1. INTRODUCTION

Overview of Jamaica’s Fisheries sector

Fisheries have provided the means of livelihood for thousands of Jamaicans for many years, and contribute significantly to economic growth. With this in mind, Government has supported the local fishing industry through a number of initiatives over the years, spearheaded by the Fisheries Division of the Ministry of Agriculture and Lands, under the aegis of the Fisheries Act (1976).

Importance of Fisheries

Income and Output. In 2003 the Fishing Industry in Jamaica contributed $1,113.9 million to the Gross Domestic Product. Total exports amounted to 1,363,693 kg, valued at US$11.4 million in 2001 and accounted for 8 per cent of all Agricultural exports. The significant expansion in exports of fish in the 1997-2000 period was attributable to the growth of the lobster and conch exports, as well as the expansion of fish farms.

Employment impact: Fisheries industry contributes to direct and indirect employment of over 40,000 persons and contributes to the local economy of many fishing communities, and makes an indirect contribution to the livelihoods of over 200,000.

Food security: Fisheries currently play an important part in food security, and given the existing resources, have the potential to increase their role in ensuring the availability of nutritious, affordable and accessible source of food. Capture fisheries and aquaculture contribute to the overall supply of fish and fish products, with domestic production currently accounting for about 20 per cent of supply. Per capita consumption of fish is approximately 19.6 kg per annum, but the potential exists to expand both marine capture fisheries and aquaculture in order to meet local demand for fish as food.

Social Impact: The social impact of the Jamaican fishing industry is particularly evident in the fishing communities, which are mainly rural, and which have fairly high rates of poverty.

Fiscal impact: Public Expenditure on fisheries industry is currently inadequate to meet development needs, and expansion of revenue is imperative if fisheries policy is to be effectively implemented. An efficient fisheries industry can however become an important source of revenue, in addition to meeting a large part of its costs of operation.

Fisheries Resources

Fisheries resources in Jamaica consist mainly of Marine capture fisheries and Aquaculture. Inland fisheries resources are considered negligible. There is also a
marketing system for fresh fish (marine and aquaculture) and imported fish products (salted and frozen products).

The marine fishery resources include those within the territorial sea and archipelagic waters - approximately 12,000 square kilometers and include the Morant Bank and most of Pedro Bank; those within Jamaica’s Exclusive Economic Zone (EEZ) covering an estimated area of 274,000 square kilometers; and fisheries in International Waters. Between 1996 and 2001 the total fisheries production ranged between 9,000 and 14,000 tonnes, increased landings being attributed to improved fishing technology and the increase in the number of fishing boats.

Available fish stocks within the inshore fisheries are considered inadequate to support a viable fishing industry. However, there are opportunities for increasing the production of national fishing industry within the EEZ, subject to its more effective regulation.

Aquaculture has expanded over the years, with the potential for further expansion to double or triple its present size, subject to the provision of adequate water supplies.

**The Jamaican Fishing industry**

The Jamaican fishing industry has been the beneficiary of several Government programmes designed to promote its growth and development since 1949, when the Fisheries Division, then a sub-division of the Forestry Department, of the Ministry of Agriculture and Lands, was established.

In terms of location of fisheries or fishing grounds, the industry can at present be divided into three main operational areas: -The Inshore (coastal) fishery, the Offshore (deep-sea) fishery, the Cays fishery and Pond Fish Culture.

Harvesting methods include: Marine Capture Fisheries (Industrial, artisanal, subsistence, recreational, sports) and Aquaculture.

The Fishing industry in Jamaica is comprised of five categories of operators: Industrial Fisheries, Offshore Artisanal, Mainland Artisanal, Inland Aquaculture and Sports fisheries. Industrial Fisheries operate vessels with a mean size of 23m in the Pedro Bank, harvesting fish lobster and conch from depths up to 25m. Offshore Artisanal fishers based on offshore cays. Mainland Artisanal fishers operate small open hull canoes along the south shelf. Inland Aquaculture are mainly large commercial farms with fish ponds of ten hectares (five acres) or more. Sports Fishers engage mainly in recreational and or seasonal sports fishing.

The most economically important species harvested are: conch, shelf and reef fish, pelagics, conch, lobster and shrimp. Conch. Since 1987, there has been a rapid expansion in the conch fishery on the Pedro Banks, due primarily to the entry into the fishery of several semi-industrial type conch-fishing vessels. Shrimp
shrimp fishery is an artisanal one, consisting of food and bait fisheries utilizing fifty-two fishing grounds. Most of the shrimp caught is marketed locally.

Annual catches of marine fish harvested on the Shallow Shelf from 1986-1991 show a downward trend as severe fishing pressures have resulted in the reduction of several families of reef fish. Deep Slope Fishes. Catches on the deep slope represent less than 10 percent of the total annual catch of marine fishes. Coastal Pelagics. The near-shore or coastal pelagics fishery of Jamaica (of which the primary target fish is the Opisthonema oglinum (Atlantic Thread Herring, or “sprat”) has evolved into one of great importance, with the catch of coastal pelagics increasing as more fishers switch to gillnets in nearshore areas in response to declining reef stock. The coastal pelagic fishery under which the thread herring falls is an open access fishery with little or no management /conservation measures in place. Larger Pelagic fishes represent an unknown proportion of the annual catch of marine finfish.

The Spiny lobster fishery is the second most important fishery (export earnings) in Jamaica. The spiny lobster, Panulirus argus, is widely distributed in the coastal waters and on the offshore banks around Jamaica with Lobster found on the Pedro Banks accounting for approximately 60% of the total landings from the fishery. The spiny lobster fishery is now under pressure and is managed using closed seasons, minimum size regulations, gear restrictions and the prohibition of the taking of berried lobsters and moulting lobsters. Shrimp and prawns. Shrimp ventures have concentrated on imported Penaeus vannamei (white shrimp). Prawn culture is based on the freshwater prawn (Macrobrachium rosenbergii) and Cherax quadricarinatus (redclaw crayfish). Tilapia presently comprises 95% of Jamaica’s aquaculture production.

Fisheries and Sustainable Development

Fisheries represent a key renewable natural resource and provides a source of livelihood for thousands of Jamaicans as well as a source of export earnings. As such, the development and effective management of the country’s fisheries can play an important role in Jamaica’s sustainable growth and development.

The economic environment of the fisheries industries is increasingly affected by global developments relating to management of fishing resources to ensure sustainability, and this has an impact on the viability of individual segments of the global industry whether in terms of countries or particular species and production methods.

Depletion of fish stocks has been seen as a major issue for the local fisheries industry for many years, particularly in relation to near-shore or reef fisheries. The depletion of near-shore fish stocks has led to more stringent regulation, but given the high degree of pressure from artisanal fishers with limited alternative means of livelihood, efforts at regulation are extremely costly. The depletion of domestic fish stocks has the consequence of increased dependence on imported food fish, unless the food fish deficits
can be significantly reduced, if not eliminated, by corresponding increases in aquaculture products.

Management of the Environment and the activities of the fisheries industry are two inter-related dimensions of the protection of the sustainability of the ecosystem. The imperative of sustainability requires the strict enforcement of environmental controls with regard to reef fishing and various destructive fishing practices, resulting in the doubtful viability of the artisanal segment. However, with due cognizance of the important social role of this segment, particularly in employment generation and poverty alleviation, solutions will need to be found – inside and outside the fisheries industries itself to address the problems of securing the long-term livelihood of fishers.

While the increasing size of the market for fish and fish products means increased possibilities for fisheries industries, increased attention to the environment, resulting in growing pressure for a strict application of the precautionary approach to all interventions. Aquaculture will increase in importance as a source of food fish. These prospects have clear implications for the development of Jamaican fisheries.

The changing environment of Jamaican fisheries: key issues and Problems

In recent years, the fishing industry has experienced a severe crisis as a result of overfishing, loss of habitats and biodiversity, increased costs of production and illegal practices.

Reduced production and increasing demand have meant that the country has come to rely increasingly on imports to provide for the needs of the population for fish and fish products as a source of food.

At the same time, the country faces serious problems of maintaining economic growth, reducing unemployment and poverty and safeguarding food safety and security.

International developments that have had major impact include:

1. Globalisation of the fishing industry
2. Rising demand
3. Improved production technologies
4. Decline of fish stocks
5. Growth of aquaculture
6. Increased concern over the environmental impacts of fishing
7. Increased international efforts to regulate the fishing industry through international treaties and conventions, development of more comprehensive frameworks at international, regional levels to manage fisheries whether on a voluntary or obligatory basis.
Against this background, an updated and sustainable policy for the development of the Jamaican fishing industry has become a major national priority.

In order to be sustainable this policy must be consistent with accepted principles of sustainable development, such as an “ecosystem approach”, and must, furthermore be closely coordinated with related policies for national development, such as environmental, economic and social development policies.

The objectives of fisheries policy

The main goals of the National Fisheries Policy are:

1. Contribute to economic growth and reduction of poverty
2. Contribute to sustainable livelihood of Jamaicans through employment in fisheries and related activities
3. Contribute to the provision of Food security

Its immediate objectives are:

1. Ensure sustainable development of the fisheries industry
2. Promote efficiency of the fishing industry
3. Promote economic and social development of fisheries industry
4. Improve systems and procedures for the management of the fishing industry
5. Promote partnerships with stakeholders in the management of fisheries and ensure transparency and accountability in the governance of fisheries resources.
6. Comply with international standards and best practices for fisheries development and management in keeping with Jamaica’s commitments under various agreements and conventions.

The National Fisheries Policy provides a framework for the formulation of strategies designed to address the important issues and challenges and opportunities facing the industry, including: globalization, trade expansion, economic efficiency, industry structure and governance, and food safety and quality.

Globalisation of seafood trade. The economic environment of the fisheries industries is increasingly affected by global developments relating to management of fishing resources to ensure sustainability. The global fishing environment is becoming more and more subject to regulation, in contrast to the traditional situation, which permitted a more uninhibited access to global fisheries resources. Other related issues which are seen as of importance in the global fisheries trade include: safety of fishers, fish quality and safety, property rights and fisheries management, illegal, unreported and unregulated fishing, sustainable development of marine capture fisheries, genetically modified organisms and
fisheries and ecolabelling in fisheries management. The development of the Jamaican fisheries industry will need to consider the impacts of this environment.

Trade expansion increased demand for seafood resulting in an increased trading possibilities for both marine capture fisheries and the aquaculture industry. The establishment of niche markets for Jamaican conch and lobster is a step in the right direction. As a result of the above trends in consumption, international trade will grow - possibly more rapidly in value than in volume terms. In developing countries, fish processing for developed markets will become a very attractive employment-generating opportunity for governments that need to find alternative employment opportunities, particularly for displaced artisanal fishers and their families. Developing countries will also become increasingly important markets for fish.

Trade liberalization has an impact on the role of imports of fish and fish products in the local economy. Against the background of the high production costs of domestic fisheries, especially artisanal fisheries, and given increasing consumer demand, imported fish may be expected to capture an increasing share of the domestic market. Developments such as the WTO trade regime, FTAA and the CARICOM Single Market and Economy (CSME) are therefore quite significant. In the long term, deriving advantages from trade liberalization will require expansion and development of local industrial fisheries which operate on a scale which will make export production viable and more effective maintenance of domestic market share more effective, based on more competitive production.

Efficiency. The increased efficiency of fisheries is critical to the industry’s ability to develop in a sustainable way. This will require measures to address increasing commercial costs and to secure additional revenues, as well as measures that increase maximum sustainable yields in the long run. This underscores the need for an ecosystem based fisheries management.

Industry structure and Governance. The efficient management of fisheries will require the development of appropriate institutional mechanisms and actions that can strengthen the industry, including:

(b) Policies to promote positive change in domestic industry structure
(c) Policies to build partnerships in management between public and private sectors as well as fishers, community-based groups and NGOs.
(d) Resource sharing on national and regional levels to improve fisheries management.
(e) Measures to ensure increased accountability
(f) Measures to decrease the level of illegal fishing in the Economic Exploitation Zone (EEZ)
(g) Measures to ensure bio security, occupational health and safety
Food safety and quality. Policies and measures to ensure food safety and quality are essential, not only to safeguard national food security, but also to ensure increased and continued access to global markets which have become increasingly regulated.

2. The Legal and Policy Framework

2.1 Fisheries Policy is guided by certain principles that are enshrined in relevant laws and regulations, and which form the basis of the management practices of the fisheries authorities. In order to ensure a sustainable fishing industry, these principles and the relevant legal instruments that codify them as well as the policies and strategies for managing the fisheries resources of the nation must be relevant to the current challenges facing the fishing industry—nationally, regionally and globally—and must be consistent with international best practice. In this regard, the *Jamaican Fisheries Act*, relevant national sectoral development strategies and international conventions and treaty obligations should be taken into account.

2.1.1 *The Fisheries Act*. The Fisheries Act of 1976 establishes certain guidelines and legal and regulatory framework for the management of the national fisheries. In many critical respects, the existing Act falls short of providing the safeguards necessary for ensuring a sustainable fishing industry, especially in the light of developments over the past twenty years.

2.1.2 *National sectoral development strategies*. The fisheries industry is a major contributor to the national economy, accounting for % of the output of the Agricultural sector and providing direct and indirect to some 0000 Jamaicans. As a natural resource-based industry, it utilizes primary resources of the country and thus has the potential for making a positive net contribution to the economy through export earnings and foreign exchange saving, especially in the light of rising domestic and world demand for fish and fish products. In addition, the industry has the potential of contributing to the alleviation of poverty, especially in rural areas that have been traditionally dependent on fishing. The development of the industry therefore should be seen as an important component of any Sustainable National Development strategy.

2.1.2.1 The *National Industrial Policy* (1996) recognises Agriculture and Food Processing as one of the strategic clusters, while the *Agricultural Development Strategy* (2004) provides for the development and expansion of fisheries and aquaculture as key strategies to stimulate economic growth, promote rural development, contribute to food security and alleviate poverty.
2.1.2.2 Within the context of a Sustainable National Development Strategy, policies for the protection and preservation of the environment and the safeguarding biodiversity are expected to impact positively on the increased productivity of national fisheries through improvement of habitats and better management of fish stocks. In this regard, regional and international initiatives in the fishing industry play an important supporting role.

2.1.3 *International conventions*. Jamaica is signatory to a number of international and regional conventions and treaties relating to the management of fisheries resources. The National Fisheries policy aims to be compliant with these arrangements in order to ensure that Jamaica can participate equitably with other nations in the global fishing industry and benefit from international and regional initiatives aimed at improving fisheries management and the overall efficiency and sustainability of the industry.

2.1.3.1 *UNCLOS*. Jamaica acceded to the 1982 UNCLOS agreement in March 1983. This agreement provides a comprehensive, enforceable international environmental law, covering all forms of marine pollution (land-based, atmospheric, ship-borne, and originating from activities on the sea-bed). It establishes a framework for cooperation on conservation and management of marine living resources on the high seas and serves as an umbrella for numerous existing international agreements covering the oceans, including international fisheries agreements and regional initiatives.

2.1.3.2 *Cartagena Convention*. The Cartagena Protocol on Biosafety to the Convention on Biological Diversity, was finalized and adopted in 2000. Its objective is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, especially where transboundary movements are involved. Ensure access to the benefits of biotechnology while minimizing the possible risks to the environment and to human health.

2.1.3.3 *FAO Code of Conduct for Responsible Fisheries*. The Code of Conduct is a collection of principles, goals and elements for action representing a global consensus or agreement on a wide range of fisheries and aquaculture issues. It stresses that countries and all those involved in fisheries and aquaculture should work together to conserve and manage fish resources and their habitats. Fishing operations and policies should be designed with a view to achieving long-term sustainable use of fish resources as a means of assuring resource
conservation, continued food supplies and alleviating poverty in fishing communities.

2.1.3.4 CRFM. The Caribbean Regional Fisheries Mechanism (CRFM) took over from the CARICOM Fisheries Resource Assessment and Management Program (CFRAMP) as one response of regional governments faced with serious over-fishing and habitat degradation in the inshore fisheries of the region. Its mandate sought to ensure that the strengthening and enhancing the capacity of national fisher folk organizations to become co-managers of the region’s fisheries resources and to ensure that organized resource users in all the participating countries are effectively and democratically represented on the National Fisheries Advisory Committees.

3. NATIONAL FISHERIES POLICY AND STRATEGY

3.1 In order to ensure that the fisheries industry will realized its potential to contribute to sustainable development, fisheries policy must be fully integrated with other strategic initiatives for national development, be ecologically sustainable, promote greater efficiency and improved competitiveness of national fisheries enterprises, ensure improved management of fish stocks, provide for effective partnerships between the major stakeholders of the industry, ensure effective enforcement and compliance with industry regulatory standards and consistency with international commitments, improve educational standards among the community of fishers, support continuous research and development, and achieve cost recovery for the services provided to the industry. The Fisheries Policy must also address the issues of Poverty, Human Development and gender equity and provide an appropriate legal framework to support all initiatives.

3.2 Integrating fisheries policy with other strategic initiatives

3.2.1 A National Fisheries Development Plan.

3.2.1.1 Planning and consultative framework should focus on the development of a medium term fisheries development plan.

3.2.1.2 Fisheries Industry Development Plan addresses three components: the increased production from capture fisheries and aquaculture to supply the domestic consumption; the increased export of high value seafood
and processed fish products; the safeguarding the sustainability of domestic fisheries by appropriate regulation of fishing activities. In seeking to increase production, the strategy should give due emphasis to the development of deep-sea fishing in order exploit currently under-exploited fisheries, and the expansion of aquaculture.

3.3 Ecologically sustainable development

3.3.1 Sustainable fisheries. The existing and proposed measures to limit the further entry of artisanal fishers into the industry and to encourage exit are necessary. However the policies in order to be effective must be also efficient. The costs of enforcement may be as high as the costs of non-enforcement. This means that appropriate incentives must be put in place to facilitate the exit of artisanal fishers from the industry including provision of alternative means of employment. The reduction of the artisanal fisheries should not therefore be seen outside the context of the expansion and development of the fisheries industry in general, taking into consideration the underexploited resources

3.4 Improved management of fisheries

3.4.1 Objectives:

1. To effectively manage the fisheries resources of Jamaica
2. To harvest each resource as close as possible to its optimal sustainable yield
3. To reverse overfishing in overexploited fisheries and increasing fishing effort in under-exploited fisheries
4. To recover resource rents to finance the fisheries management process
5. To achieve sustainable development and utilization of fisheries resources in inland waters and deep waters and distant shoals with due consideration to international obligations
6. Where possible to enhance suitable areas of habitat.

3.4.2 Strategies

The strategies will target Capture Fisheries and Aquaculture, and will include:

- Limited and fully controlled access to all capture fisheries in Jamaican waters
- An extracted resource rent the will partly cover the costs of fisheries conservation and management
DRAFT FISHERIES POLICY

- Restoration of resources in overfished areas
- Full use of resources in waters over 200 m deep and on distant shoals and extracted rent from their exploitation, both through developing fisheries that will allow employment of license holders now operating in areas that are considered to be overfished, and by licensing new entrants
- Optimal protection of all fishing areas, by carrying out Monitoring, Control and Surveillance actions and enforcement by sea, land and air
- Assessment and regulation of the inland fisheries.

3.4.2.1 Marine Capture Fisheries

1. The marine capture fisheries of Jamaica will be managed by Zones.
   - Zone 1: The island shelf surrounding the main island of Jamaica, including the slope down to 200 m adjacent to it
   - Zone 2: The Banks inside Jamaican waters down to 200m, except the Jamaica/Columbia Joint regime Area
   - Zone 3: The remainder of the EEZ of Jamaica, consisting of waters deeper than 200m
   - Zone 4: The Jamaica/Columbia Joint Regime Area
   - Any other zones that may be created.

2. The GOJ will impose access limitations on all fisheries in all Zones

3. All capture fisheries will be managed by Fisheries Management Areas and by means of Fishery Management Plans, which will be agreed upon by all major stakeholder groups

4. Licenses will be issued per Zone or sub-Zone according to the Fishery Management Plans

5. Licenses for fisheries in Zones 3 and 4 may be linked to programmes to transfer fishermen now operating in Zones 1 and 2 to offshore fisheries in Zones 3 and 4

6. Licensing fishers and fishing vessels of all kinds and for fisheries in all Zones will be the sole responsibility of the Fisheries Division of the Ministry of Agriculture. However, the Fisheries Division may enter into special legal agreements with other organizations regarding the licensing of fisheries in special management areas, marine parks and protected areas

7. Licensing and registration fees for all fisheries and related activities, including traders and processors will be based on the principle of cost
recovery and “user pays” at levels commensurate with fishing capacity and expected income from the fishery.

8. Revenues obtained from resource rent will be made available to the Fisheries Division and its co-operators to partially offset the costs of conservation and management, including monitoring, control, surveillance, enforcement, and research and data collection activities.

9. Fisheries management measures will be decided upon and implemented in close cooperation with all stakeholders. In order to facilitate consultations all participants in the fisheries will be encouraged to organize themselves into groups that can be addressed easily.

10. In order to measure the effect of the management measures to be implemented, it will be absolutely necessary to develop a cost-effective and reliable system of data collection.

11. Fishermen will be obliged to provide information on their catch and fishing effort to Fisheries Officers or to persons officially assigned by the Fisheries Division to collect data and information. This detailed information will be treated as confidential and anonymous, but summarized results will be made public.

12. All fishing vessels must be marked on the hull in the prescribed manner as soon as a licence has been received; the markings will consist of a registration number and a colour code related to the fishing zones or sub-zones included in the licence.

13. Unregistered and unmarked boats caught fishing or with fish or fishing gear onboard after the cut-off date will be seized and dealt with according to the law.

14. The use of large drift nets ("walls of death" defined as per UN) will not be allowed in Jamaican waters.

15. Regulations to protect spawning (aggregations) fish species shall be issued once the necessary knowledge has been accumulated.

16. All existing subsidies on fishing gear, engines, bait or fuel that contribute to over-exploitation and over-capitalization will be withdrawn. However, incentives to best practices of conservation and management of Jamaica’s fishery resources will be encouraged.

3.4.2.1.1 Objectives/Strategies for Zones 1 and 2
DRAFT FISHERIES POLICY

- To reduce fishing effort by stopping new entrants until stocks have recovered sufficiently. This may take 15 years;
- To divert activities of existing fishermen now fishing in Zones 1 and 2 to fishing activities in Zone 3 or to other activities, including aquaculture and tourism.
- To involve all stakeholders in the fisheries management process, including monitoring, surveillance, control and data collection;
- To reduce costs of fishing operations by using lobster and fish concentrating devices, such as casitas and artificial reefs.
- To effect improvements in existing fisheries for resources that appear to be under-exploited (e.g. peneid shrimp).

1. Fisheries management measures for Zones 1 and 2 will be decided upon and implemented in close cooperation with all stakeholders.

2. In agreement with the stakeholders, the Fisheries Division shall establish Fishery Management Areas within the Zones, and stakeholders will be encouraged to participate in managing these Fishery Management Areas along co-management lines.

3. Fishing licences in Zones 1 and 2 will be issued according to the relevant Fishery management Plans, and may limit fishers to certain sub-zones, types and quantity of gear and species.

4. In agreement with the stakeholders, the Fisheries Division shall establish fish sanctuaries. Fishers will be encouraged to participate in managing and guarding these fish sanctuaries.

5. Access to the fisheries of Zones 1 and 2 will be strictly monitored and all pertinent regulations, including closed seasons for lobster and conch, will be strictly enforced by the staff of the Fisheries division and others appointed by or under an agreement with the Fisheries Division, e.g. Marine Police, JDF Coast Guard, game wardens and NRCA Protected Area Rangers.

6. The GOJ will revise all regulations pertaining to all types of fishing gear that may be used in Zones 1 and 2, e.g: beach seines, minimum mesh size of wire or netting of fish pots; use of nets in areas with coral heads; use of spearing devices. Prohibited fishing gear will be seized and dealt with according to law.

7. Fishermen operating small boats equipped with trolling gear and operating in Zone 3, the deep waters outside the reef, will be considered under Zone 3. However, if they are also engaged in any fishing for bait in shallow waters, they also have to follow the procedures for Zones 1 and 2.
8. No individual or entity (Government or NGO) will be allowed to donate (or dispose of below full market value) any fishing gear, vessel, engine or other equipment intended to be used for fishing in Zones 1 and 2, unless it is in conformity with the management plans for these zones.

9. The Fisheries Division will encourage research into under-utilized species in Zones 1 and 2, in order to better utilize under-utilized marine resources.

10. The GOJ will study and eventually encourage the placing of “casitas” (hiding places for lobster) and other types of Fish Attracting Devices, which should be managed in cooperation with the fishers’ associations.

11. Where alternative fishing possibilities will be created in Zones 3 and 4, the GOJ will issue licences mainly to those previously licensed in other Jamaican fisheries in Zones 1 or 2, and under conditions that are related to reducing the number of boats operating in Zones 1 and 2.

12. Foreign (non-resident) fishermen will not be issued any licence for fishing in Zones 1 and 2. An exception can be made for Zone 2 only where there is a lease agreement with a Jamaican company to fish for conch or lobster for a limited period. Such exception will not be applicable to fisheries for demersal or pelagic fish.

13. The GOJ will issue regulations or orders that permit the gradual nationalization of all fisheries in Zone 2, and impose adherence to safe-diving practices.

14. Quota for conch will be set and assigned by a Fisheries Management Committee, based on advice issued by the Fisheries Division who will conduct a survey for conch at least once every third year, and data and information regarding poaching.

Small-scale and Sports fisheries

15. As soon as possible, by a specified date, all artisanal fishers and commercial sports fishers and all their fishing boats operating in Zones 1 and 2 must be registered and licensed according to law.

16. Licensed commercial sports fishing of any kind will be permitted in Zones 1 and 2 on the basis of “catch and release” only. No catch by such fisheries may be landed.
17. New licences issued before the cut-off date for small-scale fishers and boats for Zones 1 and 2 will have a validity of five years. These licences will not be transferable, nor can they be inherited.

18. After the cut-off date there will be no new small-scale fishers or commercial sport fishing boats allowed to fish in Zones 1 and 2, until there is evidence to show that the fisheries can sustain new entrants. New entries to the fisheries in Zones 1 and 2 will be suspended for at least five years by not issuing new fishing licences to fishers of any kind and boats of any kind after this date. Continuous monitoring of the resources will take place to determine when they have recovered sufficiently for the entry of new fishers to resume.

**Industrial Fisheries**

19. Industrial fishers and vessels will not be issued any licence for fishing in Zone 1.

20. Industrial fishing licences for Zone 2 will be issued on a yearly basis, based on a Fisheries Management Plan and quota regulations.

3.4.2.1.2 **Objectives/Strategies for Zones 3 and 4**

- To expand fishing in these zones, which are considered to be lightly exploited, if possible by diverting activities of existing fishermen in Zones 1 and 2 to fishing activities in Zone 3;
- To start new, or improve existing fisheries for resources that appear to be under-exploited (e.g. tunas and tuna-like fishes, sharks);
- To reduce risks and costs of fishing operations by introducing larger vessels with inboard engines;
- To secure involvement of all stakeholders in the fisheries management process, including monitoring, surveillance, control and data collection;
- To extract appropriate rents from the licensing of foreign vessels wishing to fish in Zone 3;
- To promote improved handling and marketing of fish caught in these zones.

1. Access to the fisheries of Zones 3 and 4 shall be limited.

2. Preferential access or first choice to the fisheries in Zones 3 and 4 will be given to artisanal and industrial fishermen that have moved out of Zones 1 and 2, and owners of charter, sport and recreational
fishing vessels, including foreigners, for the duration of a tournament.

3. If possible, the GOJ will provide assistance in developing the necessary infrastructure, e.g. through providing a model of a larger vessel for exploratory and demonstration fishing, to enable those reef fishermen willing to leave the reefs to fish in Zones 3 and 4 for large pelagic and other resources.

4. The GOJ will encourage the development and use of Fish Attracting Devices in a sustainable manner within appropriate areas and will establish the use of these FADs as a demonstration of the positive effect they have on concentrating fish and therefore reducing the cost harvesting. Solutions will have to be sought for the placement, use and maintenance of other FADs placed by the fishermen.

5. The GOJ will explore opportunities, including development projects, aimed at introducing a new type of multipurpose vessel that is suitable for offshore fishing of any kind.

6. The GOJ will seek to develop under-utilized resources through research and training etc.

7. The GOJ will formalize relationships with relevant international bodies (including ICCAT) and support and encourage, through CFRM regional management regimes for relevant fish stocks.

8. Fishing by tourists and in tournaments shall be on a “catch and release” basis.

3.4.2.2 Objectives/Strategies for Capture Fisheries in Inland Waters

- To conduct an assessment of inland fisheries resources, and determination of possibilities for improvement.

1. Assess fishery resources in the inland waters including rivers, natural ponds, wetlands and other water bodies;

2. Collect data on inland fisheries and develop management and development plans;

3. Establish management plans on the basis of assessment results;
4. Coordinate activities with those of environmental organizations, e.g. NEPA.

3.4.2.3 **Aquaculture.** Given concerns about declining fish stocks and the rising demand for fish and fish products in the domestic market as well as globally, aquaculture is seen as a most important component in the development and management of fisheries resources. The GOJ will therefore establish, maintain and develop an appropriate legal and administrative framework that facilitates the development and management of responsible aquaculture, including an advance evaluation of the effects of aquaculture development on genetic diversity and ecosystem integrity, based on the best available scientific information.

3.4.2.4 **Objectives/Strategy for Aquaculture**

- To regulate and control aquaculture activities, including preventing the release of exotic species into the wild
- To promote development and expansion of the culture of aquatic flora and fauna to limits dictated by marketing possibilities, including export, without damaging wetlands, lagoons, mangroves, reefs or other sensitive areas.
- To improve GOJ collaboration with other stakeholders/agencies for the development of standards for both food fish and ornamental fish species.
- To foster the development of culture of indigenous species.
- To achieve cost recovery for assistance to aquaculture enterprises, research and development.

1. Produce and regularly update aquaculture development strategies and plans as required, to ensure that aquaculture development is ecologically sustainable and to allow the rational use of resources shared by aquaculture and other activities.

2. Develop and implement a registration and licensing system for aquaculture tied in with the management planning process and with due consideration to land tenure and encumbrances. (Registration and licensing of farmers and traders may be an effective means of combating praedial larceny).

3. Promote active participation of aquaculturists, their communities and environmental organizations in the development of responsible aquaculture management practices.
4. Develop appropriate mechanisms to monitor the impacts of inputs used in aquaculture; Establish effective procedures specific to aquaculture for undertaking environmental assessment (EIAs) and monitoring with the aim of minimizing adverse ecological changes and related economic and social consequences resulting from water extraction, land use, discharge of effluents, use of drugs and chemicals and other aquaculture activities; Require that before registration an aquaculture farm should meet the applicable environmental standards.

5. Establish appropriate mechanisms, such as databases and information networks, to collect, share and disseminate data related to aquaculture activities in order to facilitate cooperation in planning for aquaculture development at the national level; establish mandatory data reporting standards.

6. Implement zoning of lands for aquaculture development plans and make provisions for adequate water supply.

7. Encourage aquaculture development particularly by fishermen who used to fish in Zones 12 and 2, in order to relieve the fishing pressure on the reef fisheries.

8. Promote research to limit bird predation.

9. Execute plans to culture native species e.g. mullet (*Mugil sp.*)

10. Investigate possibilities for expansion of cultures of Tilapia and other types of food fish (carps, *Collosoma* etc.) and ornamental fish, in keeping with market conditions.

11. Encourage the development of commercial oyster farming and Irish Moss culture, since the necessary research work has been done.

12. Provide key role (research, extension services) in the growth of aquaculture thus preventing monopolies.

13. Encourage aquaculture and mariculture research, in collaboration with scientific institutions and stakeholders.

14. Investigate subsidies and incentives and explore possibilities for an amicable financing regime for aquaculture development.
15. Extend to aquaculture the policy of the Ministry of Agriculture of reduced taxation on lands for agriculture (D rating of farm lands).

16. Increase ornamental and food fish fingerling production, in keeping with the Aquaculture branch’s mandate for enhancing fish production.

17. Apply “user pays principle” and cost recovery mechanisms to all GOJ inputs.

18. Provide disaster relief mechanisms for aquaculture, recognizing its contribution to the economy and national development.

3.5 Fisheries Governance and Institutional Development

3.5.1 The policy of the GOJ is to enhance the institutional capacity for the management and development of capture fisheries, aquaculture, and the fishing industry as a whole, so as to achieve sustainable development of the fisheries sector and enhance its contribution to national life.

3.5.2 In this regard, Government will seek to promote the goals of transparency, accountability and efficiency and involvement of all stakeholders in the management of the sector. This requires the strengthening of the institutions – public and private- that are involved in fisheries, the development of the partnership between the Government and its agencies and the key participants in the fisheries and fishing industry, and the implementation of strategies and actions that will enhance the capacities of all to effectively carry out their respective mandates.

3.5.3 Objectives/Strategies

- To enhance the status and capacity of the Government through the Ministry of Agriculture and Lands, its agencies, in particular the Fisheries Division, and other public bodies to manage fisheries resources, regulate fisheries activities, and provide services to the fisheries industry.

- To ensure that the public institutions of the fisheries sector operate along lines of transparency, accountability and efficiency in keeping with Government’s Public Sector Modernization Policy (Ministry Paper 56/02).
DRAFT FISHERIES POLICY

- To ensure that public institutions of the fisheries sector operate along lines of sustainability and stakeholder involvement in keeping with Social Policy guidelines (JASPEV) and other applicable Government policies.

- To contribute to enhanced sustainability of the fisheries development through improved collaboration and cooperation between the institutions and stakeholders involved in the management and development of fisheries.

3.5.4 Institutional Strategies

3.5.4.1 Government will ensure that the institutional capacity is in place to implement obligations under the relevant national and international instruments.

3.5.4.2 Fisheries Division

1. The Fisheries Division is to be converted into a semi-autonomous Authority, which will function as an Executive Agency of Government.

2. Government will secure improved funding for the Fisheries Division by using income from registration and license fees to be used for fisheries management and research activities.

3. The capacity of the Fisheries Division will be enhanced through training, recruitment of staff in new disciplines, investments in equipment (including provision of access to a research vessel) and improved physical facilities.

4. Training needs analyses will be conducted in order to identify gaps in the training and education of persons involved in the sector, and appropriate training programmes will be implemented to address these gaps.

3.5.4.3 Building partnerships. In keeping with Government’s commitment to involvement of stakeholders in decision-making, and in order to facilitate the implementation of collaborative strategies such as co-management of fisheries resources, Government will seek to build effective and sustainable partnerships with relevant stakeholders in the fisheries sector. These include: the Private Sector, inclusive of all commercial fishing interests, industrial fishers, recreational fishers, processors and distributors; small-scale and artisanal fishers; NGOs and Community-based organizations representing communities.
involved in or affected by fisheries; environmental, scientific and research bodies; academia and other partners. Consultative mechanisms will include bodies such as the Fisheries Advisory Council, National Sea Safety Committee, inter-agency groups involved in environmental protection and sustainable development, etc. and MOUs will be used where applicable to formalize relevant roles.

3.5.4.4 Fisheries Advisory Council. A Fisheries Advisory Council and eventually other similar bodies consisting of stakeholders and decision makers to advise the Fisheries Division on important management measures such as quota for conch and numbers of licenses for conch and lobster fisheries, aquaculture development etc.

3.5.4.5 Memoranda of understanding (MOUs). MOUs will be established with other institutions, in particular those involved in the implementation of management measures for all marine areas, including marine parks and protected areas, and those involved in applied and academic marine and fisheries research.

3.5.4.6 NGO Management in Fisheries: In conjunction with the organizational strengthening of the fishing cooperatives, attempts will be made to give them a role in the management of fisheries resources (e.g. fishing beaches, reefs) and the change process (e.g. educating artisanal fishers about the sustainable fishing and alternative livelihoods). The forestry model is to be carefully studied for best practices and lessons learned. This initiative should also be developed as a pilot project targeted to specific fishing communities.

3.5.4.7 Capacity building. The development of the ability of the Fishing Cooperatives to provide commercial services to fishermen as well as to serve as facilitators in the process of upgrading will require a significant effort to increase the capacities of these organizations. Measures will be introduced to improve the organizational capacity of NGOs involved with the Artisanal Fishers, to enable them to spearhead programmes for upgrading of artisanal fisheries, and facilitating their transition into industrial fisheries.

3.6 Research and Development

3.6.1 The available data on the Jamaican fishing industry are inadequate and should be improved by the establishment of an ongoing data collection, storage and dissemination programme, strengthening the current efforts of the Fisheries Division, especially as relates to national fisheries resources.
3.6.2 The policy of the GOJ is to enhance the capacity of public and private institutions to contribute to general marine science, to improve data collection and encourage research on all aspects of fisheries, and to provide education at all levels in all fisheries matters, so as to contribute to the sustainable development of the fisheries sector and enhance its contribution to national life.

3.6.3 Objectives/Strategy

- To provide a sound scientific basis for the management of the most valuable and important stocks
- To provide an efficient and functional framework for applied fisheries research and conduct applied research in all aspects of fisheries: stock assessment and biology; aquaculture; technology; economics; marketing; sociology; governance; nutrition and health; and to publish and disseminate research information at appropriate levels.
- To coordinate international collaboration on the assessment of shared or regional stocks and aquaculture.

1. In collaboration with stakeholders, improve the systems of statistical and biological data collection, especially as regards measuring the impact of a new fisheries law and regulations.

2. Seek technical and financial assistance in implementing data collection programmes.

3. Develop and implement a research agenda, based on fisheries management priorities and in consultation with relevant stakeholders.

4. Set up shared research programmes with academic institutions, involving research students and staff in pertinent areas of research, including: ecological and environmental issues.

5. Conduct research in biological, economic, social, marketing and processing aspects of fisheries.

6. Seek outside assistance and support from the fishing and academic communities and others in carrying out research in fields where the Fisheries Division lacks specific competence, e.g. vessel design, gear technology, fish
MINISTRY OF AGRICULTURE AND LANDS FISHERIES DIVISION

DRAFT FISHERIES POLICY

processing technology, economics, sociology, marketing, nutritional science.

7. Collaborate with other agencies in obtaining access to a national research vessel, as a platform to be used for marine and fisheries research.

8. Develop a mechanism for making available to various sectors of the public fisheries-related research results, including fisheries statistics and information from academic institutions, NGOs, etc.

9. Take part in and contribute to international workshops, conferences and publications dealing with stock assessments, aquaculture and other aspects of fisheries.

10. Identify and seek funding for a vessel that can safely and economically be used in Zone 3, and encourage and take part in exploratory fishing with different gears, in particular in Zones 3 and 4.

11. Investigate possibilities to expand and improve shrimp fisheries in shallow waters.

12. Develop and encourage the use of casitas, Fish Attracting Devices and artificial reefs.

3.7 Monitoring Control and Surveillance

3.7.1 The policy of the GOJ is to make sure that its laws, rules and regulations applicable to fisheries are adhered to, and to do this at a level of costs that is commensurate with its income fro licensing fishing and aquaculture activities and fines.

3.7.2 Objectives /Strategy

- To fully enforce the Fisheries Act and Regulations and other applicable instruments of law through actions of Monitoring, Control and Surveillance effected by different agencies, including the Coast Guard, Marine Police, The Fisheries Division, game and park wardens and through direct involvement of fishermen and aquaculturists in co-management.

- To establish and maintain a complete register of all vessels and fishers and of aquaculture facilities and aquaculturists.
1. Control of access by Jamaican vessels to the four maritime zones:

   i. The Fisheries Division will complete the registration of fishing vessels and fishermen by a certain date, so as to allow the start of a limited entry scheme by fishing zones.

   ii. The mechanisms for an integrated approach to monitoring, control and surveillance will be strengthened through the development of appropriate programmes.

   iii. Training on MCS and fisheries management will be provided.

   iv. Observer programmes will be implemented for the lobster and conch fisheries.

   v. Where, under agreements with the Fisheries Division, additional limitations on entry are imposed by Marine Parks and NGOs in charge of marine protected areas, the wardens of these organizations will effect MCS duties in their respective areas according to the applicable Laws and regulations and MOUs with the Fisheries Division.

   vi. Funding for MCS activities should be made available from funds collected for license fees and eventually other income, except fines.

   vii. Regulations regarding the use of certain fishing gears and methods, closed seasons, etc. will be strictly enforced.

   viii. Possession of species for which a closed season is applicable will be strictly controlled.

   ix. Financing will be sought for vessels, vehicles and other equipment needed for the proper execution of MCS activities.

2. Control of access to the 200 nautical miles EEZ of Jamaica:

   i. The GOJ will carry out regular controls from the air and by sea to check on any violations by foreign craft. Jamaican vessels operating offshore will be encouraged, in their own interest, to report such violations.

   ii. As a member of or participant in sub-regional or regional fisheries management organizations or arrangements, the GOJ
MINISTRY OF AGRICULTURE AND LANDS FISHERIES DIVISION

DRAFT FISHERIES POLICY

will implement agreed measures adopted in the framework of such organizations or arrangements and consistent with international law to deter the activities of vessels flying the flag of non-members or non-participant countries where such vessels engage in activities that undermine the effectiveness of conservation and management measures established by the abovementioned organizations and arrangements.

3. Monitoring, control and surveillance of aquaculture activities and inland fisheries:
   
i. The GOJ will set up a licensing system for aquaculturists and aquaculture facilities (including mariculture) and inland fisheries.

   ii. The GOJ will set up a mechanism to implement monitoring, control and surveillance of aquaculture activities and inland fisheries and implement MCS activities.

3.8 Safety standards

3.8.1 *Industry Safety standards.* Fishing is known as one of the most dangerous occupations world wide, and several fishermen are lost at sea each year. Jamaica, this situation is compounded by the fact that artisan fishers constitute the majority of persons employed in the fishing industry, and among these fishers high levels of poverty and low educational attainment are prevalent.

3.8.2 The combined pressure of poverty and poor education often results in extremely low compliance among this group with basic safety standards for work in the open sea. Given the fact that many of these fishers are forced to work in offshore banks as a result of depletion of onshore fish stocks, and given the high risk of adverse weather, especially during the Hurricane season, casualties can be unnecessarily high.

3.8.3 *Objectives/Strategy for Safety at Sea*

- To reduce the high number of fishermen lost at sea, and to reduce the high costs of search and rescue operations.
- To strictly enforce rules and regulations regarding safety at sea.
- To raise the level of awareness and knowledge of safety practices among fishers.
MINISTRY OF AGRICULTURE AND LANDS FISHERIES DIVISION

DRAFT FISHERIES POLICY

1. The GOJ will establish mandatory standards for safety a sea and implement measures to ensure that all vessels and fishermen operating on the Banks must strictly comply with the relevant regulations. Controls will be increased and stronger measures taken to enforce compliance.

2. All seagoing vessels in all zones should carry a simple radar reflector as described on page 12 of FAO Technical Guidelines for Responsible Fisheries No.1, 1996.

3. GOJ will work in close collaboration with fishers’ cooperatives and other organizations to implement measures to reduce the cost and increase the availability of safety equipment and safe vessels to small-scale and artisanal fishers as far as possible.

4. The GOJ will provide basic training in navigation, safety measures and safe diving practices to all fishermen. Completion of basic training will become a condition of the issuance of fishing licences, with appropriate standards applied to the minimum safety requirements for the relevant fishing zone (e.g. Zones 2, 3 and 4 will require a higher standard of safety knowledge for entrants).

5. The GOJ will investigate possibilities for the provision of life insurance for all licensed fishermen, working in collaboration with the fishers’ cooperatives and other organizations. Such insurance schemes will be closely linked with strict enforcement of safety regulations and safety equipment.

6. The GOJ will take such measures as will ensure that relevant weather information, e.g. weather bulletins, storm and hurricane warnings are available and widely disseminated among fishermen. Fishermen should ensure that monitoring such information becomes a regular routine in their fishing practice.

7. The GOJ, through the Fisheries Division and other agencies and working in close collaboration with fisheries industry stakeholders, will conduct continuous public education programmes aimed at increasing awareness of sea safety issues and best practices to ensure safety at sea.

8. The GOJ will encourage the establishment of National Sea Safety Committee, an inter-agency body with participation by key stakeholders in the industry and a Safety and Security Department aimed at improving safety at sea will be established within the Fisheries Division/National Fisheries Agency.
3.9 Food Safety, Biosecurity, marine pests and fish health

3.9.1 Food safety, biosecurity, control of marine pests and maintenance of fish health are important issues in the development of sustainable fisheries, relating not only to the protection of biodiversity and the promotion of a healthy society, but also the economic sustainability of fisheries through international trade in fish and fishery products. As such, the approach of the GOJ in respect of these issues is subject to standards that are established in international and regional agreements, conventions and laws to which Jamaica is committed. Application of these standards will therefore constitute a minimum condition in the development of sustainable fisheries.

3.9.2 The policy of the GOJ with respect to handling, hygienic standards, and processing, marketing and international trade is to adopt appropriate measures to ensure the rights of consumers to safe, wholesome and unadulterated fish and fishery products.

3.9.3 The policy with respect to processing fish, shellfish and other aquatic products is to encourage the addition of value to these products in Jamaica.

3.9.4 Objectives/Strategy

- To ensure safety of fish and fishery products made available to consumers
- To safeguard trade in fish and fish products by meeting all relevant international standards for hygiene, food safety and quality in the processing, marketing and international trade in fish and fishery products
- To protect biodiversity and preserve marine species
- To promote pre- and post-harvesting best practices in capture fisheries and aquaculture
- To encourage adding of value through the processing of fish and fishery products in Jamaica

1. Development of standards and Inspection. The GOJ will:

   i. Set minimum standards for safety and quality assurance and ensure that these standards are effectively applied throughout the industry; the implementation of quality
DRAFT FISHERIES POLICY

standards agreed in the context of the FAO/WHO Codex Alimentarius Commission and other relevant organizations or arrangements will be promoted.

ii. Provide information on and training in proper handling of fish products.

iii. Enhance existing and establish new inspection systems for quality control of fish products, for local consumption as well as export.

iv. Stimulate research in fish technology and quality assurance and support projects to improve post-harvest handling of fish, taking into account the economic, social, environmental and health and nutritional impacts of such projects.

v. Set up a registration and licensing system for all those involved in the handling, processing and marketing and international trade in fish and fishery products.

2. Public Awareness: Encourage the use of fish for human consumption and promote consumption of fish whenever appropriate.

3. Aquaculture. Promote best practices in pre and post-harvest handling and management in the aquaculture sector by:

i. Developing local standards for fish farms, e.g. pre-harvest standards, in conjunction with farmers and relevant regulatory agencies and require fish farms to meet these standards before certification. Develop codes of best farming practices; develop codes of best farming practices; encourage farms to improve management practices with a view to the introduction of relevant international and local phyto-sanitary standards (e.g. HACCP).

ii. Conserving genetic diversity and maintain integrity of aquatic communities and ecosystems by appropriate management.

iii. Cooperating in the elaboration, adoption and implementation of international codes of practice and procedures for introductions and transfers of aquatic
organisms in order to facilitate proper disease management and control, introduce quarantine measures on farms and at ports of entry.

iv. Encouraging adoption of appropriate practices in the genetic improvement of brood stocks, the introduction of non-native species, and in the production, sale and transport of eggs, larvae or fry, brood stock and other live materials, in order to minimize the risk of disease and other adverse effects on wild and cultured stocks; facilitate the preparation and implementation of appropriate national codes of practice and procedures to this effect.

v. Promoting the use of appropriate procedures for the selection of brood stock and the production of eggs, larvae and fry.

vi. Promoting responsible aquaculture practices in support of rural communities, producer organizations and fish farmers.

vii. Improving selection and use of appropriate feeds, feed additives and fertilizers, including manures.

viii. Promoting effective farm and fish health management practices favouring hygienic measures and vaccines; ensure safe effective and minimal use of therapeutants, hormones and drugs, antibiotics and other disease control chemicals; set up quarantine and reporting protocols to monitor and control disease outbreaks at aquaculture facilities.

ix. Regulating the use of chemical inputs in aquaculture that are hazardous to human health and the environment.

x. Requiring that the disposal of wasters such as offal, sludge, dead or diseased fish, excess veterinary drugs and other hazardous chemical inputs does not constitute a hazard to human health and environment.

xi. Ensuring the food safety of aquaculture products and promote efforts that maintain product quality and improve their value through particular care before and during harvesting and on-site processing and in storage and transport of the products.
DRAFT FISHERIES POLICY

xii. Taking precautionary measures with respect to genetically modified organisms (GMO), which must be supported by appropriate authorization and verification by the relevant authority; the use of GMOs will be in accordance with established standards and requirements.

4. Fish Processing Industry

i. Promote and facilitate the production of value-added products in the fishing industry by means of, *inter alia*: fiscal incentives to private sector processors; research and development activities in value-added fishery products—e.g. developing the technology for the processing of oysters with a view to its transfer to private sector producers.

ii. Ensure that environmental effects of post-harvest activities are considered in the development of laws, regulations and policies, and give due consideration to the avoidance of market distortions.

5. Local Marketing and Distribution

i. Facilitate the development of a more organized marketing of fish products, identifying and collaborating with existing mechanisms.

ii. Facilitate the rehabilitation and development of the Fisheries Complex for use as a marketing and processing facility for marine capture species as well as aquaculture fish.

iii. Monitor the sales of species protected by a closed season e.g. (conch and lobster) in order to better enforce controls.

6. International Trade

i. Coordinate inter-agency collaboration in order to facilitate the efficient administration of requirements and procedures for the import and export of fish products.
ii. Ensure that international and domestic trade in fish and fishery products are in accord with sound conservation and management practices through improved identification of the origin of fish and fishery products traded.

iii. Ensure that measures affecting international trade in fish and fishery products are transparent, based, when applicable, on scientific evidence, and are in accordance with internationally agreed rules.

iv. Cooperate to achieve harmonization, or mutual recognition, or both, of national sanitary measures and certification programmes as appropriate and explore possibilities for the establishment of mutually recognized control and certification agencies.

v. Cooperate in complying with relevant international agreements regulating trade in endangered species.

vi. Develop international agreements for trade in live specimens where there is a risk of environmental damage in importing or exporting states.

vii. Facilitate appropriate consultation with an participation of industry as well as environmental and consumer groups in the development and implementation of laws and regulations related to trade ion fish and fishery products.

viii. Simplify laws, regulations and administrative procedures applicable to trade in fish and fishery products without jeopardizing their effectiveness. E.g. through the use of pre-certification procedures, as in the case of exports from HACCP controlled compliant/processing plants.

ix. Collect disseminate and exchange timely, accurate and pertinent statistical information on international trade in fish and fishery products through relevant national institutions and international organizations.
3.10 Economic and Social Development of the Fisheries Sector

3.10.1 It is the policy of the GOJ to promote the development of the fisheries sector and the improved social and economic standards of fishermen and all others associated with capture fisheries and aquaculture.

3.10.2 Bearing in mind that the socio-economic situation of the capture fisheries for so-called reef fish in Zones 1 and 2 can only be improved on a sustainable basis by reducing the fishing pressure in these zones, and recognizing that this means drastically reducing the number of fishermen fishing in these zones and limiting the amount of gear that can be used for each fishing licence, and given the likely economic and social impact of changes required to improve the sustainability and productivity of traditional fishing grounds, i.e. Zones 1 and 2, special consideration will be given to fishermen who were previously operating in areas that are overfished and who have consequently been affected by restrictions and redeployment.

3.10.3 The GOJ will, through appropriate strategies and initiatives, and in cooperation with industry organizations, community groups and other fisheries stakeholders, seek to improve the economic situation of the fishing industry and the social conditions of fisher folk. In order to promote investments in the fishing industry and the expansion of trade in fish and fish products, special measures to reduce costs of fishing and improve productivity of fisheries will be supported as far as possible.

3.10.4 Goals / strategies

- To promote sustainable growth and development of the fisheries sector
- To improve employment and earnings in the fisheries sector in general
- To minimize effects of redeployment on artisanal fishers and promote alternative livelihoods
- To reduce costs and improve productivity of fisheries operations
- To strengthen competitiveness and promote the expansion of exports of fish and fish products
- To reduce poverty in fishing communities and promote gender equity in the fishing industry

3.10.4.1 Artisanal fishers:
1. **Redeployment.** The number of fishermen in Zones 1 and 2 will be reduced by not issuing licences for those zones to new entrants; encouraging fishermen to join forces and enter into fisheries in Zones 3 and 4; and supporting opportunities for alternative livelihoods and encouraging fishermen to seek these non-fishing alternatives.

2. **New fisheries.** Where opportunities are to be created for participation in new or expanded fisheries, licenses will preferably be issued to those fishermen who were previously operating in areas that are overfished and who have consequently been affected by restrictions and redeployment, in order to maintain sources of livelihood.

3. **Alternatives livelihoods- aquaculture.** The GOJ will provide land resources for establishing small fish farms (1 acre or less), training and technical inputs (e.g. fingerlings) and encourage the aquaculture/processing enterprises to contract the new fish farmers and provide technical inputs and farming materials. These “minifarms” would allow displaced artisans to make the investment, while services such as maintenance could be provided centrally by a commercial entity, which may be established by fishers’ organizations (e.g. cooperatives). The GOJ will support a pilot project in a suitable area on the South coast to promote this model, seeking funding by an appropriate international partner.

4. **Shrimp fishermen.** The GOJ will support the introduction of better gear and better marketing practices of shrimp fishermen operating in parts of Zone 1 in order to improve their productivity.

5. **Training.** GOJ will provide basic training in navigation, safety measures and safe diving practices, among other areas, to all fishermen engaged in fisheries in Zones 2, 3 and 4, such training eventually becoming an entry standard for prospective applicants for a fisheries license.

6. **Support of fishers’ organizations.** The formation of cooperatives and other types of associations of fishermen will be encouraged, since many development and management issues can best be dealt with through local groups. Fisheries management shall preferably be implemented in close collaboration with these fisheries stakeholders.

3.10.4.2 **Costs and effort.** Technical studies will be required, supported by improved research data collection, to establish reliable cost statistics
that can form the basis of timely analysis of the costs and effort of harvesting fisheries in relative to variables including: location of fishing grounds, species, type of gear, scale of operations etc. These studies and data will form the basis of policies designed to lower the cost of producing fish and fishery products in Jamaica. Government will ensure the resources are made available to conduct the necessary research and carry out relevant analyses.

3.10.4.3 Technology. Government will support improvements in fishing technology, subject to prevailing standards and regulations and consistent with sustainable fisheries management policies, through research and development activities as well as fiscal and other incentives to facilitate the acquisition of modern equipment necessary for economic exploitation of targeted fishing resources in Zones 3 and 4. Government will also collaborate with international development partners such as the FAO, as well as bilateral and regional partners, to facilitate the transfer of technology and knowledge of modern fisheries management through training programmes, observation tours, internships and technical assistance consultancies.

3.10.4.4 Infrastructure. A basic infrastructure for the fisheries sector should be developed, including berthing and marketing facilities. Government will investigate the feasibility of upgrading existing facilities which are currently run down with a view to eventual divestment for the specific purpose of strengthening development of the fisheries sector.

3.10.4.5 Landing areas-Fishing beaches.

1. The number of beaches designated as fishing beaches will be gradually reduced, and no new fishing beaches will be created and landing of fish will not be allowed on the shores of non-fishing areas, including Marine Parks and Marine Protected Areas.

2. Through the cooperation of various Ministries and other agencies involved in managing coastal areas, the GOJ will establish rules for the tenure of Fishing Beaches and promote improved living conditions of fisherfolk operating on such beaches.

3. The Fisheries Division will work in conjunction with the Beach Control Authority and other relevant Government bodies or NGOs to secure the tenure of fishers on designated fishing beaches.
4. Where possible the management of the day-to-day operations and maintenance of facilities at fishing beaches will be devolved to competent fishers’ organizations such as fishermen’s cooperatives, or other organizations.

3.10.4.6 Water supply: Special attention will be given to the development of the water supply infrastructure to facilitate aquaculture. For example, the National Irrigation Authority will be approached to regularize water supplies to fish farmers in St. Catherine, and the National Irrigation Development Plan should ensure that the needs of the aquaculture sector are taken into account.

3.10.4.7 Investment Promotion.

The growing domestic as well as international demands for fish products provide realistically exploitable opportunities for more intensive fishing of the EEZ. However this will be at a significant investment cost. A major precondition of any significant development is increased investments in fishing vessels and equipment as well as infrastructure, along with the relevant management systems to ensure effective and sustainable operations.

Given the economic constraints as well as considerations of policy, it is not likely or advisable that Government becomes a major investor in the development of commercial fisheries. The most appropriate and potentially fruitful contribution of the Government lies in investment promotion and facilitation complementing the provision of adequate infrastructure and administrative and regulatory management systems and research and development capabilities to support Private Sector investment.

1. The GOJ will promote development of Fisheries Resources of the EEZ and facilitate expansion of fishing into the Jamaica/Columbia Joint Regime Area. Joint ventures with foreign enterprises and the auction of licenses to foreign and local investors may be one method of attracting new investments.

2. The development of a national fishing fleet will become a focus of industry strategy, with Government acting as facilitator through appropriate enabling legislation, investment and trade promotion activities (e.g. streamlining investment procedures, financial incentives, research and development activities, and data collection and dissemination).
3. Particular attention will be given to the fisheries industry in the Investment facilitation activities of JAMPRO and NIBJ. These agencies will work in conjunction with the Ministry of Agriculture through projects (e.g. extended Agricultural Support and Services Project (ASSP) to fund the preparation of business plans for deep-sea fishing ventures. The Fishing Cooperatives could become the sponsors of such sub projects, which would aim at reducing investment risks and costs by making information available to prospective investors, especially groups of artisanal fishers.

4. The GOJ will support contributions of venture capital and loans through NIBJ /DBJ and via approved financial institutions (including Credit Unions, PC Banks and Small Business and Community Finance agencies) to acquire boats on a lease basis from overseas. This will require the coordinating services of a Business Development Officer for fisheries.

3.10.4.8 Cost recovery and financing

1. **Fiscal administration:** A review of revenue base will be conducted with a view to introducing measures to increase revenues from the fishing industry, including: Cost recovery and cost sharing through increased user fees for the services provided by the Fisheries Division; levy on imported processed fish products; Ensure collection of economic rent from high-value fisheries by establishing a realistic licensing fees. Quotas auctions may be considered as a method of promoting competition and raising revenues.

2. After careful analysis, a determination will be made as to the appropriate modality for financing various services provided to the industry, e.g. cost recovery, cost sharing and subsidy (Cost recovered services- e.g. fisheries management; Cost sharing services-e.g. artisanal fisheries inputs; and Subsidized services- e.g. training, research and development).

3.10.4.9 Trade policies. Government will ensure that the interests of the fisheries sector and the sustainable development of fisheries are considered in all trade negotiations, whether international, regional or bilateral.

3.10.4.10 Human development and poverty alleviation
3.10.4.10.1 Human development is an integral aspect of sustainable development. Further efforts should be made to ensure the effective integration of fisheries into key national policy documents relating to human development, poverty reduction and rural development, paying particular attention to gender issues and internationally recognized fishery development instruments such as the Code of Conduct for Responsible Fisheries.

3.10.4.10.2 Objectives/Strategy

- To reduce poverty in fishing communities and promote gender equity in the fishing industry

1. The development and implementation of non-fishery alternatives will be closely related to broader programmes for local and national economic development.

2. Programmes to assist fishers should be integrated with the programme of the National Poverty Eradication Programme (JPEP) and agencies targeting poverty, such as Jamaica Social Investment Fund (JSIF).

3. Steps will be taken to ensure that women fisherfolk are effectively integrated into the industry and that issues arising from the changes in the management policies do not have a disproportionately adverse effect on women.

3.11 Education

3.11.1 Awareness building: Measures will be implemented to increase public awareness and education about capture and culture fisheries and related issues in order to increase public support and participation in sustainable fisheries management policies.

3.11.2 Behaviour Change: The transformation of the fishing industry will require significant Behaviour Change. Adequate strategies need to be developed and resources invested to manage this complex social political and economic process. This strategy should be developed by experts in Governance and Change Management, and the Government should seek technical assistance in this area.

3.11.3 Training: Given the low levels of educational attainment among artisanal fishers, many may have difficulties in effecting a successful transition into industrial or commercial fishing in Zones 3 and 4, and may face problems
with the reduction of fishing in Zones 1 and 2. Special efforts will have to be made to improve the educational standard of those who are capable, or to provide suitable training to facilitate their transition to the new fishing zones or to alternative livelihoods.