

Market Profile on Fresh Water Fish



Prepared By: Ministry of Industry, Commerce Agriculture & Fisheries

Agricultural Services Unit

Hope Gardens, Kingston 6

Email: Marketing@moa.gov.jm

Telephone # (876)927-1731-50

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Table of Contents

| | Page |
|--|------|
| Introduction | 3 |
| Supply Availability/Pond Requirement | 3 |
| Estimates of Fish Yield per 0.4 | 3-4 |
| Fish Production | 4 |
| Target Markets | 5 |
| Fish Imports & Value By Country | 5 |
| Profitability of Tilapia Fish Farming Enterprise | 6 |
| Export Requirements | 6 |
| Global Trade | 7 |
| Opportunity | 7 |
| Reference | 8 |

Introduction

Based on the Ministry of Industry, Commerce, Agriculture & Fisheries, Fish farm Survey there are 140 active fish farmers in Jamaica rearing fish on 1,061.5 acreages of pond.

Why Invest in Fish?

High local demand

The availability of good quality water

Reduction of import

Conserved foreign exchange

Supply Availability/Pond Requirement

Aquaculture production occurs primary on the South Central plains of St. Catherine and Clarendon. Farming also occurs in St. Elizabeth, Westmoreland, St. Mary, Portland and Trelawny. These areas have suitable topography, good clay soils and available water supplies. Fish production occurs on soils with 25% to 50% clay. The ideal pond size is 0.4 hectare (1acre) in area and excavated to depths of 1.22m to 1.83m (4-6ft) dependent on the size required for the mature fish. Tilapia fish is produced over a cycle of 3 to 4 months from fingerlings or up to 6 months if advanced fry is stocked while the Basa cycle varies from 6 months to 10 months.

Estimates of Fish Yield per 0.4 hectare

Tilapia Fish

Yield will be dependent on the species of fish as well as stocking density. The Tilapia stocking density ranges from 10,000 to 20,000 fingerlings per grow out cycle. The mature fish weights about 1.48kg (3.25 pounds). Two and a half (2.5) crop cycle per year is possible.

Basa Fish

The newly introduced Basa fish (*Pangasius hypophthalmus*) stocking density is about 40,000 fingerlings per grow out cycle per 0.4 hectare. One and a half (1.5) or 2 cycles per year is possible depending on the size fish that is required. Basa fish is harvested at 2.5kg (10 months grow out) or 1.5kg (6 months grow out)

Fish Production (kg) for the Period 2014 to 2017

Table 1

| Year | Production (kg) | | Total |
|-------------|------------------------|-------------|--------------|
| | Tilapia | Basa | |
| 2014 | 864,490 | - | 864,490 |
| 2015 | 585,000 | - | 585,000 |
| 2016 | 927,362 | 5,000 | 932,362 |
| 2017 | 1,085,242 | 249,000 | 1,334,242 |

Source: Ministry of Industry, Commerce, Agriculture & Fisheries
Fisheries Div

Over the four year reviewed period from 2014 to 2017 fish production grew by 54.3% moving from 864,490kg in 2014 to 1,334,242kg in 2017. Production of the Basa Fish which was introduced into Jamaica in 2016 grew by 4,880% in just two years moving production from 5,000kg in 2016 to 249,000kg in 2017. Currently Basa fish is produced by only one farming enterprise.

Target Markets: Export and local markets

Local Market

According to the Jamaica Aquaculture Industry Based line survey, the wholesalers purchase 50.2% of fish for distribution, grocery stores purchase 23.2% while retailers and hotels purchase 16.9% and 9.7% respectively.

Export Trade data is currently unavailable

**Table 2: Fish Import (kg) and Value (US\$) By Country
2017**

| | 2017 | |
|-----------------|-----------|------------|
| Country | Kilogram | US\$ |
| China | 236,273 | 800,654 |
| Surname | 5,563,390 | 15,676,300 |
| Guyana | 1,630,236 | 5,691,726 |
| Vietnam | 360,064 | 854,524 |
| USA | 363,172 | 2,365,955 |
| Other Countries | 294,758 | 2,354,786 |
| Total | 8,447,893 | 27,743,945 |

STATIN

In 2017, Jamaica imported eight million four hundred and forty seven thousand eight hundred and ninety three kilograms (8,447,893kg) of fish valued at twenty seven million seven hundred and forty three thousand nine hundred and forty five United States dollars (US\$27,743,945). Eighty five point two percent (85.2%) of fish imported in 2017 was obtained from Surname and Guyana.

Profitability of Tilapia Fish Farming Enterprise

Table 3: Estimates Cost of Production-Farmgate Margin Dec 2017 to April 2018

| fish | Cost of Production | Farmgate Price | COP/Farmgate Margin % |
|---------|--------------------|----------------|-----------------------|
| Tilapia | \$311.3/kg | \$697.4/kg | 124 |

Source: MICAF Fisheries Div

Based on the cost of production-farmgate margin (table 3) Tilapia fish enterprise could realize profit margin of approximately 124% on investment. Therefore, it is profitable to produce and sell Tilapia at the farmgate. The profitability of the newly introduced Basa fish species has not yet being established locally.

Export Requirements

Inspection and Approval of Production Areas

Jamaican Aquaculture products destining for the export market should be reared in water that has no noxious substance present therein in such quantities as would be harmful to human health. Harvested products are required to undergo purification in relay area before exported. Designated purified areas require frequent certification.

European Union Import Requirements

- Sanitary Certification
European Union (EU) requires that shipments be accompanied by a certificate issued by the competent authority of the exporting country;
- Catch Certification
This Catch Certificate certifies that the products in question have been caught legally.

Global Trade

Over 2 million metric tonnes of *P. hypophthalmus* was produced in 2015. Vietnam dominates production with 1.1 million metric tonnes been produced in 2015. Pangasius products generated US\$1.77 billion for Vietnam in 2014. The EU and USA are the most important markets.

Tilapia

Tilapia is the most popular aquaculture species farmed in over 100 countries. It is the most traded seafood commodity (fresh whole, frozen whole, fresh fillet and frozen fillet). At least 133 countries imported frozen whole tilapia in 2015. The total market size for tilapia is 345 million United States dollars. The United States imports frozen whole Tilapia from 17 countries

Opportunity

As mentioned earlier Jamaica imported over eight million kilograms of fish in 2017. Therefore, this is an opportunity for local farmers to displace imports.

Reference

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