COVID-19 IMPACT ON FARMERS IN BANGLADESH: FINDINGS FROM THE BAEN SURVEY



The Society for Bangladesh Agricultural Extension Network (BAEN) recently organized a survey among Extension and Advisory service providers in Bangladesh to understand the challenges faced by farmers due to COVID-19 and the effectiveness of the measures aimed at addressing them. In this blog, Dr. Sekender Ali presents findings from this survey.

CONTEXT

COVID-19 has impacted all sub-sectors of agriculture (crop, livestock and fisheries) in Bangladesh. The nationwide lockdown strategy included several protective measures that resulted in restricted access to agricultural products, inputs, markets and Extension and Advisory Services (EAS). These restrictions, which were in place till 30 May 2020, significantly affected farming, including food supply and demand. Agricultural Extension in South Asia previously published two blogs on the impact of COVID-19 and

the role of EAS in addressing some of these issues. In April 2020, the Society for Bangladesh Agricultural Extension Network (BAEN) decided to conduct an online survey to assess the effects of COVID-19 on Bangladesh's agriculture and the effectiveness of interventions. The online survey link was mailed to EAS professionals (representing the public, private and NGO sector). As many as 117 EAS professional responded to the survey. A breakup of respondents by sector of representation has been presented in Figure 1.

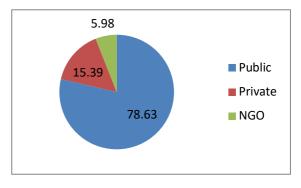


Figure 1: Percentage of respondents from public, private and NGO



MAJOR FINDINGS OF THE STUDY

The findings of the online survey to assess the effects of COVID-19 on Bangladesh Agriculture and the effectiveness of interventions are discussed below.

Problems faced by farmers of Bangladesh due to COVID-19

Due to COVID-19, farmers of Bangladesh are facing different types of problems in varying degrees. BAEN members made an exhaustive list of these problems from different media sources (print and television) and through consultations with relevant EAS experts. This list was further modified and validated by BAEN's Executive Committee and finally 28 items were included in this study.

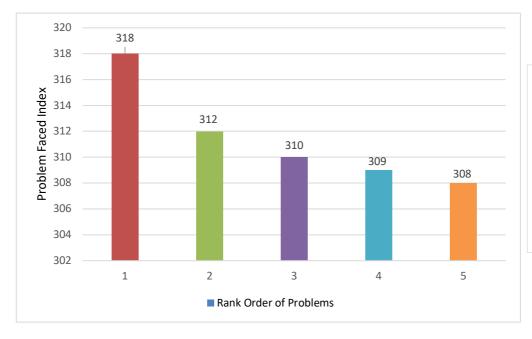
Respondents were asked to mention their opinion on the extent of difficulty experienced by farmers due to a select problem as a result of the pandemic. They highlighted their response ('severe problem', 'moderate problem', 'low problem' and 'no problem'). Out of these 28 items, the respondents felt 22 problems were very severe (Box 1).

Box 1. Problems perceived as severe by the respondents

- 1. **Wastage and low price of vegetables and fruits** (at farm gate or local market due to disconnect with the customer, absence of traders (middlemen as collectors, transporters wholesalers, etc.) and vehicles for transport
- 2. **Low price** of egg, milk, meat, etc. at farm and local markets due to reduced customer footfall, traders and vehicles
- 3. Losses from export quality vegetables due to closure of borders and airports
- 4. Wastage of flowers in farmers' fields as there are no customers, traders, collectors, transporters and vehicles
- 5. Losses from shrimp to farmers and exporters due to closure of borders and airports
- 6. **Losses from crab** and **mud eel** to producers, and dry and frozen fish to exporters owing to closure of borders and airports
- 7. **Reduced income** due to dampened marketing of farmers products
- 8. Food shortage in agricultural labour households due to lack of work and stay at home
- 9. Losses for mango and litchi farmers and traders (due to marketing constraints)
- 10. Low price of fish products at farm and local markets due to reduced customer footfall, traders and vehicles
- 11. Inability of farmers to pay loan instalments and unavailability of new loan for cultivation and farms
- 12. Shortage of skilled manpower and labour for vegetables and fruits transporting and marketing
- 13. Shortage of labour for harvesting and post-harvest practices of Boro rice
- 14. Complex bank procedures to avail loans for agricultural activities
- 15. **Inadequate supply of inputs for livestock production** like days-old chicks, poultry feed, veterinary medicine and vaccine, etc. due to restricted transport and quarantine measures
- 16. **Shortage of labour for post-harvest practices** of vegetables and fruits (sorting, grading, packaging, handling, etc.)
- 17. Farmers have to pay more for buying inputs and food which increases their family expenses
- 18. Shortage of labour for livestock (poultry, cow, goat, milk, meat, egg, etc.) production
- 19. **Inadequate supply of fisheries production inputs** like fish seed, feed, medicine, vaccine, equipment, etc. due to restricted transport and quarantine measures
- 20. **Shortage of food grain, vegetables, fruits, egg, milk, fish**, etc. in big cities due to short supply of agricultural products from fields and local markets
- 21. Shortage of harvesters for Boro rice harvesting
- 22. **Inadequate supply of crop production inputs** like seeds, fertilizers, pesticides, etc. due to restricted transport and quarantine measures

Problems related to "wastage and low price of farmers' products (vegetables, fruits, egg, milk, meat, flower, shrimp, crab, etc.) at farm gate or local market due to disconnect with the customer, absence

of traders (middle men as collectors, transporters wholesalers, etc.) and vehicles for transport" were the top ranked problems. Severity of top ranked five problems is presented diagrammatically in Figure 2.



- Wastage of farmers' products at farm gate or local market
- 2. Low price of farmers' products at farm gate or local market
- 3. Disconnect with the customer
- 4. Absence of traders
- Lack of vehicles for transport

Figure 2: Top five problems that are assessed as severe

Initiatives taken by different organizations to minimize problems faced by the farmers of Bangladesh due to COVID-19 Pandemic

Different organizations of Bangladesh have taken several initiatives to mitigate problems faced by the farmers of Bangladesh due to COVID-19. Perception on effectiveness of these initiatives vary considerably. BAEN members made an exhaustive list of these initiatives to include in the study.



Respondents were asked to mention their perception on the degree of effectiveness of these initiatives by highlighting the correct response - 'highly effective, 'moderately effective, 'low effective', and 'not effective'. The initiatives organized on the basis of rank order for effectiveness are presented in Box 2.

Box 2. Rank order of initiatives to minimize COVID related problems faced by the farmers Highly effective Initiatives

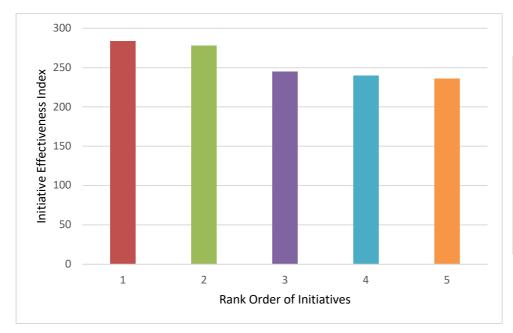
- 1. Cultivate every inch of land for more crop production (as directed by the Prime Minister).
- 2. **Implement continuous agricultural activities** for ensuring food security (also directed by the Prime Minister).
- 3. Ensuring all time presence of DAE staff (24 hours every day of each week in respective work areas).
- 4. **Arrange weekly** *haat* (makeshift market) in open field in every area to help farmers sell their produce by maintaining social distance (as instructed by the Prime Minister).
- 5. Allocation of BDT. 9,000 crore as fertilizer subsidy.

Moderately effective Initiatives

- 1. **Ensure hassle-free movement of farm workers** travelling from one district to another, especially for Boro rice harvesting.
- 2. **Purchase 8 lakh ton Boro paddy** @Tk26 per kg and **10 lakh ton boiled Boro rice** @Tk36 per kg from farmers directly.
- 3. **Excluding vehicles transporting agricultural producer and agro inputs** (fertilizers, pesticides, diesel, etc.) from lockdown.
- 4. **Distributing seed of BINA-19 rice variety** by Bangladesh Institute of Nuclear Agriculture (BINA) for *kharif* season and providing suggestions for its cultivation.
- 5. Setting up a control room by the Department of Livestock Services (DLS) to advise farmers.
- 6. **Agri. digital apps support** for agricultural advisory services by government/private organizations/mobile company/various projects.
- 7. **Allowing movement of people engaged in crop harvesting and facilitating** food and agricultural input supply chain.
- 8. **Upazilla-wise distribution and allocation of farm machinery** (Combined Harvester, Reaper and Rice Trans planter with subsidy).
- 9. Executing necessary measures to enhance Kharif-1 production.
- 10. **Stimulus package of BDT. 5,000 crore for the farmers** to boost agricultural production in the backdrop of COVID-19 fallout.
- 11. **Distribution of VGF Rice to farm families** in 20 districts by the Department of Fisheries (DOF) as Humanity Assistance Program.
- 12. **Initiating monitoring cell by BADC for emergency situation** to preserve Boro seed and distribution of Aus seeds across the country.
- 13. Allocation of BDT. 200 crore as incentive for purchasing agricultural machinery (especially rice harvesters).
- 14. Irrigation incentive for farmers provided by BADC.
- 15. Allocation of BDT. 150 crore as incentive subsidy for purchasing seeds.
- 16. **Continuation of existing disbursement of loans at 4% interest** for producing spices like onions, garlic, zinger and chili, etc.
- 17. **Providing food aid and relief** to daily wage earners.
- 18. Credit support by NGOs for farming activities.
- 19. **Setting up of control room by DOF** to provide suggestions to farmers.
- 20. Broadcasting nutrition related audio clips by DOF to create awareness.

Findings revealed that among the 25 initiatives, five were highly effective and 20 were moderately effective. It was also found that initiatives related to the Prime Minister's directions – to cultivate every inch of land for more crop production, implement continuous agricultural activities for ensuring food security, arrange weekly haat (makeshift market) in open field in every area to help farmers for selling their produce by maintaining social distance, ensuring all time presence of DAE staff in respective working areas and allocation of BDT. 9,000 crore as fertilizer subsidy – were identified as

the top ranked initiatives i.e. the highly competent initiatives. Effectiveness of top ranked five initiatives is presented diagrammatically in Figure 3.



- Cultivate every inch of land for more crop production
- 2. Implement continuous agricultural activities for ensuring food security
- 3. Ensuring all time presence of DAE staff
- 4. Arrange weekly *haat*
- Allocation of BDT as fertilizer subsidy

Figure 3: Top five initiatives ranked as effective

RECOMMENDATIONS TO MINIMIZE THE IMPACT OF COVID 19

Based on the above findings, a few suggestions to minimize the problems being faced by farmers of Bangladesh are mentioned below:

- Strictly follow the Prime Minister's directions that have been shown as highly effective.
- All time presence of Extension and Advisory Service (EAS) providers at local working areas for technical support to crop, livestock and fisheries sectors to minimize their problems.
- Effective collaboration and coordination among public and private Extension & Advisory Services (EAS) providers, with BAEN responding to immediate threats to Bangladesh's agriculture.
- Strengthen digital advisory services and provide information on output prices, availability of inputs, etc.
- Arrange proper marketing system to sell farmers' produce (vegetables, fruits, egg, milk, meat, flower, shrimp, crab, etc.), so that they can benefit by getting fair price with minimum wastage.
- Arrange e-marketing system to help farmers buy inputs and sell agro-products in collaboration
 with BAEN, government's extension organizations (DAE, DLS, DOF, etc.), NGOs (SDI, BASA, iDE,
 OXFAM, Practical Action, HELVETUS, etc.) and private organizations (One Bangladesh, Matrix,
 ABC Start-up Ltd. Etc.).
- Organize proper transport system for marketing farmers' products by taking subsidy or aid from donor and development organizations.
- Organize proper transporting and distribution system to transport agricultural inputs from manufacturing and marketing companies to local dealers and farmers.
- Proper monitoring and distribution of government subsidies, grants, incentives, credit, etc. for betterment of farmers.
- Strengthen cooperative farming and marketing systems.
- Ensure migration of agricultural labour from surplus areas to the deficit areas of the country while ensuring proper healthcare for them.

- Increase agricultural mechanization facilities for farmers.
- Providing low interest credit to farmers' groups (common interest groups formed by DAE, farmer groups of NGOs) to buy large agricultural equipment like rice harvesters with matching government subsidy so that small and marginal farmers can harvest their rice and also earn money by cutting other farmers' rice.
- Providing incentives to crab, mud eel and flower farmers as their products are not saleable
 due to lockdown of airport and lack of customers; temporally, these areas may be used for
 producing other crops with incentives.
- Educate farmers about hygiene measures such as handwashing, wearing masks, staying home if sick and maintaining social distancing.
- Ensure vehicle, insurance, incentive, PPE, sanitizer products, etc. for EAS personnel.
- Ensure grants from development partners (FAO, IFAD, other donors, development banks, etc.)
 for:
 - Increasing the capacity of EAS providers
 - Increasing capacity of small and marginal farmers to buy agricultural implements
 - Establish low cost cold storage facilities at farmers areas



CONCLUSION

BRAC Survey (2020) reported that the agriculture sector took a major hit as farmers across the country suffered a steep loss of approximately BDT 565.36 billion (56,536.68 crore) during the public holiday (March to May 2020) announced to contain COVID-19. Nationwide lockdown was continued in Bangladesh up to 30 May 2020.

Presently, the country is divided into Red, Yellow and Green Zones based on the severity of pandemic. The lockdown continues in Red Zones. Due to this, agricultural sectors are suffering. Severity of problems faced by the farmers of Bangladesh are mentioned in Box 1 and Figure 2. To minimize the problems faced by farmers, several organisations and the Government of Bangladesh have taken several initiatives. Effectiveness of these initiatives is presented in Box 2 and Figure 3. After conducting

this survey, at the time of Eid-ul Fitr, the government provided BDT. 2500.00 to each of the 50 lakh low income population directly by using cell phone account which was very effective in minimising people's problems which were not included in the initial list of the survey.

Bangladesh Army played a major role by collecting vegetables and fruits from farmers at legally prescribed prices and distributing it among low income people, which was also beneficial for both the producing farmers and the needy. A private organization is trying to introduce online marketing for farmers' products, while another organization, Matrix, started online shop for farmers' products. As per suggestion of BAEN, Matrix is producing quality agricultural food through their contact farmers and those are being marketed by this online shop.

SDI (an NGO) is trying to collect their beneficiary farmers' products to market in Dhaka city. SDI is facing transport problems, as the transport workforce is not willing to work during the pandemic. The transport costs are also very high. SDI is trying to arrange a subsidy from IFAD for transporting farmers' produce. All these organizations have committed to work with BAEN for the welfare of the farmers of Bangladesh.

References

BRAC 2020. Rapid Perception Survey on COVID19 Awareness and Economic Impact. BRAC, Bangladesh

Mohammed SA. 2020. Ways to overcome the effects of COVID-19 on Bangladesh agriculture. AESA Blog 114. Agricultural Extension in South Asia

Roy R. 2020. Mitigating impact of COVID-19 on Food and Agriculture in Bangladesh. AESA Blog 108. Agricultural Extension in South Asia

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