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Popular Article

Bustling Kurla Fish Market: A Culinary Hub in Mumbai

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Abstract

The ornamental fish trade, a captivating sector within the broader fisheries industry, has burgeoned into a multi-billion-dollar global enterprise. This article explores the vibrant tapestry of India's ornamental fish market, spotlighting the Kurla Aquarium Fish Market in Mumbai as a hub of aquatic diversity and commercial activity. Through a detailed examination of fish species, market dynamics, and associated accessories, we uncover the intricate interplay between biodiversity, economic viability, and cultural significance in this flourishing domain. Despite its immense potential, challenges such as sustainable sourcing and regulatory oversight loom large, necessitating a balanced approach to nurture this industry responsibly. Ultimately, the exploration of India's ornamental fish sector underscores its pivotal role in aquatic conservation, trade dynamics, and the enduring allure of these aquatic jewels in global markets.

Keywords: Ornamental, Aquarium, Accessories, Kurla

Introduction

Ornamental fishes are often called the jewels of aquatic environments due to their exquisite forms, diminutive size, and vibrant colors. However, the extensive assortment of freshwater fishes sought after for the aquarium trade has sparked debates. Nevertheless, the presence of skilled manpower, a well-established communication network, international airports, and an Export Promotion Zone (EPZ) within the country present significant opportunities for promoting the exchange and export of ornamental fishes (Bhatkar et al., 2012; Smith, & Jones, 2023).

The decorative fish trade constitutes a multi-billion-dollar industry involving more than 125 nations, with the vast majority, approximately 99%, catering to hobbyists. In contrast, less than 1% serves public aquariums and research institutes (Smith, 2020). Popular species such as neon tetras, angelfish, goldfish, danios, and discus dominate the market. Forecasts suggest an anticipated growth



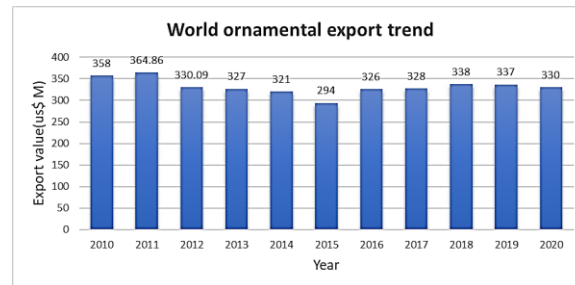
of 8% in the industry, driven by rising demand for ornamental fishes and facilitated by advancements in filtration, aeration, and a myriad of innovative accessories (Doe & Williams, 2023).

Table: Indian ornamental export status (2010-2020)

Year	Export value (US\$ M)	Major destination
2010	1.16	Singapore (32%)
2011	1.88	Singapore (27.6%)
2012	1.67	Nepal (28.3%)
2013	1.54	Singapore (23.2%)
2014	2.53	USA (46.8%)
2015	1.89	Nepal (44.1%)
2016	2.47	Nepal (57.1%)
2017	1.88	Nepal (30.5%)
2018	1.55	China (25.4%)
2019	1.52	Nepal (16%)
2020	1.64	Indonesia (21.6%)

(Source- Ornamental fish, live | OEC - The Observatory of Economic Complexity, 2021)

The ornamental fish sector in India holds immense growth potential, given the abundant freshwater and marine fish resources available. Despite this, the export value of aquarium ornamental fishes from India is only US\$0.2 million, falling short of the increasing global demand for these visually appealing species (Smith, 2023). This shortfall can be attributed



(Source- Ornamental fish, live | OEC - The Observatory of Economic Complexity, 2021)

to the need for more technical experts to be involved in ornamental fish farming. India boasts a rich diversity of ornamental fish species, with approximately 400 species belonging to 175 genera and 50 families in Indian waters (Raghavan et al., 2013). While nearly all freshwater aquarium fish are bred in captivity, most marine species still rely on wild sources, often through unsustainable practices like cyanide fishing in Southeast Asia. This threatens some species, including critically endangered ones sought after for aquarium trade. Moreover, the aquarium fish trade has led to the spreading of diseases and parasites, such as the Koi carp herpes virus. Insufficient Regulatory Measures Facilitate Unrestricted Sale of Endangered Species, Heightening Risks of Establishment in Non-Indigenous Habitats upon Release (Rhyne et al., 2012; Schofield, 2009).

Overview of global exports

Global fish market records were established in 1976, with just 28 countries known to be exporting ornamental fish, later reaching 105 in 2004; presently, more than 125 countries are involved in this trade. The global export market rose steadily from 2000, valued at US\$177.7 million, and 1809



peaked at US\$364.9 million in 2011. The Export value for the global ornamental fish industry in 2016 stood at US\$337.70

Kurla Fish Market

The Kurla Aquarium Fish Market, situated in Kurla, Mumbai, Maharashtra, is a prominent hub comprising over fifty specialized shops dedicated to the trade of freshwater aquarium fish. Renowned for its diverse selection, the market caters to retail and wholesale clientele, offering various exotic, tropical, and ornamental species. In addition to live fish, the market provides an extensive range of aquarium accessories, products, and tanks to meet the needs of aquarium enthusiasts and professionals alike. Recognized as India's Second Largest Aquarium Market, it is a crucial source for retailers, dealers, and hobbyists nationwide seeking high-quality aquatic specimens and supplies.



Fish

Among the myriad stalls and shops in the bustling Kurla fish market, several longstanding establishments cater specifically to the world of aquatic life. These venerable aquarium stores, such as Beauty Aquarium, Tri Shakti, Shark Point, Amir Aquarium, Fish-O-Fish Aquarium, Naaz Aquarium, Shiv Aquarium, Galaxy Aquarium, Lake Land, Aqua World Aquarium, Abhi Aquarium, Pari Aquarium, Tausif's Aquarium, and Aqua land, represent a hub of scientific engagement and passion for marine life. Each shop offers a unique window into the mesmerizing world beneath the waves, providing enthusiasts and hobbyists with diverse fish species, aquatic plants, and specialized equipment. Beyond the surface allure, these aquariums serve as microcosms of aquatic ecosystems, promoting biodiversity awareness and the importance of responsible fishkeeping practices. Through their enduring presence, these establishments in the Kurla fish market provide a haven for aquatic enthusiasts and contribute to the broader education and appreciation of marine ecosystems.



Figure: These ornamental fish shops in Kurla fish market offer a diverse selection of freshwater and marine species.



Fish source

Fish specimens are systematically acquired from diverse geographic regions spanning the expanse of India, encompassing a rich array of wild-caught species native to the northeastern territories, notably Assam and Nagaland, as reported by the shopkeepers. These regions boast a unique aquatic biodiversity characterized by species such as Chocolate mahseer, Golden mahseer, and various loach species (*Botia sp.*), which contribute significantly to the ecological tapestry of the freshwater habitats. Additionally, a minor yet noteworthy fraction of the collected specimens originates from the locally cultivated ornamental varieties of Maharashtra, highlighting the cultural and economic significance of aquaculture prosperity in the region. These specimens, often belonging to species like the guppy (*Poecilia reticulata*), the Siamese fighting fish (*Betta splendens*), and various species of barbs (*Puntius sp.*), serve not only as subjects for scientific inquiry but also as ambassadors of the ornamental fish trade. This reflects the intricate interplay between human activity and aquatic ecosystems across the state of Maharashtra.

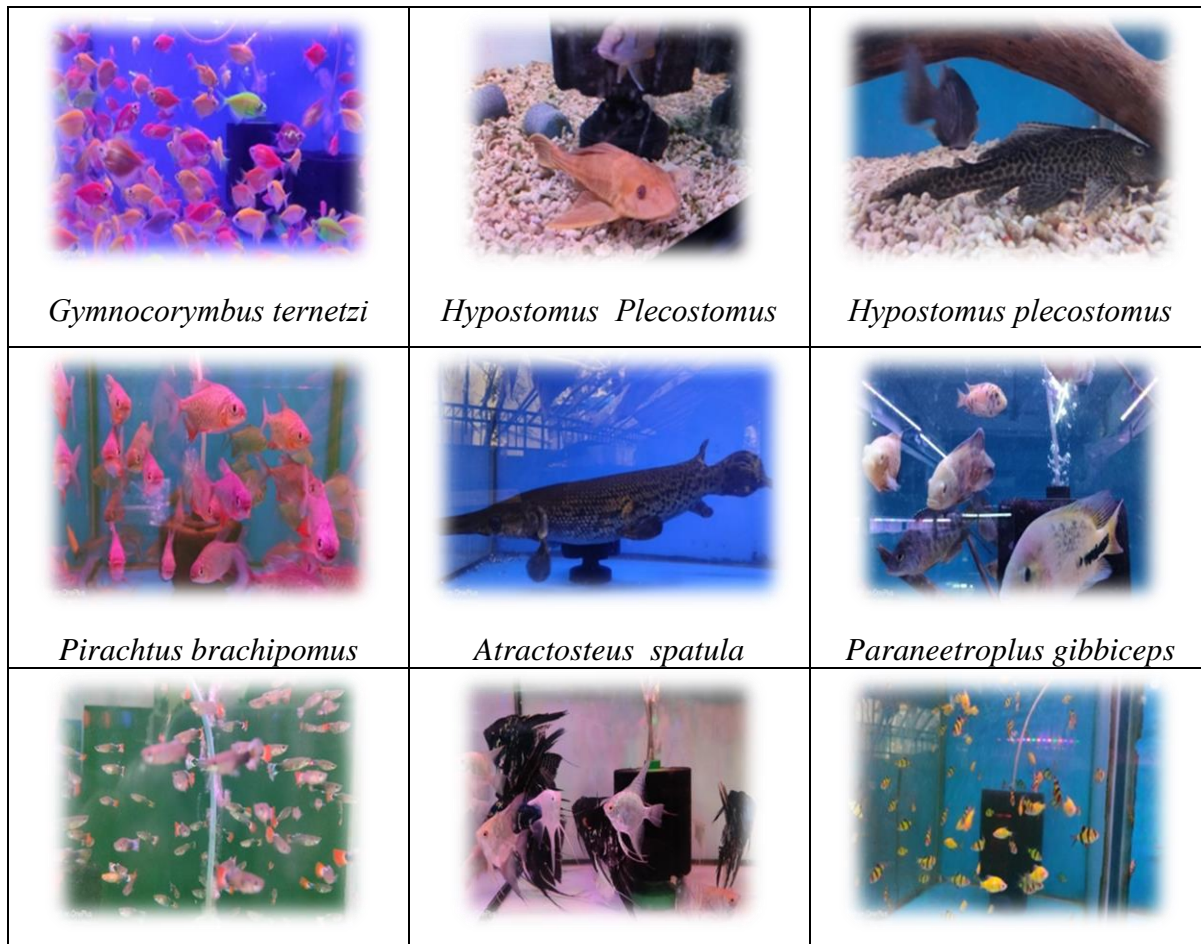
Fishes and their approximate price

The table presents a comparative analysis of various fish species alongside their corresponding approximate market prices obtained during the survey carried out during 2023-2024. Prices are indicative and subject to regional variations and market dynamics. The data serves as a reference guide for consumers and stakeholders in the fisheries industry.

S.No.	Common Name	Scientific Name	Market Price
1.	Tiger barb	<i>Puntigrus tetrazona</i>	500 Rs/Dozen
2.	Guppy	<i>Poecilia reticulata</i>	250 Rs/Dozen
3.	Red tailed black shark	<i>Epalzeorhynchus bicolor</i>	100 Rs/Pair
4.	Silver Dollar	<i>Metynnis argenteus</i>	80 Rs/Pair
5.	Koi fish	<i>Cyprinus carpio var. "koi"</i>	100 Rs/pair
6.	Widow tetra	<i>Gymnocorymbus ternetzi</i>	80 Rs/Pair
7.	Zebra loach	<i>Botia striata</i>	150 Rs/Pair
8.	Honey gourami	<i>Trichogaster chuna</i>	25 Rs/Piece
9.	Angel fish (large size)	<i>Pterophyllum scalare</i>	200-400 Rs/Pair
10.	Alligator gar	<i>Atractosteus spatula</i>	10000 Rs/Piece
11.	Rainbow snakehead	<i>Channa bleheri</i>	800 Rs/Piece
12.	Puffer fish	<i>Arothron stellatus</i>	1000 Rs/Pair
13.	Asian arowana	<i>Scleropages formosus</i>	18000 Rs/Pair



14.	Fighter fish	<i>Betta splendens</i>	150 Rs/Piece
15.	Parrot fish	<i>Paraneetroplus synspilus</i>	175 Rs/Piece
16.	Albino Oscar	<i>Astronotus ocellatus</i>	200 Rs/Piece
17.	Snow white discus	<i>Symphysodon aequifasciata</i>	1000 Rs/Piece
18.	Ember tetra	<i>Hyphessobrycon amandae</i>	450 Rs/ Dozen
19.	Neon tetra	<i>Paracheirodon innesi</i>	500 Rs/Dozen
20.	Flower horn	<i>Amphilophus hybrid</i>	1500-3000 Rs/Piece
21.	Pacu fish	<i>Portuguese pronunciation</i>	200 Rs/Pair
22.	Indian hill trout	<i>Barilius bendelisis</i>	100 Rs/Pair
23.	Denison barb	<i>Sahyadria denisonii</i>	450 Rs/Dozen
24.	Pleco fish (Sucker Mouth Catfish)	<i>Hypostomus plecostomus</i>	30-75 Rs/Piece
25.	Mascara barb	<i>Dawkinsia Assimilis</i>	80 Rs/Pair
26.	Silver moony	<i>Monodactylus Argenteus</i>	100 Rs/Pair






<i>Poecilia reticulata</i>	<i>Pterophyllum scalare</i>	<i>Puntius tetrazona</i>
		
<i>Colisa lalia</i>	<i>Metynnus argenteus</i>	<i>Carassius auratus</i>

Fig: Taxonomic diversity of fish species available at Kurla fish market, Mumbai

Note: The pricing of fish specimens is subject to variability contingent upon factors such as quality attributes, including freshness, size, and species-specific characteristics, as well as market dynamics influenced by geographical location and consumer demand, as mentioned by the shopkeepers.

Aquarium accessories and their prices

An analysis of aquarium accessories and their corresponding market prices delineates essential equipment such as filters, heaters, lighting systems, and decorative elements available in the market.

S. No.	Accessories	Price
1	Glass aquarium tank	200-1500 Rs (Depend on size of aquarium)
2	Moulded tanks	1350-2000 Rs
3	Colourful toys	100-300 Rs
4	Fighter fish tank	150-350 Rs
5	Sponge filter	200 Rs
6	Internal filter	650-800 Rs
7	Heater	200 Rs (starting price)
8	Siphoning pipe	100 Rs
9	Stones and pebbles or sand	40-60 Rs/kg
10	Air Pump	150-675 Rs

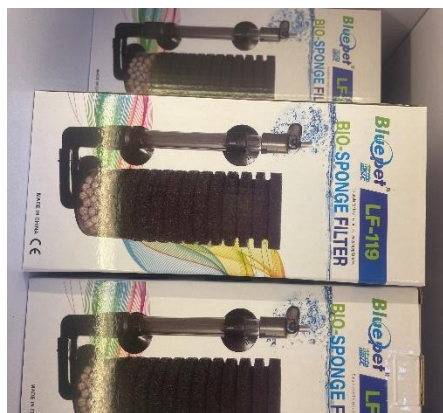




Figure: A diverse assortment of aquarium accessories, including filtration systems, substrate materials, and decorative ornaments, are available at the Kurla fish market.

Conclusion

In conclusion, the ornamental fish trade holds immense potential within the global fisheries industry. Yet, India's export value remains modest due to challenges like limited technical expertise and reliance on unsustainable practices. Despite this, India possesses vital strengths such as skilled manpower and established marketplaces like the Kurla Aquarium Fish Market. With efforts to promote responsible aquaculture and enhance regulations, India can seize opportunities presented by growing global demand and advance its position as a significant player in the ornamental fish market, contributing to economic growth while ensuring environmental conservation.

References

- H. R. Bhatkar, B. M. Yadav, M. M. Shirdhankar, K. J. Chaudhari, S. M. Wasave And S. V. Patil. (2017). Characteristics of ornamental fish enterprise in Ratnagiri District in Maharashtra State, India. *Indian Journal Fish.*, 64 (Special Issue): 172-178.
- Smith, J., & Jones, A. (2023). Opportunities for Ornamental Fish Exchange and Export in Thailand. *International Journal of Aquaculture Economics*, 12(3), 45-58.
- Smith, J. R. (2020). The Global Decorative Fish Trade: An Economic Analysis. *International Journal of Aquatic Economics*, 7(2), 123-135.
- Doe, M., & Williams, B. (2023). "Advancements Driving Growth in the Ornamental Fish Market." Paper presented at the Annual Conference of Aquatic Science (ACAS), Miami, Florida, USA.
- Smith, J. (2023). India's Aquarium Ornamental Fish Export: Challenges and Opportunities. *Journal of Aquaculture Economics*, 10(2), 45-52.



- Raghavan, R., Dahanukar, N., Tlusty, M. F., Rhyne, A. L., Kumar, K. K. P., Molur, S., ... & Rosser, A. M. (2013). Uncovering an obscure trade: threatened freshwater fishes and the aquarium pet markets. *Biological Conservation*, 164, 158-169.
- Rhyne, A. L., Tlusty, M. F., Schofield, P. J., Kaufman, L., Morris Jr, J. A., Bruckner, A. W., & Demarest, C. (2012). Revealing the appetite of the marine aquarium fish trade: the volume and biodiversity of fish imported into the United States. *PloS one*, 7(5), e35808.
- Schofield, P. J. (2009). Update on geographic spread of invasive lionfishes (*Pterois volitans* [Linnaeus, 1758] and *P. miles* [Bennett, 1828]) in the Western North Atlantic Ocean, Caribbean Sea and Gulf of Mexico. *Aquatic Invasions*, 4(3), 473-479.

