

A Critical Evaluation of Regulatory Regime in the Shrimp Hatchery of Bangladesh in Light of the EU Requirements

Mohammad Saydul Islam Sarkar, Md. Simul Bhuyan*, Mahmudul Hasan, Mohammad Rokan Uddin

Institute of Marine Sciences and Fisheries, University of Chittagong, Chittagong, Bangladesh

***Corresponding Author:** Md. Simul Bhuyan, Institute of Marine Sciences and Fisheries, University of Chittagong, Chittagong, Bangladesh.

ABSTRACT

The hatchery Act-2010 was yet to be passed by the parliament at that time. Therefore, there were no particular Hatchery rules in Bangladesh. There was no definition of unsafe Post Larvae (PLs) in the proposed Hatchery Act. Even no provision was found regarding the withdrawn of unsafe PLs from the market in the proposed Hatchery Act-2010. There was no hard and fast provision in the proposed Hatchery Act-2010 regarding the examination of PLs in an authorized laboratory. These provisions were also unaddressed by the running regulatory mechanisms in Bangladesh. Water is an important factor for shrimp hatchery having different physical and chemical parameters. According to EC regulation this provision was not mentioned in proposed Fish Hatchery Act-2010, but partially mentioned in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008, and not mentioned in others regulatory regimes (Shrimp sub Strategy, Department of Fisheries; National Shrimp Policy (Draft copy); National Fisheries Policy-1998; Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983). Scientific and commercial name of shrimp PLs should be informed to the farmers by the hatchery owners. But this was not indicated in the proposed Hatchery Act-2010. This provision was also unaddressed in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008, and others regulatory regimes (mentioned above). Size and production date of PLs are very important to the farmers for accurate feed management in culture system. Proposed Fish Hatchery Act-2010 did not reveal the size and production date of PLs, whereas only production date was addressed in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008. Mentioning of temperature, pH and salinity of water in the PLs carrying bag was not addressed in the proposed Hatchery Act-2010 and Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008, and others. HACCP management, including good aquaculture practices, good hygienic practices and good environmental practices, was not mentioned in proposed Fish Hatchery Act -2010.

Keywords: Evaluation, Regulatory Regime, Shrimp Hatchery, Bangladesh, EU Requirements

INTRODUCTION

Bangladesh shrimp industry, that includes shrimp hatchery, culture, processing plant, shrimp depot, etc. is playing a significant role for the national economy of Bangladesh (Ahmed et al. 2002; BFFEA, 2008). Shrimp is an expensive and highly value earning fish product in the export oriented market where highly competitive shrimp market is prevailing in the international level. Bangladesh has to compete with different countries so as to retain the running export market. The importers of Bangladesh shrimp are very much keen and watchful about the quality and safety of the product rather than cost (Claire, 2004). For safety measure, which is one of the major criteria for foreign buyers, the importers are time to time imposing some of the non-tariff barriers, regulations, and some

other conditions on Bangladesh shrimp (Karim and Kabir, 2008).

EU, USA and JAPAN are the main importers of Bangladesh shrimp and they are more concerned about some conditions including freezer requirement, hygienic wrapping and packaging, high degree of personnel hygiene, training requirement of the personnel, hygiene and environment friendly waste disposal, hygienic food processing requirement, maintenance of cold chain, healthy storage and transport system, sanitary and phytosanitary (SPS) aspects, traceability and food safety, quality assurance, labeling requirements, HACCP aspects, environment and human rights issues and concerned labor rules, etc. (SSOQ, 2008; FAO/NACA, 1995).

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Bangladesh must improve the safety and quality of its shrimp products and needs to take a lot of corrective measures to retain the international market in order to avoid products being denied and rejected from foreign markets (Gammage et al. 2008). Thus to sustain market share and gain competitive advantages, Bangladesh has to abide by the international policy regimes and quality standards. Since EU has the largest demand of Bangladesh shrimp, Bangladesh needs particularly to focus on the EU requirements and their non-tariff barriers. It is time to keep watchful eyes and to think about how far Bangladesh shrimp industry is ready to address the EU, USA, JAPAN and FAO requirements (Huda, 2001).

Despite the rapid growth of Bangladesh shrimp cultivation, the global frozen shrimp market continues to be dominated by Thailand, Indonesia and China (Karim, 2003). Significant innovations in production and processing in those countries have increased the value added associated with their exports and the market share that they command (Raux and Bailly, 2002). Unfortunately, the same is not true for Bangladesh. Innovations in both production and processing have yet to be secured. Furthermore, stricter import requirements and compliance regulations in importing countries have meant that Bangladesh must improve the safety and quality of its shrimp exports to avoid products being denied and rejected at point of entry into foreign markets. Bangladesh shrimp has been rejected at the port of entry into the EU and USA in different times. Therefore, Bangladesh needs a lot of corrective measures to retain the international market, particularly the EU market. EU banned Bangladesh shrimp in 1997. Bangladesh overcame the problem, but the Union has been chronologically imposing directives to maintain international standard through the production chain of shrimp.

The importers of Bangladesh shrimp are very much keen about its quality and safety. To ensure the food safety they are imposing several non-tariff barriers on Bangladesh shrimp. Traceability rules are one of the examples of these barriers. EU Commission expressed their deep concern about the rejection of several big consignments of shrimp from Bangladesh to EU countries due to use of EU prohibited antibiotics (Karim and Uddin, 1998). Since EU is the biggest buyer of Bangladesh shrimp (around 45%),

Bangladesh needs to focus on the EU requirements and their non-tariff barriers. Thus to retain market share and gain competitive advantages Bangladesh has to follow the international policy regimes and quality standards (Haque, 2004; Haque, 1994).

To face these global challenges, Bangladesh must confirm the international standard at each level of production and processing schedule. Each and every stakeholder should come under the guidance of law. From the above view point, Bangladesh will have to adopt their prevailing Law, Regulations and Strategies as and when necessary considering the requirements of the buyer countries (Rahman, 2008; Khatun, 2004; Muir, 2003). Bangladesh has been competing with Thailand, China, Vietnam, India, Taiwan and some other countries in the shrimp export market. Those countries have already adopted necessary policy and regulatory reforms to address the international requirements. In this study regulatory regime in the shrimp hatchery of Bangladesh was evaluated in light of the EU requirements.

METHODOLOGY

The prime job of this study was to examine the Bangladeshi regulations whether the concerned laws, ordinances, rules and regulations are able to address those international requirements or not and to identify the gaps between the non-tariff trade rules of the importing countries and the concerned Bangladeshi regulations.

This study mainly dealt with policy and regulatory framework. Attempts had been taken here to find out the international requirement and concerned Bangladesh policy and regulatory arrangements to address those requirements in the field of shrimp industry (Shrimp Hatchery). Therefore, content analysis based on primary official documents and secondary data, information & publications, had been selected as principal methodology of this research work. EU requirements and all the related Bangladesh policies, laws, rules, regulations, circulars etc. were collected and a thorough examination & qualitative analysis had been done. Native regulatory instruments related to the Shrimp Hatchery (Laws, Ordinances, Rules, Regulations, Policies, Circulars etc.) were collected from the concerned ministries and associated departments. Documents containing international requirements and directives (particularly EU) were collected

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from the Ministry of Fisheries and Livestock, Bangladesh Frozen Food Exporters Association, Bangladesh Shrimp and Fish Foundation and from the concerned website (http://europa.eu.int/comm/food/fs/inspections/special_topics/guide_thirdcountries_en.pdf).

Other methods of data and information collection were as follows-Focus Group discussion with concerned stakeholders, the study had taken a random interactive approach that included individual interviews with technical specialists, field workers, practitioners, related researchers and related public, private and NGO officials.

This was basically an exhaustive study. More time allocation was needed for this type of work. Extensive field visits had also been hampered due to resource constraint. There was also paucity of relevant literatures.

RESULTS AND DISCUSSION

An analysis of compatibility of the national regulatory regime with those non-tariff trade rules and the gaps between the two were discussed gradually according to institutional basis as follows:

EU Requirements [directives regulations (Gist only)]-1

Regulation (EC) No 178/2002

Shrimp hatchery owners have to give assurance that-

- Unsafe PLs are to be withdrawn from the market by the Hatchery owners.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act-2010 (Placed before the parliament as a bill and still under consideration by the parliament.)
- Shrimp sub Strategy, Department of Fisheries
- National Shrimp Policy (Draft copy)
- National Fisheries Policy-1998
- Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.
- Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Gap Analysis Between EU Directives And Local Law/Rules/ Regulations

The hatchery Act 2010 is yet to be passed by the parliament. Therefore, there are no particular Hatchery rules in Bangladesh. There is no definition of unsafe PLs in the proposed Hatchery Act. Even no provision is found regarding the withdrawn of unsafe PLs from the market in the proposed Hatchery Act 2010. This point is also unaddressed in other related regulatory regimes mentioned in the column two.

EU Requirements [Directives Regulations (Gist Only)]-2

Council Directive 96/23/EC

- Sample of PLs produced in the hatcheries are to be examined in an authorized laboratory.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act -2010 (Placed before the parliament as a bill and still under consideration by the parliament.)
- Shrimp sub Strategy, Department of Fisheries
- National Shrimp Policy (Draft copy)
- National Fisheries Policy-1998
- Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.
- Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Gap Analysis between EU Directives and Local Law/Rules/ Regulations

There is no hard and fast provision in the proposed Hatchery Act 2010 regarding the examination of PLs in an authorized laboratory. This provision is also unaddressed by regulatory mechanisms depicted in the column two.

EU Requirements [Directives Regulations (Gist Only)]-3

Council Directive 80/778/EC

Water used in the hatcheries must be pathogen free and the bio-chemical parameters of the water must be within the EU approved limit.

Bangladesh Legal/ Regulatory Regime

- fish hatchery act -2010 (placed before the parliament as a bill and still under consideration by the parliament.)
- shrimp sub strategy, department of fisheries
- national shrimp policy (draft copy)

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- national fisheries policy-1998
- fish and fish products (inspection and quality control) ordinance, 1983.
- fish and fish products (inspection and quality control) rules, 1997, amended in 2008.

Gap Analysis Between EU Directives And Local Law/Rules/ Regulations

Water is an important factor for shrimp hatchery having different physical and chemical parameters. According to EC regulation this provision is not mentioned in proposed Fish Hatchery Act -2010 but partially mentioned in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

EU Requirements [Directives Regulations (Gist Only)]-4

Commission regulation (EC) 2065/2001/EC

- The method of production of the PLs and their commercial and scientific name are to be informed to the farmers by the Hatchery owners.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act -2010 (Placed before the parliament as a bill and still under consideration by the parliament.).

Gap Analysis between EU Directives and Local Law/Rules/ Regulations

Scientific and commercial name of shrimp PLs should be informed to the farmers by the hatchery owners. But this is not indicated in the proposed Hatchery Act 2010.

This provision is also unaddressed in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008, and others regulatory regimes addressed in column two.

EU Requirements [Directives Regulations (Gist Only)]-5

Council decision 2000/13/EC

The PL carrying bags are to be labeled with the following information-

- Temperature, pH and salinity of water in the bag.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act -2010 (Placed before the parliament as a bill and still under consideration

by the parliament.).

- Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.
- Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Gap Analysis Between EU Directives And Local Law/Rules/ Regulations

Size and production date of PLs are very important to the farmers for accurate feed management in culture system.

Proposed Fish Hatchery Act -2010 does not reveal the size and production date of PLs, whereas only production date is addressed in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Mentioning of temperature, pH and salinity of water in the PLs carrying bag is not addressed in the proposed Hatchery Act -2010 and Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

EU Requirements [Directives Regulations (Gist Only)]-6

Council decision 94/356/EC

Hatcheries should follow the HACCP's (Hazard Analysis at Critical Control Point) management system like-

- GAP: Good Aquaculture Practices.
- GHP: Good Hygienic Practices.
- GEM: G
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- ood Environmental Practices.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act -2010 (Placed before the parliament as a bill and still under consideration by the parliament.)
- Shrimp sub Strategy.
- National Shrimp Policy (Draft copy)
- National Fisheries Policy-1998
- Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Gap Analysis between EU Directives and Local Law/Rules/ Regulations

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HACCP management, including good aquaculture practices, good hygienic practices and good environmental practices, is not mentioned in proposed Fish Hatchery Act -2010.

But for overall quality control management it is boldly addressed in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

EU Requirements [Directives Regulations (Gist Only)]-7

Regulation (EC) No 852/2004

Hatchery owners should maintain the following things-

- Hatcheries must be fumigated before every production cycle.

Bangladesh Legal/ Regulatory Regime

- Fish Hatchery Act -2010 (Placed before the parliament as a bill and still under consideration by the parliament.).
- Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983.
- Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

Gap Analysis between EU Directives and Local Law/Rules/ Regulations

Fumigation of hatchery before production cycle is likely to render the PLs free from pathogens, prohibited antibiotics, and other hazardous chemicals and ultimately fit for culture.

Any provision about fumigation is not mentioned in proposed Fish Hatchery Act -2010 and also in Fish and Fish Products (Inspection and Quality Control) Rules, 1997, amended in 2008.

RECOMMENDATION FOR SHRIMP HATCHERY

- Proposed Fish Hatchery Act-2010 did not cover the ins and outs of the regulatory measures offered by the foreign importing countries regarding Bangladesh shrimp. Since shrimp is a highly export oriented commodity in Bangladesh economy, a comprehensive Shrimp Hatchery Act must be introduced keeping provisions that will address the EU, USA, Japan and other Bangladesh shrimp buyer country's requirement.
- A detailed Shrimp Hatchery Rules has to be adopted soon after the enactment of the Shrimp Hatchery Act. After that the Shrimp Hatchery Rules must be updated time to time

to accommodate the upcoming regulatory requirements demanded by the importing countries. In that case the national interest of Bangladesh must be kept in mind.

- Post Larvae (PL) are the end product of a shrimp hatchery. According to EC directives, sample of PLs produced in the hatcheries are to be examined in an authorized laboratory. But there was no provision of setting a testing laboratory for PLs in the hatchery in the proposed Fish Hatchery Act 2010. This provision is to be incorporated either in the Act or in the concerned Rules.
- Government can setup a testing laboratory in the Hatchery Zone from where hatchery owners can test their PLs before marketing.

OVER ALL RECOMMENDATIONS

- To retain the export market of shrimp, quality of the end product must be maintained. Quality can be attained by checking in each stage of production chain. Although this study considered only EU regulations and requirements; laws, rules, regulations should be adopted for each stakeholder considering the regulations and requirements of EU, USA, Japan and other importing countries to sustain and boost up this industry.
- The noble responsibility, to ensure the products are safe for consumption, can be celebrated by offering performance certificate with incentives to the owners of the processing plant, shrimp hatchery, feed mill and to the dedicated personnel's and workers. Therefore Government can introduce a system to offer certificates as well as incentives for the good stakeholders and punishment for the evils.
- Sometimes EU becomes angry without any valid reason because of the instigation by the competing countries. Embassies of Bangladesh in the EU countries should negotiate with for those unwanted situations. The embassies should try to uphold the good images of Bangladesh shrimp industry including shrimp hatchery.

CONCLUSION

Shrimp is literally termed as White Gold of Bangladesh due to its economic importance. It is the second largest foreign exchange earning export commodity in Bangladesh. The future of shrimp hatchery is bright due to the geographical location and climatic condition of the country. The

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geographical location and the physiographic and the meteorological conditions make Bangladesh one of the richest countries in fisheries resources both in quantity and quality. But the expansion of production is fully dependent on the possibility of its export. Bangladesh earned less money by exporting more amounts of shrimp due to the question arising about the quality and safety measures.

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