Report of the
Rapid Assessment to Evaluate the Impact of the Ongoing COVID-19 Epidemic on the Poultry Sector in Bangladesh

Food and Agriculture Organization of the United Nations
Emergency Centre for Transboundary Animal Diseases
Bangladesh

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Rapid Assessment to Evaluate the Impact of the Ongoing COVID-19 Epidemic on the Poultry Sector in Bangladesh

Executive Summary

A rapid assessment of the impact of ongoing COVID 19 epidemic on the poultry sector was conducted at Metro and Batiaghata upazilas of Khulna district on 21-22 April 2020. Qualitative and semi-quantitative data were collected from poultry farmers, poultry dealers (feed, day-old-chicks and medicine sellers), local poultry association leaders and the District Livestock Officer of Khulna using focus group discussions (FGDs), semi-structured interviews (SSIs) and other methods used in participatory epidemiology (PE).

The key findings were:

- The smallholder poultry farms are hard-hit by the COVID-19 epidemic.
- More than 80% of broiler farms and 10% of layer farms have already been closed in assessment area. The remaining farms are facing tremendous loss due to a drop in the price of eggs and poultry meat.
- The disruption of the supply chain and reduced demand appear to be the cause of the drop in the price at the farm gate. Misconceptions in society about transmission of the coronavirus through chicken and eggs also contributed to the reduced market demand for chicken meat and eggs.
- Most of the smallholder poultry farms do their business on credit from the dealers, but during the COVID-19 epidemic, this credit facility is no longer available.
- The turmoil in smallholder poultry production affects not only the livelihoods of these marginal farmers but also significantly affects the whole poultry industry, including the traders, dealers, feed millers, hatchery owners and medicine providers.
- It is likely that a continuing decline in poultry production would lead to an acute shortage of poultry meat and eggs in the market in the near future, which would continue until the poultry industry recovers from this damage.

Recommendations:

1. Effective public communication to reassure consumers that coronavirus does not spread through chicken and eggs
2. Restoration of the supply chain of poultry meat and eggs
3. Innovation of alternative channels of marketing eggs and broilers (temporary selling points, street vendors, home delivery)
4. Immediate cash incentives and access to interest-free credit facility to smallholder farmers to continue or restart their business
5. Access to soft loans for large farmers
6. Ensuring veterinary services and supply of necessary vaccines and medicines
7. Identification of locally available alternatives to imported feed ingredients and medicines
Background and Methods:

The first case of COVID-19 in Bangladesh was detected on 08 March 2020. As of 24 April 2020 the number of laboratory-confirmed cases increased to 4,689 (28/million population) with 131 deaths (0.8/million population). The number of tests conducted is gradually increasing, but still quite limited; so far 39,476 tests (240/million population) have been conducted. As a response to the COVID-19 outbreak, the Bangladesh government has imposed social distancing. Since 17 March 2020, the government has closed all educational institutes, prohibited all mass gatherings, and closed down public transportation. A national holiday has been declared at all workplaces since 25 March 2020. Some affected areas or districts have been place under total lockdown. The economic shutdown in response to the epidemic has had a substantial impact on the poultry industry and poultry farmers in Bangladesh. FAO ECTAD conducted a rapid assessment in Khulna district on 21 and 22 April 2020 to understand the impacts of the ongoing COVID-19 epidemic on the poultry sector in Bangladesh.

Qualitative and semi-quantitative data were collected using focus group discussions (FGDs), semi-structured interviews (SSIs) and other methods used in participatory epidemiology (PE). FGDs and SSIs were held with selected key informants including farmers, poultry dealers (feed, day-old-chicks and medicine sellers) and local poultry association leaders from Metro and Batiaghata upazilas of Khulna district, as well as the District Livestock Officer of Khulna. PE tools such as proportional piling were used to collect semi-quantitative data. When appropriate, receipts and sale documents were evaluated to confirm changes in prices of poultry inputs and commodities. The details of the key informants are given in Table 1. The interview checklist is presented in Table 2.

Table 1. Details of the key informants

<table>
<thead>
<tr>
<th>Respondent category</th>
<th>No.</th>
<th>Farm / business size</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers and dealers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sonali breeder</td>
<td>1</td>
<td>2000 parent birds</td>
<td></td>
</tr>
<tr>
<td>Layer farmer</td>
<td>3</td>
<td>700, 3000, 18000 layers</td>
<td></td>
</tr>
<tr>
<td>Layer and broiler farmer</td>
<td>1</td>
<td>1500 broilers and 500 layers</td>
<td></td>
</tr>
<tr>
<td>Broiler farmer cum dealer</td>
<td>2</td>
<td>1000 and 3000 broilers Dealing with 12 and 40 farms of Khulna district</td>
<td>Semi-structured interview (SSI)</td>
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<tr>
<td>Dealer</td>
<td>1</td>
<td>Dealing with 1000 farmers of Khulna, Satkhira, Bagerhat and Jessore districts</td>
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<tr>
<td>District Livestock Officer, Khulna</td>
<td>1</td>
<td>-</td>
<td></td>
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<tr>
<td>Local leaders</td>
<td>5</td>
<td>Farmer, breeder and dealer</td>
<td>Focused Group Discussion (FDG)</td>
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<tr>
<td>Poultry Association</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
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</tbody>
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1 [http://www.fao.org/3/x8833e/x8833e00.htm](http://www.fao.org/3/x8833e/x8833e00.htm)
Table 2. Interview checklist for rapid assessment of the impact of the ongoing COVID-19 epidemic on poultry farms

- Local availability of inputs like feed and DOCs
- Increase or decrease in the price of inputs
- Selling of products like eggs, boilers
- Increase or decrease in the price of products
- Challenges to maintain the supply chains
- Any alternative measures for marketing products
- Any shortage in labor and its impact
- Availability of veterinary service
- Availability of vaccines and medicines
- Any other constraints faced by farmers
- Planning for replacement stock (new crop)
- Any closure of farm in the neighborhood
- Disease situation, increase or decrease of mortalities
- Any sort of emergency support received by the farmers
- Farmers’ knowledge of any government incentive package
- Farmers’ expectation of support from the Government or any other source

Results:

Availability and price of inputs

During the interviews and FGD, each participant was asked about the availability of inputs including feed and day old chicks (DOCs) during the ongoing COVID-19 epidemic in Bangladesh. Key informants reported that feed and DOCs are currently available. Before the epidemic began, feed companies would sell feed to farmers on credit. However, during the epidemic, credit facilities have been withdrawn. Most of the larger layer farmers are buying feed ingredients and mixing the feed on their farm. Some of the feed ingredients, especially those that are imported, are in short supply in the market. On the other hand, broiler and Sonali farmers are buying ready feed. The price of ready feed has not increased but feed dealers have limited the credit facility for ready feed.

Each informant was asked about the price of inputs and the receipts of input purchases were checked. The price of imported ingredients has increased; for example, the price of DL Methionine has increased from BDT 6125 (25 kg pack) to BDT 10200 (a 66% increase). On the other hand, the price of ingredients that are produced in the country, especially maize, has decreased by 15%.

To assess the price of DOCs, the purchase receipts from one Sonali breeder and several dealers were evaluated. The DOC price has dropped by 70%. Breeders could not sell 50% of their DOCs since the beginning of the COVID-19 epidemic in Bangladesh. Most of the breeders have decreased their DOC production by 50%.

Marketing of poultry products

Layer farmers and association leaders were asked about the price of eggs and their documents of sale for eggs were checked. According to data provided by the key informants, the egg price has decreased drastically since the beginning of the epidemic and also remains unstable (Figure 1).
Figure 1: Egg price (in BDT) before and during COVID 19 response

During the COVID-19 epidemic, all offices, restaurants, and schools have been closed, causing a decrease in egg consumption. Poultry breeders have decreased their rate of hatching and have been selling fertile eggs as table eggs, causing an increase in egg supply in the market. The egg supply chain has also been disrupted due to transportation restrictions.

Broiler farmers, dealers, and association members were interviewed about the price of broilers. At the beginning of the COVID-19 response, there was a rumor that COVID-19 could also spread through birds. This led to decreased consumption of chicken. Restaurant closures during the epidemic have caused a further decrease in demand. The supply chain has also been disrupted due to transportation restrictions.

Key informants reported that the broiler price decreased by 50% during the first week of the epidemic, and from the second week of epidemic, the price has started to increase but did not reach to the level of pre-COVID 19 stage (Figure 2).
Supplies and labor challenges and solutions

Each key informant was asked about the status of the supply chain. At the beginning of the COVID-19 epidemic, there was a serious disruption of movement. Farmers could not get inputs and could not sell their products, except in the local market. The Ministry of Fisheries and Livestock (MoFL) issued an order to exempt poultry inputs and production from the movement restrictions on 25 March 2020. Even after issuing the order, local law enforcement agencies obstructed the movement of poultry products in some areas. Members of the poultry association have communicated with district level law enforcement agencies and local officials from the Department of Livestock Services (DLS) to resolve the problem. Farmers also arranged to sell eggs and broilers at Farmgate and made a public announcement. The informants reported that a shortage of labor was not a problem for them.

Availability of veterinary services, vaccines and medicines

The incidence of disease was reported to be unchanged since the beginning of the epidemic. There have been no unusual mortality events identified. However, because of the movement restrictions, veterinary services have been interrupted. All of the informants reported that they are receiving veterinary services remotely.

Local vaccines and medicines are currently available in the market, according to the informants, but there have been shortages of imported vaccines and medicines.

Farm closures

Dealers were asked about farm closures and requested to show their documents of feed sales. An 83% decrease in feed sales was observed between the first and third week of April 2020. During the FGD, a proportional pilling exercise was conducted to estimate the percentage of farms that have closed. The results suggest that 80% of broiler farms have stopped restocking and 10% of layer farms have sold their laying hens due to the low price of eggs. Broiler farmers reported that they are observing the situation and will wait for a return to normal before restocking.
Impact of the government support package

Large farm owners, dealers, and members of the poultry association were aware of the government support package but did not know the details or process to receive the support. None of the small-scale farmers were aware of the incentive. Irrespective of large and small, none of the farmers had received any support yet.

Additional need for support

Each informant was asked to respond individually about the types of support they most needed. The responses were:

- A grant for small-scale farmers who have been badly affected by the COVID-19 epidemic
- Flexible, low-interest rate loans for large-scale farmers and breeders
- Raise awareness among the public that poultry products are safe to consume during the epidemic
- Inclusion of eggs and chicken in relief packages
- An assessment of demand for poultry products followed by control of production of DOCs, eggs, and broilers in order to stabilize prices
- Withdrawal of value-added tax (vat) from poultry inputs

Discussion and Recommendations:

Nearly 70,000 small and medium-scale poultry farms constitute the major part of the poultry industry in Bangladesh. This study clearly showed that the smallholder poultry farms are hard-hit by the COVID-19 epidemic. More than 80% of broiler farms and 10% of layer farms have already been closed in assessment area. The remaining farms are facing tremendous loss due to a drop in the price of eggs and poultry meat. The disruption of the supply chain and reduced demand appear to be the cause of the drop in the price at the farm gate. Reduced consumer visits to the market during social distancing and lockdown as well as misconceptions in society about transmission of the coronavirus through chicken and eggs have also contributed to the reduced market demand for chicken meat and eggs.

It is noteworthy that most of the smallholder poultry farms do their business on credit from the dealers, but during the COVID-19 epidemic, this credit facility is no longer available. This is likely due to the dealers being afraid of possible non-recovery of their investments. Interestingly, turmoil in smallholder poultry production affects not only the livelihoods of these marginal farmers but also significantly affects the whole poultry industry, including the traders, dealers, feed millers, hatchery owners and medicine providers.

It is likely that a continuing decline in poultry production would lead to an acute shortage of poultry meat and eggs in the market in the near future, which would continue until the poultry industry recovers from this damage. The key driver for the recovery of the poultry industry appears to be the poultry end producers receiving a fair price of their products: eggs and broilers. Reaching this target requires immediate reinstatement of the supply chain for uninterrupted flow of products from farms to consumers, as well as restoration of consumer confidence regarding the safety of eggs and chickens with
regards to coronavirus. In the meantime, farmers and other industry players will need to be supported to continue or restart their businesses.

Recommendations:

8. Effective public communication to reassure consumers that coronavirus does not spread through chicken and eggs
9. Restoration of the supply chain of poultry meat and eggs
10. Innovation of alternative channels of marketing eggs and broilers (temporary selling points, street vendors, home delivery)
11. Immediate cash incentives and access to interest-free credit facility to smallholder farmers to continue or restart their business
12. Access to soft loans for large farmers
13. Ensuring veterinary services and supply of necessary vaccines and medicines
14. Identification of locally available alternatives to imported feed ingredients and medicines