Amendments to the Fisheries and Marine Resources Act 2007

Marine aquaculture to play a determining role in the fisheries sector

Introduction

The Budget Speech 2008-2009 has spelt out quite clearly the importance of attaining food security, thereby the creation of a Food Security Fund to the tune of Rs 1 billion. Never before has a Government in Mauritius attributed such a vast sum of money to ensure our food security and to make sure that concrete agricultural projects become a sine qua non condition to our global objective of prosperity and sustainable development. The Budget also makes provision for the development of aquaculture, whereby self-sufficiency in fish products can be attained. Aquaculture is indeed one sector which is currently thriving the world over. It has a tremendous potential. By going hand in hand with the numerous measures that this Government has taken in favour of the fishers community, aquaculture will further enhance the fisheries sector and will allow the fishing community to reap long term benefits.

Overview of the fisheries sector

The fisheries and seafood sector contribute about Rs16 billion to the national economy whilst the local fish production sector is valued at about Rs1 billion. 807 fishing vessels used the port facilities at Port Louis in 2007 for transshipment, bunkering, repairs, maintenance and dry docking. The total supply of fish and fish products for direct consumption is about 18,000 tons, whereas 92,000 tons of processed fish and fish products produced mainly from imported raw materials are exported. This sector employs 12,000 persons, including those involved in fishing, canning, other processing activities, distribution and marketing.

There is already a fish farm operating in the lagoon in the south-east which is culturing fish using new technology in cages with success. We have to move forward and a do-nothing policy will serve no purpose. We need to have a vision for aquaculture development in the country, and the present Government is seeing far ahead. La Ferme Marine de Mahebourg, operational since 2002, can now export its aquaculture produce to the EU. This is a breakthrough in our efforts to develop and export aquaculture products, as one must not forget that one has to abide to the very stringent EU norms in this particular context. Furthermore, an additional processing facility namely Pelagic Process Co. Ltd has also been listed for the export of aquaculture products to the EU.

The harsh realities are that our lagoons are being depleted for multi factorial reasons - which we don't have to highlight - the main reason being over fishing in our lagoons. We are encouraging our fishermen to move off lagoon. The authorities are placing
FADs in different regions, giving training, there are a series of accompanying measures, and fishermen are taking advantage of all these facilities.

**Empowering fishermen through the FIT**

Government has allocated 300 shares of the FIT to each fisherman, and a quota of 1,000 tonnes of fish in the waters of St. Brandon and on the banks for its operation, which is being traded off. Of course, revenue accruing is going to be allocated to fishermen to finance many of the projects. In addition, the Ministry of Housing and Lands has already agreed to put at the disposal of the fishermen two barachois for development of aquaculture. Government has further allocated a sum of Rs15 m. to the FIT to assist it to undertake seafood related projects on commercial lines in partnership with the private sector. Rs5 m. will be invested in a cage culture project at Bambous Virieux for the benefit of fishermen of that region. The remaining Rs10 m. will be used to acquire boats of 12 meters approximately, and fishing gears to enable a greater number of fishermen to operate on Fish Aggregating Devices (FADs). These boats will be granted on an operating lease to associations of registered fishermen who will have the option to acquire the boats. The Associations will be requested to participate to the extent of only 25% of the project cost. The project can cost as much as Rs250,000. There is a sensitization campaign, which is being waged to encourage fishermen to group themselves into associations and benefit from the scheme.

**Some important developments**

With respect to infrastructure requirements, we are seeking assistance from the Kuwait Fund for Arab Economic Development (KFAED) for improvement of the infrastructure at fish landing stations, namely Trou d’Eau Douce, Baie du Tombeau, La Preneuse and Grand Gaube, so as to facilitate the storage and marketing of fish by fishermen. The infrastructure will comprise dredging for navigation of boats, jetties, fish landing facilities, cold room, ice making plants. The project will support the redeployment of a third of the fishermen to fish in off lagoon areas and thus earn better income, namely in tuna.

The Mauritius Ports Authority (MPA) has identified a new site for the setting up of the auction fish market, because the site originally identified appeared to encroach on the buffer zone where Aaprapavasi Ghat is. A new site has thus been identified, and construction will start incessantly.

It is the policy of Government to lease stations which are not being properly utilized, for example, La Ferme Fish Farm Experimental Station where there is inland aquaculture. Government has allocated it to the private sector, to one entrepreneur; and today, that person has already harvested five tonnes, and a stock of 66 tonnes would be harvested by December 2008. This is the reason as to why we want to maximize aquaculture production from our existing water bodies.

**Prospective investors in aquaculture projects**
The Board of Investment (BOI) is the presence of firm requests for the development of marine aquaculture from overseas as well as local promoters amounting to the tune of some 1.5 billion rupees. We cannot lose track of such an investment potential which is its turn will not only have multiplier effects on the economy, but helps to create some 2000 direct jobs as well. In this respect, we should not lose tract that scope for increasing fish production would come only from Aquaculture as is the world tendency. 55% of the world production is expected from aquaculture in the next decade. In developing marine aquaculture, the Ministry of Agro Industry and Fisheries, and the Board of Investment/Ministry of Finance and Economic Development along with the Prime Minister’s Office and the Ministry of Environment would see to it that all necessary clearances being sought in particular EIA and sustainability as basic criteria for approving any marine aquaculture project. Independent counter expertise/external assistance would also ensure the proper implementation of government policies and enforcement provisions necessary for aquaculture development. We are in no way going to depart from the principles of sustainability and environment protection when developing aquaculture.

Aquaculture in other countries

What is noted at global level is that most capture fisheries resources are either being fished to the maximum of their capacity or being over exploited. In Mauritius our lagoon resources are overexploited and the traditional banks fisheries are also heavily exploited. We have to turn to aquaculture particularly marine fish farming if we are to reverse the trend in fish production in the lagoon. Faced with this situation, many countries around the world are already engaged in marine aquaculture and promoting it so as to increase fish production. A few examples will illustrate this.

In Greece, 256 farms have been operational in the lagoon areas, employing about 1500 people including fishermen and have produced 40,000 tonnes of fish in floating cages. The total area of the lagoon under culture amounted to 4,500 m3. In Spain, marine fish farming has been developed in earth ponds and tanks, and more recently in inshore or semi off-shore conditions. Nowadays intensive fish farming is moving offshore towards increasingly exposed environments. The two main relevant laws are the Mariculture Act and the Coasts Act. The Mariculture Act ensures the regulation and planning of mariculture in the Spanish territory, in rivers, estuaries, lagoons and salt marshes, territorial waters and the exclusive economic zone. About 40,000 tonnes of fish have been produced through marine aquaculture in 2007. Norway has produced half of the world production of farmed Atlantic salmon. Most of the Norwegian sea-farms are cage systems located along the coastline, with deep sheltered fjords constituting ideal conditions for aquaculture. The total volume of fish farmed in 2003 was 582,061 tonnes. Annual fish production from mariculture in Malta is around 5000 tonnes and mostly exported to the EU. Nearer to us in the region marine aquaculture is carried in Mayotte/Reunion where production is about 400 tonnes per year.

Masterplan on marine aquaculture and consultations with stakeholders
In this context, the Ministry of Finance and Economic Development commissioned a study through the Board of Investment (BOI) to promote the development of aquaculture. A study on the development potential of marine aquaculture in Mauritius was thus carried out in August 2006 by a consultant from the firm IDEE (Ichtyo Development Eau Environment). The study assessed the potential of aquaculture development in Mauritius, identified potential sites and sustainable species for aquaculture. A Workshop on the Potential of Aquaculture in Mauritius was held in April 2007 with the participation of all stakeholders. The findings of the study revealed the potential for an annual production of 29,000 tonnes to 39,000 tonnes of fish in the medium to long term with the possibility to create a total of 4,000 jobs. One of the recommendations of the Masterplan on aquaculture elaborated as a result of the study related to the need for a legal framework for aquaculture development in Mauritius.

Inter-ministerial meetings were conducted with the Prime Minister’s Office, the Ministry of Agro Industry and Fisheries, the Ministry of Housing and Lands, the Board of Investment (BOI) and the Attorney-General’s Office to discuss on the need for a regulatory framework for the allocation of sea concessions for commercial fish farming activities in the waters of Mauritius. A first draft of the Aquatic Business Activities Bill (ABAB) was proposed by the Attorney-General’s Office in May 2007. The object of the bill was to provide the legal framework to regulate the exercise of certain business activities in or around the sea, particularly aquaculture, setting up of marinas and pumping sea water for use on land. This first draft of ABAB was widely circulated among stakeholders for comments and suggestions. Following the posting of the draft Bill on the website of my Ministry in July 2007, meetings with stakeholders and official intervention on radio, comments were received on the draft text from various stakeholders.

Meetings were also held with fishermen, pleasure craft organizations and other stakeholders to explain to them the intent of the Bill and the measures to be taken by promoters of aquatic business activities to mitigate impacts of their projects on the environment. The Hon J. Valayden, Attorney General, Minister of Justice & Human Rights, the Hon Jeetah, Minister of Industry, Small & Medium Enterprises, Commerce & Cooperatives and the Hon C. Sayed Hossen, Chairman of the Commission for the Democratization of the Economy participated in one of the meetings.

Subsequently, concerning the pumping of sea water from the sea in relation to the setting up of the Land Based Oceanic Industry (LBOI) the Ministry of Finance and Economic Development has felt it appropriate to deal with it separately as it is felt that this can be done under the Maritime Zones Act. On the other hand, alternative solutions are being sought for the setting up of marinas. Thus a number of activities which would have been regulated under the Aquatic Business Activities Bill in a single package have now been unbundled. In this conjuncture, we are left essentially with the formulation of a legal framework to regulate fish farming activities in the sea. The legal process will now be more direct and addressing issues in a clearer way.

**Amendments to the Fisheries and Marine Resources Act 2007**
Being given that there are already provisions for fish farming under Part III of the Fisheries and Marine Resources Act 2007, it has been decided to reinforce the legal framework for the development of marine aquaculture in this part of the Act as announced in the Budget Speech. While drafting the provisions enabling these activities, reference was made to similar legislation prevailing elsewhere. In France, for example, there is the "Décret fixant le régime de l’autorisation de l’exploitation de culture marine" of 2006, whereby no person shall without authorization delivered by a competent authority, undertake such activities. The decree also provides for the zoning, the exploitation of aquaculture farms, the protection of the environment and management of the coastal zone.

In fact Part III of the Fisheries and Marine Resources Act already has the basic provisions for fish farming and needs to be consolidated to take on board certain factors to make it respond to requirements for commercial fish farming and broaden its scope. These issues cover mainly the identification of fish farming zones in the sea, the procedures to obtain an authorization for fish farming, the requirement to obtain an Environment Impact Assessment for fish farming so as to ensure the environmental sustainability of such developments, the grant of a concession for fish farming and the conditions for operating such a concession.

We therefore now have the necessary legal framework to regulate marine aquaculture. We are living in a fast moving world and the possibilities for development are ever so dynamic. So we have to continuously assess the situation and take the most appropriate route if we are to progress. Here the appropriate route is to amend the Fisheries and Marine Resources Act in this juncture and this is what the Government is doing.

The amendments proposed on the part dealing with “Fish Farming” in the Fisheries and Marine Resources Act 2007, thus concern among others the delimitation of fish farming zones, that is areas of the sea where fish farming can be carried out. In fact, the intention of government is to develop marine aquaculture gradually and in this context only eight sites where fish cage culture is to be undertaken, will be developed in the first instance, out of the fourteen sites proposed for fish cage culture in the Mahebourg region in the Aquaculture Master Plan. A precautionary approach is thus being ensured in the development of fish farming. Out of the eight sites, two of them are operational under the Ferme Marine de Mahebourg following its application for fish farming which dated back before the year 2000 and its operation since 2002. We are now just providing the appropriate regulatory framework for its operations.

A Section 8A is added to Part III of the Fisheries and Marine Resources Act on fish farming accordingly. It is to be noted that one of the sites will be reserved exclusively for the Fishermen Investment Trust to empower artisanal fishers in fish cage culture development.

A new section 8B is added to consolidate the provisions for authorization to carry out fish farming in the sea. In fact this section provides that no person shall carry out fish farming in a fish farming zone unless the person, is a company incorporated or
registered under the Companies Act 2001; obtains an authorization in principle and in writing from the Permanent Secretary of the Ministry of Agro Industry & Fisheries; obtains an EIA licence under the Environment Protection Act 2002; and is the holder of a concession granted by the Prime Minister.

The definition of “fish farm” in Section 2 is amended in the Fisheries and Marine Resources Act 2007 so as to include “structure, area or any area in a fish farming zone” in order to broaden it to cover new developments in fish farming. Section 8(2) is repealed as there will be no need to gazette applications relating to fish farming in the sea as such cases will now need an Environment Impact Assessment which are gazetted and published in daily newspapers for public comments.

**Satisfying strict standards through rigid assessments**

Strict controls will be extended at all levels and any person wishing to undertake marine aquaculture shall make an application to the Board of Investment in such form as may be required and accompanied by a full and detailed account of the project along with a social impact assessment to identify its impact on the local community. It should contain a written statement by the promoter indicating the benefits that shall accrue to the local community and to small enterprises in terms of employment and business opportunities. The applicant should submit an implementation plan of the project with details of timeframes of its completion.

The BOI shall submit its recommendations on the project to the Permanent Secretary of the Ministry of Agro Industry and Fisheries who shall consider issuing the authorization under such terms and conditions as he may deem fit to determine or he may reject the application. A Company can only at this stage apply for a concession to the Prime Minister as provided for in the new Section 8C. The Prime Minister shall on the recommendations of the Ministry of Agro Industry & Fisheries and the Board of Investment grant to the applicant a concession by way of a deed of concession.

The concession shall be granted for a duration of 20 years and may be renewable for subsequent 10 year periods. This is in line with the Non-Citizens Property Restriction Act falling under the purview of the Prime Minister’s Office. The concession shall not be transferred without the authorization of the Prime Minister and all provisions of the Maritime Zones Act shall be complied with. It will be subject to such annual fees and charges as may be determined.

The concessionaire shall have to clearly and visibly mark off the area to avoid any confusion in the identification of the site as provided in the new Section 8D. The marked off area will be under the overall control and administration of the concessionaire.

The new Section 8E on cancellation and suspension of concessions provides that should it happen that the area allocated is used for any purpose other than that for which it has been granted; is utilized in a way that it constitutes a nuisance; fish farming
is insufficiently carried out; or if provisions of the Act are not complied with, the Prime Minister may cancel or suspend the concession.

In order to safeguard the public interest or the implementation of a project of national interest, the new Section 8F provides that the Prime Minister may, on the grounds of public interest, or of the implementation of a project of national interest that modifies the status of the fish farming zone, remove a concession from a concessionaire, subject to payment of a reasonable compensation to the concessionaire.

Four Ministries i.e. the Prime Minister’s Office, the Ministry of Agro Industry and Fisheries, the Ministry of Environment and National Development Unit and the Ministry of Finance and Economic Development will be directly involved in the processing of applications for fish farming thus securely locking the process for their approval. Furthermore, the concessionaire will have to abide by the provisions of the Maritime Zones Act, i.e. he will be able to carry out fish farming under strict conditions and would not be allowed to alter the objectives of the concessions. For example, he cannot make use of the concession for any other purposes except fish farming.

These amendments are vital if we are to increase fish production which will not only provide a larger fish supply to the local population but also create employment and raise our export earnings. Fish processing activities will also increase and fish farming will have other multiplier effects on the economy and “fish farm to plate” given a new dimension.

Location of the Fish Farming Zones

The First Schedule (Section 8A) of the amendments make provision for the creation of a maximum of 8 fish farming zones, each one in a radius of up to 300 metres. All of them are in the Southeast region, in the vicinity of La Ferme Marine de Mahebourg, which already operates two farms. The 6 remaining farming zones will be set up in the following areas of the sea, in the southeast region: Baie Fer à Cheval, Ouest Ilot Marianne, Est Pointe Bambou (2 zones), Ouest Ile Flammand, and Nord Est Ananas Bank.