

Oceans Economy and Trade Strategies (OETS Project)

National Stakeholder Consultation - BARBADOS

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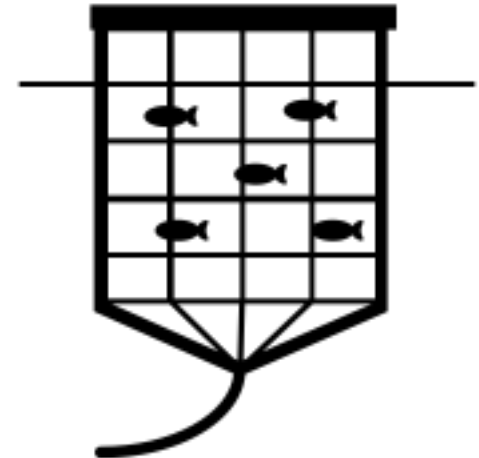
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AQUACULTURE

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- **Aquaculture** is the farming of aquatic organisms, such as fish, molluscs, crustaceans and aquatic plants (Adapted from FAO, 1998).



Sector Analysis

- No mariculture
- Limited inland aquaculture production

Historical Overview

Attempts before 2000

- an inland government pilot tilapia farming project
- a small-scale freshwater culture carried out by private individuals
- rearing of dolphinfish, both imported and attempting to use captured local dolphins to spawn
- rearing of red drum using imported cultured eggs from the island of Martinique.
- Fisheries Division to culture seamoss (*Gracilaria* spp.), which was imported from St. Lucia.

Inland Aquaculture

- An Aquaculture Pilot Project: The Greenland experimental fish farm was set-up by the Fisheries Division with support from USAID in the early 80's, to rear the Nile tilapia, *Oreochromis niloticus*.
- Since 2000, inland aquaculture has been slightly more successful with tilapia being reared from 2006 - 2015 at an inland location which has also unfortunately ceased due to the owner having to give back the land.

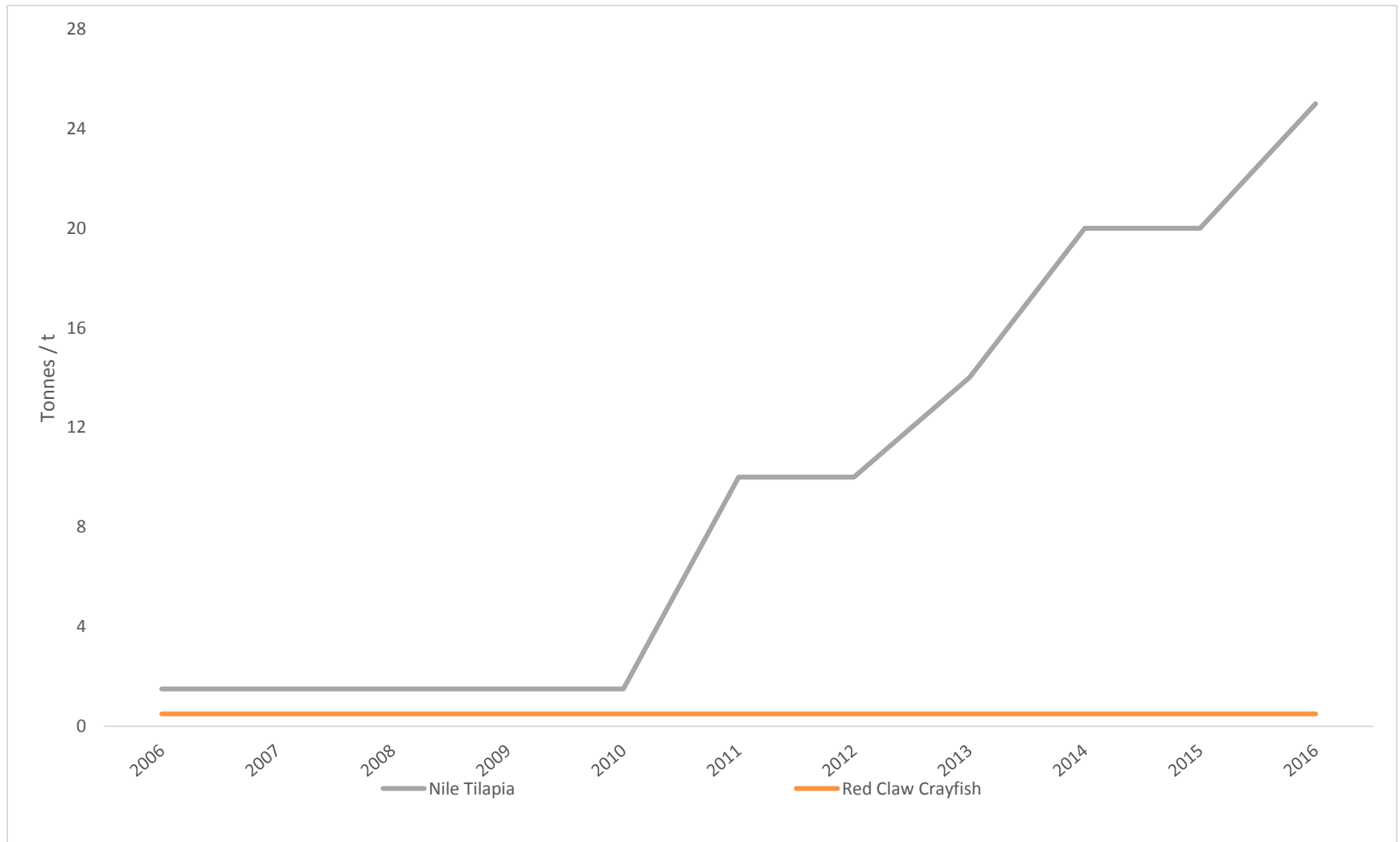
Coastal aquaculture & mariculture

- Experimental cultivation of seamoss was initially started by the Fisheries Division in 1989 with a local strain of the seamoss being cultured using floating rafts on the West Coast.
- Conset Bay on the East coast was identified as a feasible location for cultivation of sea moss.

Sector Trends

- FAO started producing statistics on Barbados inland freshwater aquaculture in 2006 with the ***production of two species, red tilapia (first introduced in the 1980's) and red claw crayfish*** which supplied the local market.
- In the period 2006-2016, aquaculture production has **increased** at an annual average rate of 29%.
- (Reported) production increased from 2 tonnes in 2006 to 26 tonnes in 2016, with Red Tilapia accounting for the vast majority of it (25 tonnes) (Figure 1).
- In the same year, the sector generated revenues amounting to 256'000 USD.

Figure 1: Aquaculture Production in Barbados between 2006 – 2016



Employment

- The primary aquaculture producing farm operating in the island ***employs 2 people.***
- However, there are many small commercial aquaponics set ups and backyard producers, approximately ***15 small commercial aquaponics*** who sell to local market ***and 50 backyard producers.***



Challenges to expansion of sector

- Limited availability of physical resources such as land & coastal space, freshwater and soil suitability
- Competition for limited space particularly from tourism related activities

Recommendations

- Development of a soft regulatory framework for aquaculture activities
- Updated and detailed study to determine feasibility for both inland aquaculture and mariculture of selected species
- A strengthened data collection framework and system



Recommendations



- Development and implementation of pilot projects
- Capacity building at various levels across a range of stakeholder groups
- Increasing investment in innovation
- Use of alternative energy sources such as wind, hydro and solar for operations;
- Further development of aquaponics systems which have seen a greater uptake especially in backyard systems as well as in schools.

Discussion