INTRODUCTION

The novel coronavirus disease (COVID-19) outbreak was declared a pandemic on 11 March 2020. The health crisis may spark a food crisis, unless measures are taken quickly to protect the most vulnerable, keep food supply chains functioning, and mitigate the pandemic’s impacts across the food system. The Food and Agriculture Organization of the United Nations (FAO) knows from dealing with past health crises that these can have a drastic effect on food security, especially that of vulnerable communities.

Approximately 1.3 million people are food insecure and in need of food and livelihood assistance in Cox’s Bazar district of Bangladesh (JP, March 2020). Food security among the poorest people living in the host community is also a growing concern. Many have lost access to the lands they farmed previously, often government forestland, and many have seen their wages declined – limiting their food and nutrition security.

The shock of COVID-19 outbreak is unprecedented in that it simultaneously affects significant elements of both food supply and demand in Cox’s Bazar district and around Bangladesh. Supply chain and trade disruptions could restrict people’s access to sufficient and nutritious sources of safe food, especially in areas that already have high levels of food insecurity.

In response to the outbreak, FAO, along with other humanitarian and development partners in Cox’s Bazar, is working with the Government of Bangladesh on preparedness and response measures in host communities. In line with Government priorities, collective efforts are necessary to protect the food supply chain and support agricultural production to avoid a major food crisis and safeguard the most at risk. The humanitarian community provided food assistance, cash support, and agricultural inputs to the households in Ukhiya, Teknaf, Cox’s Bazar Sadar, and Ramu, and plans to extend their supports to extremely vulnerable host communities in all sub-districts in the district.

The ongoing lockdown, which is crucial to contain the outbreak, has impacts on the livelihoods and food security for the most vulnerable Bangladeshis, particularly those working in agriculture and other informal sectors. Lockdowns and other restrictions on business activity to control COVID-19 will lead to reductions in food consumption and in nutrition status — especially among the poor (through rising food prices, falling incomes, or both). People will have less money to pay for their food. Consequently, these families buy more grains and staples at low cost instead of expensive goods like meat and fresh produces.

To respond to the economic fallout from COVID-19, effective support to the food system is needed at different levels. Agricultural production support, cash transfers and safety nets for the poor and vulnerable, labour mobilization, transportation support for movement of commodities, and use of information and database support for farmers and business coordination within the food supply chain - are some of the potential coping initiatives. These approaches will optimize the chance to boost agricultural production and keep small firms operating.

Government agencies need to be at the forefront to lead the coping interventions in collaboration with the national and international development stakeholders. The development policies require to be contextualized for effective and efficient implementation of the coping activities. Immediate, short, medium- and long-term development planning should be developed in coordinated way to implement policies and programmes that target the most vulnerable communities.

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CALL FOR ACTIONS
(COPING STRATEGIES)

Raise Awareness: Development agencies should initiate intensive awareness programmes on safety protocols to avoid COVID-19 transmission at different levels. The awareness programme should also include messages against rumors and wrong understanding to create demands for agricultural commodities. In addition, testing for COVID-19 should be increased as much as possible for all farm workers.

Build Capacity: Prioritize effective knowledge and skill development mechanisms for the farmers and market actors on technical and business interventions to increase productions, improve market functions, and increase business interactions. Government agencies need to strengthen their institutional capacity and improve comprehensive agricultural extension service provisions for the producers.

Provide Input support: Quality Input support, both in-kinds and in cash integrated with technical supports and assistance on GAP, needs to be the primary focus for the government service providing agencies to sustain quality food production and marketing chains. Input support in kind should include seeds (fish and crop), feeds (fish and livestock), day old chicks and fertilizers while Cash support should include grants and/or seed money for immediate recovery of agricultural losses.

Support Alternative Income Generating Activities: Government agencies need to have separate support plans for the marginal and smallholder farmers’ households. Considering their socio-economic situation, alternative income-generating activities need to be considered through start-up grants. Households across the sub-sectors should be engaged in locally feasible on farm and off farm Income Generating Activities (IGAs) that would indirectly contribute to agricultural farming and marketing.

Agricultural Mechanization: Government agencies need to increase provisions of farm machinery and equipment support for the agricultural farmers to efficiently cultivate and safely harvest the crops, fishes and livestock in a timely manner.

Market stabilization and development: Gear up the food value chain and strengthen input and output market functions to facilitate supplies to the farmers. Additionally, ensure fair trade of commodities to support farmers getting better price. The government needs to encourage the private sector entities to support the market operation systems and provide regulatory support.

Transportation: Inter growth center transportation/movement of commodities and market actors is key for the vibrant agricultural supply chain where government has major role to play. Relevant Government agencies need to have alternative transportation options ready for the seasonal farm workers as well as agricultural commodities to ensure continuation of supply chain.

Coordination and cooperation: Relevant government agencies (DAE, DoF, DLS) in Cox’s Bazar do not have adequate resources and capacity to implement independently aforementioned coping strategies effectively and efficiently. The agencies need to coordinate with the UN agencies and development partners for comprehensive planning on immediate, short/medium and long-term solutions to deliver comprehensive support package for the farming communities.

1 Department of Agricultural Extension (DAE), Department of Fisheries (DoF), Department of Livestock Services (DLS)
SUB-SECTOR LEVEL IMPACTS & COPING ACTIONS

AGRICULTURE SUB-SECTOR (CROPS & VEGETABLES)

Potential impacts on crops/vegetable farming

Approximately 60% of the vegetable supply comes from local producers in winter, but in summer, 35-40% the vegetables sold in Cox’s Bazar comes from outside of the Cox’s Bazar districts. Though the COVID-19 situation impact thus far have been minimal, as the food supply has been adequate and markets have been stable, current blockages of transport routes, transport restrictions and quarantine measures, labor shortages, and spikes in product prices present obstacles to the continuation of the supply chain, potentially resulting in food shortages over the long term. In the short term, procuring labor for Boro (irrigated winter crop) rice harvesting from late April to mid-May will be a large obstacle for farmers.

- If the restriction of movement lasts longer, the major constraint will be on the marketing of agricultural commodities. Harvesting may be disrupted because of a lack of seasonal labor; planting as well because of a lack of seed or fertilizer supplies as transportations have been restricted; and market interactions because of lock downs and social distancing. These will combine to disrupt the food system.
- Current blockages of transport routes, transport restrictions and quarantine measures, shortages of labor, unavailability of inputs and services, and spikes in product prices will interrupt the food value chain.
- Most of the farmers (83%) collect their inputs from local and sub-district markets, while only 17% purchase them from district markets. Farmers will soon move on to winter vegetables cultivation. If they do not get quality inputs and timely services or if they face higher prices for inputs, farmers may be discouraged from cultivation, which will lead to a shortage of supply meaning a state of food insecurity.
- Vegetable production in the summer season may also be restricted by lack of irrigation facilities in some areas.
- The lockdown situation will create a huge supply shortage, resulting in higher prices of foods. Involved in vegetable cultivation are being deprived of their regular sales and income, which ultimately influences their livelihoods.

Immediate Actions

i. Educate the farmers about COVID-19 including transmission risks, hygiene practices etc. Additionally, educate farmers on hygiene practices in crop and vegetable handling, safe vegetable production and healthy working conditions.

ii. Ensure quality seeds (rice and vegetable) along with user-friendly training handouts to the farmers to increase their production through individual and collective actions.

iii. Provide farm machinery support to the farmers to effectively and efficiently cultivate and harvest their crops/vegetables. Also support the farmers in maximizing the utilization of the machineries to reduce production cost as well as addressing labour crisis; Farm machinery include- Water pump, Rice transplanter, Reaper, Seeder, mini-harvesters and Power thresher.

iv. Provide cash grants as seed money, cash for work or in-kind support to the marginal and smallholder farmers to procure agriculture inputs like-fertilizer, pesticides or start Alternative Income Generating Activities (AIGAs), which may indirectly support production and market development. For example – battery operated van for Local Service Provider.

v. Provide marginal and poor farming households with a rainwater harvesting system for both drinking water and homestead gardening purposes.

Short Term Actions

i. Train the farmers on potential coping strategies for increased production and developing agro-business and markets. Coping strategy includes improve knowledge and skill on improve production techniques/adopt new technologies and effective access to market opportunities.

ii. Train the DAE staff on improved technologies, emergency contingency plan and improved extension service provision.

iii. Support farmers and market actors with alternative transportation for safe movement of commodities in between the growth centres and aggregation centres.

iv. Support farmers to market their crops and vegetables and help them getting good price. Link the farmers with private sectors to perform the businesses in terms of workers’ mobility, transportation, capacity building and access to finance in maintaining cash flow for operations of the businesses.

v. Promote inter agency coordination and cooperation to provide comprehensive assistance and support to the farmers on integrated crop and vegetable production.
POND AQUACULTURE AND MARINE FISHERIES SUB-SECTOR

Potential impacts on fisheries

Fishing is one of the major economic activities in Cox’s Bazar. Approximately 18% of the population in the district is engaged in the fish sector in one way or another. Massive lockdown due to the viral outbreak is taking place during the time of year that is most suitable for stocking fish in the Cox’s Bazar district.

- Associated supply chain disturbances, uncertainty and shortages in the fingerling supply, many farmers in this region might miss the upcoming pond aquaculture season, resulting in a shortage of farmed fish in the local market over the long term.
- At the same time, many fish hatcheries have limited their production because of the low demand for fingerlings. The cumulative effect could be a price hike for fingerlings.
- 50% of farmers are limiting fish feed, while others are not stocking fish at all. The cumulative effect is that feed sales are going down; the market is expecting 30-40% drop in the price of fish feed in the short term.
- Marine fishing, which makes up 95% of fishing in the district, will follow a declining trend of demand and production of marine fish in local markets. At present, the export of marine fish has been completely halted because of the closing of the seaports and associated activities.
- With the outbreak of the infection, the number of customers and therefore sales for the fish market dropped almost immediately. As a result, the price of fish is dropping, and fishmongers are selling their fish with very little profit margin or no profit at all.

Immediate Actions

i. Build awareness of the aquaculture farmers and marine fishers on COVID-19 transmission including hygiene practices. Additionally, aware farmers on hygiene practices in handling fish, safe fish production and healthy working conditions. Incorporate health-screening protocols at every step.
ii. Provide quality fingerlings and fish feed to the pond-aquaculture fish-farmers to increase fish production through individual and collective actions.
iii. Provide pond-aquaculture equipment and relevant tools to the farmers to effectively and efficiently cultivate and harvest their fishes and other integrated crops. The equipment and tools include- water pump, DO and PH meter, lights, nets, etc.
iv. Provide cash grants as seed money to the pond aquaculture farmers and/or marine fisherfolk to improve production techniques and adopt new technologies, lease ponds or procure inputs like- fertilizer and feed.
v. Promote Alternative Income Generating Activities during “ban” period and crisis seasons (drought). Cash for work might be an option to improve essential food purchase capacity.

Short Term Actions

i. Provide intensive technical training on integrated pond aquaculture to the pond aquaculture farmers, on dry-fish production to the dry fish producers and on “safety at sea” to the marine fishers.
ii. Organize training for the DoF staff on marketing and agribusiness, safety at sea and integrated pond-aquaculture to improve service provisions for the fishers. Govt. Fish Seed Farms should be given special attention to produce more spawn, fry and fingerlings as much as possible.
iii. Support aquaculture farmers and marine fishers with local transport facilities to ensure transportation of fingerlings and seeds in time as well as transport marine fishes to higher markets. Conduct events with fish producer and market actor to increase linkages and interactions leading to better market access and improved supply chains for the pond aquaculture farmers. Additionally, link with external buyers or niche markets to facilitate seasonal or long-term supply contract.
iv. Increase inter agency and inter stakeholder coordination and cooperation to improve fish production and expand promotion at outside markets. Facilitate private sectors to ensure smooth supply chain of feed and medicine.
v. Build confidence of the consumers through awareness programmes and improve fish storage and landing facilities and maintaining hygiene practices in fish handling.
Livestock farmers in this region mainly practice traditional systems. Lack of technical knowledge about animal health, vaccination, feeding, and breeding as well as limitations of quality services including inputs are holding this district back from becoming competitive with other parts of the country. The COVID-19 outbreak has drastically affected the livestock sub-sector in Cox’s Bazar.

- It is likely that the livestock and poultry productivity may decrease further in Cox’s Bazar as many farmers may leave livestock and poultry farming due to COVID-19.
- Transport restriction may result to feed scarcity for livestock and poultry; selling of livestock and poultry products. Poor selling may limit their capacity to purchase required feed/medicine.
- Due to the uncertainty of market demand, the farmers are less interested to get new poultry stock. Due to the outbreak and the associated lack of demand, Day Old Chick (DOC) production has dropped sharply.
- Local area may face shortage of chicken in local markets due to unavailability of DOC supply and other inputs to the producers.
- The situation has restricted the provision of the government services for the farmers (e.g. veterinary services) resulting potential risk for the livestock and poultry production.
- Many poultry farmers are worried about paying off their bank loans and incurring financial losses due to COVID-19.
- Restaurants are closed - resulting significant reduction the number of buyers of meat, eggs, and milk.
- Social rumors are affecting the market of poultry and livestock products.

Immediate Actions

i. Intensively aware the livestock and poultry farmers on COVID-19 transmission including hygiene practices. Additionally, aware farmers on hygiene practices in handling livestock, poultry and eggs, safe and clean livestock and poultry production and healthy working conditions. Incorporate health-screening protocols at every step.

ii. Support the poultry farmers with quality DOC and feeds to increase layer and broiler production through individual and collective actions. Supports should also include quality shed/house for both poultry and cattle/milk-cows.

iii. Urgently create provisions for livestock and poultry farming equipment and relevant tools for the farmer to efficiently produce livestock and poultry and other integrated crops. The equipment and tools include- artificial insemination machine, egg incubator/hatching equipment, etc.

iv. Provide cash grants, cash for work or in-kind support to the marginal livestock and poultry farmers to procure necessary inputs like-DOC, shed, feed/fodder, medicines.

v. Provide seed money to initiate AIGAs to recover economic loss, which may indirectly support production and market development.

Short Term Actions

i. Organize technical training for the livestock and poultry farmers as well as for the government staff on improved technologies to promote integrated livestock and poultry farming. Coping strategy may include improved knowledge and skill for improved production techniques/adoption of new technologies and effective access to market opportunities

ii. Provide support in fodders production to the cattle/milk-cow farmers to promote large-scale livestock farming.

iii. Close coordination among the relevant development organizations including government agencies and private sectors should be encouraged to ensure smooth supply chain.

iv. Provide input support to farmers with poultry/livestock feed, vaccination, Artificial Insemination (AI), fodder grass and Ipil Ipil (fast growing legume plant) seed distribution.

v. Develop mechanisms and support smallholder farmer to increase market demand and price of their products and retain their business.