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"Linking the market and Primary producers"

TILAPIA



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INTRODUCTION

Tilapia fish originates from Africa, and were introduced to the Pacific Islands and Asia for farming from 1950s onwards. It is expanding world-wide in both developed and developing

countries because of the rapid growth rate and hardy characteristics of the fish¹.

Tilapia belongs to the family of "Chichilidae" and is largely freshwater fish which dwells in shallow stream, ponds, rivers and lakes. It is one of the most consumed farmed fish in the world². Tilapia is named the "food fish of the first century, and it is one of the most cultured freshwater fish in the world, which is farmed in more than 100 countries³.

There are about 50 Tilapia farms in Samoa with 13 farms in Savaii and 37 active farms in Upolu⁴. This includes individual farms, community and organizations in both Savaii and Upolu.

FARMING

Tilapia can be farmed in both intensive and extensive aquaculture systems⁵. There are several ways outlined by the Fisheries Division that is used for Tilapia farming, Earthen ponds, Raceways or Concrete tanks Freshwater Spring/Lakes utilizing of hapas and etc.

¹Nandlal, S., and Pickering, T. 2004. Tilapia fish farming in Pacific Island countries. Volume 2. Tilapia Grow-out in Ponds. Noumea, New Caledonia: Secretariat of the Pacific Community

²<https://www.researchandmarkets.com/reports/4828779/tilapia-market-global-industry-trends-share>

³Norman-Lopez, A. and Bjorndal, T. 2009. The global market for tilapia-one or several. Institute of research Economics and Business Administration, Bergen. SNF Project No. 5716; working paper no. 10/09

⁴Fisheries Division, Ministry of Agriculture and Fisheries.

⁵fisheries.tamu.edu/pond-management/species/tilapia/

There are 3 types of Tilapia currently exist here in Samoa. The Mozambique that was firstly introduced in the early 1950's. It was cultured here with the purpose on promoting the over fishing of marine fish. However, it was due unpleasant smell of the Mozambique's flesh which lead to the discontinuation of culturing for this commodity. However, it is still discovered in some water bodies. The Nile tilapia was the second tilapia introduced in 1991, its' flesh was good for consumption hence the introduction for cultivation purposes here in Samoa⁶. Mozambique Tilapia is nowadays considered less suitable for farming than the Nile Tilapia⁷.

In 2010, the Genetically Improved Farm Tilapia (GIFT) was the other type of Tilapia which was transported from Fiji. GIFT is obtained from the Nile Tilapia in a practice that is easy to care for, grows quickly, quickly used and sold for consumption⁸.

INCOME

Harvestable/Saleable Yield:

Approximately 1,900 fish are harvested, after considering a 5 percent mortality loss (100 fingerlings)

Market:

50% of the sales are made to local villagers. Buyers pick up fish from the Tilapia farm on the day of the harvest. Fifty per cent of sales (950 tilapia) are made to local villagers. Buyers pick up fish from the Tilapia farm on the day of harvest. Fish are sold on a per-string basis, with three fish per string. A further fifty per cent of sales (950 tilapia) are made to Apia-based

⁶ The farming guide of Tilapia Pamphlets

⁷ Nandal, S., and Pickering, T. 2004. Tilapia fish farming in Pacific Island countries. Volume 2. Tilapia Grow-out in Ponds. Noumea, New Caledonia: Secretariat of the Pacific Community

⁸ The farming guide of Tilapia Pamphlets

hotels and retail outlets. The producer delivers fish to these markets on the day of harvest. Fish are sold on a per kilogram basis, with a single fish weighing 300 grams⁹.

Price:

Fish are sold to local villagers for \$5.00 per string (316 strings for one production cycle), and to hoteliers and retailers for \$4.50 per kilogram .Tilapia is sold to the public during the First Harvest (Talomua) event for \$5 for the medium size and \$10 for the large size.

PRODUCTION AND GROWTH RATE

Tilapia culture in earthen ponds has been quite successful in Samoa for the past five years, but the activity has also faced major constraints and limitations as a result of lack of feeds, technology and skills, and limited access to markets¹⁰.

ADVANTAGES AND DISADVANTAGES OF TILAPIA FARMING IN SAMOA

ADVANTAGES:

- Easy to culture
- Easy to breed
- Moderate local demands
- Brood stock, facilities and capacities are available
- Strong and positive impact in rural areas

DISADVANTAGES:

- Lack of feeds available
- Lack of inbreeding control strategies at farm level
- Lack of marketability(demand/supply) knowledge
- Lack of business plans at farm level¹¹

⁹ Farm Manual 2022-2023, Ministry of Agriculture and Fisheries.

¹⁰ Samoa Aquaculture Plan 2013-2018

¹¹ Samoa Aquaculture Plan 2013-2018

Table 1: Average Prices at the Fugalei Market

Commodities (SAT\$/kg)	March 2024	April 2024	Lowest Price for 2024 to date	Highest Price for 2024 to date
Taro	3.76	3.66	3.76	4.75
Banana	1.5	1.68	1.5	1.68
Ta'amu	5.54	4.05	4.05	10.54
Coconut	0.95	0.94	0.92	1.02
Breadfruit	1.36	3.14	1.36	3.14
Yam	9.18	7.53	5.96	9.28
Head Cabbage	14.44	16.34	12.99	16.34
Tomato	30.91	37.48	25.34	37.48
Chinese Cabbage	11.88	12.33	11.47	12.33
Cucumber	8.6	9.47	7.53	9.47
Pumpkin	6.11	5.76	5.76	6.41

Source: Samoa Bureau of Statistics

Table 2: Foreign Currency per Tala (SAT\$)

May-Jun 2024	USD\$	NZD\$	AUD\$	YEN\$	FJD\$	EURO
1 Samoan Tala SAT\$=	0.3563	0.5792	0.5353	56.4500	0.7845	0.3267

Source: BSP Exchange Rate

Market Link Newsletter

This newsletter is published bi-monthly and it seeks to assist stakeholders (farmers, consumers, wholesalers, policymakers) make informed market and marketing decisions based on credible, relevant price and supply information. Help us help you by providing constructive feedback on market information issues that will improve the service which will lead to growing a healthy and wealthy Samoa. For more information contact the Policy, Planning and Communication Division and ask for Fereni Tofilau.

Disclaimer

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