

# Department Of Fisheries

## Matshya Bhaban

### Ramna, Dhaka



January 2006

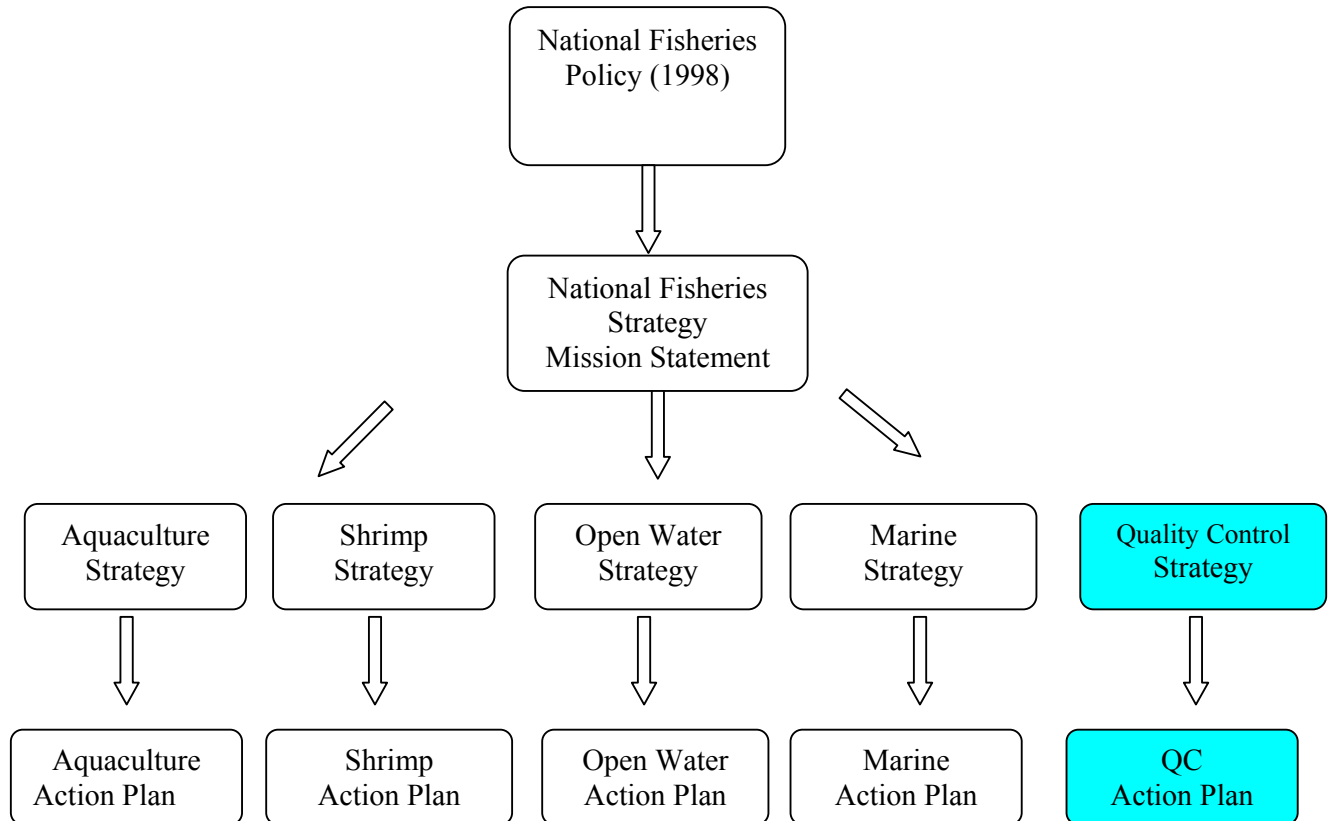
---

## BACKGROUND

---

### Policy Framework

A set of **Strategies and Action Plans** that will direct the management of the department has been formulated:



**Figure 1: Policy Framework**

---

## 1. APPROACH

---

**The approach to developing the Quality Control Sub-strategy was three-fold:**

**1. A review of the key documents** that lay out the principles upon which the Government of Bangladesh and its cooperating partners are planning and implementing their development activities and the identification of those principles and objectives that relate to quality control.

**2. An extensive consultative process** involving all stakeholders in quality control to clarify the current problems and agree on means of overcoming these.

The stakeholders consulted, through workshops and discussions between October 2004 and February 2005, included:

Farmers	DoF staff at all levels
GoB funded DoF Project Directors	Donor funded DoF quality control projects
GoB local government staff	Private sector entrepreneurs
NGO staff	BFFEA
	SHAB
University lecturers	Research professionals

**3. The summarising of the findings of 1 and 2 under seven agreed themes** to provide an agreed Quality Control Sub-strategy and the basis for the subsequent development of an Action Plan upon which the Department of Fisheries can develop its quality control activities in a rational manner.

---

## 2. DOCUMENTS PROVIDING GUIDING PRINCIPLES

---

The Government of Bangladesh and its cooperating partners are planning and implementing their development activities according to the principles laid out in a number of key documents, these include:

<b>International Level</b>	
	<b>Millennium Development Goals</b>
	<b>FAO Code of Conduct for Responsible Fisheries (1995)</b>
<b>National Level</b>	
	<b>The Constitution of the Government of Bangladesh</b>
	<b>The 6<sup>th</sup> 5-Year Plan (Draft)</b>
	<b>The National Strategy for Economic Growth, Poverty Reduction and Social Development (Draft)</b>
<b>Cross-Sectoral Level</b>	
	<b>Comprehensive Food Security Policy (Draft 2000)</b>
	<b>National Rural Development Policy (MoLGRD&amp;C 2001)</b>
	<b>Environment Policy &amp; Implementation Plan (MoEF 1992)</b>
	<b>The National Environmental Management Plan (1998)</b>
	<b>National Water Policy (MoWR 1999a)</b>
	<b>The Bangladesh Water and Flood Management Strategy (1995)</b>
	<b>The National Water Management Plan</b>
	<b>National Land Use Policy (MoL 2001)</b>
	<b>National Energy Policy (1996)</b>
<b>Sectoral Level</b>	
	<b>National Fisheries Policy (MoFL 1998)</b>
	<b>The Fisheries Sector and Future Developments Study (2003)</b>
	<b>National Agricultural Policy (MoA 1999)</b>
	<b>Livestock Development Policy (MoFL 1992)</b>
<b>Sub-Sectoral Level</b>	
	<b>Draft Aquaculture Extension Strategy (2003)</b>
	<b>Draft Shrimp Strategy</b>
	<b>Draft Inland Capture Fisheries Strategy</b>
	<b>Draft Marine Strategy</b>
	<b>Draft Monitoring and Evaluation Strategy</b>
	<b>Draft Human Resource Development Strategy</b>
	<b>The New Agricultural Extension Policy (1996)</b>
	<b>Fish Inspection and Quality Control Rules/1997</b>

---

### **3. QUALITY CONTROL OBJECTIVE STATEMENT**

---

#### **Objectives of the National Fisheries Policy (Development Goal)**

- 1. To enhance fisheries production and development*
- 2. To alleviate poverty through creating self-employment and improvement of socio-economic conditions of fishers*
- 3. To meet the demand for animal protein*
- 4. To achieve economic growth and increased foreign currency earnings by exporting fish and fisheries products*
- 5. To maintain an ecological balance, conserve biodiversity and improve public health*

#### **Mandate of the Department of Fisheries**

As part of the mandate of the Department of Fisheries special reference is given to Quality Control under the specific mandate:

- to enforce quality control and quality assurance measures considering global requirements and issuances of health certificate for exportable fish and fishery products.
- assist the administrative ministry to formulate policies, acts and rules etc.

It is also required under the mandate to:

- to disseminate improved environmentally friendly aquaculture technologies through training and demonstrations and to extend extension and advisory services to the local stakeholders.

The mandate is therefore twofold for Quality Control

- 1) To establish the regulations to control the quality aspects of the sector and
- 2) To help inform the stakeholders how best to comply with the regulations and the need for them.

#### **Objectives of the Quality Control Sub-strategy**

*Through the establishment and implementation of sound regulations ensure that fish and fish products placed on the market is of good quality and the consumers have confidence in the product and that the producers, traders and processors know, understand and are willing to comply with the regulations.*

#### **Components of the QCS**

Certification

Regulatory Framework

Quality Assurance

Advocacy and information dissemination / extension

Planning, Monitoring and Evaluation

8.1 Quality Control Sub-strategy.doc

Collaboration  
Human Resource Development

---

## 4. THE STRATEGY

---

The Strategy has the aim of giving guidance for implementing Quality Control for the next 10 to 20 years. This is not an easy task as the requirements made by consumers and the importing countries are changing fast reflecting growing concerns, not only in the quality of the product, but in how it was produced. Recent demands that have to be reflected in this strategy include recognition of the impact of the fisheries sector on the environment; social equity in the production of the product and traceability of the product from source so that any deliberate attempts at contamination can be determined.

The Strategy must also take into account the potential growth in the fisheries sector and the export trade especially. This will place an even greater pressure on the institutions currently involved and means that there must be greater cooperation amongst all stakeholders to take on this responsibility.

The first priority however must be to ensure that the food safety requirements for exported products are met. Currently this represents one of the major challenges as more stringent requirements mean that shipments are frequently rejected as demands on the criteria that constitute safe food are constantly being upgraded. This now includes demands for the source of all exported foods to be traced back to their source of production which places a further burden not only on the processor, but on the producers and the hatcheries as well.

- The production and provision of quality fish for the domestic and export market will remain in the hands of the private sector.
- Food safety must be monitored and ensured, by the private sector, through the implementing the HACCP protocol.
- The processors through implementation of HACCP will provide assurances that the product is of good quality and fit for consumption,
- The final responsibility for export certification will remain the responsibility of the Government and its agent.
- International regulations will implemented under the instruction of the government's agents
- The Government will through the provision of policies, regulations and laws provide the framework for ensuring good quality products are available for the domestic and export market
- Regulations will be reviewed to provide improved guidance for issues such as self assessment quality control (HACCP), traceability, standards for ancillary industries such as ice plants and marketing depots.
- Regulations will be prepared to support other government agencies given the responsibility for domestic food safety of fish and fish products.
  
- Improved industry food safety monitoring, quality assurance and the use of third party audits, will reduce the need for lot inspections by QC before the issuance of certificates of fitness for export which remain the responsibility of the Government.
- The government and the private sector may be supported through the activities of approved third parties to provide assurance that the products meet the criteria

demand of the products by the market i.e. quality, eco friendly, socially responsible etc.

- The promotion of an understanding of the issues and an increased awareness of quality control requirements will be undertaken by the DoF in conjunction with other stakeholders
- The provision of a dedicated quality control staff who have built up the knowledge and skills to successfully implement the requirements of the strategy
- A career structure that will support the development of the core staff
- A Monitoring and Evaluation system that will support the continued improvement of the sector through the provision of accurate information and reports that will promote improved management.



---

## 5. CERTIFICATION

---

***Objective: To develop an effective certification system that will ensure fish and fish products satisfy international requirement of food safety and are accepted as quality products by the buyers and buying country authorities.***

The prime responsibility of the certification system is to ensure that the products are safe for consumption. The standards and requirement for this are being raised constantly with new regulations being introduced. The system therefore needs to be flexible and capable of taking on new requirements required by importing countries.

Certification is at two levels.

1. The first is for the processing plant, to ensure that it has the capacity and knowledge to produce processed goods of the required quality. The plants must be fully conversant with and able to implement fully the HACCP regulations.
2. The second aspect of certification is for the export of the product stating that it meets the standards set by national and international regulations.

### Processing Plant Licensing

- Establish a certification and regulation protocol for all fish and fish product processing plants ensuring flexibility to take on new regulations.
- Prepare strict regulations according to national and international laws and dictates for the issuance of licences for processing plants to operate for both export and domestic market.
- Categorise processing plants for their ability to comply with the regulatory requirement and are able ensure quality through self monitoring. Processing plants meeting the requirement would be placed in a Class A category would require less inspection and sampling before goods can be certified for sale/export.
- Ultimately through training and upgrading of facilities ensure that all processing plants are of sufficient standard to be categorised in the first category.
- Any processing plants which cannot meet the requirements within a given time frame will be denied a processing licence.
- Annual monitoring will be undertaken before renewal of licences to ensure that standards are being maintained
- Examine ways to ensure that only those plants meeting the required standard are certified and that no undue pressure either political or financial can be exerted to gain certificates for plants that are not of the required standard.
- Ensure that products are only processed in plants that have satisfied the regulations and been granted a license for operation.

### Export Certification

- The government and its agent (DoF Quality Control Wing) will remain responsible for the issuance of health certificates declaring the fish or fish products fit for consumption and the local and international market.
- Audit the effectiveness of the QC Wing through an assessment by a supervisory audit team comprising local and international experts.

- Establish the creditability of export certification by minimising the percentages of rejected consignments,
- As the government is the competent authority recognised by EU, no need to have a third party certification.
- The issuance of certificates would be supported by documentation detailing the production process from hatchery to processor and details of input supplies from accredited sources,
- All hatcheries, ice plants, depots and feed plants should be licensed,
- Increase the understanding and ownership of the certification process so that there is a mutual understanding of the needs for compliance.
- Establish quality criteria needed for different markets.

#### Traceability

The recent demands by both the US FDA and the EU for all fish and fish products to be traced back to source of origin have placed an increased burden on the certification process.

- The traceability of processed goods must be ensured through clear documentation of the source of the product from hatchery level to processor
- Traceability for producers should be supported through zonation and be extended up to Union level and can include farmer groups.
- A suitable system to monitor compliance with traceability should be developed. This could be supported by authorised third party organisations.
- To find out of the products trace and assurance of the products quality seal of quality control in the Department of Fisheries to be introduced. to perform this job some institution could be involved subject to the approval of MoFL.

#### Resources

To determine the safety of foods before certification can be issued, laboratory testing of samples needs to be undertaken. This requires not only laboratories with equipment capable of detecting contaminants and chemicals deemed to be hazardous to food safety, but the staff and the resources to utilise this equipment accurately.

At present laboratory services are duplicated by many agencies, but few have the capacity to handle the detailed requirements for detections of contaminants and traces of prohibited chemicals.

- Identify laboratories capable of undertaking the required analysis of samples
- Ensure that manpower and resources are available
- Ensure that results can be delivered in a timely and efficient manner
- Build link with international laboratories to test for substance for which local capacity does not exist.
- Each competent authority should have an accredited laboratory

---

## 6. REGULATORY FRAMEWORK

---

**Objective:** *To establish a regulatory framework that will provide clear guidelines required to ensure that produce from Bangladesh will remain competitive and be able to meet consumer and international demands.*

At present the **Fish Inspection and Quality control Rules/1997** provide the basis for the regulation of Quality Control, but will be revised as per needs due to changes in international and national requirements.

In light of current policies, and international requirements revise the regulations to reflect current requirements for quality, environmental protection, social equity and traceability.

- Regulations form the framework in which the industry must function to ensure that it complies with both national and international development objectives
- The regulations are revised to reflect current international requirements for quality, environmental protection, social equity and traceability and current national policies.
- All stakeholders must be involved in the formulation of the regulations which should be designed to advance the ability of the sector to promote good quality products in an environmentally and socially just manner.

Areas in which regulations are required are:

Processing:

- Prepare regulatory frameworks for the processing industry to ensure that the quality of processed goods can be assured.
- Implementation of HACCP
- Contamination from organic and chemical prohibited substances

Marketing

- Prepare regulatory frameworks for the marketing of shrimp and fish
  - Depots
  - Ice Plants
  - Packaging and transportation
  - Time from harvesting to delivery
  - Handling centres / auction halls
- Sale of live products: crab etc.
- Importation of live products i.e. aquarium fish and new breeding stock

Shrimp Aquaculture

- Regulation should be developed to ensure that environmental destruction such as the destruction of mangrove forest are not permitted for the continued expansion of the shrimp sector;
- In conjunction with zonation and land use regulations, control on the increased salination of pasture land and arable land i.e. rice paddies needs regulated for;

- In order to prevent pollution and possible contamination of waters regulations need to be prepared for the safe disposal of contaminated water and shrimp waste

#### Marine Sector

- Development of regulations to promote the use of turtle exclusion devices to ensure acceptance by eco-friendly buyers and the US FDA
- Develop regulation for the acceptable quantities of trash fish and their utilisation caught during shrimp trawling
- Develop regulations for chilling of fish and times a catch can be kept on ice as opposed to freezing
- Develop regulations to restrict the use of chemicals during drying of fish. Advocacy needs to be linked showing the problems associated with the use of chemical on health and options that could be employed that

#### Hatcheries

- Codes of conduct for all hatcheries should be prepared;
- Regulations should be incorporated with the code to control chemical usage and sanitary measures
- Regulations should be prepared detailing source and methods of capture of brood and their subsequent testing for disease

#### Feed Industry

- Regulations to establish quality feeds that are free from contaminants and hazardous materials

#### Social Issues

- Regulations need drafting to ensure that the sector complies with international treaties on the use of child labour and there is an advocacy programme to reduce the involvement in key areas such as PL collection.
- Regulations need to be enforced covering land rights to ensure that poor farmers are not forcibly evicted to enable large land owners take of the resources for their own gain.

#### Implementation and Compliance Monitoring

- The implementation of regulations requires an acceptance and an understanding of the need for them. The educational role should be covered by QC wing with the support from field staff at both District and Upazila levels;

---

## 7. QUALITY ASSURANCE

---

*Objective: To assure the consumers that the product is produced in a manner and of a quality that meets their demands taking into consideration social responsibility, environmental protection and traceability*

In addition to the legal requires for products to be certified there is growing demands for an assurance on the quality of the product to be given. This is largely an industry based Quality Assurance Scheme, that declares that the industry is in compliance to certain requests made on it. The numbers of assurances required are growing steadily as buyers and buying countries place more and more conditions on how and where products are produced. This requires the industry to set standards which should be followed to ensure that consumers are assured of the quality.

These link in closely with the range of regulations proposed under the previous sector. Compliance with those would enable exporters to assure importers that their concerns have been addressed.

Currently these cover:

- Size and grading of product
- Freshness of product
- Environmental protection and conservation
- Socially just production methods

- Endorse an industry led Quality Assurance scheme that covers all key issues of consumer concerns
- Assist the Private Sector in lobbying for acceptance of the status of QA scheme by potential customers.
- Support private sector compliance with government requested QA demands e.g. traceability, use of turtle exclusion devises, etc
- Ensure flexibility so that new demands can be responded to so as to remain competitive on the international market

Organic production:

- Establish the parameters for classification as “Organic”
- Develop credibility for produce through promotional work to encourage importers to pay premium prices for produce accredited as being organic;
- Facilitate the development of organic production through the declaration of zones assigned as “chemical and pollutant free”

Size and grading of product

- Establish grading for different types of produce as per international standards
- Support the industry to establish guideline and code for exporters determined by consumer demands (CODEX) through consultations with all stakeholders

---

## **8. Advocacy and information dissemination / extension**

---

***Objective: Ensure that all stakeholders understand and are able to support the regulations for Quality Control and feel that the regulations are relevant to the problems***

Much of the requirements of Quality Control are the preparation of sound regulations and ensuring that the stakeholders abide by these. This requires that the stakeholders be involved in the formulation of the regulations and also be fully aware of them. They must also be fully aware of any changes in national or international requirements that are likely to cause a change in the regulations. Not only should people be aware of the regulations they should for the future prosperity of the sector actively lobby for recognition of the regulations and for people's cooperation in implementing them.

The advocacy and information dissemination can take place in many different forums and is not the sole preserve of the Department of Fisheries. In fact the leaders in much of this must be the Private Sector as they stand to lose the most if there is little compliance with the regulations.

Advocacy is also essential for promoting Bangladesh's product abroad and so there must be clear linkages to Export Promotion Bureau and overseas commercial delegations.

- Develop the capacity to provide information on the quality of the industry through seminars, trade fairs and through the mass media i.e. radio, television, news media and internet.
- Develop capacity to provide information on the status of the industry and be able to respond to adverse publicity
  - Develop an IT system with up to date information flow
  - Develop local information system that is accessible by all producers
  - Develop an information support unit to provide accurate information on the status of the industry to ensure the image of the industry is positive.
- Form stakeholder bodies / associations to help advocate the quality of the product

---

## 9. PLANNING, MONITORING AND EVALUATION

---

***Objective: The establishment of a monitoring and evaluation system involving participation of all stakeholders to ensure the quality of the service, a targeted output and learning from experience.***

The importance of improving the quality of marketed products cannot be over stated. To ensure that lessons are learnt and improvements are implemented it is essential to have a monitoring system that provides accurate information on the state of the sector. This information will come from a variety of sources and must be collected systematically and evaluated to enable planning for the future improvement.

- Establish flows of information from all sources of relevant information on the industry from hatcheries, to production, to processing, to exporting, to local markets, to imports
- Ensure collaboration with all stakeholders to ensure sharing of information
- Provide information bulletins to all stakeholders on the status of the sector including shipments, buyers, rejections etc
  
- Establish clear set of indicators that will establish success of the sector
- Evaluate the impact of the strategy and regulations on achievement of indicators
- Plan to improve impact and achieve targets
- Establish reward and punishment system for all stakeholders to promote the development of the sector

---

## 10. COORDINATION, COLLABORATION AND LINKAGES

---

***Objective: Enhanced coordination of and collaboration/linkages with the different service providers involved in providing quality control at national and field levels in order to improve the quality and coverage of quality fish products.***

Although the Quality Control activities of the Department of Fisheries are largely implementation activities, coordination is needed at all levels to ensure compatible policy formulation, for both national and export driven sectors. Collaboration is also required at other levels to ensure that regulations are adhered to and that an understanding of the needs for improved quality is appreciated.

Organisations with which collaboration is essential including, but not limited to:

- Bangladesh Food Control Council (Not yet formed)
- Bangladesh Frozen Foods Export Association
- Ministries of Commerce and Industry
- Export Promotions Bureau
- Ministry of Foods/ Agriculture/ Land / Science and technology
- Bangladesh Standards Testing Institute
- Ministry /Department of Public Health
- City/Town Councils and Corporations
- US FDA/ EU / Japan
- Hatcheries (SHAB)/ Producers (associations)/ Processing Plants/ Marine Fisheries Association / Salted and Dried Fish Association/ Live Fish Exporters Association
- Local Markets and Traders
- Research bodies including Universities and BFRI

- Determine mandates of different organisations and roles in implementing or regulating aspects of Quality Control
- Ensure collaboration by establishing focal points for consultation and collaboration
- Ensure consistency of Policy formulation

Research

- Undertake a needs assessment for research activities.
- Identify suitable research institutes to undertake work and develop action plan to undertake research
- Secure funds for research activities

Linkages to Production Sector

The skills developed for providing a Quality Assurance and Certification Scheme for marketed fish and shrimp could also be used to support the certification and development of the input supply side for example the quality of feed. This would not be seen as a main priority for activities, but should be assessed as a financial option to utilise the skills and revenue options.



---

## 11. HUMAN RESOURCE DEVELOPMENT

---

***Objective: A systematic Human Resource Development strategy developed and implemented so that the staff of the Department of Fisheries and its partners are able to meet the challenges of implementing the Quality Control Strategy.***

Quality Control is a specialised activity within the overall mandate of the Department of Fisheries. It therefore needs to build up a core of staff who are adequately trained for the job and who can gain promotion within the wing. At present this is not the case and several external evaluations of the running of the QC section have pointed out this failing.

- Establish a cadre for Quality Control that offers a career path for those selecting to opt for this technical area.
- Select candidates based on the desire to join the cadre and the technical competence.
- Open up recruitment for non-fisheries graduates, but with relevant skills (e.g. biochemistry, micro-biological and laboratory skills.)
- Establish staffing structure that offer the possibility for promotion within the sector depending on an evaluation of capability,
- Re-designate senior management position as Director Quality Control, with financial and budgetary control over all activities within the unit.

Much of the activities for Quality Control will remain in the hands of the private sector. It is essential that a pool of skilled technicians and managers be developed to support these activities.

- Promote the need for University based courses on food safety
- Promote the development of technical courses for laboratory technicians and field workers tasked with improving the quality of products from farmer to processors.
- Develop modular courses to enable staff employed in quality control, stay current with knowledge and skills
- Develop management course for senior management of processing facilities and staff in competent authorities (both government and private)
- Establish linkages with international organisations and ensure flow of information through networking and exchange visits
- Develop a register of qualified technicians