



Pangasius trade in India- 2021

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Abstract

Recently, pangasius culture has become major part of aquaculture industry in India. It gained popularity due to its hardy nature during culture, short culture period and good demand in the market. The Indian pangasius gained importance when cost of pangasius imported from Vietnam increased. Andhra Pradesh is the top pangasius producer of pangasius whereas West Bengal is hub for seed production of pangasius. Most of the pangasius produced in India is sold in domestic markets in whole chilled condition. The farmgate price of the pangasius and fingerling price in the year 2021 observed was Rs. 87/ kg and Rs. 3.01, 4.06 and 5.05 per fingerling for 2-3 inch, 4-5 inch and 5-6 inch fingerlings respectively. Prices of pangasius feed did not show any significant monthly variation.

Keywords: pangasius, Indian market, seed rate, farm gate prices

Introduction

Aquaculture is one of the fastest growing sectors in India which has grown at 6-7% per annum in recent past, because of the species diversification (introduction of new species) and new culture system. To sustain in international trade few species i.e. pacific white shrimp (*Litopenaeus vannamei*), pangasius and tilapia were introduced in India. These species are advantageous over indigenous fish species (Lakra and Singh, 2012); are hardy to culture, has small culture cycle and high export demand in International market, and are compatible with other species (Ayyappan *et al.*, 2008) [1].

Pangasius hypophthalmus was introduced in India way back in 1990s (Rao, 2010). However, culture of this species got expanded in early 2000s. Initially, farming of pangasius was limited to the state of West Bengal and then it got expanded to other states (Ravindranath, 2008) [6]. Now, pangasius has become one of the major catfish contributors to India's aquaculture production (Lakra and Singh, 2012).

The study was conducted to find out the trend of farmgate price of pangasius, seed price of pangasius and feed price in the year 2021 in India. It included study of published price data as well as survey of farmers. Data was collected through telephonic/ personal interview of farmers.

Following information was collected during the interview.

1. Price and size of fingerlings at the time of stocking
2. Month of stocking
3. Farm gate price of the fish
4. Size of the fish at the time of harvesting
5. Type and price of feed used

Price Trend of Pangasius Seed

The most common time of stocking pangasius seed is June to august. Prices of the fingerlings varies with location, supplier, and season. More than 1000 million seed are produced in West Bengal and supplied to all the other states like Andhra Pradesh, Odisha, Rajasthan, Maharashtra, Punjab, Haryana, Bihar, Jharkhand etc. However, some commercial hatcheries in Andhra Pradesh, Bihar,

Chhattisgarh also supply to some extent. However, West Bengal is the seed production hub (Mohan *et al.*, 2017) [4].

The study revealed that the price of seed is highly influenced by the state of West Bengal. The seed production rate of West Bengal state cause fluctuations, for example, if the seed is produced more, the prices fall down whereas when the demand is high and seed production rate is low then seed prices shoot up. One of the biggest constraints in the seed production is lack of large scale and professional seed producers. Availability of seed also affects the stocking period of pangasius farmers. If the seed is not available at reasonable rates, farmers opt for some other species or change their stocking period and harvesting time to reduce the cost of the production. Majority of farmers stock fingerlings of size 2-3 inch. Some farmers follow short term culture by stocking 1-2 inch seed and sell at the size of 5-6 inch (Ghosh, 2019) [2]. During the present study, fingerlings prices of three different sizes were considered. The average prices of pangasius fingerling in the year 2021 for 2-3 inch, 4-5 inch and 5-6 fingerling were Rs. 3.01, 4.06 and 5.02 per fingerling respectively.

Table 1: The following table shows price of pangasius seed in different states at different time in the year 2021.

Sr. No.	State	Average Price of fingerlings (price per fingerling in INR)		
		2-3 inch	4-5 inch	5-6 inch
1	Maharashtra	3.00	4.00	5.00
2	Andhra Pradesh	2.90	3.90	4.90
3	West Bengal	3.00	4.00	4.90
4	Punjab	3.10	4.20	5.20
5	Haryana	3.20	4.30	5.30
6	Bihar	3.00	4.10	4.90
7	Jharkhand	2.90	3.90	5.10
8	Assam	3.00	4.10	5.10

Table 2: Average price of pangasius fingerlings on monthly basis in the year 2021 is presented in the following table.

Sr. No.	Month	Fingerling Size		
		2-3 inch	4-5 inch	5-6 inch
1	January	3.00	3.90	4.90
2	February	3.20	4.00	5.10
3	March	3.00	4.00	5.10
4	April	3.20	4.10	5.00
5	May	2.90	3.90	5.00
6	June	2.90	3.90	5.10
7	July	2.90	4.00	5.10
8	August	2.90	4.00	5.10
9	September	3.10	4.10	4.90
10	October	3.00	4.10	4.90
11	November	3.00	4.10	5.00
12	December	3.00	4.00	5.00

Pangasius Production and Farmgate Prices

In the year 2018 total production of Pangasius was 855,500MT was achieved with 500,000MT from Andhra Pradesh, followed by 150,000MT from Bihar. Farmgate pangasius prices have shown huge variations in last decade. Prices in 2006 were Rs. 35/ kg, while in 2007 it was Rs. 16-26/ kg. Again in 2009, it was Rs. 54-56/kg but in 2010 it declined to Rs. 27/kg. Then slowly the farmgate price increased but are very unstable (Mugaonkar *et al.*, 2016) [5]. In 2017, average price of pangasius was Rs. 61/kg which increased up to Rs. 74/kg in 2018, 77/kg in 2019 and Rs. 86/ kg in 2020. The average farmgate price of pangasius in India for the year 2021 observed was Rs. 87/ kg.

Following table shows the variations in farmgate price of pangasius in different states in the year 2021. The farmgate prices of pangasius saw sudden drop during initial months of pandemic-induced lockdown and showed increasing trend by the end of the year.

Table 3: Farmgate price of pangasius in different states in the year 2021.

Sr. No.	State	Farm gate Price of pangasius per kg in Indian Rupees (Harvest size 1 kg)
1	Maharashtra	80 – 95
2	Andhra Pradesh	70 – 90
3	Haryana	80 – 100
4	Bihar	85 – 100
5	Madhya Pradesh and Chattisgarh	80 – 90

Table 4: Average farmgate price of pangasius on monthly basis in the year 2021.

Sr. No	Month	Average Farm gate price (per kg in Indian Rupees)
1	January	90
2	February	90
3	March	85
4	April	85
5	May	80
6	June	85
7	July	90
8	August	90
9	September	85
10	October	85
11	November	90
12	December	90

Feed for Pangasius

Feed is a major input component of any fish farming activity. 90% of pangasius farmers used ready feed available in the market whereas small scale and traditional farmers rely upon farm made feed which is made using locally available ingredients like rice bran and oil seed cakes. Commercial scale pangasius farmers prefer floating feed available in the market manufactured by various companies like Growel, Avanti, Ananda, Nexgen, IB, Abis, Anmol etc. Each manufacturer has its own standards and prices.

The only factor that affects the feed prices of any brand is the cost of raw ingredients. If the cost of raw ingredient increases, then price of feed also increases. Unavailability of raw ingredients causes rise in their prices. Among raw ingredients, the major role is played by fish meal. Availability of fish meal and its cost plays important role in price of pangasius feed. When such a case happens, the decision of raising the price of feed is taken unanimously by the feed manufacturers. In the year 2021, feed prices in India showed slight increase in the prices due to increased rate of raw ingredients.

In India, many farmers prefer feed with 28% protein content. Higher protein content feed increases cost of production. Due to fluctuating farm gate price of pangasius, farmers try to reduce cost of production as much as possible. The feed bags are available in various sizes like 10 kg, 20 kg, 25 kg, 30 kg and 40 kg depending on the manufacturer. Below given table shows the average prices of feed per 10 kg by different size and protein content in the year 2021.

Table 5: Average prices of feed per 10 kg in the year 2021 by different size and protein content

Feed Type	Feed Size (in mm)	Protein Content (%)	Price per 10 kg in Indian Rupees
Starter	0.5-0.8	36-40	750-110
Grower	2-3	28	320-550
	4	28	330-570
	4	24	310-450

Table 6: Monthly average prices of feed per 10 kg in the year 2021 by different protein content.

Sr. No.	Month	Feed rate per 10 kg in Indian rupees	
		Protein Content 24%	Protein content 28%
1	January	310-420	340-560
2	February	310-420	340-560
3	March	310-420	340-560
4	April	310-420	340-560
5	May	310-420	340-560
6	June	310-420	340-560
7	July	320-450	340-560
8	August	320-450	340-560
9	September	320-450	340-560
10	October	320-450	340-560
11	November	320-450	340-560
12	December	320-450	340-560

(Note- The feed prices are available in minimum to maximum range as price varies from manufacturer to manufacturer and did not show major month-wise variation.)

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