## ORL-EM&P-06 Ornamental Fish-Keeping in Nepal: Trend, Trade and Future Prospect

Narayan Giri and Sarita Gautam\*

Central Fisheries Promotion and Conservation Center Central Fisheries Building Kathmandu, Nepal saritagtm.aqua@gmail.com

The ornamental fish-keeping industry in Nepal has a rich history, dating back to the Rana regime. A survey conducted in 1997/98 revealed that the Kathmandu Valley alone housed 20 aquarium wholesalers and 5,000 aquarium keepers. Since then, the industry has expanded significantly, with the number of aquariums across Nepal rising to 115, of which 77% are concentrated in Bagmati Province (Kathmandu). In addition, the Government of Nepal has approved the importation of 144 ornamental fish species, with four major importers operating from the Kathmandu Valley. However, a recent market survey identified out of 144 species, 36 species including Guppy, Zebra Fish, Angel fish, Tetra Fish, Koi carp has more demand and import is also high. These imports, predominantly from India, along with China, Thailand, and Singapore, reflect Nepal's evolving ornamental fish market.

Over the past five years, the Kathmandu Valley has seen a dramatic rise in the importation of ornamental fish, from 120,843 (number) in 2017/18 AD to 467,992 (number) in 2021/22 AD. This growth is attributed to modernization of the city, cultural interests, aesthetic values, and the perceived health benefits and religious value of fish-keeping. In response to increasing demand, the Centre for Fisheries Promotion and Conservation Centre has been producing and selling around 60,000 ornamental fish annually, including Japanese Koi, Thai Koi, and Comet Goldfish, at competitive prices. Surveys of aquarium keepers reveal that 53% prefer species such as Goldfish, Guppy, Molly, and Milky Carp, while 24% opt for Oscar, Parrot, Dollar, and Betta fish due to their vibrant colors and compatibility. Despite this growth, the ornamental fish trade in Nepal has fluctuated. Starting at NRS 30 million in 1999, the market peaked at NRS 153.5 million in 2017 before sharply declining to NRS 38 million. This drop is linked to the local construction of 58% of aquariums and an increasing share of locally bred fish. For the promotion of the business retailers have adopted diverse sales strategies, including aquarium decoration (27%), social media marketing (22%), discount offerings (14%), and festival promotions (9%).

However, challenges persist, including high mortality rates during transportation (22.2%), market diversification difficulties (21.9%), disease outbreaks (17.5%), and low-quality fish imports (15.5%). Similarly, the common issues related to fish diseases include white spot (27%), fungal infections (24%), and fin rot (19%). Due to longer and tedious custom, mortality of imported fish is observed due to oxygen deficiencies. Sometimes import of non-recommended species is also noticed. To counter these issues and foster the growth of the industry, several strategies are recommended by the retailers: specialized training for fish keeping, market promotion through exhibitions, establishing ornamental fish farms and supplying locally available colored fish, and encouraging. Government support is vital in providing the necessary resources and services to sustain industry development. Establishment of quality brood resource center, encouraging private sector to produce highly demanded ornamental fish keeping in Nepal. Establishment of one dedicated government institute is urgent to flourish the ornamental fish keeping business in Nepal.

By implementing these measures, Nepal's ornamental fish industry can continue to grow, benefiting both domestic enthusiasts and contributing to the nation's economic development.