise procurement. Donor procurement facilitates bulk purchase by the respective partner and allows government agencies to deploy valuable human resources elsewhere. To mitigate shortages, most countries were beginning domestic production of equipment and supplies that traditionally were imported.

The need for ventilators can only be met by the international market, although there were emergent examples of domestic innovation. Many western countries have banned the exporting of ventilators, and also curtailed exports of other essential equipment, drugs, reagents, and supplies. This undermines countries' preparedness for managing increased caseloads requiring ventilation in the future.

In **Bangladesh**, there are no provisions in the national preparedness plan for any emergency supply chain management. Instead, procurement continues to use forecasts by the respective hospital directorate office. While there was adequate stock of consumables and drugs at the beginning of the outbreak, logistics surge capacity is limited. However, the government has procured 1.5 million items of PPE from international and national markets by 24 April, with more in the pipeline. After distribution, the PPE inventory as at 24 April amounted to 0.27 million items. The procurement department is presently struggling to procure a standards-compliant particulate respirator (N-95 or equivalent) internationally, reflecting the global shortage of quality PPE. The Bangladesh Garment Manufacturers and Exporters Association has started converting existing production capabilities to PPE equipment locally. Given present limitations of access to virus-proof fabric, local factories can only produce waterproof equipment, which has obtained government approval for the intended level of protection. This lower-grade equipment has been deployed for use by support workers, leaving valuable virus-proof resources for frontline workers. The Bangladesh Garment Manufacturers and Exporters Association is in discussion with a coalition of UN agencies and other organisations to upgrade production facilities, while sourcing certified virus-proof fabric from China (Dhaka Tribune, 2020). However, there are presently no adequate arrangements to safely dispose of the vastly increased volume of medical waste. Meanwhile, Bangladesh has started production of a generic version of remdesivir, an antiviral drug that has shown promise in the treatment of COVID-19.

Supply of critical care facilities is also a challenge: as at 16 April, 6,500 beds were available for isolation and only 150 beds for critical care. There is concern that critical care facilities will soon be overwhelmed, and expansion of ICU beds and regular oxygen supply is an immediate need.

In **Kenya**, there is mixed procurement of essential supplies through UNICEF and the Kenya Medical Supplies Authority. To mitigate the challenges of global market shortages and to address the persistent lack of PPE, the private sector and donor communities have started

to work with the Ministry of Trade and Industry to produce oxygen, alcohol-based handrub, face masks, gowns, and other PPE in country. However, due to lack of applicable fund disbursement policies, the government has not yet provided guidance on how such private sector initiatives will be financed, even though the government received emergency funding for PPE from the World Bank.

Specific gaps that can only be met on the international market at present involve N-95 particulate respirators for frontline health workers and ancillary supplies for COVID-19 testing, such as viral transport media and ribonucleic acid extraction kits, as there is not yet any logistics pipeline for COVID-19 diagnostics. A local university has developed prototype ventilators for domestic production.

In **Pakistan**, the government has developed a detailed list of drugs, reagents, and supplies required to cope with the COVID-19 outbreak and initiated emergency procurement. During April 2020, the Ministry established supply gaps for key PPE for the month of May 2020, based on epidemiological forecasts and established usage rates. Major shortages of N-95 particulate respirators, goggles, surgical masks, nitrile and latex gloves, surgical gowns, and face shields were identified, and international procurement is likely to incur significant challenges. To bypass such international bottlenecks, the private sector has begun local production of PPE, while the Drug Regulatory Authority of Pakistan has taken measures to facilitate imports of essential medical supplies, including ventilators. Pakistan expected to have received 2,500 ventilators by the end of May 2020, and national efforts are under way to produce more locally in the near future.

Sierra Leone is highly dependent on partner support and procurement expertise to secure essential drugs, reagents, and supplies for the response.

In **Uganda**, existing or anticipated gaps include PPE, ventilators, high-dependency beds, and COVID-19 test kits and related supplies. Given the challenges of international procurement, the government has proposed support for local production of PPE. However, there is no local experience in the production of such items (MoH Uganda, 2020b).

6.6 Genuine community engagement

The health systems literature emphasises the importance of community engagement in managing epidemics, and in particular the necessity for high levels of institutional trust between communities and the formal health system for this engagement to be successful (Topp and Chipukma, 2016). For example, it has been established that ‘health systems that earn the trust and support of the population and local political leaders by reliably providing high-quality services before crises have a powerful resilience advantage’ (Kruk *et al.*, 2015). Moreover, it is also clear that the reverse is true – community distrust of frontline health services generated resistance to seeking care and implementing infection control measures during the Ebola crisis (Thiam *et al.*, 2015).

Institutional trust can be promoted through community engagement, bearing in mind that communities are not homogenous and taking into account the differences by gender, ethnicity, class, etc., as well as the important role of women in community leadership. Responsiveness to community demands and priorities can also be promoted (including through social accountability), and taking into account cultural preferences. For example, in

Sierra Leone community monitoring of services increased trust and confidence in health workers, and improved the perceived quality of care provided by clinics. This in turn led to an increased likelihood of people reporting symptoms and seeking care during Ebola – and thus to lower mortality (Christensen *et al.*, 2020).

Aside from the importance of trust, the literature increasingly recognises the importance of engaging with communities as actors during shocks, particularly learning from the roles communities played in overcoming the Ebola crisis in West Africa. In Liberia community engagement was found to be crucial, including the formation of community-based surveillance teams and treating communities as active participants of health response efforts, not just passive recipients (Marston *et al.*, 2020).

One of the lessons learnt from the Ebola crisis in Sierra Leone is the missed opportunity of effective social mobilisation by women. Delayed involvement of women led to reduced information amongst them (as primary caregivers) about potential approaches to tend to the sick within the household (ACAPS, 2016). Learning from the Ebola crisis, UN Women argues that an effective approach could be to enlist women's organisations and communicate key messages through them (Devex, 2020). These messages could cover a range of gender-specific challenges that are a direct or indirect outcome of COVID-19 such as information and messaging on domestic violence, accessing healthcare services, and awareness on social protection programmes targeted toward women.

6.6.1 Health system actors have successfully engaged local authorities, leaders, and influencers, including women leaders, to enhance the community uptake of culturally appropriate preventive community and individual health and hygiene practices in line with national public health recommendations

The rapid situation analyses uncovered a variety of methods used to communicate with communities and engage them in preparedness and response. Difficulties were also identified, including opposition to social distancing by faith groups in Pakistan, low levels of institutional trust in Kenya, and disinformation in Sierra Leone. Overall, it was found that the types of community engagement that worked well during Ebola outbreaks (such as community surveillance teams and positive engagement with community leaders) had not yet been instituted in Maintains countries in regard to COVID-19.

In **Bangladesh**, local government representatives have been engaging communities to raise awareness of COVID-19 prevention. Posters, billboards, and the printed press, as well as electronic media, have all been deployed to disseminate accurate information, address misinformation, fake news, and rumours, and provide medical and public health experts with a platform to contribute scientific content.

Research in **Kenya** shows gaps in preventive behaviour and mistrust of government services. Residents of informal urban settlements tend to correctly identify COVID-19 key symptoms and groups at risk. However, observations in coastal Kenya highlight that only about 30% of Kenyans use a face mask properly, 30% leave their noses uncovered, while 40% have either no mask at all or let it hang around their necks. Residents in the informal settlements generally turn to trusted non-governmental partners or local health facilities for help and information rather than accessing government sources of information (Population

Council, 2020). Similarly, while governmental agencies attribute poor uptake of voluntary testing to stigma, a more common reason given by ordinary people is fear of isolation in the government facilities.

Community leaders, including women leaders, are often highly organised and lead a range of local groups and community structures that provide and advocate for services and provide data on residential populations and facilities. To date, however, there has been little positive engagement by the government with these community leaders (Corburn *et al.*, 2020).

In **Pakistan**, the National Risk Communication and Community Engagement strategy, adapted from the WHO tools, is part of the National Action Plan for COVID-19. The strategy focuses on the role of civil society and local communities through 2,152 rural support programmes covering 36,897 village organisations and 489,525 community support organisations (The Nation, 2020b). Healthcare workers, media, and other staff are being trained on risk communication, social mobilisation, and community engagement. Local messages have been prepared through a participatory process, specifically targeting key stakeholders and at-risk groups.

However, activity by community actors has sometimes threatened to increase risks of infection, including opposition to social distancing by religious leaders. To build public awareness, the government has replaced ringtones with COVID-19 awareness messages and regularly sends short messages to encourage people to practise hand hygiene and social distancing. Most newspapers outlets, television stations, and radio stations dedicate significant time and effort to providing regular COVID-19 updates to the general public, often complemented by dashboards on their company websites. Rapid surveys have found high levels of awareness and compliance: most participants avoided visiting crowded places and wore masks when they left their homes. Risky behaviour was predominantly reported by unmarried males aged 16–29 Hayat *et al.*, 2020).

In **Sierra Leone**, one way that the government builds awareness at the national level is through radio, for which the Ministry of Health and Sanitation has developed several broadcasts in 13 local languages, with local leaders disseminating information on the virus. While the urban population can be reached through traditional and social media, in rural Sierra Leone information also flows through traditional leaders. Their involvement was key during the Ebola response and the same course of action has been taken this time. Students attending radio lessons received regular reminders on COVID-19 as part of their scheduled lessons. As recent cases have emerged in informal settlements, some local leaders have initiated their own COVID-19 sensitisation training, joined by medical practitioners, social workers, the police. Results from a survey conducted in the Freetown area on the effectiveness of the above interventions indicated that over 95% of respondents had heard of COVID-19, with 90.3% being able to correctly identify at least one symptom; however, 41% of respondents believe that COVID-19 is man-made. (Grieco *et al.*, 2020) Despite the government's efforts to provide accessible, accurate information, disinformation is commonly circulated through social media. The official response to counter these rumours has been slow. The communication department of the Ministry of Health and Sanitation is planning to use a mechanism successfully deployed during the Ebola outbreak, when a bulletin is published daily listing, and correcting, fake news. Implementation is, however, still pending.

In **Uganda**, traditional media are used to create awareness, provide updates, and effect appropriate risk communication. Health messages are further enforced by mass text messages sent by telecommunications providers to their mobile clients. The government insists that all messages and community engagements are channelled through the MoH to ensure that messages are standard and uniform in nature. Misinformation appearing especially on social media is corrected through official social media channels on Twitter and Facebook.

7 Conclusions

Governments have directed focus and resources to managing COVID-19 but the complexity of the issues and their multi-sectoral nature has challenged often limited state capability. In particular, it is a clear challenge to balance strategies to contain COVID-19 infection with the secondary effects caused by these strategies. COVID-19 will be a factor for all countries for a long time. A crucial course-correction is needed now to improve the future for vulnerable and disadvantaged groups.

This investigation has illuminated areas and issues to be examined and considered how to deliver a well-coordinated and balanced response to a major shock across social services. Maintains, in keeping with its multi-sectoral mandate, will continue to work with others to refine and strengthen the **analytical framework** used for this report, and address some of the knowledge gaps about shock responsiveness against this framework.

7.1 Governance

Countries have had different governance challenges – for some this has been decentralisation, others have not had the benefit of pre-existing public health policies and preparedness, some have squandered community trust, and all have struggled with multi-layered coordination. The gap left by the government responses has led to a range of community schemes, local solutions, and private sector innovations.

Further analysis is required on how different **leadership** approaches (e.g. centralising control through the Ministry of Health, or military, or disaster management agency) affect coherency and coordination, and how the informal rules, values, and norms that shape relationships and interactions among actors underpin the speed and effectiveness of an emergency response. Maintains is currently undertaking a short study to explore the role of traditional leaders in supporting the government's response in Sierra Leone.

The need to increase **availability of financing** to respond quickly to a shock is highlighted by this study. Maintains is undertaking one in-depth study of health shock costs and financing in Sierra Leone, as well as exploring shock financing approaches in other countries. This work, undertaken with close links to the Centre for Disaster Protection, will be synthesised for cross-country and cross-sector learnings.

7.2 Mitigation of secondary impacts

The evidence presented in this report suggests that the secondary effects will be substantial and long-lasting, particularly for vulnerable and disadvantaged groups.

Economic consequences are particularly severe due to extremely high rates of informal employment, especially for women. **Social protection** has been the key tool to meet some of these needs, with successes in rapid disbursement and increased coverage in Pakistan and Bangladesh respectively. It is clear that countries with reasonably well-established safety nets for vulnerable populations have found it much easier to expand, adapt, and innovate, pointing to the need for further investment in social protection programmes and social

registries for the next crisis. However, even in these countries, social protection schemes are not achieving the effective coverage required to mitigate the disruptive effects of COVID-19.

Maintains has commissioned a study looking across all of its six countries, to explore, document, and evaluate the different social protection approaches taken to COVID-19. In addition, Maintains is undertaking longer-term research in Bangladesh, Kenya, and Pakistan looking at the enablers and constraints for effective shock-responsive social protection in long-term social protection programmes, how social registries can be used for shock scale-up, and how social protection can support nutritional outcomes.

A major gap identified in this report, across countries and sectors, has been mainstreaming **gender and inclusion**. Significant gaps have been seen in leadership, engagement at community level, and in interventions to mitigate impact that will have very long-term impacts and deepen inequalities. Bangladesh, Kenya, and Pakistan have not provided any funding or made any policy commitment for gender-based violence, sexual and reproductive health services, provision of childcare, or support to mitigate the economic effects on women. Women's health, safety, and livelihoods have been severely compromised – some will never recover. Governments should put in place immediate measures to address this significant gap, including the involvement of women's groups in the design, development, and delivery of services.

Maintains is committed to full incorporation of GESI into research plans and methodologies, and has launched new research to assess the impact of COVID-19 and associated government responses on food security, livelihoods, access to and utilisation of health services, education, and awareness and practice related to COVID-19 among poor urban communities in Ethiopia.

Scaling up effective distance learning has been a major challenge, which will exacerbate inequalities of **educational** outcomes and reduce life prospects, particularly for girls. Efforts are required now to strengthen both the content quality and reach, and to invest in catch-up programmes. Maintains will use its research programme in Uganda to develop a better understanding of the impacts of school closures on refugees, particularly girls and those with disabilities.

Finally, no countries appear to be getting ready for the expected increase in **malnutrition** that is just around the corner. Nutrition programmes, services, and screening need to be ramped up now, and school feeding programmes swiftly replaced. In Kenya and Uganda, Maintains is researching how lessons from scaling up community management of acute malnutrition, primarily in situations of drought, can be applied in other shock contexts.

7.3 Health system

In pivoting to provide COVID-19-related services, **health** systems have been majorly disrupted, with essential services including antenatal care, immunisation, and institutional delivery severely restricted or suspended – against WHO recommendations. This is likely to cause very high secondary effects on morbidity and mortality.

Whilst countries have been working to expand treatment capacity within national health systems, supply-side constraints mean that it seems unlikely that countries will be able to

manage a large number of cases requiring hospitalisation, resulting in high mortality rates. This would also compromise the ability to restart and maintain essential service delivery. It is therefore imperative that countries find ways to minimise the reproduction rate of COVID-19, whilst also mitigating the secondary consequences of these actions. Improving testing rates and adopting community engagement strategies that proved effective in Ebola are urgent priorities.

It will be important to continue to document the emergent strategies as countries try to both recover from and respond to COVID-19 at the same time – particularly those related to essential service delivery. This will expand our understanding of how low-resource social systems can deal with long-lasting shocks like pandemics, which have such widespread direct and indirect primary and secondary effects, and improve our ability to support countries to learn from COVID-19 and prepare for future shocks.

Health is a primary entry point for Maintains shock-responsive research and Maintains will continue to develop the conceptual framework for a shock-responsive health system that underpins this work (Newton-Lewis *et al.*, 2020). In Ethiopia, Maintains is researching how community-based health workers can support preparedness and strengthen shock responses; in Kenya, Uganda, Pakistan, and Sierra Leone, Maintains is seeking to explore in detail how health systems can better respond to shocks, looking at early warning systems, financing, and the provision of existing services alongside shock scale-up.

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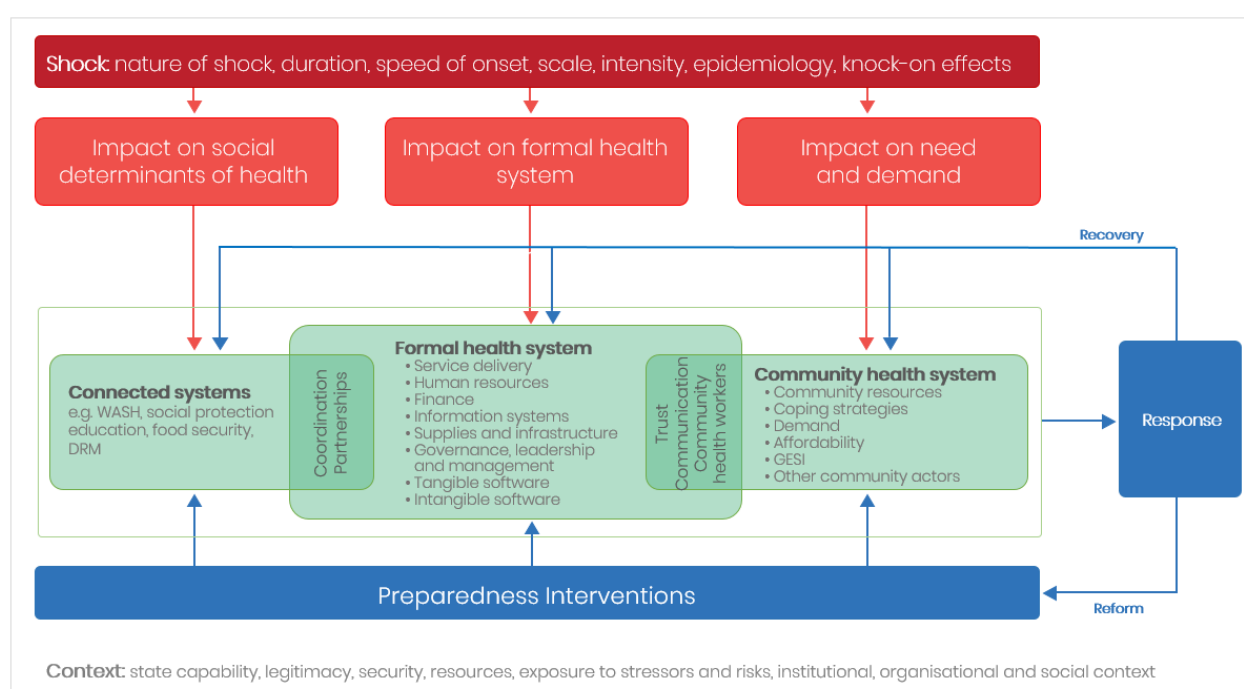
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Annex A Conceptual model of a shock-responsive health system

As described in Section 2.1, the analytical framework for this report was developed out of a conceptual model for shock-responsive health systems. This annex provides a little more detail on that model; for full details, please see Newton-Lewis *et al.* (2020).

This model was developed to cover all types of shocks – including natural hazards, epidemics, and population displacements – and builds upon the latest literature and thinking on health systems and resilience.

Figure 8: Model of a shock-responsive health system



The model recognises that the shock will have three key impacts – on the formal health system, on other connected social systems such as social protection and nutrition, and on the demand for health services.

A key aspect of the model is the formal health system (including the public sector directly and private sector indirectly), which includes both:

- 'hardware': six building blocks of the health workforce – health information systems; supplies and infrastructure; finance; governance, leadership and management; and service delivery; and
- 'software': the people within the system. This includes both tangible software (their capacity and the formal processes by which people act) and intangible software (the informal rules, values, and norms that shape relationships and interactions among actors, and which are themselves shaped by the socio-political context in which the health system operates) (Sheikh *et al.*, 2011).

The literature shows that both hardware and software components of a formal health system are important in determining how well that system can be responsive to a shock (Kruk *et al.*, 2015). Many of these factors have already been identified as underpinning the success of the health systems of Hong Kong, Singapore, and Japan in dealing with COVID-19 (Legido-Quigley *et al.*, 2020).

The formal health system has strong interdependencies with community health systems and other connected social systems, such as education, social protection, and food security. A shock like COVID-19 affects all of these interdependent systems: directly affecting the health system, changing needs and demand for services at the community level, and impacting on the social determinants of health.

The way these systems interface with a shock involves four phases (which may overlap): preparedness, response, recovery, and reform.

Annex B Terms of reference

COVID-19 preparedness and response – learning and implications for Maintains

Maintains and COVID-19

The emerging COVID-19 pandemic is becoming an extreme shock to national health systems and will challenge the international response given its global nature. Preparedness and response interventions will also impact on other social systems: for example, through school closures, restricted mobility, and a likely economic downturn.

Maintains is a research programme that is primarily focused on drought and flood (Maintains was originally conceived as responding to natural hazards) and to a lesser extent on epidemics. As such, most Maintains programmes and staff/partners do not have direct expertise in dealing with infectious diseases, and thus will not engage in the COVID-19 response directly.

However, the COVID-19 pandemic provides a platform for understanding how different countries manage preparedness and response interventions, and how these impact on social service delivery. The research mandate of Maintains, and the flexibility within the programme, provides an opportunity to study in real time how countries are able to adapt and respond. The lessons coming out of this can support the longer-term work of Maintains and may identify gaps and opportunities for further work to support pandemic management, to be delivered under Maintains technical assistance or beyond.

Maintains is proposing a two-stage response:

1. Rapid situation analyses in all countries (subject to the feasibility of deploying consultants): As an initial exercise, Maintains will hire country-level consultants to work on a rapid (10-day) assignment to document the preparedness and response activities of the six countries where Maintains works. This will use a 'systems' lens in line with Maintains' mandate, rather than specifically focusing on the technical response to the pandemic.
2. Further work if appropriate: Based on the findings from the situation analyses and the emerging global situation, Maintains and the UK Department for International Development (DFID) will then decide whether to carry out further work analysing and documenting components of the preparedness response policies and activities in more depth in specific (or all) countries, and whether to utilise targeted technical assistance, under Component 2 of Maintains.

At the time of writing, the numbers of cases in Maintains countries are small, but this will evolve quickly over the coming weeks.

Scope of work

Objectives of the research: The primary objective of this work is to see what Maintains can learn from COVID-19 as regards the national ability to respond to shocks. This will involve using a ‘systems’ lens, in line with Maintains’ mandate, rather than specifically focusing on the technical response to the pandemic. As such, the study will focus on the leadership and governance of the response to the pandemic, and its impact across social sectors, with a primary focus on the health sector.

A secondary objective is to identify whether further work or technical assistance from Maintains would add value. The learning and insights from this study will be a key source of knowledge for the Maintains country research programmes and will be fed back to national governments, DFID, and other key stakeholders, in order for them to use this information to target support.

As such, there will be three elements within the rapid situation analyses in each country:

1. **National overview:** A brief overview of the national preparedness and response to COVID-19 in terms of
 - a. overall leadership and governance at national and provincial levels;
 - b. governance, scale-up, and impacts across key non-health social services (nutrition, social protection, education);
 - c. the extent to which various key sectors have developed and are implementing business continuity plans to manage a pandemic; and
 - d. financing arrangements used or envisaged to be used for COVID-19 emergency preparedness and response measures.
2. **Health sector response:** A more detailed consideration of how the health sector is scaling up to prepare and respond, using the World Health Organization (WHO) building blocks as the framework for analysis, with additional consideration of community engagement.
3. **Support options:** A brief scoping of any entry points for Maintains to provide technical assistance in a way that fits Maintains’ mandate, is non-duplicative, and could strengthen preparedness and response activities.

Profile of the country consultants: Given the timeline and sensitivity of the work, the country consultants will need to have:

- pre-existing strong relationships and entry points to stakeholders, particularly ministries of health and the WHO; they will need a level of seniority, and credibility with and respect from key players in order to ensure swift access to stakeholders;
- a strong public health background, with a detailed understanding of the national health system, and ideally expertise in infectious diseases (though they are not required to be an expert in this field);
- the ability to gather large amounts of information quickly and to assess it in order to pull together key messages and learning points (this includes dealing with conflicting information);
- the ability to work in a sensitive way that minimises the demands put upon national stakeholders dealing with the pandemic; and

- excellent command of English, as well as the official language of the country of operation, and the ability to be able to produce succinct presentations and reports in a timely manner.

Methodology: The consultants will be expected to identify the optimum approach for their country in the first two days of the assignment, after familiarising themselves with global guidance on strategic planning and response to COVID-19, such as is available here: www.who.int/docs/default-source/coronaviruse/srp-04022020.pdf.

It is expected that the country consultants will review national policy and planning documents, guidelines, and notices, and engage with government stakeholders at national and sub-national levels, as well as with other stakeholders, such as WHO, development partners, non-governmental organisations, and the private sector, guided by the framework set out below. The engagement will be via attending existing meetings and groups, individual interviews, and phone calls.

The consultants would be expected to develop a list of key informants, which should include the following:

- Key figures in government decision-making – likely the presidential office, disaster management agency, office of national security, chief medical officer, and chief scientific officer.
- Key government ministries:
 - a. often termed ‘one health partners’, including health, agriculture, water, and environmental protection;
 - b. other social sectors (education, social welfare);
 - c. national security (internal affairs);
 - d. finance; and
 - e. other economic sectors if appropriate (including transport, communication, energy etc).
- Health protection/public health agencies: national health/scientific bodies, WHO, Centres for Disease Control from the US, China and Africa, Public Health England etc
- Key development partners and United Nations agencies, as appropriate: DFID, United States Agency for International Development, European Union, World Bank, United Nations Children’s Fund, United Nations Development Programme, etc.

Deliverable: The final output will be a report (c. 20 pages plus annexes if required) documenting the preparedness and response activities, guided by the framework below, plus a set of recommendations as to possible entry points for Maintains in regard to providing technical assistance.

Reporting: The country researchers will report to the Global Health Learning Lead (Tom Newton-Lewis) and will have strong links to the relevant Maintains Country Lead.

Research framework

The sections below provide a framework for the reports. The consultants should provide information under each of these sections, and should seek to provide as much information

as possible, but it is recognised that it may not be possible to fulfil this level of detail and we expect the consultants to use good judgement in tailoring the approach to what is appropriate for their country contexts.

System-wide response

- Who is leading/managing the response? Has a national emergency response committee been activated? What is its leadership, membership, accountability, and role, and how is it functioning?
- Is emergency legislation in place? Are appropriate delegations of authority in place?
- What coordination activities exist between the health system, other related social systems (social protection, education, and nutrition), and key transport and utility services?
- If possible, what are the preparedness activities and plans being enacted in these other sectors?
- Have there been any changes to service delivery in other social sectors (education, nutrition, social protection)?
- How are trade-offs being managed?:
 - How will decisions be made over school closures and the impact on educational outcomes, as well as teenage pregnancy and gender-based violence?
 - How will decisions be made over border control, reduction in people's movements, trading, and the impact on economic activity (and how it can be mitigated)?
 - How will people have their basic needs met and access social protection if they are in quarantine or lock-down?

The health sector

- Governance:
 - Were there existing public health emergency contingency, preparedness, and response plans – either in general or for pandemic influenza? Are they forming the basis for activities? Have they been updated or supplemented?
 - What are the broader existing legal and policy foundations for guiding the response (covering levels of the health system, engagement of private and non-profit sectors, international agencies, inter-sectoral coordination etc.)? What work is taking place to update these legal and policy foundations, and agreements with non-state providers and actors?
 - Who is driving preparedness activities in health? How is coordination between the ministry of health, other sectoral ministries, disaster management agencies, sub-national governments etc. working? Has the government engaged technical experts and research networks? How well is the government doing in regard to providing guidance and planning assumptions to partners? Do governmental decision makers refer to existing expertise, such as pandemic preparedness plans that may already be in place?

- What is the role being played by different types of international agencies? Is the government able to lead the coordination of partners involved in response operations? How is this being done?
- What is the level of centralisation of the preparedness and response activities? Is anything being done to increase or decrease the decision space of local managers? What are the mechanisms for coordinating and augmenting district and national responses?
- Service delivery:
 - What has been done to strengthen the ability to identify, isolate, and care for infected patients?
 - What are the strategies in place to limit household to household transmission, including reducing secondary infections and preventing transmission events?
 - Have risk assessments been undertaken in respect of infection prevention and control activities at all levels of the healthcare system? Have referral pathways been defined? Have facilities and referral systems been mapped in case they need to be brought into the response as surge capacity?
 - Have there been any changes in the provision of other services (e.g. temporarily reducing the package of services provided by the public health system)? Or the pricing (e.g. making things free that were not already)?
 - Has there been any change in how the private sector is used (e.g. contracting it in on a temporary basis)?
- Information and communication systems:
 - To what extent are countries relying on existing surveillance and management information systems at national and sub-national levels? Have new information systems been constituted? How are they being used?
 - Has there been a special focus on communicating with travellers, for example through airlines, travel agents, and tour operators?
- Health workforce:
 - What, if anything, is being done to re-deploy the existing workforce?
 - What is being done to create surge capacity when needed?
 - Are plans being put in place to protect frontline workers?
 - What trainings and preparedness activities are being undertaken with the workforce? Do they comply with the need to avoid risky gatherings and transport? Are all avenues to take advantage of remote training of staff by radio, digital media, etc. exploited?
 - What is the role of community health workers in preparedness and response activities?
- Finance:
 - Is there an estimate of additional funding needs for COVID-19 emergency preparedness and response measures? How much of the needed additional funding has been mobilised already and how much more is expected?

- How do the government and donors (intend to) mobilise extra funds? Where will this come from – for example, government contingency fund, government contingency budget lines, government budget reallocations, donor support, etc?
 - Are activities being undertaken to allow more expenditure flexibility in response to the shock?
- Supplies, logistics, and infrastructure:
 - Are timely activities being undertaken to build up stocks of drugs, consumables, and equipment? Are stockpiles established at strategic hubs?
 - Have engagement and planning been undertaken with producers and suppliers?
 - Is supply chain information being made available to partners to coordinate activities?
 - Are activities being undertaken to redistribute drugs, consumables, and equipment?
 - Are emergency procurement and distribution plans being developed (or in place), including governmental capping of prices for essential drugs and supplies, and requisition, if necessary?
 - Are adjustments being made to infrastructure (e.g. treatment centres or units, upgraded or new facilities, mobile facilities, preparation of specialist centres)?
- Community engagement:
 - What is being done to communicate preparedness and response plans to the public? Is there a clear plan on how to engage with communities and businesses on what they can do to limit the virus' spread? How are existing communication networks, media, and community engagement staff being used?
 - Does this include a gender equality and social inclusion (GESI) element?
 - Are messages clear and consistently used? Is there a proactive plan to identify and correct misinformation?
 - Is there evidence that the population trusts the government's ability to handle the pandemic? If not, in what ways is this manifested?

Further work/Maintains technical assistance

- Does the government feel that it is receiving adequate technical support from development partners?
- Are there any entry points through which Maintains could provide technical assistance in a way that is non-duplicative and could strengthen preparedness and response activities, respecting the mandate of Maintains? Are there any obvious gaps which Maintains cannot fill but that require support from elsewhere?

Annex C Summary of COVID-19-related social protection programmes

Table 13: Summary of COVID-19-related social protection programmes

	Bangladesh	Kenya	Pakistan	Sierra Leone	Uganda
<i>Social assistance – Cash-based transfers</i>	Benefit under key safety net programmes will be increased (amount not determined yet). Disbursement of BTK 1,250 crore cash assistance among 5 million households through mobile financial services.	The National Treasury appropriated an additional KSH 10 billion (equivalent to US\$ 100 million) for supporting the elderly, orphans, and other vulnerable people with cash transfers. 1,094,238 Inua Jamii beneficiaries will start receiving KSH 8,000 (US\$ 80) each. Social distancing will be required at payment centres.	The 'Ehsaas Emergency Cash Program' launched, providing PKR 12,000/family and benefiting 67 million individuals (10 million families). There are three categories of beneficiaries: 1) 4.5 million existing 'Ehsaas Kafaalat' beneficiaries (all women) already getting PKR 2,000 will get an extra PKR 1,000 emergency relief (total=PKR 3,000) for the next four months; 2) 3 million affected households will be identified through the national socioeconomic database (eligibility threshold will be relaxed upwards); and 3) those with income below PKR 20,000.	Fast-track targeting of 25,000 extremely poor households in the regular National Safety Net Program (horizontal expansion). Emergency cash transfer of US\$ 120 per household (level of minimum wage in Freetown for two months) targeting 29,000 households of informal workers in urban areas of Freetown, Bo City, Kenema City, Makeni, and Port Loko (total US\$ 4 million).	'Girls Empowering Girls' urban cash transfer and mentoring programmes for adolescent girls, which is implemented by the Kampala Capital City Authority, has transitioned to remote coordination, adopted a virtual mentoring model to ensure delivery continuity, and implemented remote enrolment for pre-registered beneficiaries.
<i>Social assistance – Public works</i>		As part of the 'Kazi Mtaani' ('Jobs in the Neighbourhood') public works programme, 10,600 youths living in Nairobi's slums (Mathare, Kibera, Mukuru, and Korogocho) have been enlisted for street			

		cleaning, fumigation, disinfection, garbage collection, bush clearance, and drainage unclogging services, among others. Daily wage is about US\$ 6/day delivered via M-Pesa.			
Social assistance – In-kind	Food subsidies include selling rice at BTK 10/kg through OMS, down from BTK 30/kg.			On 4 April, 25 kg bags of rice, SLL 250,000 (US\$ 25.77), Veronica buckets, and other items were distributed to PWDs in district headquarter towns, reaching 1,891 individual and group beneficiaries. Outreach is continuing, expecting to reach approx. 10,000 PWD (500 per district and 2,500 in the Western Area), for a cost of SLL 4 billion.	The Government of Uganda has begun delivering food packages to 1.5 million vulnerable people in Kampala and Wasiko districts. The food packages include 6 kg of maize flour and 3 kg of beans and salt per head. Lactating mothers and the sick will additionally receive 2 kg of powdered milk and 2 kg of sugar.
Social assistance – Utility waiver		Fee waivers on person-to-person mobile money transactions on M-Pesa were approved. Also, a 100% tax relief for persons earning less than KSH 24,000 (US\$ 240) is planned.	The government has also allowed for deferment of utility bills for a period of one month initially, which may be increased further if the lockdown continues.		
Social insurance – Social security contributions					NSSF has announced measures that allow businesses/employers facing economic distress due to COVID-19 to reschedule NSSF contributions for the next three months without accumulating a penalty.

<i>Labour markets – Wage subsidy</i>	The government is to pay the salaries and wages of select factories (details to be announced).				
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Source: Gentilini *et al.* (2020)