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COPING WITH COVID-19 THE CASE OF BANGLADESH

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I. INTRODUCTION

The COVID-19 pandemic is a major catastrophe which has the potential for unprecedented loss of lives unless effective measures are taken to contain it. Governments all over the world have introduced various measures to contain the spread of infection; the chief among them is social distancing, more accurately described as physical distancing. As an immediate consequence of enforced distancing on a wide scale, a large part of economic activities has come to a standstill. The resulting shutdown of the economy, while essential for limiting the spread of infection, has potentially disastrous consequences not just for economic growth but also for the lives and livelihoods of millions of people who have been forced to stop working.¹ Our societies are thus caught in a cruel dilemma: the economy must be shut down to ensure effective physical distancing, otherwise too many lives will be lost; and yet shutting down the economy has its own dire consequences. The present paper seeks to present an integrated policy framework for dealing with this dilemma in Bangladesh.

In the developed world, the dilemma has often been posed as a choice between human life and the economy, or to look at it from the negative side, as a choice between death on a massive scale and a deep recession. In developing countries like Bangladesh, the nature of the choice must be seen in a slightly different way. Here, the consequence of an economic shutdown is bound to manifest itself in the form of massive loss of livelihoods for millions of people, for which no mitigating system such as unemployment insurance currently exists. This is especially true of those working in the informal sector of the economy, which accounts for by far the larger part of the labour force. Because of the very nature of the work they do and the amount of income they earn, the majority of the people who will lose their livelihoods have very little staying power; as a result, the threat of hunger will loom large. For a population that is already poor and undernourished, acute hunger will inevitably translate into heightened levels of morbidity and mortality. No wonder "If the virus doesn't kill us, hunger will" is a common refrain that is being echoed all around the developing world.

There is a genuine trade-off here whose existence cannot be wished away. This paper argues, however, that the severity of the trade-off can be reduced by adopting a judicious combination of three types of policy instrument: (a) physical distancing through economic shutdown, as a means of containing the spread of infection, (b) bold measures of economic support, especially entitlement support to households, who are facing the spectre of hunger as a consequence of economic shutdown, and (c) a powerful system of public health support, as a means of ensuring that the economy can be reopened 'safely'. The centrality of public health support is emphasized since it is the key to minimising the economic cost of the pandemic. The paper also discusses how the precise combination of the three instruments ought to change over time during the course of the pandemic so as to better manage the trade-offs that inevitably arise. For this purpose, the paper makes a distinction between two phases of the pandemic

– the first phase, characterised by strict distancing and widespread economic shutdown, and a second phase, characterised by more relaxed distancing and gradual reopening of the economy made possible by an effective system of public health support. Policy proposals are calibrated to meet the distinctive demands of the two phases.

The rest of the paper is organised as follows. A conceptual framework is developed in section II to clarify the inter-connections between the three types of policy instruments mentioned above. Section III discusses the main features of the kind of public health support that will be need to lay the foundation for the strategies of shutdown and economic support. In section IV, we derive certain principle of economic support based on the insights of the conceptual framework. Guided by these principle, Section V proposes a set of measures for economic support, building on the measures already adopted and/or announced by the government. Section VI discusses the fiscal implications of the proposed policies and Section VII summarises the main policy recommendations.

II. A CONCEPTUAL FRAMEWORK

We can begin by specifying a three-fold objective that should guide government's response to the pandemic: (1) minimising loss of lives directly attributable to the pandemic, (2) minimising hunger (and potential loss of lives) due to loss of livelihoods caused by measures designed to control the pandemic, and (3) minimising loss of output in the economy, again caused by measures designed to control the pandemic.

Each of these objectives is of paramount importance. As we demonstrate below, if the pandemic is allowed to spread undeterred, at least half a million people could die from COVID-19 in Bangladesh. There is, therefore, no choice but to adopt harsh measures such as temporary economic shutdown to contain the spread of the virus. But, as we also know, the shutdown imposed in Bangladesh has already resulted in a huge loss of livelihoods, causing nearly half the population to lose their entitlement to food and other essentials (see Section V). The lost entitlements must be restored in order avoid large-scale hunger and 'distress morbidity and mortality' induced by hunger. Finally, the direct economic cost of output lost due to shutdown is also going to be enormous. The World Bank has estimated that in Bangladesh the growth of GDP could fall drastically from the height of over 8 percent in 2018-19 to as low as 2-3 percent in 2019-20 and 1.2-2.9 percent in 2020-21, even if strict shutdown lasts for 2-4 months. If the shutdown were to continue for longer, growth could be negative, resulting in a fall in GDP (World Bank, 2020: p.36). All three objectives must, therefore, be pursued simultaneously.

The problem is, it is not easy to reconcile the three objectives, because measures designed to promote one goal may militate against the others. For example, strict enforcement of physical distancing through economic shutdown will promote the first objective very well, but this will make it harder to achieve the other two goals, because the stricter the observance of physical distancing, the more massive will have to be the scale and duration

¹See Ahmed *et al.* (2020) and PPRC-BIGD (2020) for evidence on the enormous loss of livelihoods that has already occurred in Bangladesh.

of economic shutdown, causing greater loss of output and livelihoods. On the other hand, if the government wanted to minimise the loss of output and livelihoods by relaxing the shutdown too early, infection could get out of control, thereby defeating the first objective, and eventually defeating the other two objectives as well, as even more drastic measures might be needed later to regain control over runaway infection.²

Difficult trade-offs are thus inescapable. Policy instruments must be chosen with a view to softening these trade-offs. A systematic way of thinking about it is to recall Jan Tinbergen's famous dictum that we must have as many instruments as objectives. Since we have three objectives here, we should look for three instruments. These are: (a) enforcement of strict physical distancing through temporary economic shutdown³, (b) a massive programme of economic support – in particular, entitlement support for those who have lost their livelihoods, and (c) an effective programme of public health support that will allow 'safe' re-opening of the economy through a massive campaign of testing, tracing and treatment (the 3T's).

It is only when the three instruments are employed together that it will be possible to deal effectively with the trade-offs among different objectives that will arise inevitably in the course of controlling the pandemic. Public health support would have to play a key role here because it is instrumental in softening the trade-off between infection distress and economic distress. To see precisely how the trade-offs can be softened, it may be helpful to use a simple model that examines the interconnections among the three instruments systematically. Given the nature of the problem we confront, the model involves both epidemiological and economic considerations. Let us begin with some basic issues in the epidemiology of COVID-19 because they set the parameters within which both economic and public health measures must operate.⁴

It is important to begin by recognising that there is no easy way out of the COVID-19 pandemic. When a virus first causes an outbreak of disease, there is initially a limited window of opportunity when it can be nipped in the bud – by identifying the few affected individuals and keeping them in quarantine so that the virus cannot escape to the rest of the community. In that case, either the patients will recover by killing the virus with the help of antibodies created by their immune system, or the patients will die taking the virus to the grave with them. Either way, the demon is gone.

²It is sobering to note that on the very day (31 May, 2020) the Government of Bangladesh allowed significant relaxation of economic shutdown, with a view to reviving the economy and restoring livelihoods, the country recorded the highest daily levels of both new infections and COVID-related deaths. See, <https://www.thedailystar.net/coronavirus-deadly-new-threat/news/highest-number-covid-19-deaths-report-ed-day-40-die-total-infected-crosses-47000-1906948>.

³There are other measures too, such as regular handwashing, wearing masks in closed environments and maintaining a healthy life style, which are also important for containing infection. We are focusing here on physical distancing through economic shutdown because of its enormous economic impact.

⁴For reliable evidence on the properties of the novel coronavirus and COVID-19, see Verity et al. (2020) and WHO (2020). It must be remembered, however, that the evidence is itself evolving and some of the parameters reported below may change over time.

However, once the genie has come out of the bottle and spread across a large swathe of the community, things become much more difficult. In this situation, the pandemic will end only when a community achieves what is known as 'herd immunity'. This is a state of affairs where a certain threshold proportion of the population has acquired immunity from the disease so that the virus finds it hard to locate new victims.⁵ The threshold of herd immunity can be achieved in two ways. First, there is a natural process, whereby infection spreads undeterred across the community, and the infected people acquire immunity with the help of antibodies created in response to infection. Once the spread of infection has created natural immunity among a sufficiently large number of people to ensure 'herd immunity', the pandemic gradually dies out.⁶ The second way is through human intervention – in particular, by gaining immunity through vaccination.⁷

The problem, however, is that the second option is not currently available; and while the first option is always available, it is too painful to contemplate. If infection is allowed to spread undeterred in the hope of achieving 'herd immunity' through the natural process, a conservative estimate suggests that almost half a million people could die in Bangladesh before the pandemic comes to an end.⁸ This is a mind-boggling figure, evocative of an impending apocalypse. The natural path to herd immunity is, therefore, not really an option. However, the other option – acquiring immunity through vaccination – is not available at the moment. So, the only sensible thing the society can do is to find some way of keeping the rate of infection low, so that fatality from infection be kept well below the natural path, until a vaccine arrives to eventually put the pandemic to an end. In other words, what the society needs is a 'holding operation', which will essentially buy time until vaccines become available. This is where the first instrument comes into play. Physical

⁵An alternative possibility is that the virus might mutate into a variety that is far less lethal so that we can live with it (like the coronaviruses that cause common cold). But we cannot bank on that happening.

⁶For a lucid discussion of the concept and relevance of herd immunity in the context of the current discourse on coronavirus, see O'Grady (2020).

⁷Whichever path is chosen, success depends on controlling a parameter called the virus's basic reproduction number denoted as R_0 , which stands for the average number of persons that can be infected by a single infected person. As R_0 falls, so does the rate of infection; and when it becomes less than 1, it heralds the gradual demise of the virus, as fewer and fewer people will be infected over time and eventually the virus will find no way out. For a simple exposition of the meaning and significance of R_0 , see Fisher (2020).

⁸The total number of estimated deaths depends on the peak value of cumulative fatality rate, which in turn depends on two parameters: the value of cumulative infection rate obtaining at the time the threshold of herd immunity is reached and the infection fatality rate (the percentage of infected people who die because of infection). Since the novel coronavirus is so new, scientists do not yet have firm estimates of either of the two parameters. Based on the evidence available so far, their best estimate is that somewhere between 50 and 70 percent of the population will have to be infected if herd immunity is to be achieved through the natural path. The value of infection fatality rate is also uncertain (Lloyd 2020), but a conservative estimate would be around 0.6 percent, based on the experience of Wuhan, China. By applying this fatality rate to the lower end of the infection rate associated with herd immunity (50 percent), it can be estimated that at least half a million people will die in Bangladesh ($170 \text{ ml } 0.5 \text{ } 0.006$) if the epidemic is allowed to run its natural course.

distancing, applied rigorously so as to cause an economic shutdown, is precisely the kind of holding operation that is needed.

By reducing interactions, physical distancing reduces the scope for new infections.⁹ At any given point in time, the rate of infection will be lower than under the natural path, which will allow the existing healthcare system to deal with the patients more effectively, thereby helping to reduce the number of deaths. As a result, the cumulative fatality rate will also be lower at any point in time. Hopefully, vaccines will arrive at some point down the road, but until that happens physical distancing would have done the job of 'holding operation' by keeping the fatality rate below the natural path.

The logic of physical distancing suggests that the stricter the observance of distancing, the greater will be the gain in terms of saving lives from infection, simply because the rate of infection will be slowed down further. The problem with stricter distancing, however, is that it will also impose a heavier economic cost – in terms of loss of output, livelihoods and possibly even lives. Distancing will inevitably require reduction in economic activities, and more stringent distancing will require more widespread shutdown of the economy. As argued before, in the context of a country like Bangladesh, shutdown in economic activities not only means loss of economic output but potentially loss of lives as well – through hunger and malnutrition; we may call it 'distress mortality' to distinguish it from infection fatality.¹⁰ By requiring more widespread shutdown of the economy, stricter distancing will entail higher level of distress mortality. Thus arises the trade-off between infection fatality and distress mortality.

Faced with this trade-off, the policymakers will have to employ the second instrument – viz., economic support – in particular, entitlement support to those who have lost livelihoods, so as to avert hunger and distress mortality. If the scale of entitlement support is large enough to mitigate widespread hunger, the trade-off between lives and lives can be avoided. But this does not mean that trade-off disappears completely; only the content of the trade-off changes. The stricter the distancing regime, the bigger will have to be the scale and cost of economic support; in addition, there will remain the cost of lost output because of the shutdown. Thus, while saving more lives from infection, a stricter distancing regime will impose a bigger economic cost. The only way this trade-off can be softened is by introducing the third instrument – viz., namely public health support. The role of this instrument, in the present context, is to enable 'safe' reopening of the economy. Once the capability to 'test, trace and treat' is developed well, it will be possible to send back to work those individuals who test negative, while keeping the rest away. This will permit gradual reopening of the economy, thereby reducing economic cost without aggravating infection mortality. That is how the trade-offs will be softened.

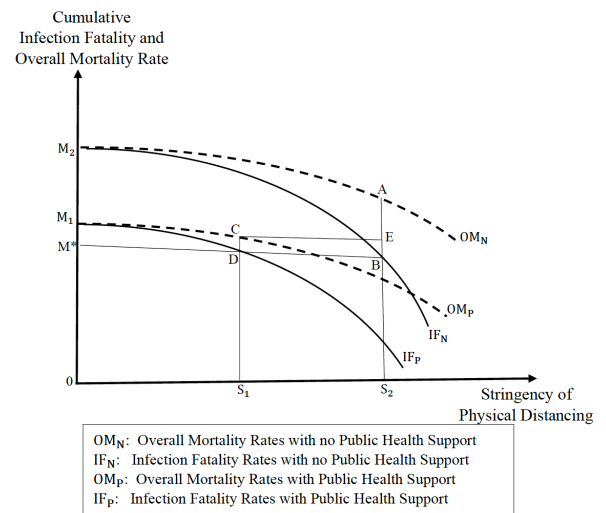
The interconnections between the three instruments are analysed in Figure 1, where we show levels of mortality

⁹The effect of distancing is thus akin to that of low population density. Technically, it amounts to reducing the basic reproduction number R_0 .

¹⁰The term 'distress mortality' is used here as a shorthand expression for all kinds of distress caused by lack of entitlements, including pangs of hunger, morbidity and mortality.

associated with different degrees of stringency of distancing, under two alternative regimes of public health support. Let us first focus on the upper two curves. The curve shows the final cumulative levels of infection fatality that will be associated with different degrees of distancing in the absence of public health support.¹¹

Figure 1. Physical Distancing, Public Health Support and Mortality



We have noted earlier that a more stringent distancing regime will lead to lower cumulative fatality rate. Accordingly, the curve is shown to fall as the level of stringency rises. The curve shows the final cumulative levels of overall mortality – combining infection fatality and distress mortality – that will be associated with different degrees of distancing in the absence of the other two instruments. The vertical gap between the two curves shows the level of distress mortality. Since distress mortality is higher at stricter levels of distancing, the gap between the two curves widens as distancing becomes more and more stringent.¹² With zero distancing (and hence no economic shutdown), both infection fatality and overall mortality coincide and they are denoted by the point on the vertical axis.

Now imagine a scenario where community transmission of the virus has already occurred, and somewhat belatedly the policymakers have woken up to the reality and opted to take drastic measures of physical distancing, represented in the diagram by S_1 , resulting in large-scale economic shutdown. If the rules of distancing are strictly observed, the authorities would succeed in bringing down the final cumulative infection fatality from M_2 to M^* .

¹¹In this and the ensuing analysis, 'final' means the point at which the epidemic comes to an end. As discussed earlier, this will happen when the threshold of herd immunity has been reached either through community transmission or with the help vaccination.

¹²The way the curves have been drawn suggests that as the stringency of distancing rises the fall in infection mortality more than compensates for the rise in distress mortality so that overall mortality falls. But this need not be the case. The rise in distress mortality could in principle exactly offset or even overwhelm the fall in infection mortality, in which case the curve will be either horizontal or upward sloping instead of being downward sloping. But none of this will alter the substance of our argument. For our argument to hold, all that is needed is that the gap between the two curves widens with the stringency of distancing.

However, a heavy price will be paid in terms of distress mortality – shown by the vertical gap AB between the two curves at the point . Suppose, the government is fully alert to this danger and attempts to avert distress mortality by adopting the second instrument i.e., by offering generous entitlement support. And imagine that support is so generous and effective that the entire distress mortality is eliminated. Overall mortality would then be exactly equal to the infection fatality rate M^* .

But there would still remain a huge economic cost, consisting of the cost of economic support for those who have lost their livelihoods and the loss of output due to shut down. Introduction of the third policy instrument helps minimise this cost. Suppose an effective public health programme has been put in place so that any given level of infection fatality can be maintained while reducing the stringency of distancing. Alternatively, for any given level of stringency, the level of infection fatality comes down. In the diagram, this means the infection fatality curve will shift to the left (or go down) – from to . Correspondingly, the overall mortality curve will also shift from to . An immediate consequence of this shift is that while previously a strict regime of physical distancing (represented by) was necessary to achieve the infection fatality rate M^* , the same fatality rate can now be achieved at a more relaxed regime of distancing (represented by). As a result, the stringency of shutdown goes down and hence the loss of output goes down. At the same time, the potential of distress mortality also comes down (because more people are able to work under the relaxed regime) – from AB to CD ; correspondingly, the need for economic support also comes down. The overall economic cost of distancing can thus be reduced without aggravating infection mortality. The inescapable trade-offs would thus have been softened by the combined effect of the three instruments applied in tandem.

The main insights of the preceding analysis can be summed up as follows. Physical distancing and the consequent economic shutdown are needed to reduce the spread of infection. However, distancing by itself cannot bring the epidemic to an end. The epidemic will end only when the community achieves herd immunity, either naturally through community transmission of infection, or artificially through vaccination. Since achieving herd immunity through the natural path would be disastrous in terms of lives lost, the only sensible strategy is to wait for the vaccination to arrive and meanwhile try to keep the spread of the virus as low as possible through physical distancing. In short, the objective of physical distancing is to ‘buy time’, not to cure the epidemic. The more rigorously we implement physical distancing, the lower will be the loss of lives from infection during the waiting period. However, more rigorous physical distancing will also entail more stringent and more prolonged economic shutdown, causing harsher economic distress. This gives rise to an inevitable trade-off between keeping infection under control and keeping economic distress under control. Public health support can help manage this trade-off better by reducing the length of time for which strict distancing will be needed.

Several policy implications follow immediately from this analysis. First, in order to achieve the three objectives of reducing infection mortality, avoiding distress mortality and minimising loss of output, policymakers must adopt three instruments in tandem – namely, physical distancing

(resulting in economic shutdown), generous economic support and strong public health support.

Second, while all three instruments are essential, public health support should be considered the foundation of any policy response to the pandemic. The speed at which public health capability can be developed will determine the duration of economic shutdown. The faster this capability is developed, the sooner will it be possible to re-open the economy safely; as a result, the less will be the compulsion to adopt a highly expensive economic package to mitigate economic distress and the smaller will be the direct loss of output.¹³ The pandemic will inevitably impose an economic cost; setting up a strong system of public health support is the key to minimising this cost.

Third, because of the interconnections between the three policy instruments, it is not possible to specify the level of any one policy instrument without reference to the others. For example, for how long strict distancing should be enforced in the form of economic shutdown depends on how soon it is possible to set up an effective system of public health support that will enable safe reopening of the economy. Similarly, the nature and level of economic support that will be needed in order to avoid distress mortality will depend on both the stringency of distancing and the efficacy of public health support. The more stringent the regime of distancing (and hence more extensive the extent of economic shutdown), the higher will have to be the level of economic support so as to mitigate the effect of livelihoods lost. On the other hand, strong public health support will reduce the need for economic support by permitting a shorter period of strict shutdown and hence a faster restoration of livelihoods. The policy proposals made in the ensuing sections have been made with these considerations in mind.

III. THE CENTRALITY OF PUBLIC HEALTH SUPPORT

The conceptual framework developed in the preceding section has made the case that public health support must be treated as the foundation of any comprehensive policy package in response to COVID-19. Indeed, as explained there, one cannot even discuss economic support in a meaningful way, without first specifying the extent to which public health measures will be available. This is because answers to questions such as how much economic support will be needed, and for how long, depend crucially on how quickly adequate public health measures can be put in place so that the economy can be opened up safely. It is beyond the scope of the present paper (and beyond the expertise of the present author) to offer a detailed account of the quantity and quality of public health measures needed, let alone to attempt a full costing of such measures. Nevertheless, in view of the centrality of public health support in the overall scheme of COVID19-response, it is necessary to outline

¹³The centrality of public health support has been stated eloquently by economist Barry Eichengreen (2020): “In the fight against the Covid-19 pandemic, economists, economic policymakers and bodies such as the G7 should humbly acknowledge that “all appropriate tools” imply, above all, those wielded by medical practitioners and epidemiologists.” (Emphasis added)

at least the broad contours of the nature and magnitude of support that must be ensured.

The task of public health support in the present context is two-fold: (a) testing people for the presence of infection, so that those who test negative can be allowed to go back to work, and (b) isolating and treating those who test positive for current infection and tracing their contacts for further action, if needed. If these two tasks can be performed effectively on a large scale, this will allow us to relax the severity of economic shutdown and thus reduce economic distress without aggravating infection fatality. The sooner we can install an extensive system of public health support, the quicker shall we be able to relax the shutdown (while still waiting for the vaccine); as a result, the lower will be the magnitude of economic distress and hence the smaller would need to be the scope of economic support. This is the basis of the contention that the size and duration of economic support depends crucially on the availability of public health support.

What, then, needs to be done on the public health front? First, on the issue of testing, we may begin by noting that two different types of test are being considered all over the world. There is firstly an antigen test to check whether a person has infection at the time of testing. The standard version of this test is known as the RT-PCR (Reverse Transcription-Polymerase Chain Reaction) test, and it is being used all over the world. The second type of test looks for signs that a person has had infection in the past – this is known as the antibody test, as past infections are expected to leave their marks in the form of antibodies that the immune system creates to fight the virus.

The two types of tests are not substitute of each other, however, as each has its own strengths and limitations. As a test for the presence of current infection, the antigen test is important for the purpose of treatment and containment of the disease. The antibody test is less useful for testing current infection (since the antibodies might have been created by a past infection that no longer exists), but it is more useful for assessing the cumulative prevalence of infection and the extent of acquired immunity in the community – a vital piece of information required to devise public health strategies (e.g., risk stratification, vaccine prioritisation). Both types of tests should, therefore, be applied in tandem.

An important question in the context of this paper is: will these tests serve the purpose of letting the 'safe' workers go back to work so that the economy can be allowed to reopen gradually? If a person is found negative by either test, indicating no current infection, then that person can be considered 'safe' to go back to work, at least for the time being. The test will have to be repeated, however, because there is no guarantee that a person who has no infection now will not get infected in the future. In this respect, the two tests are similar. The difference lies in dealing with cases that test positive. In the first test, a person found positive is definitely 'unsafe', as it indicates current infection; so, instead of being sent back to work that person should be isolated and treated. By contrast, in the second test, if a person is found positive, then that person is 'very safe' because he or she would have acquired immunity through the antibodies created by past infection. Such a person can not only be sent back to work, but also should not require repeated testing (unlike in the case of negative outcome by either test). In this respect, an

antibody test can be extremely useful for minimising the total amount of testing needed. The problem, however, is that so little is currently known about the novel coronavirus that the mere presence of antibodies cannot tell us how strong the immunity is against fresh infection and for how long the acquired immunity will last. As a result, even if a person tests positive with an antibody test, the possibility of future infection cannot be ruled out until scientists learn more about the immune response to COVID-19; as of now, repeated testing will still be needed.

The upshot of this discussion is that both types of test can prove useful for the purpose of identifying the 'safe' workers who can be allowed to return to work, provided the tests are reliable and repeated frequently. Furthermore, until a vaccine is found, the tests will have to be conducted not just repeatedly but also on a massive scale if most of the economy is to remain open. To get a sense of how massive the scale of testing will need to be, consider a proposal made by Paul Romer, a Nobel-laureate economist, who suggested that, if almost all of the US economy is to remain open, more than 20 million tests will have to be conducted every day, so that every American citizen can be tested every two weeks.¹⁴ Romer also shows that even though the cost of such a massive amount of testing will inevitably be high, it will still be worthwhile because the economic loss inflicted by the shutdown is much higher. By applying the same logic to Bangladesh, if the economy were to remain almost fully open, nearly 12 million tests will have to be conducted every day, which will enable the entire population to be tested every two weeks. There are those who think a less ambitious scale of testing than the one suggested by Romer may suffice, if testing is supplemented by other measures such as contact tracing. But, even by their criterion, the number of tests per day needed in Bangladesh would run into millions rather than thousands, which is the current situation in the country.¹⁵

In view of the massive scale of testing needed, cost considerations as well as the feasibility of scaling up assume great significance. In this respect, antibody tests have the advantage that they are much cheaper than PCR tests. While a standard PCR test can cost several hundred dollars, a typical antibody test could be carried out at less than 10 dollars. In fact, a locally developed test, called the G-Rapid Dot Blot test, can cost as low as four dollars per test kit.¹⁶ Antibody tests have the further advantage that they can give results very quickly. While it can take several days to get the result of a standard PCR test, the results of antibody tests can be obtained within minutes. The scientists who developed the local rapid test claim that currently their test takes about 15 minutes but with further refinement the time required can be brought down to as low as five minutes. Especially important in the present context, the production of antibody test kits can be scaled up very significantly within a relatively short

¹⁴See, <https://www.msnbc.com/all-in/watch/nobel-prize-winner-we-should-be-testing-30-million-for-covid-19-daily-81912389636>

¹⁵The situation prevailing on May 31, 2020: "A total of 11,876 samples were tested in 52 labs across the country in the last 24 hours." See, <https://www.thedailystar.net/coronavirus-deadly-new-threat/news/highest-number-covid-19-deaths-reported-day-40-die-total-infected-crosses-47000-1906948>.

¹⁶This test was developed by the *Gonoshaysthaya Kendro* initially as an antibody test but was subsequently modified to serve as an antigen test as well, and is currently undergoing validation assessment.

period of time. In the case of G-Rapid Dot Blot test, it has been suggested that with an investment of \$5 million over a period of six months it should be possible to produce 100 million tests kits per month.¹⁷ This is the kind of scale at which testing will be needed, even if the economy of Bangladesh were to reopen only partially but safely.

While pursuing these and other avenues of scaling up the production of reliable antibody tests, efforts must be made simultaneously to encourage the search for cheaper ways of doing PCR tests at a large scale. Given proper incentives, this is not an impossible task. In India, for example, official approval has recently been given for a locally developed PCR kit, which costs one-fourth of the imported kits and can deliver results in less than three hours. The private laboratory that developed this kit has claimed that it can manufacture up to 100,000 kits per week which can be further scaled up if needed.¹⁸

There is no reason why testing capacity cannot be increased manifold in Bangladesh, given adequate incentive to the producers of test kits. If it proves impossible to scale up so much that the entire economy can be opened up safely in the near future, the goal should be to scale up as much as possible and then to reopen the economy commensurate with the scale of testing achieved. The point is to provide maximum possible incentive so as to ensure a massive scale up, even if we eventually fall short of the scale needed to re-open the economy in its entirety.¹⁹

We suggest that the best policy in the present circumstances is for the government to give an undertaking that it will buy whatever amount is supplied (up to a limit) at an agreed price, and then to provide the tests free of cost, at least to the poorer households who would be provided with entitlement support.²⁰ The commitment to buy whatever is produced is the mechanism needed to ensure adequate supply, while providing the test free of cost to the poor is the mechanism needed to ensure that demand does not lag behind supply. In the process, the government will have to bear the brunt of the financial cost, while the task of innovation falls to the private sector.

This is not as radical a proposal as it may sound. Creation of new technologies and provision of healthcare both involve large positive externalities, and standard economic theory suggests that in the presence of positive externalities the market, if left on its own, will not supply the socially desired amount. The government must either carry out these activities by itself or give adequate incentive to the private sector to deliver the goods. Since the government sector is not usually very good at innovation, this task is better left to the private sector, but the government must bear the financial cost. The need for providing the tests to the people free of cost (or at least at a heavily subsidized rate) arises also on the ground of externalities that are

¹⁷The information related to the G-Rapid Dot Blot test reported in this paragraph was obtained through personal communication with the scientists involved.

¹⁸See, <https://homegrown.co.in/article/804276/coronavirus-india-first-indian-testing-kit-detects-covid-19-in-2-5-hours>.

¹⁹In that event, full reopening of the economy will have to wait until a vaccine becomes available.

²⁰The reach and scope of entitlement support is discussed in section V, where we estimate that nearly half the population will need entitlement support for a prolonged period.

involved in the context of mass testing. People need to take tests not so much to protect themselves as to protect others – so that the ‘safe’ individuals can be allowed to work without endangering others’ lives, while the ‘unsafe’ ones are isolated, again so that others are not endangered. It is in this other-regarding effect of testing that externalities come in.²¹ The presence of externality in turn could create a propensity for free riding. People might think: if others take measures that will ensure my safety, why should I pay for it myself? This is especially true in a poor country like Bangladesh, where meagre household resources have to confront competing demands for food and other needs, including healthcare. In this situation, if poor people are asked to pay for the tests, the demand may fall short of what is needed in order to ensure the safety of the society as a whole. Offering tests free of cost is the simplest way to prevent this from happening.

Mass testing is one arm of public health support that will be needed in order to manage the pandemic. The other arm is facilities for isolating, contact tracing and treating the patients who will test positive for current infection. As the rate of testing is ramped up, the demand on these facilities will also expand correspondingly. The need for both material and personnel will increase manifold; the number of doctors, nurses, PPE, hospital beds, oxygen, ventilators, and medicine related to COVID treatment will have to be multiplied by several factors from the current levels. But just as the country is not yet ready to undertake testing on the required scale, the country is not equipped to supply these facilities at the required level either. The government must make an all-out effort during the first phase – the phase of strict distancing – to build up the necessary capacity before it contemplates relaxing the restrictions on distancing in the second phase.

Capacity building will involve both commitment of additional financial resources and organizational innovation. Historically, the health sector of Bangladesh has been starved of resources in a scale that has few parallels even in the developing world. As the comparative picture presented in Table 1 shows, Bangladesh lags way behind its South Asian neighbours and all grouping of low-income countries in terms of government expenditure on health, whatever criterion is used – share of GDP, share of total government or per capita expenditure.

For example, around 2017, the government of Bangladesh spent less than 0.4 percent of GDP on the health sector; the next lowest in South Asia was Pakistan which spent 0.9 percent. Even the least developed countries (LDCs) as a group spent 1 percent of GDP on health, and the group of lower-middle income countries, to which Bangladesh currently belongs, spent 1.3 percent. What is also a matter of grave concern is the fact that the share of GDP spent on the health sector has been declining over time. During the decade of the 2000s, the share was around 0.52 percent; in the next five years, between 2011 and 2015, it came down to 0.49 percent; and in the next two years, it fell further to 0.38 percent. This means that as the GDP of the country has grown relatively rapidly in the recent years, government expenditure on health has failed to keep pace with it.

²¹Pure self-interest is not entirely absent here, insofar as those who have been diagnosed as ‘safe’ will be able to earn a living, while those diagnosed as ‘unsafe’ may hope to receive medical treatment. But the point is that, beyond the impact on one’s own well-being, testing also has an impact on others, for which there is no direct gain for those who would take the test. This is what gives rise to the externality.

Table 1. Government Expenditure on the Health Sector: A Comparative Picture 2017

Country/Region	Percentage of GDP	Percentage of Total Government Expenditure	Per Capita Expenditure (USD)
Bangladesh	0.38	2.99	6.06
Nepal	1.24	4.50	10.70
Pakistan	0.92	4.30	14.08
India	0.96	3.38	18.80
Sri Lanka	1.63	8.48	68.50
South Asia	0.94	3.55	14.95
Sub-Saharan Africa	1.87	---	27.39
Least Developed Countries	1.03	5.84	10.82
Low Income Countries	1.25	---	7.90
Lower Middle-Income Countries	1.29	5.65	25.59

Source: World Development Indicators 2019

Such a poorly funded healthcare system can hardly be expected to take good care of people's health even in normal times, let alone in a state of pandemic. Even much better equipped health systems around the world are getting overwhelmed by the pressure of COVID-19. If the healthcare system of Bangladesh has not yet fallen apart completely from the pressure, it is only because testing has not been extensive enough to identify all those who need treatment.²² If and when the scale of testing is ramped up in the manner suggested above, the existing system will no doubt fail utterly to cope unless resources are devoted to this sector massively and at a rapid pace. The government has as so far allocated a paltry Tk. 1,500 million to the health sector in response to the pandemic, which is less than 0.01 percent of GDP. This is symptomatic of the neglect with which the health sector has all along been treated in Bangladesh; but if the authorities do not realise even now that the time has come to make a decisive break with the past and prioritise the health sector, this pandemic is going to wreak havoc on the economy as well as on human life. Financial allocation for the sector must be pushed up at least by 1 percent of GDP (thus making the overall allocation to the health sector comparable to the average of lower-middle income countries) if the public health system is to have any chance of fighting the deadly virus successfully so that, not only human lives are saved, but also the economy can function with some degree of normalcy.

For the programme to succeed, however, commitment of additional resources is not going to be enough. An extensive and highly efficient organizational framework must be put into place so that services can be delivered

²²By the end of May, 2020, the total number of tests performed in Bangladesh was 1.7 persons per thousand, which was not only way below the figures for developed countries such as Portugal (76.3), Spain (76.1), Italy (60.9), UK (57.7), USA (49.4) and Germany (47.2), but also lower than in most developing countries – for example, Chile (28.6), Malaysia (16.0), Costa Rica (7.5), Ghana (6.7), Rwanda (5.8), Brazil (4.1), India (2.5), Pakistan (2.4) and Nepal (2.2). Source: One World Database on COVID-19: <https://github.com/owid/covid-19-data/blob/master/public/data/testing/covid-testing-all-observations.xlsx>.

quickly whenever and wherever needed.²³ The official organizational structure is simply not equipped to face this challenge on its own; the government must reach out for help from outside. Apart from inducting the private healthcare sector within an integrated emergency healthcare network, the government must also involve the social sector – the extensive network of NGOs that have a rich experience of providing healthcare services at the grassroots level. Despite its many failings, the government of Bangladesh has a distinguished history of forging effective cooperation with the social sector for providing public health facilities to the masses – for example, mass immunization, oral rehydration therapy, and improvement in sanitation and water supply. Indeed, it is primarily through this cooperation that Bangladesh has achieved quite startling progress in health outcomes, compared to other low-income countries, despite its pitifully low expenditure on the health sector, leading to an apparent paradox that has been dubbed as a 'development surprise' (Asadullah *et al.*, 2014).

The time has come to revive that spirit of cooperation once again. The government already has an extensive network of community clinics at the rural level and healthcare centres at union and upazila levels, even though they are heavily underfunded and undermanned. It should be possible to find a way so that these facilities can join forces with the NGOs who have expertise in the health sector, thereby developing a nation-wide network that is capable of providing both testing and post-test healthcare at a massive scale.

Only when the public health system is capable of undertaking mass testing and providing the concomitant healthcare services to the infected people, will it be possible to reopen the economy gradually. And only then

²³Organizational improvement encompasses many dimensions – for example, (1) training a large cadre of health assistants and/or lab technicians nationwide to do millions of tests per month, (2) improving operating procedures with respect of health and safety during sample collection, optimal processing and analytical protocols that need to be maintained to ensure reliable results, (3) monitoring and evaluation of training, supply chain and quality, (4) ensuring compliance with testing, (5) governance structure, and (6) contact tracing.

will it be possible to achieve the triple goals of saving lives, reducing economic distress and minimising the loss of economic output.

IV. SOME PRINCIPLES UNDERLYING POLICIES FOR ECONOMIC SUPPORT

The conceptual framework developed in section II makes it clear that the size and content of economic support cannot be decided independently of what is being done about the other two policy instruments – viz., physical distancing and public health support. The capacity of the public health system to test for infection and manage the patients is especially important in this regard. How well the public health system can perform these tasks will dictate how stringent or relaxed would distancing have to be, which in turn will determine how much of the economy can be allowed to remain open and how many people can be allowed to return to work, and this in turn will have a bearing on the nature and size of economic support. This line of reasoning leads to several principles that should guide the formulation of policies for economic support.

A. Two-Phase Approach

Greater ability of the public health system for testing and patient-management will permit more relaxed distancing and less severe shutdown. The nature of economic support that will be relevant under such conditions would be very different from what would be needed under a regime of strict distancing when most of the economy will have to remain closed. But, as discussed in section III, it will take time before the current public health system of Bangladesh can be brought up to a level that would permit significant relaxation of physical distancing. Therefore, policymakers will need to contemplate two different types of economic policy response appropriate for two phases: (1) the first phase, characterised by very strict physical distancing and very little opening of the economy, and (2) the second phase, when distancing can be relaxed significantly, thus allowing gradual re-opening of the economy.

The duration of the first phase will depend on two factors: (a) how quickly the regime of physical distancing is able to bring down the daily rate of infection on a consistent basis i.e., how soon we can cross the peak of infection, and (b) how quickly the capability of the public health system can be developed to do the three T's (test, trace and treat) effectively.²⁴ Experience of other countries suggests that

²⁴It is obvious that Bangladesh has yet to meet either of the two conditions at the time of completing this paper (June 1, 2020). The rate of infection is still rising – the peak is nowhere in sight. And the proportion of population being tested is still pitifully low (as noted in section III). And yet one observes with consternation that the government has decided to relax economic shutdown significantly starting from May 31, 2020, as if the first phase is over. Though well-intentioned, this pre-mature reopening of the economy could cost the country dearly. It will not only cost more lives as infection spikes ever more strongly, increased fatality will eventually oblige the government to reimpose shutdown even more harshly than before, thus prolonging the agony. Instead of treading such a dangerous path, the government should focus on fulfilling the first two conditions, so that safe re-opening can be possible in about three months from now.

if distancing can be implemented rigorously across the country, it may be possible to meet the first condition in about three months. At least the same length of time would be needed to revamp the public health system up to an acceptable level of efficacy. We thus assume, somewhat optimistically, that the first phase will last for about three months. As for the onset of the second phase, it has to be recognised that building up a strong public health system is a continuous process. Therefore, the second phase itself will have to be viewed as an evolving scenario in which more and more enterprises are allowed to reopen as our capacities to test and manage patients become gradually stronger. The duration of the second phase will depend on how long it takes for herd immunity to be achieved. We hope this will be achieved through vaccination rather than through the natural process. On the expectation that a workable vaccine will be available early next year, we have assumed tentatively that the second phase will last for at least six months.

B. Two-Sector Approach

It needs to be borne in mind that even in the first phase, with strict distancing in place, the entire economy cannot be closed down; some essential sectors must continue to function. After all, people must be provided with food, medicine and healthcare, for example. If they are to function effectively, government's policy package will have to pay special attention to the needs of these sectors.

While thinking about economic support, it will, therefore, be useful to think in terms of a two-sector approach: an 'essential' sector that must remain open even in the first phase and a 'non-essential' sector that remains closed until the second phase sets in.²⁵ We should, however, be clear in our mind as to what constitutes an 'essential' sector in the present context. Whether a sector is 'essential' does not depend on either its weight in the GDP, or its share of employment, or its importance as a foreign exchange earner. It depends solely on whether continued operation of the sector is essential even in a regime of strict distancing in order to support the life and sustenance of the population. The core of it is the food sector broadly defined.²⁶ The rest of the economy is 'non-essential' in the present context.

The two sectors cannot be viewed in isolation, however. They are interlinked in a way that is important to appreciate because it has an important bearing on policy. The households belonging to the 'non-essential' sector would be facing the threat of hunger, but their hunger can be averted only by the 'essential' sector that is capable of providing the goods and services needed by these households. In other words, the 'essential' sector needs to be supported in the first phase not only for the sake of the people who are continuing to earn their livelihoods from it but also for the sake of the households

²⁵For an intuitive justification for adopting the two-sector approach towards COVID-response, see Krugman (2020). A more technical analysis is provided by Guerrieri *et al.* (2020).

²⁶The broad definition includes not just production but also transportation and distribution networks constituting the supply chain of the food sector, as well as ancillary services such as public administration, public utilities and financial intermediation, including both banks and microfinance institutions, that are needed to support both production of food and its supply chain. All these activities must be allowed to operate in a relatively unencumbered manner even in the first phase.

who used to belong to the 'non-essential' sector, which is now closed. Any support intended for the households left jobless in the 'non-essential' sector will be ineffective unless the 'essential' sector is capable of meeting their needs.

C. Changing Focus of Economic Support

An implication of the two-phase two-sector approach is that the focus of economic support must change over time. The difference in the focus in the two phases can be stated simply. In the first phase, the focus will have to be primarily on households – to compensate for their loss of livelihoods caused by widespread economic shutdown required by strict distancing. Millions of households have lost their entitlement to food and other essentials of life as a result of economic shutdown.²⁷ Restoring their entitlements should be the prime concern in this phase. There will have to be an element of 'enterprise'-focus too, in so far as enterprises in the 'essential' sector must be supported so that they can provide the goods and services demanded by those receiving entitlement support. The primary focus would still be on households, but enterprises involved in the 'essential' sector will need to be supported, as a complement to entitlement support for households.

In the second phase, the focus will begin to shift away from households and towards enterprises in all sectors, including the 'non-essential' sector. As more and more enterprises begin to function, many households will also begin to earn their livelihoods by working; to that extent, the need for entitlement support to households will diminish. This shift will have to happen first slowly and then more rapidly as the second phase matures enough to permit more and more enterprises to be brought back to economic life. Even within the second phase itself, some refocussing would be needed as the phase evolves. Initially, the focus will have to be on the smaller enterprises, as their staying power is the weakest and as such their need for support is the greatest. The larger enterprises can be taken care of later.²⁸

Thus, the focus of economic support will have to change in the following sequence: primarily households in the first phase, gradually shifting towards enterprises in the second phase – initially, smaller enterprises and then the larger ones. From this perspective, the sequence in which the Government of Bangladesh has been announcing its various policy packages is completely the wrong way around. The first few packages it announced were mainly enterprise-focussed, and even within them, the large-scale export sector received priority attention.²⁹ Household-

²⁷For evidence based on large-scale rapid surveys, see PPRC-BIGD (2020) and Ahmed *et al.* (2020).

²⁸Apart from timing, the treatment of smaller and larger enterprises will also have to differ in terms of content. For smaller enterprises, the grant element will have to have precedence over loan, while for the larger enterprises the opposite will have to be the case.

²⁹It might be argued that the very first package – aimed at the export sector, mainly the garments industry – was actually a kind of entitlement support in disguise since the purpose of the support was to enable the firms to pay salaries to their workers. But it is not at all clear why, in any comprehensive scheme for entitlement support, protecting the entitlement of garment workers should receive priority over protecting the entitlements of other segments of the society, especially workers in the informal sector.

focussed social security support came later and that too initially in a patchy way, with a more systematic package being devised only gradually.³⁰

D. The Objective of Economic Support: 'Relief and Rescue', not 'Stimulus'

The objective of the economic package will have to be defined keeping in mind the nature of shock that has jolted the economy. What the pandemic has done is primarily to inflict a 'supply' shock to the economy – in the sense that the supply of a wide range of goods and services has been forcibly stopped as a result of the shutdown required by physical distancing. There is an element of 'demand' shock too, especially for the export sector of the economy. To the extent that the export sector will suffer because of falling external demand as global income plummets and the global supply chains are disrupted due to world-wide economic shutdown, deficient demand can be partly responsible for the loss of output. For the domestic sector, however, which is by far the larger part of the economy, it is restricted supply rather than an exogenous fall in demand that is the main problem.

The implication of a supply shock is that the solution does not lie in stimulating aggregate demand as in a typical Keynesian recession which is caused by deficient demand.³¹ Of course, as supply falls, and as a result income falls, demand will fall too, but at the aggregate level of the economy such an endogenous fall in demand cannot cause any additional loss of output beyond the loss caused by restrictions on supply. Boosting aggregate demand is not going to boost production in this situation.³² Taking a more disaggregated view, however, demand can potentially be a problem. For example, taking the two-sector approach discussed above, it is still valid to argue that supply restriction is the binding constraint on the 'non-essential' sector – stimulating demand for their output is not going to help, as they are required to remain closed by the need for physical distancing. However, the fall in income caused by loss of output in the 'non-essential' sector may induce a fall in demand for output

³⁰This is in sharp contrast with the approach adopted by some other countries, for example, India. While there has been well-deserved criticism of some aspects of the response by the Indian government, at least they got the sequence right. The first economic package it announced was focussed entirely on protecting the entitlements of people who had to stop working because of the shutdown. This was followed by a package aimed mainly at small and medium enterprises.

³¹As Blanchard (2020) observes, "In a normal recession, control of aggregate demand would be the main motivation for using fiscal policy. This, however, is not a normal recession, and it has important implications. In the short run, so long as confinement and lockdown constraints are on, potential output will remain much lower. ... sustaining demand above potential, say, through tax cuts for firms or households, may lead to rationing and inflation rather than an increase in activity." (p.1) A recent World Bank (2020) report puts it more succinctly: "Demand stimulus will not increase supply in the short run, because production facilities are closed to mitigate the spread of the virus." (p.34.) See also Krugman (2020).

³²So long as the marginal propensity to spend is less than one, the fall in demand induced by fall in income must be less than the fall of output (income) caused by restricted supply. Therefore, even though demand will fall, it cannot cause any additional loss of output over and above the exogenous fall in supply; in other words, supply will remain the binding constraint *ex ante*. Of course, *ex post*, supply and demand must be equal, but whether demand deficiency or supply restriction is the binding constraint is a matter of *ex ante* demand and supply.

in the 'essential' sector which will remain open during the shutdown and hence is not subject to a binding supply constraint. Lack of demand can indeed be a problem for this sector.³³ It is arguable, though, that this problem will be largely attenuated if entitlement support is provided on an adequate scale to all those who have lost their livelihoods. After all, it is their loss of income that would cause a fall in demand for 'essential' goods in the first place; so, if their loss of income is largely compensated by a massive programme of entitlement support, the fall in demand will be offset too. No additional stimulus to demand will be needed.

The upshot of all this is that to think of an economic policy response in terms of a 'stimulus' is not the right way of going about it in the current circumstances. All this talk of stimulus package, not just in Bangladesh but in most other countries as well, reminds one of an old aphorism "The Generals are always fighting the last war". The last time the world plunged into an economic crisis, following the financial meltdown in 2008, an exogenous fall in demand played a very big part. As such, Keynesian stimulus to aggregate demand was the right response at that time. But we live in a very different world today. Why would one want to stimulate demand when supply cannot respond because of enforced shutdown? The need of the hour is (a) to provide economic support to the people who have lost their livelihoods so that they can avoid large-scale hunger and (b) to support those enterprises which are allowed to function during the pandemic but whose staying power has been dented too badly for them to be able to function without external support. In short, the name of the game should be 'relief and rescue', not 'stimulus'. An 'economic support' package would be a more appropriate description than a 'stimulus package'.

Of course, the policy package will contain elements that are common to a Keynesian stimulus package, but for different reasons. For example, an expansionary fiscal policy, involving deficit financing, will be needed, not for stimulating aggregate demand, but for making available the resources that the relief and rescue package would require. Similarly, an easy monetary policy will be essential, but once again not for the sake of stimulating demand, rather for easing the credit and liquidity constraints faced by hard-hit enterprises. Despite the apparent similarity in the form of some of the policy responses as between a 'stimulus package' and a 'relief and rescue package', the distinction in objectives still needs to be borne in mind in order to get the priorities right.

V. THE POLICY PACKAGE FOR ECONOMIC SUPPORT

The policy package for economic support will have to have two major components: (a) entitlement support for households and (b) production support for enterprises. As discussed above, importance must be attached to proper sequencing of the two components. In the first

³³A recent theoretical paper inspired by the COVID shutdown has shown that although this may happen it is not inevitable (Guerrieri *et al.*, 2020). It all depends on two factors: the degree of substitutability between 'essential' and 'non-essential' goods and the propensity to consume on the part of those who have lost income in the 'non-essential' sector.

phase, which we have defined as the period of strictest possible adherence to physical distancing, the main focus will be on entitlement support for households who have lost their livelihoods. This will have to be complemented by enterprise support to the 'essential' sector, because otherwise entitlement support will be ineffective.³⁴ In the second phase, defined as the period of a more relaxed regime of physical distancing made possible by large-scale testing and strong patient-management capability of the public health system, the focus will shift gradually towards enterprise support for the 'non-essential' sector as well. We offer some suggestions below on what, in our view, should be the core features of each of these components.

Entitlement Support

Three major issues are involved here: (a) who should receive support i.e., identification of beneficiaries, (b) what kind of support – for example, whether it should be in cash or kind – and the mode of delivery, and (c) how much support i.e., the scale of support per household and in the aggregate. We shall argue that some bold and non-conventional thinking may be needed on each of these issues.

Identification of beneficiaries

Since the need for entitlement support has arisen because people have become unemployed and the majority of them will have to remain unemployed in the first phase (the regime of strict distancing), one possible approach would be to identify the unemployed people, prepare a list, and target them for entitlement support. Unfortunately, however, this option may not exist for practical purposes because identification would pose serious problems. The degree of difficulty would of course vary across sectors. Those who have lost jobs (or have been furloughed) in the formal sector of the economy may be identified relatively easily, by seeking relevant information from the registered enterprises and their respective associations. The government partially embraced this option in its very first package, which was designed to offer subsidised loan to the export sector so that firms could pay wages to the workers who were unable to work because of shutdown. But this option was embraced only partially as similar provision for wage payment was not extended to the domestic segment of the formal sector. The main problem, however, lies with the informal sector, on which most of the burden of unemployment has fallen but where listing is exceedingly difficult.

On various occasions in the past, the government promised to prepare a comprehensive list of the entire workforce engaged in all sectors of the economy, but it is yet to deliver on the promise.³⁵ In the absence of a list, it is almost impossible to know exactly how many people

³⁴As noted in section IV, the core of the 'essential' sector is the food sector broadly defined to include production, import, transportation and distribution of food as well as ancillary services such as public administration, public utilities and financial intermediation which are necessary for efficient functioning of the food sector.

³⁵The government does carry out Labour Force Surveys periodically, which are useful for many purposes but not for the purpose of a comprehensive listing because these are based on sample rather than census. Population Census could have been a useful in this regard, but the last census was in 2011 and the next one is due in 2021.

have become unemployed, let alone who.³⁶ A possible option is to look to the Ministry of Social Welfare, which operates a wide variety of social safety net programmes catering to various vulnerable segments of the society. Lists of beneficiaries in these programmes already exist, which can be a basis for preparing updated lists to include those who were previously not counted as vulnerable but have now become so because of loss of livelihoods. The government has already made a move in this direction by proposing to expand the existing schemes of “Old Age Allowance” and “Allowances for the Widow, Deserted and Destitute Women” in 100 poverty-prone upazilas. A budget of Tk. 8,150 million has been allocated under this initiative. Potentially, it should be possible to expand several other social security schemes in a similar manner.

But a major problem with this option is that safety net schemes in Bangladesh do not have a great track record of targeting benefits to those who need them the most. An analysis of the overall safety net programme based on the *Household Income and Expenditure Survey of 2016* found that “About two-thirds of the beneficiaries belong to the non-poor households, and they capture three-fourths of the total benefits disbursed by the programme nationwide.” (Osmani, 2018a, p.37). There are of course variations among schemes, but the two schemes singled out for expansion in the 100 poorest upazilas do not fare any better than the average. The above-mentioned study shows that the proportion of poor among the beneficiaries was only 29 percent for the Old Age Allowance scheme and 32 percent for the scheme for Widows, Deserted and Destitute Women (p.40).

In any case, the really serious problem of relying on the existing social safety net is its fragmented nature, which is composed of over hundred schemes and administered by multiple government departments. Such an unwieldy and uncoordinated system will not be able to meet the needs of the hour. We need a vastly simplified system, with a unified structure, so that millions of households can be reached swiftly and efficiently (even if with some degree of mistargeting). For this purpose, a nation-wide comprehensive list of vulnerable households must be prepared immediately, building from the ground up – a list for each village and each ward. The criterion for inclusion will simply be whether a household is suffering from food insecurity. It does not matter how many members of the household are employed or unemployed, or whether they are involved in the formal or informal sector, or whether they live in slums or not, or whether or not the members of the household include those who have come back from their normal place of work in search of a temporary abode, or whether they include old, disabled, widows, or people with other types of vulnerabilities. It also does not matter whether the household is old poor or new poor. All that matters is whether or not the household is facing food insecurity at the moment.³⁷

³⁶A recent newspaper report cites estimates ranging from 1 crore (10 million) to 5 crore (50 million) people being left without work in the wake of the shutdown. See, *The Daily Star*, May 1, 2020: <https://www.thedailystar.net/business/news/more-crore-no-job-and-hope-1898554>.

³⁷The government has recently prepared a list of 5 million beneficiaries, as part of its COVID response, for providing one-time cash support of Tk. 2500 each, which has already been disbursed. But this list was meant to cover only the informal sector workers in urban areas, whereas we are proposing a comprehensive list for the country as a whole covering all sectors and both urban and rural areas. As discussed below, the list will have to cover nearly 20 million households, accounting for half the population of the country.

It should be possible to prepare such a list reasonably quickly, and fairly reliably, at the local level by involving local government personnel, elected representatives, school teachers, religious leaders, and NGOs (which are ubiquitous in rural Bangladesh). Some error of targeting is perhaps inevitable in such a process. Overall, the goal should be to allow some error of inclusion, if necessary, in order to avoid the error of exclusion as much as possible. To minimise errors, and to ensure transparency, it is imperative that the list from each village/ward is openly displayed at a place where everyone has access. In this digital age, it should also be possible to upload these lists online. Such open display will serve two purposes. First, those who feel that they have been unreasonably left out can appeal for inclusion. Second, it will also act as a mechanism for self-selection to some extent since well-off households will be loath to be seen by everyone as belonging to the ranks of the needy. This will help minimise errors of both exclusion and inclusion.

The Nature of Support and the Mode of Delivery

In the measures taken so far, the government has sought to provide support in both cash and kind, but the major emphasis has been on kind – viz. distribution of food. In her speech on 13 April, the Prime Minister announced two new programmes for food distribution:

- (a) A Tk. 25,030 million programme for distribution of 500,000 metric tons of rice and 100,000 metric tons of wheat free-of-cost among the low-income people.
- (b) A Tk. 2,510 million programme of special Open Market Sales (OMS) in which 74,000 metric tons of rice will be sold at Tk. 10 per kg to low-income people living in urban areas. The special OMS was already launched on April 1, 2020, but amid allegations of widespread misappropriation of rice, the government suspended the programme on April 15. A revised programme was subsequently launched in accordance with the directives given by the Prime Minister in a speech to the parliament on April 18, 2020. The food would now be distributed on the basis of ration cards; for this purpose, it was decided that 5 million new ration cards would be introduced, bringing up the total number of ration cards to 10 million.

In the same speech on 13 April, the Prime Minister also announced two major initiatives for providing cash support.

- (a) A Tk. 7,600 million programme for distributing cash to workers in the informal sector. The programme was subsequently revised upward to Tk. 10,000 million for Tk. 2500 to each of 5 million households, according to a list prepared by the Ministry of Disaster Management and Relief.
- (b) A Tk. 8,150 million programme for expanding the existing “Old Age Allowance” and “Allowances for the Widow, Deserted and Destitute Women” schemes under the social safety net system in 100 most poverty-prone upazilas.

These initiatives demonstrate that, although belatedly, the government is paying serious attention to the need for entitlement support, which should be the first order of priority at this time. But the modality of support it has chosen to adopt deserves serious rethinking. The current thinking seems to be stuck in the old ways of dealing with welfare needs in a fragmented and uncoordinated way that characterises the existing social safety net system. Multiple programmes for food distribution combined with multiple programmes for cash distribution, none of which is being planned in co-ordination with the others, is a recipe for duplication and misappropriation, quite apart from being a logistical nightmare.

In normal times, there is some justification for pursuing multiple programmes for welfare support, as specially designed schemes may be needed to reach different target groups most effectively. But these are not normal times. The logic of multiple targeted programmes does not apply now, for there is no multiplicity of target groups at this time. There is just one target group – a vast mass of people faced with the threat of hunger and food insecurity. As estimated below, it will be necessary to provide entitlement support to nearly half the population for a prolonged period of time. When operating on such a vast scale, simplicity of the delivery mechanism will be the key to success. And nothing is simpler than a cash support programme for all. The alternative mechanism of delivering food directly to half of the households in the country for several months will be a logistical nightmare. Even a combination of food and cash support may not be wise as it would compromise the simplicity of the mode of delivery that is needed at this moment. Of course, cash support may be supplemented on the supply side by releasing government stock of food through Open Market Sales (OMS). The government has already purchased additional 200,000 tons of foodgrain as part of its COVID-response. This stock should be used to expand the availability of food in the market, instead of distributing it directly to households, for the sake ensuring simplicity of the delivery mechanism.

In addition to its simplicity of operation, cash support programme has the further advantage that it will help oil the wheel of the 'essential' sector, which will remain open even in the first phase, and segments of the 'non-essential' sector that will gradually open up in the second phase. As people spend their cash to buy food from the market, the whole chain from production and transportation to distribution will be rejuvenated. This will not only strengthen the incentive for producers to keep producing the food the country needs but will also boost the entitlement of millions of people involved in this chain.³⁸ The benefit of cash support will be even stronger in the second phase. As enterprises belonging to the 'non-essential' sector are gradually allowed to reopen, lack of demand may threaten to replace supply restriction as the binding constraint. Cash in the hands of the people will help resolve that problem.

Despite these advantages, several misgivings are quite common against cash support, but upon reasoned scrutiny they do not hold water in the present circumstances. First, there is an apprehension that cash income may be at least partially frittered away, while whatever food support

³⁸Furthermore, there is no reason to believe that the government will be able to carry out this massive operation more efficiently than those who are already involved in the process.

one gets will be mostly consumed. There is in fact quite a large literature on the question of whether cash or food support can better ensure that people actually consume more food. Findings from recent studies do not lend support to the popular apprehension; in general, cash support is found to be no less effective than food support in ensuring higher levels of food consumption.³⁹ In any case, one must bear in mind the difference between normal and abnormal times. In these abnormal times, when people have lost work and have no idea of when they might be able to get back to work again, it is highly unlikely that people will do anything with the cash other than what is absolutely essential for their survival.

Second, there is a common perception that injection of cash in the economy will raise the price of food thus hurting the poor themselves. The distinction between normal and abnormal times is again relevant here. Under normal circumstances, a large dose of cash support to millions of poor people may indeed lead to a one-shot increase in the price of food, although even in this case the poor would not necessarily be hurt (compared with the situation of no support) – it is just that the real value of the support will be less than the nominal value. However, the present situation is far from normal. Because of the massive loss of work, people's purchasing power and hence effective demand for food has fallen drastically. If this situation persists, the price of food will fall. In these circumstances, the new injection of cash will only restore (perhaps only partially) the demand that has been lost, and thus at best lift the price up to the level that prevailed before the pandemic began. So long as the cash support programme does not overcompensate people for their loss of income, there is no reason to suspect that prices will rise above the level of *status quo ante*.

Finally, one needs to confront the perennial question of corruption. There is a common refrain that it is easier to steal cash than to steal food. However, past experience as well as recent newspaper reports about misappropriation of food – so much so that the initial programme of special OMS had to be suspended⁴⁰ – do not inspire much confidence in the presumption in favour of food on the ground of corruption. In any case, it all depends on the mechanism through which cash is delivered. Without adequate safeguards, cash may indeed be stolen relatively easily, but it should not be beyond the ingenuity of our policy-makers to put in place the right kind of safeguards.

To begin with, the opportunities for misappropriation of funds will be greatly reduced if the list of beneficiaries is prepared through the process described earlier – involving multiple segments of the population at the local level and then displaying the list in an accessible manner. In order to minimise the risk further, cash should be transferred directly to the beneficiaries' bank accounts wherever possible.

The Government of Bangladesh already has considerable experience with cash transfer programmes through its social security system. For instance, the Cash Transfer Modernization Project under the Ministry of Social

³⁹See, for example, the discussion on this topic in Banerjee and Duflo (2019).

⁴⁰The *Daily Star*, April 18, 2020: <https://www.thedailystar.net/front-page/news/theft-subsidized-food-rogue-dealers-political-links-blame-1894459>.

Welfare administers the Old age, Widow and Disability allowance programmes, reaching more than six million poor households. Also, among the new initiatives adopted in response to COVID pandemic, the component aimed at helping urban informal sector workers involves cash support through direct bank transfer. There is no reason why the same approach cannot be expanded to encompass all beneficiaries. For those who do not have a bank account, recourse may be taken to the services of agency banking, mobile banking agents and microfinance institutions, who are to be found all over the country. The *Palli Karma Shahayk Foundation* (PKSF), which acts a conduit for channelling funds to microfinance institutions across the country, can play a key role as a facilitator of this process. The point is that, given good intention, it should not be hard to work out the details of a digital mechanism for secure transfer of funds to the beneficiaries. The current government first came to power with a rousing promise of creating a digital Bangladesh; the time has come to deliver on that promise fully.

(c) The Scale and Cost of the Entitlement Support Programme

A couple of questions are addressed here: (1) how many people need entitlement support and (2) what should be the size of support?

We should begin by acknowledging that in the absence of some kind of official record of who has lost work and who has not, it is impossible to arrive at an accurate estimate of how many people are facing the threat of hunger, and hence need support. At this point, one can at best make an educated guess so as to serve as a basis for emergency planning and allocation of resources. The real picture will become clearer at the stage of implementation, when the people in need begin to be identified at the local level through the process described earlier. At that stage, the estimates for both the number of beneficiaries and the amount of resources required can be revised to make them more realistic.

One approach towards making an initial estimate is to start with the official estimate of the proportion of people who were already poor before the crisis began (because if anybody is suffering from the threat of hunger now, surely those who were already poor must be among them) and add some estimate of people who have become 'newly poor' as a result of the shutdown. According to official estimates, based on projections from data from *Household Income and Expenditure Survey* (HIES) of 2016, about 20 percent of the population can be categorised as poor in 2020 under normal circumstances. In order to make an estimate of the 'new poor', let us go back to HIES 2016. According to this survey, about a quarter (24.3 per cent) of the population lived below the poverty line in 2016. Another 30 percent of the population had consumption level below one and half times the (upper) poverty line.⁴¹ If the income of this latter group were to decline even by one-third, they would have joined the ranks of the poor. By using these proportions, we may surmise that if 20 per cent of the population were poor in 2020 before the pandemic began, there would be another 24 per cent for whom even a loss of one-third of income would be enough to push them into poverty. Loss of income of this magnitude for the non-poor is not at all implausible in the

⁴¹This is based on author's calculation from the raw data of HIES 2016.

present circumstances. In fact, given the evidence we have from rapid response surveys, one-third loss of income for the vulnerable non-poor would appear to be almost certainly an underestimate (Rahman and Matin, 2020). The actual proportion of 'new poor' will almost certainly be higher than 24 percent. We assume conservatively that at least 30 percent of the population would have become 'new poor' in the wake of the shutdown. Adding them to the 'old poor' (20 percent), we can estimate that at least half the population are now in a state of acute food insecurity. That makes 85 million food insecure people. According to HIES 2016, the bottom half of the population has an average household size of 4.3.⁴² This means approximately 20 million households are in dire need of entitlement support right now.

An alternative approach would be to start from labour force data, rather than poverty data, and make an estimate of how many people may have become newly unemployed, partially or wholly. Islam (2020) has followed this route. Using the *Labour Force Survey* (LFS) of 2017, and assuming quite reasonably that daily labourers and a part of those in the formal and informal sectors who are employed on a precarious basis must have become unemployed, he estimates that about 20 million workers are currently facing the threat of hunger. This is identical to our estimates of 20 million needy households. There is a slight difference in that our estimate is in terms of households whereas Islam's is in terms of workers, and since there may be multiple workers from the same household, the implicit number of households in Islam's estimates will be somewhat lower than ours. But the two estimates are not miles apart.

For the purpose of comparison, one may also look at the estimate of poverty based on World Bank's upper poverty line of PPP \$3.20, which is meant to capture those who may be non-poor by the standard poverty lines but whose income is low enough to make them vulnerable to sudden shocks. According to this poverty line, some 52.3 percent of the people of Bangladesh were poor in 2016. By 2020, this figure may have just dipped below 50 percent, which again validates our estimate that almost half the population of the country could be currently below the national poverty line. We can, therefore, proceed with some confidence with the estimate that half the population, which translates to 20 million households, need entitlement support immediately.

Turning now to the task of estimating the magnitude of support needed, we proceed in two steps. First, we make a normative estimate of a minimal level of income a typical poor household might need to pull through these difficult times, and then apply an estimate of income lost to arrive finally at the amount of support needed.

For the first part, we start with what is called the 'lower poverty line' in the literature of poverty estimation in Bangladesh (and other developing countries). It refers to a level of income (strictly speaking, consumption), which allows for minimum food requirements but very little by way of non-food expenditure. By contrast, the 'upper poverty line' also allows for minimum food needs but makes room for a slightly more comfortable expenditure on non-food items. Since, food consumption is the prime concern in the current predicament, it makes sense to work with the lower poverty line. In HIES 2016, the lower

⁴²Author's calculation from the raw data of HIES 2016.

poverty line for 2016 is given as Tk. 1862 per capita per month (BBS 2017, p.). Between 2016-17 and the first three months of 2020, the consumer price index has gone up by around 20 percent (BBS, 2020, p.13). Thus, in current prices, the lower poverty line will be around Tk. 2234. For an average household with 4.3 members, this translates to Tk. 9606, or approximately Tk. 10,000 per month. This is the level of income that must be guaranteed, on the average, for the food insecure households.

The whole amount of this income need not be provided as support, though, because the goal should be to replace the portion of income that has been lost due to the shutdown of the economy. A Rapid Response survey carried in the first half of April shows that poor and vulnerable non-poor households have lost close to 80 percent of their pre-pandemic income on the average (Rahman and Matin, 2020). In order to compensate for this loss of income, the food insecure households should be given Tk. 8000 per month.

For 20 million households, the total amount of resources works out to be Tk. 160,000 million per month. This level of support should continue for at least three months (the first phase), because the country is unlikely to be ready for the second phase (of relaxed distancing, and hence gradual relaxing of shutdown) before that. Thus, a total of Tk. 480,000 million will be needed for entitlement support in the first phase, which amounts to slightly less than 2 percent of GDP. This is by no means excessive considering how important entitlement support is not only on humanitarian grounds but also for the sake of controlling the pandemic, because the poor people are unlikely to abide by distancing restrictions for long if they and their children have to go hungry for months on end. As the second phase begins, and people gradually go back to work, it will be possible to taper down the amount of entitlement support. As discussed earlier, we must be prepared for the possibility that the second phase will last for at least six months in Bangladesh, before the shutdown can finally be ended with the emergence of an effective vaccine. Assuming that the level of entitlement will decline linearly to zero over the six-month period, an amount of Tk. 80,000 million will be needed per month on the average i.e., half the monthly expenditure in the first phase. Thus, over the second phase as a whole, another Tk. 480,000 million will be needed. Combining the two phases, the total resource requirement turns out to be Tk. 960,000 million, which amounts to about 3.8 percent of GDP.

Enterprise Support in the First Phase: The 'Essential' Sector

It may be recalled from our earlier discussion that 'essential' sector consists mainly of the food sector (broadly defined to include all ancillary activities), which must be allowed to remain open in the first phase because without smooth functioning of this sector, the very objective of entitlement support will be defeated. It is encouraging to note that the government has already taken a number of initiatives to support this sector.

(a) The provision for cheap loan (at 4% interest) that already existed for import substituting commercial crops has now been extended to the production of foodgrains (rice and wheat) as well, which were previously outside the purview of this scheme.

- (b) Further incentive to crop production has been given by promising to allocate Tk. 90,000 million worth of fertilizer subsidy in the budget for 2020-21.
- (c) The Prime Minister also declared an allocation of Tk. 2,000 million for mechanisation of harvesting and Tk. 1,500 million for seeds and seedlings distribution among affected farmers so that they can continue agriculture production.
- (d) The government is also going to ramp up its procurement of foodgrains to ensure a fair price for farmers. The procurement of paddy and rice would be increased by 200,000 metric tons, compared to the previous season's purchase, at an additional expense of Tk. 8,600 million.
- (e) Bangladesh Bank is rolling out a scheme worth Tk. 500,000 million, from its own funds, to provide cheap loan (at 4% interest) to augment the working capital of producers engaged in non-crop agricultural activities such as fish farming, poultry, dairy and livestock, and seasonal flower and fruit farming.
- (f) Bangladesh Bank is also launching a refinance scheme worth Tk. 30,000 million to help farmers, micro and marginal businesses, and low-income professionals, to provide loans at 9 percent through microfinance institutions.

Some of these measures involve transfers (e.g., fertilizer subsidy), some involve government expenditure (e.g., crop procurement) and some involve loan, which includes both subsidised and unsubsidised loans. Taking into account transfers, expenditures and only the interest subsidy on subsidised loans (but not counting the loan amount itself), the total fiscal cost of the combined package for agriculture is estimated at Tk. 107,850 million, which is 0.42 percent of GDP.

These measures are adequate in our view as far as financial support is concerned. It should be understood, however, that while financial support is welcome to anybody, lack of finance is not the main constraint the food producers are facing at the moment. What they need is a reliable way of marketing their products so that they do not have to incur a loss, which many of them are actually doing right now. If the programme for entitlement support is large enough to sustain demand for food at a high level and the transportation and distribution channels work well so that supply can meet demand, the food producers will not have much cause for concern anyway. On the other hand, if these conditions are not met, financial incentives alone will not be able to stimulate production; what was meant to be a production support will turn into a form of income support. If production is to keep pace with the demand generated by entitlement support to non-working households, the really important task is to keep the transportation and distribution channels open. This is where some lapses currently exist.⁴³

One example is the blanket restriction on passenger-carrying vehicles, which is causing a serious problem in many parts of the country where harvesting depends critically on the use of migrant labour. The government has responded to this problem by importing and incentivising

⁴³The examples discussed below draw upon a perceptive discussion of these and related issues in Mansur (2020).

the use of expensive harvesters (costing almost Tk. 3 million each). But a much cheaper, as well as entitlement-enhancing, option would be to allow migrant workers to move to wherever there is a demand for their services. Some steps have recently been taken in this direction by organising specially chartered vehicles to transport the migrant workers. But there is no reason why the entire transport system cannot be opened up to allow people to go wherever they have to in connection with 'essential' economic activities. The reason for this restriction on transport is of course the fear that the need for physical distancing will be compromised by people cramping in buses, launches, rail compartment, and so on. But the fear may be overblown. Since a large part of the economy is in shutdown mode, people have no reason to travel in connection with these activities, and they are unlikely to travel *en masse* for fun or social visits under the present circumstances. One should in fact expect an element of self-selection to operate here: those who have to travel in connection with their work in the 'essential' sector will avail of the transport facilities, while those who have lost work in the 'non-essential' sector will be loath to spend money on unnecessary travel and risk catching the virus in the bargain. This will permit some degree of physical distancing in the transport sector. It is thus reasonable to expect that opening the transport sector fully at this stage will ensure smooth movement of both people and goods associated with the 'essential' sector with minimal violation of physical distancing.

At the same time, wholesale and retail outlets of the food sector should also be allowed to remain open for as long as the owners deem it to be commercially viable. The current restrictions on opening hours of kitchen markets and groceries is counter-productive, because it encourages too many people to throng to those places within a short span time, thus inducing violation of physical distancing. Longer opening hours will help meet the food needs of people with greater adherence to physical distancing as people will have the scope to space out their time for shopping.

Equally counter-productive is the indiscriminate restriction on movement in Dhaka city, which has hampered the functioning of the online food delivery system. From the point of view of maintaining physical distancing in the course of matching demand and supply of food, online delivery is the ideal mechanism. Newspaper reports suggest that these online firms are being inundated with orders, but they are unable to meet demand mainly because of the harassment of delivery boys by the police. There has reportedly been a change of heart recently on the part of the authorities as the police are being more accommodating in this regard, but the problem is that many delivery boys have already left the city because of bitter experience.

These are but a few examples of inconsistencies in policy that arise from the lack of a clear understanding of the interconnections between 'essential' and 'non-essential' sectors. The need for entitlement support arises from the loss of livelihoods in the 'non-essential' sector, but the entitlements cannot be ensured effectively unless the 'essential' sector is allowed to operate in a relatively unencumbered way. Therefore, schemes for financial support to the producers in the 'essential' sector must be complemented by measures to open up the sector in all its components – from production to final sale to the consumers.

Enterprise Support in the Second Phase: Cottage, Micro, Small and Medium Enterprises

When the economy begins to reopen in the second phase, priority must be accorded to the cottage, micro, small and medium enterprises (CMSMEs). One reason they deserve priority is that, with their limited staying power, they would have suffered much more than large enterprises in the first phase. A no less important reason is that this sector accounts for an overwhelming proportion – about 86 percent – of employment outside agriculture.⁴⁴ This means that the more quickly and more effectively this sector can be brought back to life, the faster would the government be able to whittle down entitlement support to those who have lost their livelihoods. Thus, both on equity ground and on the pragmatic ground of saving resources on entitlement support, the major focus of the reopening phase should be on this sector.

It is encouraging to note that the government has recently announced a support package for this sector, comprising subsidised credit to enterprises by way of working capital loan. A total loanable fund of Tk. 200,000 million has been earmarked for this purpose, which will be disbursed through commercial banks and other financial institutions from their own resources. The loans will carry a maximum interest rate of 9 per cent, of which the borrowers will pay 4 per cent and the remaining 5 per cent will be paid by the government as interest subsidy. This has been supplemented by a refinancing scheme of Tk. 100,000 million, which will ensure added liquidity for the banks at a cheaper cost. This combined package is a move in the right direction, but it is far from adequate. Several limitations of the package may be noted in this context.

First, although the package explicitly incorporates the cottage sector within its ambit, it is a safe bet that hardly any money will go to this sector. The historical inability of the formal banking system to reach the smallest segment of the economy is well known, and the reasons for this failure are also well understood by now. Apart from the problem that the smallest of enterprises are seldom able to offer any tangible collateral, a major impediment is that the banks' transaction cost of dealing with tiny amounts of loan is simply too large to cover the costs that are entailed by the standard scrutiny procedures they are required to follow. There is no chance that these procedures will be relaxed for this specific package. If anything, the opposite will be the case, as the cost of any failure to recover the loan will have to be borne entirely by the banks themselves.

Furthermore, the scheme contains several provisions which will ensure that most of the cottage units will be left out anyway even in the improbable case where the banks are willing and eager to lend to them. First, the scheme stipulates that at least 15 percent of total loan should be given to rural enterprises. It is very likely that in practice this minimum will turn out to be the maximum because of the relatively small rural penetration of banks (especially, private sector banks) and the relatively high transaction cost of dealing with small rural enterprises. In that event, the cottage sector will be especially disadvantaged since as many as 75 percent of them are located in the rural areas (BBS, 2015). Second, in the cottage sector, the major type of activity is wholesale and retail trade, in which almost half the establishments are engaged. And

⁴⁴According to the *Economic Census of 2013*; BBS (2015).

yet, this activity receives the least priority in the allocation of funds stipulated by the scheme. Out of total loans, only 20 percent is allocated to trade as compared with 50 percent for commodity production and 30 percent for other services.

Clearly, this scheme is not designed to help the cottage sector, whatever the intention might be. Yet, since cottage enterprises provide almost two-thirds of all employment generated by the combined CMSME sector, the needs of this sector cannot simply be ignored. Indeed, within the CMSME sector the cottage segment should receive the highest priority on both equity ground and for the sake of reviving employment quickly so that the burden of entitlement support can be eased as rapidly as possible. Among the packages announced so far, the one that comes closest to being able to reach the cottage sector is a refinancing scheme worth Tk. 30,000 million intended to help farmers, micro and marginal businesses and low-income professionals through microfinance institutions. Since experience has shown that microfinance institutions are much better suited to the task of dealing with the smallest of enterprises, this scheme has a much better chance of reaching the cottage sector. Furthermore, since this a refinancing scheme, in which the loanable fund will come eventually from the Bangladesh Bank instead of the lenders' own resources, it will also provide greater incentive to the lenders to seek out potential borrowers, as compared with the scheme for CMSMEs.

The problem, however, is that the size of the loanable fund is too small to meet the needs of the hour. If the CMSME scheme, worth Tk. 200,000 million were allocated according to the proportion of employment, the cottage sector would have received about two-thirds i.e., Tk. 120,000 million.⁴⁵ At least this amount should be ensured for the cottage sector. Additional funds will be needed to meet the needs of other intended beneficiaries of the scheme (small farmers, low-income professionals), and this allocation should be generous too, considering the imperative of giving priority to reviving the livelihoods of low-income people in general. We would propose raising the size of the loanable fund from the current level of Tk. 30,000 million to Tk. 200,000 million. Furthermore, since most of the entrepreneurs in this sector are likely to be poor, who would have faced dire economic conditions during the shutdown, the loans should be provided at a nominal charge of 2 percent, with the government paying 7 percent to the lenders. The fiscal implication for the government would still amount to only Tk. 14,000 million, just 0.05 percent of GDP. By any standard, this must be seen as a very cheap way of reviving livelihoods in a big part of the economy, which accounts for more than half of all employment outside agriculture.⁴⁶

⁴⁵Of course, the share of the cottage sector will be much smaller in terms of production. But a strong case can be made that in the present crisis allocation of resources should be guided more by employment than by production, since the current imperative is no much to stimulate production as to protect and revive livelihoods. This is consistent with the general proposition maintained in this report that economic support measures adopted in response to the COVID crisis should be seen primarily as a 'relief and rescue' package as distinct from a 'stimulus' package.

⁴⁶According to the *Economic Census of 2013*, the cottage sector provided 54 percent of all employment in the non-agriculture component of the economy (BBS, 2015).

Let us now turn to the rest of the CMSMEs, i.e., enterprises belonging to micro, small and medium categories. Even after separating out the cottage segment, this truncated category, which we might call MSMEs, still remains a very important part of the economy, especially from the point of view of employment and livelihoods. According to the *Economic Census of 2013*, the MSMEs provided more than double the employment generated by the large-scale sector (BBS, 2015). Accordingly, this sector should receive at least as much if not more attention than the large-scale sector in an economic rescue package whose immediate objective should be more to revive livelihoods than to revive production. This is the group that the COVID scheme for the CMSMEs will cater to for all practical purposes. As such, it is important to assess how well the scheme is equipped to offer succor to this sector and whether more needs to be done.

The first matter of concern is that this scheme is meant to be operated mainly by the banking system, and yet, like the cottage sector, a vast proportion of micro and small enterprises do not have access to the banks. A study of this sector carried out in 2017 found that "...less than 40% SMEs have access to bank finance in Bangladesh, and if micro businesses are included, the percentage of small enterprises staying out of banks' coverage will be much higher." (Hossain, 2020a). So, if the banks deal only with their existing clients, which they may very well be tempted to do in order to play safe, the whole purpose of the scheme will be defeated. A prior requirement, therefore, is to have a comprehensive list of MSMEs existing in the country, so that banks can reach out to most of them if they want to. But no such list currently exists. The *Economic Census of 2013* does provide a benchmark list, but it needs to be updated quickly. A possible route, as suggested by Hossain (2020b), is to combine the resources of the Bangladesh Bureau Statistics (BBS) with those of the SME foundation and Bangladesh Small and Cottage Industries Corporation (BSCIC) to update the 2013 list as expeditiously as possible.

A second concern is the common one involving any micro and small enterprise that it is difficult for them to obtain bank loans by complying with all the stringent requirements of bank financing, especially the requirement of offering collateral or guarantor. And yet, without some kind of guarantee, the banks will understandably be reluctant to deal with the enterprises, especially the ones they have not dealt with before. Some kind of group-based lending could be a solution to this problem, as it has proved to be so in the arena of microfinance. As Hossain (2020b) points out, a model already exists in the form of the "Credit Wholesale Program (CWS)" of the SME Foundation. Under the programme, banks provide group-based lending in MSME clusters, without asking for collateral or guarantor. The programme has proved to be highly successful with a repayment rate over 95 percent, and could be used for the purposes of the present scheme too. Thus, the combination of a comprehensive listing and recourse to group-lending to complement standard banking practices, where needed, could go a long way towards reaching the vast majority of the MSMEs who would otherwise be left out.

The contents of the package need some reconsideration as well. The objective of the package is to offer working capital loans to the enterprises, but it is not clear what kind of needs assessment was done before arriving at the

loan package of Tk. 200,000 million. Building upon the work of Hossain (2020a, 2020b), some suggestions are offered below by way of an alternative package.⁴⁷

The first principle of the alternative package is that since the majority of the MSMEs would have been close to financial ruin due to the shutdown in the first phase, it will not be sensible to burden them with new loan repayment liabilities without first easing their prior financial stress. One way of easing this stress is to reduce the interest burden they are already saddled with. The Bangladesh Bank has taken measures to ease the problem somewhat by allowing postponement of loan repayment for a period for all categories of enterprises. But mere postponement may not be enough for the smaller enterprises; what they need is interest waiver for a few months, the cost of which should be borne by the government. Using Bangladesh Bank data, Hossain (2020b) estimates that the MSME sector currently pays roughly an amount of Tk. 21,929 million as monthly interest. On the basis that interests on prior loans should be waived for at least six months (covering three months before and three months after the new COVID loan is sanctioned), the total cost of interest waiver comes to approximately Tk. 132,000 million.

Secondly, while it is sensible to offer cheap loans so that the enterprises can pay wages to workers, it should be borne in mind that, as relatively low-income people, the entrepreneurs themselves will need some support. As the economy begins to revive, it will take some time before businesses can earn enough to make any kind of profit after meeting all expenses. As such, the loan package should contain two components; one for paying wages and one for maintaining the employers. Projecting the current numbers of workers and employers in the MSME sector on the basis of data from the *Economic Census*, and using survey data for wages and production/sales, Hossain (2020a) estimates that total wage payment in the MSME sector at present would cost around Tk. 70,000 million per month; and if employers are to be paid 10 percent of their revenue as profit, it would amount to Tk. 40,000 million per month. On the basis that both wage and profit support should be provided to cover at least six months' needs, the total loan amount turns out to be Tk. 660,000 million, which is more than three times the size of the loan package proposed by the government. The actual fiscal burden of the government will be a lot less, however, as it will have to bear only the cost of interest subsidy at 5 percent, which amounts to Tk. 33,000 million. Adding the cost of interest waiver estimated above, the total fiscal cost of the package would be Tk. 165,000 million.

Add to this Tk. 14,000 million fiscal support for the cottage sector estimated earlier, and the total fiscal implication for supporting the combined CMSME sector amounts to Tk. 179,000 million, which is just about 0.7 percent of the GDP. This can hardly be viewed as a high price to pay for reviving employment and livelihoods in the segment of the economy that provides about 86 percent of all employment outside agriculture.

Enterprise Support in the Second Phase: The Large-Scale Sector

Support for enterprises in the large-scale sector needs to be considered separately for two segments: (a) the domestic sector i.e., enterprises catering mainly to the domestic market, and (c) the export sector i.e., enterprises catering mainly to the export market. The challenges facing the two segments are different in some fundamental ways; as such, the responses warranted by their predicaments may well be different.

On April 2, 2020, the Bangladesh Bank announced a Tk. 300,000 million loan package for the large-scale sector of the economy – including both industry and services. The specific aim of the package is to offer some relief to the enterprises by reducing the interest burden on their working capital loans for a period of one year. Instead of paying the standard rate of 9 percent, they will pay only 4.5 percent, and the remainder 4.5 percent will be paid by the government to the banks by way of interest subsidy. The loanable fund will come from the bank's own resources, but the burden of interest subsidy will be borne by the government through its budget. The fiscal burden of the subsidy amounts to Tk. 13,500 million.

A couple of considerations are relevant in assessing the adequacy of this package – one from the perspective of banks and another from the perspective of enterprises. From the bank's perspective, the major issue is that of incentive. Since the operation of this programme will involve additional paperwork (for loan approval and reimbursement of subsidy), and hence additional cost for the banks, the obvious question arises: what incentive would they have to engage in this programme, especially since they will have to find the loanable fund from their own resources, bear the entire risk of default, and receive the same interest rate of 9 percent that is currently applicable to standard working capital loans?

One possible source of gain for the banks lies in the additional low-cost liquidity that Bangladesh Bank has recently made available to the banks by reducing the repo rate. To the extent that banks are able to utilise this low-cost liquidity to offer loans under this programme, they will enjoy a higher margin compared to standard deposit-based loans even if the rate of interest remains the same. It is not clear, however, whether this benefit will be large enough to outweigh the additional cost of managing the programme. If not, this will put an additional burden on the banking system that is already quite fragile because of widespread loan default, cap on interest rates and the general atmosphere of uncertainty in the wake of economic shutdown. Anything that pushes this fragile system into further distress and thereby threatens to engender a financial crisis will not be in the interest of anyone, least of all the very enterprises whom the current package is meant to serve. The package should, therefore, be revised in a way that while supporting the enterprises in distress, it also strengthens the banking system instead of weakening it by placing extra burden on it. One possibility is to raise the interest subsidy by 1 percentage point so that banks are able to charge 10 percent for loans made under this package. The borrowers will still pay 4.5 percent as in the original package, but the government will pay 5.5 percent, instead of 4.5 percent, to the banks. This added incentive will not only safeguard the banks' financial position but will also

⁴⁷While using Hossain's raw data, our estimate of the size of support needed differs from his, because of different assumptions about coverage and duration of support.

encourage them to seek out the distressed enterprises and make loans to them as expeditiously as possible.⁴⁸

From the enterprises' perspective, the interest subsidy will certainly be welcome, but questions may justifiably be raised about the adequacy of support. According to the current provisions, the subsidy will apply only up to 30 percent of the working capital loans that enterprises are entitled to receive from their banks under normal circumstances. Considering the economic stress the enterprises would have suffered on account of near-complete shutdown in the first phase, the extent of support needs to be more generous than that. The need for at least partially covering the losses they would have incurred in the first phase should be factored into the support programme, in addition to meeting the need for facilitating operations in the second phase. We would, therefore, recommend that interest subsidy be offered to the whole of working capital loans, instead of limiting it to 30 percent.

If the interest subsidy is raised from 4.5 percent to 5.5 percent (to provide incentive to banks) and applied to the whole of working capital instead of just 30 percent (to strengthen the support to enterprises), the fiscal burden for the government will rise from Tk. 13,500 million to approximately Tk. 50,000 million, or about 0.2 percent of GDP.

Turning now to the export sector, it is encouraging to note that the government has adopted a number of special measures to support it. The basic idea behind offering special support to the export sector has some obvious validity. While the domestic sector has faced largely a supply shock owing to enforced shutdown, the export sector has been confronted with both a supply shock, because of shutdown in Bangladesh, and a demand shock, because of shutdown in the rest of the world. As the shutdown in Bangladesh is gradually lifted, the domestic sector will also revive (albeit with the help of government support), but the export sector will not directly benefit from it; it will have to wait till foreign demand is revived. But while lifting the shutdown for the benefit of the domestic sector is in principle under the government's control, revival of foreign demand is not. The export sector thus faces a greater degree of uncertainty and greater likelihood of incurring losses.⁴⁹

⁴⁸In order to avert the potential moral hazard problem that banks might be induced to offer loans indiscriminately so as to enjoy the benefit of 1% subsidy, the current regulatory and supervision provisions should be applied ever more vigorously by the Bangladesh Bank.

⁴⁹Apart from losing future production (until demand revives), the garment sector is currently incurring huge losses on the output that has already come on board. Many buyers are forcing garment manufacturers to accept large discounts on the prices already agreed upon and/or withholding payments for completed orders, by taking advantage of the precarious nature of worldwide demand. According to newspaper reports, factories across Bangladesh are owed a staggering \$5 billion for mostly shipped and completed orders, equivalent to 15 percent of the country's net apparel export. See, <https://www.thedailystar.net/country/news/bangladeshi-garments-suppliers-held-hostage-international-clothing-brands-retailers-1901218>.

The special measures adopted so far by the government to deal with the predicament of the export sector include the following components:

- (a) Salary support worth Tk. 50,000 million for workers in the export sector. The fund will be administered by the Bangladesh bank and provided as interest-free loan through the commercial banks so that factories can pay salary of their employees for a period of three months. The banks will only charge 2 percent of the disbursed amount as their operating commission. The enterprises will repay the loans over a period of 18 months after a grace period of 6 months.
- (b) A new Pre-Shipment Credit Refinance Scheme to be operated by the Bangladesh Bank with a total fund size of Tk. 50,000 million. The fund will be disbursed by the commercial banks who will receive the funds from the Bangladesh Bank at 3 percent interest and disburse it to the clients at 6 percent. The scheme thus amounts to 3 percent interest subsidy from the point of view of enterprises in comparison with the standard interest rate of 9 percent.
- (c) Increasing the size of the existing Export Development Fund (EDF) and reducing the interest rate. The size of EDF will be increased from 3.5 billion USD to 5.0 billion USD to facilitate import of raw materials under back-to-back Letter of Credit. The interest rate has been reduced from 2.73 percent (LIBOR plus 1.5 percent) to 2 percent (fixed).

Of the three components, the first one – offering salary support for three months – was the very first support scheme adopted by the government in response to the COVID-19 pandemic. Notwithstanding the importance of the export sector, especially the garments industry, for the economy of Bangladesh, it is somewhat odd that the support should have come to the workers in this sector in precedence over the rest of the economy. The oddity lies in the fact that if workers in any sector could have been supported by the employers themselves for a few months, without immediate government support, it was the garments industry – the most resourceful sector of the country. We have argued earlier for the case of a universal approach to entitlement support, in which the government should directly assist all those who have become food insecure due to loss of livelihoods, regardless of the sectors they belong to. If, however, the government intended to provide support to workers through their employers in specific sectors, priority should have been given to domestic enterprises, especially in the small and medium sectors, where the employers' staying power is much weaker than in the export sector. In any case, this is now a *fait accompli*, as the scheme was supposed to last for just three months. The only suggestion we can make is that the scheme is not extended any further.⁵⁰ The other two components of the special package for the export sector are entirely justified and should continue as planned.

⁵⁰There is a lesson here for the industry as well. Since, by its very nature, the export sector is subject to periodic fluctuations in demand, they should try to build up contingency fund in good times so that they are able to support workers fully in bad times, without waiting for a government handout. They have enough economic prowess to be able to do so, given the right intention.

Looking at the fiscal implication of the special package for the export sector, it may be noted that the first component does not involve any direct fiscal cost. The entire amount of the fund is loan, for which a 2 percent service charge will apply but the charge will be borne by the clients, not by the government. There is of course an opportunity cost of this fund, but this does not entail any direct demand on revenue. It is true that a fiscal allocation will have to be made in order to make the fund available to the Bangladesh Bank, but since the loan is going to be repaid within two years, there is no net expenditure in this scheme if one takes a two-year perspective. The other two schemes do involve direct fiscal cost by way of interest subsidy. The Ministry of Finance has estimated the subsidy amount to be approximately Tk. 7,500 million. Adding this to the cost of our proposed expansion of the general support programme for large-scale enterprises, the total fiscal cost of supporting the large-scale sector comes to about Tk. 57,500 million, which amounts to 0.23 percent of GDP.

VI. THE FISCAL IMPLICATION OF PROPOSED POLICIES

The measures of support proposed in this paper will no doubt involve a substantial fiscal commitment on the part of the government. Drawing upon the discussion in Section V, we present in Table 2 a summary of the estimated cost of the economic component of the proposed programme. The fiscal burden of economic support comes to about Tk. 1,300 billion (\$15.1 billion), or just over 5 percent of GDP. Additional resources will have to be committed to the health sector, which, as we have argued in Section III, should receive additional allocation to the tune of at least 1 percent of GDP. The total fiscal commitment would thus amount to over 6 percent of GDP (\$18.0 billion).

For comparison, the combined financial value of official packages announced so far comes to just over Tk. 1,000 billion, which is about 4 percent of GDP. But, as a measure of fiscal burden, this figure is misleading. The lion's share of government packages will be delivered in the form of loans, mostly at subsidised interest rates although there are some unsubsidised loans as well. Only the cost of subsidy involved in these loans ought to be counted as the fiscal burden of the government.⁵¹ A rough estimate suggests that counting interest subsidies along with grants and government purchases, the fiscal cost implied by the official packages will be no more than Tk. 100 billion, which amounts to just 0.4 percent of GDP.

⁵¹The government will of course have to make budgetary provisions for the loans to be disbursed; and this will require considerable budgetary readjustment and perhaps expansion of total expenditure in the forthcoming fiscal year. But, while counting the fiscal burden on the government from a medium-term perspective, the loan amounts must be left out, especially since most of them are very short-term loans, to be repaid in less than two years.

Table 2. Fiscal Implication of Proposed Economic Support Package

Area of Support	Amount in Million Taka	Percentage of GDP
Entitlement Support	960,000	3.78
Agriculture	107,850	0.42
CMSME Sector*	179,000	0.70
Large Scale Sector	57,500	0.23
Total	1,304,350	5.13

*CMSME stands for Cottage, Micro, Small and Medium Enterprises.

What we are proposing in this paper, therefore, constitutes a huge step-up in terms of fiscal commitment on the part of the government. The step-up is nonetheless justified because the cost of not making this commitment will be even higher in terms of human misery and output forgone. Looking at the breakdown of the cost, it is evident that entitlement support to households is by far the biggest component, accounting for almost three-fourths of total cost of economic support. This support is essential not only to stave off the threat of hunger and distress mortality, but also for saving the economy from total ruin. There are at least two ways in which an extensive programme of entitlement support is going to save the economy. First, it is only with the assurance of freedom from hunger that people will be willing to abide by the restrictions of physical distancing, which is essential for controlling the pandemic so that the economy can be re-opened in a safe and sustainable manner. Without this assurance, people will feel compelled to disregard the need for distancing; the pandemic will then get out of control, which will render it impossible to sustain any kind of economic activity. Second, even if businesses were keen to reopen, a depleted and emaciated labour force, stalked by acute hunger, is not the kind of resource that will help them to restore normal production.

It is, therefore, essential that the government explores all possible avenues for the necessary resource mobilization. A part of it will come from external sources. The Asian Development Bank has already committed over \$600 million, the International Monetary Fund has announced a support package of over \$730 million and the World Bank has committed another \$100 million. Together, they constitute just 8 percent of the resources needed. More funds may yet come, but it is clear that the major part of the resources must be mobilized internally. This will have to be done partly by readjusting budgetary allocation – specifically, by putting on hold relatively less essential expenditures at least for a year, and partly by taking recourse to deficit financing, most of which will have to be monetized.

Deficit financing should not be a matter of concern for the government in the present circumstances, for a number of reasons. First, since the existing level of deficit financing is very much within the safe range, the government has some leeway for increasing it without putting excessive burden on the economy. Second, if the pandemic is managed well, the need for deficit financing will be very temporary, mostly for a year, and perhaps with some hangover for another year. Third, the fear of

run-away inflation that is normally associated with the idea of deficit financing does not apply in the present circumstances. Insofar as the bulk of the money will be used for restoring households' entitlements that would have fallen in the wake of shutdown, deficit financing will only restore the lost demand for goods and services, instead of adding to pre-existing aggregate demand. As a result, the danger of inflationary pressures emerging from the demand side is not very significant. Fourth, to the extent that some of the resources will be used to soften the credit and liquidity constraints faced by enterprises, deficit financing will help restore the supply side quickly, thereby softening any pressure on inflation that might emerge from the demand side. Finally, even if the rate of inflation rises temporarily to some extent, poor households will still benefit from the overall impact of deficit financing. Since restoring the purchasing power of poorer households is the principal reason behind deficit financing, a slight increase in prices will not make them worse off compared to the situation without deficit financing. The only effect of the rise in price will be to reduce somewhat the real value of the entitlement support they would have received, but they would still end up with more real purchasing power with deficit financing than without.

Part of the financing should also come from a redistribution of income – from the rich to the poor. Since the bulk of the additional resources will be used for protecting the entitlements of the bottom half of the population, the richer half of the population should be called upon to make some sacrifices for the bottom half. In part, such a redistribution is warranted by history. Bangladesh society is becoming increasingly unequal; in the three decades from 1986 to 2016, the share of the bottom 40 percent of the population in national income has fallen from 18 percent to 13 percent, while the share of top percent of the population has increased from 31 percent to 38 percent (Osmani, 2018b, p.9). Any redistribution today, even if temporary, will go some way towards mitigating this historical injustice.

The amount of redistribution needed will actually be quite modest. Suppose, the entire cost of the entitlement support programme were to be borne through such redistribution, i.e., 3.8 percent of national income were to be transferred from the rich to the poor. If the entire transfer were to come from the top 10 percent of the population, who commands some 38 percent of national income, they will have to give up just 10 percent of their annual income. If instead the contribution came from the entire richer half of the population, which commands nearly 80 percent of national income, the transfer will amount to less than 5 percent of per capita income. Considering that such transfers will have to happen only once, not perpetually, the magnitude of transfer is by no means beyond the realm of feasibility.⁵²

Thinking about the mechanism of transfer, the usual route of taxing the rich is not ideal in the current circumstances. This is partly because this is meant to be a one-shot transfer, for which it would be impractical to incur the administrative costs of imposing a new tax or raising an old one. More importantly, what one needs at this time of national crisis is a sense of solidarity not dissension,

⁵²The need for such a redistribution scheme in the present context has been discussed, among others, by Islam and Ahmed (2020) and Barkat (2020).

which taxes are bound to create.⁵³ Any such redistribution should be voluntary. The government should appeal to the moral obligation as well as enlightened self-interest of the richer half of the population to come forward to help voluntarily.

The power of the moral impulse should not be underestimated. Even in normal times, human behaviour is not guided by pure self-interest alone; moral considerations play a large part in shaping people's conduct with each other. Adam Smith wrote illuminatingly about it in his *Moral Sentiments* two and a half centuries ago, but his observations still remain valid, as modern findings of behavioural economics powerfully testify (Thaler, 2015). The reach of moral obligation expands even more in times of crisis, especially one like the current pandemic that engulfs the entire society.

In addition to moral sentiments, the government can also appeal to the enlightened self-interest of the rich. As discussed earlier, a massive programme of entitlement support will not only mitigate the sufferings of the poor, it will also help create the conditions in which the economy can be re-opened in a safe and sustainable manner. Without staving off widespread hunger, it will not be possible to reopen the economy sustainably. And a state of affairs in which the economy cannot be reopened sustainably cannot serve the interests of the rich. Therefore, it is very much in the interest of the rich themselves that the entitlement programme is implemented successfully at the required scale.⁵⁴

Some members of the rich are already contributing privately through their own initiative. But these initiatives need to be harnessed through a common channel so that a snowballing effect can occur, as contributions made by some people encourage others to join in.⁵⁵ The government has already set up a relief fund to attract donation from the wider society. But this is an all-purpose fund, not earmarked for any specific programme. It might be wiser to set up a dedicated fund meant specifically for financing the entitlement programme since the motivation to contribute is likely to be stronger if it is known that the money will be used for fighting the hunger of the poor.⁵⁶ To make the objective explicit, it may be called the *Entitlement Support Fund*.

To make it work, the government will have to embark upon a massive campaign through the media, including the social media, calling upon the richer half of the society (including the Bangladeshi diaspora abroad) to contribute to the fund. It should be explicitly mentioned as

⁵³"This is not the time to create new enemies", as Voltaire might have said. However, higher taxes on the rich can be used as a long-term strategy for achieving social justice, once the pandemic is gone.

⁵⁴Yet another aspect of self-interest is that the very act of helping may enhance the mental well-being of the rich people, which may be valued especially highly in these difficult times, thus making 'giving' a win-win proposition, as Mahmud (2020) has observed.

⁵⁵Recall the Captain Tom initiative in the UK, which started as one man's initiative to raise a modest £1000 for the health service personnel engaged in the fight against COVID, but ended up raising more than £30 million.

⁵⁶Although all money is eventually fungible, behavioural economics shows that people often behave as if fungibility didn't exist. They find it psychologically more comforting to earmark different pots of money for different ends. See, Thaler (2015).

part of the campaign that donating as little as 5 percent of annual income by the richer half of the society will be enough to feed the poorer half throughout the pandemic. Appeal should be made to both moral obligation and enlightened self-interest. The amount of money donated should be constantly updated and displayed digitally in government website and throughout the media, so as to induce the snowballing effect. The people of Bangladesh have a proud history of standing by each other in times of crisis; the compassion and the spirit of unrequited benevolence displayed by them during the Liberation War, devastating cyclones and great floods are still fresh in the collective memory of the nation. There is every reason to hope that the nation is capable of displaying the same spirit of compassion once again.

VII. SUMMARY OF POLICY RECOMMENDATIONS

- (1) A comprehensive policy response to COVID-19 will consist of three types of policy instruments (a) enforcement of physical distancing through temporary economic shutdown, (b) a bold package of economic support, consisting mainly of an entitlement support programme designed to help those households whose livelihoods have disappeared due to economic shutdown, and (c) a strong programme of public health support that will enable safe reopening of the economy in the shortest possible time.
- (2) The contents of the policy instruments will have to be calibrated on the basis of a two-phase approach – a first phase consisting of at least three months during which distancing will have to be imposed very strictly resulting in large-scale economic shutdown, and a second phase lasting for at least another six months during which it should be possible to re-open the economy gradually by relaxing the shutdown.
- (3) The actual timing of the transition from the first to the second phase will depend on a couple of conditions being met: (a) the daily rate of infection must go past the peak and begin to come down on a consistent basis, and (b) the public health system must be able to carry out the three T's (test, trace and treat) effectively on a massive scale.
- (4) For this transition to be possible in the shortest possible time, the government will have to embark upon a bold programme of revamping the public health system on a priority basis, as this will be the foundation on which the economic support programme will be built. The pandemic will inevitably impose an economic cost; the only way to minimise this cost is to put in place a strong system of public health support, which will permit quick re-opening of the economy 'safely'.
- (5) An important component of the public health programme will be a vast scaling up of the ability to test for COVID infection. In order to induce the supply of the millions of test kits that will be needed, the government should give an undertaking that it will buy whatever amount is supplied by the market (up to a limit) at an agreed price. The tests should then be provided free of cost, at least to the poorer households, to ensure that demand does not lag behind supply.
- (6) At the same time, efforts must be made to improve the overall capability of the public health system to trace, monitor and treat COVID patients on a large scale. This will require both organizational innovation and additional resources. Organizationally, the public healthcare system should team up not just with the private sector but also the social sector, especially many reputed NGOs who have vast experience of providing valuable healthcare services at the grassroots level. In terms of resources, allocation to the health sector should be increased by at least 1 percent of GDP to raise it from its current abysmally low level to at least the average of low-middle income countries.
- (7) The policy package for economic support will have two major components: (a) entitlement support for households and (b) production support for enterprises. Relative emphasis on the two components will change over time. In the first phase, i.e., the period of severe shutdown, the main focus will be on entitlement support for households who have lost their livelihoods. This will have to be complemented by enterprise support to the 'essential' sectors (the core of it being the food sector broadly defined) which must remain open even in the first phase, because otherwise entitlement support will be ineffective. In the second phase, when the economy gradually begins to reopen, the focus will shift gradually towards enterprise support for the 'non-essential' sector as well. Even within this phase, there will be an element of sequencing – attention being paid first to the small sector and then to the large. Thus, the overall sequence will be from households to smaller enterprises and finally to larger enterprises.
- (8) Entitlement Support to Households: Three major issues are involved here: (a) how much support i.e., the scale of support per household and in the aggregate, (b) who should receive support i.e., identification of beneficiaries, and (c) what kind of support – e.g., whether it should be provided in cash or kind. Some bold and non-conventional thinking is needed on each of these issues.
- (9) The paper estimates that at least half of the population has become food insecure in the wake of economic shutdown. This means that some 20 million households will need entitlement support in the first phase. The amount of support needed is estimated conservatively at Tk. 8000 per household per month. In the second phase, when the economy begins to re-open, the number of households needing support will gradually decline. Taking the two phases together, it is estimated that the entitlement support programme will cost Tk. 960,000 million – about 3.8 percent of GDP.
- (10) For the identification of beneficiaries, a common universal approach should be adopted instead of following a fragmented approach, in which different

- target groups are identified by sectors, occupations, location, age and sex, etc. For this purpose, a nationwide comprehensive list of vulnerable households must be prepared immediately, building from the ground up – a list for each village and each ward. The criterion for inclusion will simply be whether a household is suffering from food insecurity. It should be possible to prepare such a list reasonably quickly, and fairly reliably, at the local level by involving local government personnel, elected representatives, school teachers, religious leaders and NGOs. To minimise errors of inclusion and exclusion, the lists should be openly displayed at a place where everyone has access, including digital forums.
- (11) A unified cash support scheme should be adopted in order to simplify the delivery mechanism. Simplification of the delivery mechanism is especially necessary in view of the fact that the support scheme will have to be operated on a massive scale – encompassing nearly half the population of the country. And nothing is simpler than delivering cash. The existing stock of foodgrain held by the government should be used to augment the supply side through open market operations. Cash should be transferred directly to the beneficiaries by using digital banking, mobile banking network and microfinance institutions. The *Palli Karma Shahayak Foundation* (PKSF) can play an important role here as the facilitator of the process.
- (12) Enterprise Support in the First Phase: The Essential Sector: The ‘essential’ sector consists mainly of the food sector (broadly defined to include production as well as all ancillary activities such as transportation, distribution, and wholesale and retail trade in food products). The government has already announced a number of support packages for this sector, whose fiscal cost amounts to 0.42 percent of GDP. In terms of resources, the level of fiscal support is adequate, but attention should be given towards removing some inconsistencies in government policies that inhibit smooth functioning of the ancillary components of this sector.
- (13) Enterprise Support in the Second Phase: Cottage, Micro, Small and Medium Enterprises (CMSME): When the economy begins to reopen in the second phase, priority must be accorded to the cottage, micro, small and medium enterprises (CMSMEs), because of their limited staying power and also because this sector accounts for an overwhelming proportion – some 86 per cent – of employment outside agriculture.
- (14) The government has announced a subsidised loan disbursement scheme, to be operated by the banking system, supported by a refinancing scheme. Experience suggests, however, that the formal banking system is utterly incapable of reaching the cottage sector. This paper proposes that a separate package should be implemented for the cottage sector, to be implemented with the help of microfinance institutions. Loans worth Tk. 200,000 million will be provided at a nominal charge of 2 percent to the borrowers and the lenders will receive 7 percent from the government by way of subsidy. The fiscal cost of this programme will be only about 0.05 percent of GDP, a rather cheap way of reviving livelihoods in a sector that provides more than half the employment outside agriculture.
- (15) For the rest of the sector (MSMEs), the banking channel may be used, but the current package would need to be modified in a number of ways. First, since many of these enterprises are currently outside the network of the banking system, a comprehensive list of these enterprises must be prepared first through the cooperation of BBS, SME foundation and BSCIC. Second, since the micro and small enterprises find it hard to abide by standard banking requirements, an innovative approach should be adopted for them, following the model of the “Credit Wholesale Program (CWS)” of the SME Foundation, which has a proven track record. Third, before giving any loans to them, their liquidity position should be improved by granting them waiver on existing loans for at least three months. Finally, since the entrepreneurs are mostly low-income people, subsidised loans should be offered not only to enable wage payment to workers but also to ensure a normal level of profit for them. The paper estimates that a revamped programme of this kind will cost around Tk. 165,000 million. Adding the support to be provided to the cottage sector, the total fiscal cost of supporting the CMSME sector turns out to be Tk. 179,000 million, which is roughly 0.7 percent of the GDP.
- (16) Enterprise Support in the Second Phase: Large-Scale Sector: The very first package announced by the government in response to COVID-19 was in support of the export sector: Tk. 50,000 million worth of interest-free loan was offered to enable the firms to pay wages to workers for three months. However, if the intention was to protect the entitlement of workers, there was no justification for giving precedence to workers in the export sector over others, especially those working in the informal sector of the economy. This programme should not be extended beyond three months, and if the firms remain closed for a longer period, entitlement support should be provided to their workers, along with all others, through the unified cash support programme proposed in this paper. Other packages offered to help the export sector may remain in place.
- (17) The government has announced a separate package for the large-scale sector in general, aimed mainly at the domestic sector. The intention is to provide subsidised working capital loan to enterprises badly affected by the shutdown. This paper proposes to modify and expand this package in two respects. First, in the existing package, firms are entitled to receive subsidised loan only up to 30 percent of their normal working capital requirements. However, since the intention is to help the really distressed firms, subsidised loan should be extended to cover the entire working capital requirement. Secondly, the existing scheme provides no incentive to the banks at all to undertake the additional administrative cost and to bear the additional risk of providing loans to firms in distress. The paper proposes that the interest subsidy should be increased by 1 percentage point, which will go to

the banks rather than to the clients. The expanded package will entail a fiscal cost of Tk. 57,500 million, which amounts to 0.23 percent of GDP.

- (18) The measures of support proposed in this paper will involve a substantial fiscal commitment on the part of the government. The fiscal burden of economic support comes to about Tk. 1,300 billion (\$15.1 billion), or just over 5 percent of GDP. An additional allocation of at least 1 percent of GDP will be required for the health sector. The total fiscal commitment would thus amount to over 6 percent of GDP (\$18.0 billion). The most important component is the entitlement support programme which accounts for three-fourths of the cost of the overall package for economic support.
- (19) For comparison, the fiscal cost of the official packages announced so far (counting interest subsidy but not the loans as fiscal cost) amounts to no more than 0.4 percent of GDP. The proposed policies clearly require a huge step-up in terms of fiscal commitment on the part of the government.

Most of the resources will have to be mobilised internally as external resources promised so far covers less than 10 percent of the requirement. The government will have to resort to both substantial reallocation of resources (postponing less essential expenditures) and deficit financing (mainly through monetization rather than borrowing). Under the present circumstances, deficit financing is a relatively safe option.

- (20) Attempt should be made to raise a part of the resources through redistribution of income from the rich to the poor – not through new taxation but by encouraging voluntary transfer. The entire entitlement support programme can be financed through redistribution if the richer half of the population gives up just 5 percent of their annual income – on a once-for-all basis. The government should set up an *Entitlement Support Fund* for this purpose and launch a massive campaign in its support.

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This research is a part of the [Rapid Research Response to COVID-19](#) project which aims to generate rapid and actionable research-based insights to policy and program actors, on the socioeconomic impact the COVID-19 pandemic on our lives, focusing on the poor and vulnerable population of Bangladesh.



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