Securing fish for the Caribbean

In the Caribbean Small Island Developing States (SIDS) fisheries are an important source of animal protein with current annual fish consumption ranging between 10 and 35 kg/capita. However, the available figures often fail to account for tourism impacts, which would reduce these per capita consumption levels of fish. The sector also provides livelihoods, particularly in coastal communities. In the CARICOM countries, at least 64,000 persons are directly employed in small-scale fisheries and aquaculture, and an estimated 180,000 people are involved in fish processing, retail, boat construction, net repair, and other related activities.

Capture fisheries production in the CARICOM countries is on the rise, increasing by 9 percent from 2011 to 2012. Total estimated production in 2012 was 171,000 tonnes, the highest reported landings ever by the CARICOM countries. The main fish producing countries were Guyana (31%), Suriname (21%), Bahamas (11%), and...

Key facts

- The CARICOM region imports more than one-third of the fish consumed by its population.
- Dependency on fish imports in CARICOM is increasing due to rising demand from the population and challenges faced by regional governments in jointly managing their marine fisheries resources.
- Aquaculture in the Caribbean region is developing more slowly than in other regions but offers major opportunities for growth if enabling investment environments are created.
- The Caribbean region is one of the few regions in the world where a regional level fisheries management plan is not in place – including for commercially important species like spiny lobster and queen conch.
- The first ever regional fisheries management measure agreed by WECAFC 15 is the regional seasonal closure for all fishing activities of Nassau Grouper in identified spawning areas for the period 1 December – 31 March, starting in December 2014.
- CARICOM countries are part of the Western Central Atlantic Region, one of the most overexploited fishery areas in the world. Though fisheries production is declining in the Western Central Atlantic Region as a whole, it is increasing slightly in CARICOM countries.
Trinidad and Tobago (7%). The main produced species are marine fishes (53%), shrimp (20%), conch (10%), lobsters (8%), and tuna and bonito (6%). Over the last decade capture fisheries production has fluctuated between 140,000 and 162,000 tonnes, impacted by the variations in fish stocks, weather conditions, some changes in fishing intensity and fuel prices.

Aquaculture production by the CARICOM countries has been around 5 percent of total fish production in recent years. In most Caribbean SIDS the aquaculture production is nearly insignificant. Current production levels are similar to those in the mid-1990s, which is around 8 thousand tonnes. There was a hike in production around 2005-2007, when aquaculture production of white leg shrimp in Belize and Nile Tilapia in Jamaica was flourishing. Major investments were made in these countries to boost production in a few years. However, inadequate farm management, declines in global market prices of species culture, diseases, cheap fish imports and the lack of enabling policy and legal frameworks in support of the sector are among the main reasons for the reduction in production in Belize and Jamaica in recent years.

**CARICOM fish trade**

The combined fish and fishery products export value of the CARICOM members fluctuated in the period 2000 - 2012 between 220 million USD and 291 million USD annually. The fish and fishery products export value ranged in the same period between 44,000 tonnes (in 2002) and 66 thousand tonnes (in 2008). One third of the exported products (by volume) were shrimps, while fresh and frozen fish remains the chief category of exported products with over 60% of export volume. Lobster exports account only for some 3 thousand tonnes (<5% of the total volume), but represent in value terms around one-third of the total export value of CARICOM fishery products.

The major fish and fisheries products exporting countries (in value terms) among the CARICOM members are: Bahamas (28%), Suriname (26%) and Guyana (20%). Major export earning species are spiny lobster in the Bahamas, seabob, shrimp and ground fish in Guyana and Suriname. Re-exports of fish and fishery products by CARICOM countries are small and value less than 4 million USD annually.

The value of fish and fisheries products imports by the CARICOM was some 189 million USD in 2013, an increase of 37% compared to 2010. Three countries account for three-quarters of the fish import bill. In 2013 this translated to: Jamaica, 30% (56 million USD), Trinidad and Tobago, 23% (44 million USD), and Haiti, 21% (39 million USD). The major sources of imported fish and fishery products by the CARICOM were Canada (32 million USD), Thailand (31 million USD) and USA (30 million USD). Norway, Netherlands and China were other major exporters to the CARICOM, each with exports of 15 million or more to the CARICOM annually.

In terms of volume FAO estimated the imports of fish and fishery products by CARICOM countries in 2011 at some 76,000 tonnes, however this is likely significantly higher as many imports are not reported by CARICOM countries. It should be noted that most imported fish originates from outside the Caribbean region. The range of imported products is large and includes, amongst others, salmon, catfish, sardines, tuna, shrimp, and fillets of many kinds of marine and freshwater fish.

While production by the CARICOM countries is increasing slightly the import of fish and fisheries products shows a steeper rise. In 2000 fish imports by the CARICOM countries added up to some 56,000 tonnes, while in 2011 these imports reached 76,000 tonnes, an increase of 35% in just over a decade. The continuing increase in population in the region together with the impact of a more demanding tourism industry and the ongoing promotion of a healthier lifestyles and diets will spur demand for healthy, safe and high quality food including fish and fisheries products. To meet the increasing demand a number of challenges need to be addressed.

**Major challenges to securing fish for the Caribbean**

**Fisheries Governance**

The Caribbean region is one of the very few regions in the world where there is no regional or subregional fisheries management plan in effect. A majority of the countries in the region do not have formally adopted fishery management plans in place, not even for the main targeted fish species. Moreover, fisheries laws and regulations that are in place are often outdated and do not allow for effective enforcement of these regulations. Fisheries management information systems that provide the required information and statistics in a useful format to policy and decision makers are lacking. Institutions in the region established in support of fisheries...
management generally have insufficient human and financial resources to carry out their duties and functions.

**Illegal, unreported and unregulated (IUU) fishing**

Illegal, unreported and unregulated (IUU) fishing is widespread in the Western Central Atlantic region. IUU fishing continues to be a threat to the effective conservation and management of fish stocks in the Region. IUU fishing is causing economic and social losses for the Caribbean countries and may negatively impact their food security. Some studies estimate that current IUU fishing is substantial and ranges between one-quarter and one-third of total reported landings in the region. The number of IUU related conflicts between fisher fleets, fisherfolk and bilaterally between countries is on the rise.

**Climate Change adaptation**

Climate change and variation is posing new challenges to the CARICOM populations who rely on the sea and fisheries, in particular the SIDS, which are uniquely vulnerable because of their high dependence on aquatic ecosystems. Implementation of the regional “Strategy, action plan and programme proposal on disaster risk management and climate change adaptation in fisheries and aquaculture in the CARICOM region”, which was developed in 2012 is critical.

**Aquaculture**

While aquaculture is globally the fastest growing food producing sector with an annual growth rate of 8.8%, production in the Caribbean as a whole, and particularly in CARICOM, has hardly increased over the last decades.

Global aquaculture production for food has surpassed capture fisheries production. A Caribbean Blue Revolution is needed and possible. Aquaculture development can increase total fish production by the CARICOM states by 30% within 10 years if the essential investments are made in enabling aquaculture policy and legal frameworks, supported by applied research, capacity building and information.

**FAO’s work in fisheries**

**Western Central Atlantic Fishery Commission (WECAFC)**

The Western Central Atlantic Fishery Commission (WECAFC) is a Regional Fishery Body (RFB) with 34 members and is the main vehicle for the implementation of FAO’s work in regional fisheries governance, management and conservation. In total 13 regional fisheries workshops and meetings were organized in the period 2012-2014.

The 4 regional management recommendations and 5 resolutions issued by WECAFC 15, hosted in Trinidad and Tobago in March 2014 are being implemented by members with assistance from FAO and the WECAFC Secretariat. The Secretariat mobilizes resources for and technically supports the work of the commission and its active Working Groups (Queen Conch, Lobster, Flying Fish, Shrimp and Ground fish, Recreational fisheries, Spawning aggregations/Nassau Grouper, Fish Aggregating Devices, Deep sea fisheries in the high seas, IUU fishing and Sharks).

FAO has managed to mobilize, together with its resource partners, substantial funding in support of these activities of the working Groups.

**FAO Technical Cooperation**

The FAO’s Technical Cooperation Programme (TCP) addresses requests from governments for direct technical support to the fisheries sector, including responsible aquaculture development and to reduce the reliance on fish imports. In the period 2012-2014 FAO supported the countries in the Caribbean region with 37 projects (including some 24 TCP projects, 8 regional and national trust fund projects and 5 global projects) that all contributed to fisheries and aquaculture development and management. Areas of support included, amongst others, fisheries and aquaculture policy development, fisheries and aquaculture legal framework reviews and updates of legislation, fisheries statistics, small-scale aquaculture development, aquaponics, fisheries value chain development, aquatic animal health management, fisheries management, stock assessments, capacity building in application of the Ecosystem Approach to Fisheries (EAF), fisherfolk organizational strengthening, fisheries co-management, performance reviews of Regional Fishery Bodies (RFBs), and introduction and building capacity for implementation of international fisheries instruments.

**Code of Conduct For Responsible Fisheries**

Promotion of the Code of Conduct For Responsible Fisheries (Code) and the adoption and implementation of the Code, related technical guidelines, and international fisheries instruments in the region is at the core of our mandate.
Regional capacity building workshops in the period 2012 -2014 addressed the Code, the Ecosystem Approach to Fisheries (EAF), the Port State Measures Agreement (PSMA) and the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (SSF).

Partnerships with regionally active institutions enable FAO to increase its reach and impact in the region and build on the comparative advantages of each of these partners. These partnerships developed over many years are expected to be strengthened further.

Our partners include:

- Caribbean Regional Fisheries Mechanism (CRFM)
- Caribbean Fisheries Management Council (CFMC)
- Caribbean Network of Fisherfolk Organizations (CNFO)
- Gulf and Caribbean Fisheries Institute (GCFI)
- Caribbean Large Marine Ecosystem project (CLME)
- University of the West Indies (UWI)
- Central America Fisheries and Aquaculture Organisation (OSPESCA)
- French Institute for the Exploration of the Seas (IFREMER)
- National Oceanic and Atmospheric Administration of the USA (NOAA)
- Convention on the International Trade in Endangered Species (CITES)
- Secretariat of the Specially Protected Area and Wildlife (SPAW) Protocol

Blue Growth Initiative

FAO’s global Blue Growth Initiative is targeted at a “Sustainable Contribution, and Conservation, of Living Renewable Resources in the Marine and Fresh Water Ecosystems as well as adjacent Coastal and Inland Ecosystems, to Food and Nutrition Security and Poverty Alleviation” and will also support the Caribbean region.

In the Caribbean region it is foreseen to initiate a “Caribbean Blue Revolution”, under which FAO aims to support the CARICOM countries with the responsible development of aquaculture, building on lessons learned from other regions, technology transfer and simultaneous assistance in the establishment of enabling policy and legal environments as well as increased capacity building efforts.

The way forward

Areas in which impacts can be expected in 2015 - 2016 include:

- Regional management and conservation plans for major commercial species
- Aquaculture Better Management Practices and demonstration activities will have been developed at country level for utilization in the region as a whole.
- The implementation of international fisheries instruments in the Caribbean, with particular reference to the FAO Agreement on Port State Measures, will have increased. Caribbean SIDS will participate in Areas Beyond National Jurisdiction – Ocean fisheries governance processes.

For further information contact:
Food and Agriculture Organization of the United Nations
Subregional Office for the Caribbean
Second Floor, United Nations House
Marine Gardens, Christ Church
BB11000 Barbados
Tel: +1 246 426-7110
Fax: +1 246 427-6075
Email: FAO-SLC@fao.org
Website: www.fao.org