

## 18. Dried Small Indigenous Fish are the Pride of Assam: The Story of Suman Halдар

*Adored by some and scorned by others*

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*Figure 1. Dried fish stall of Suman at Maligaon market, Assam. Credit: Sourabh Kumar Dubey, 2021*

Fish is a dietary staple for the vast majority of inhabitants residing in the northeastern region of India. Assam is an important fish-consuming state within the eastern Himalayan ecosystem where almost all people (99 percent) eat fish. Besides fresh fish available from Assam's vast and luxuriant waterscapes, dried fish and a variety of other traditional processed fish-based products are popular among the residents of Assam. Due to the great demand for these products in the region, various dried fishes are imported from coastal states like West Bengal, Odisha, Andhra Pradesh, Tamil Nadu, and Gujarat, as well as landlocked states like Uttar Pradesh and Bihar. Apart from that, some specific dried fish and fermented fish-based products are also imported from countries like Bangladesh and Myanmar. Assam's dried fish supply chain is complex and centered on the Jagiroad market situated at Morigaon district, 50 km away from the capital city of Guwahati, which is regarded as Asia's largest dried fish market.

Suman Halder (35) has owned and operated a small dried fish retail stall along with a petty shop adjacent to the Maligaon fish market for the last two years (Figure 1). A traditional fisher by caste, Suman has lived in Assam since birth, but his ancestors originally migrated from West Bengal. Popularly known as 'Hukan Mas' in Assam, Suman refers to dried fish as 'Hutki', a name that evokes the pungent aroma that emanates while it is cooked. Suman sells more than a dozen varieties of dried fish, both of freshwater and marine origin, including Hilsa (*Tenualosa ilisha*), Gangetic hairfin anchovy (*Setipinna phasa*), Indian river shad (*Gudusia chapra*), Ribbonfish (*Trichiurus lepturus*), Bombay duck (*Harpadon nehereus*), Dhela (*Osteobrama cotio*), Mola carplet (*Amblypharyngodon mola*) and Pool barb (*Puntius sophore*). Suman gets all of his dried fish from the Jagiroad wholesale market. Suman remembers that in his village, when he was a child, a large proportion of the community were fishers and their families. He sees a great number of small indigenous fish species (SIS), not only in the markets but also in their locality every year during the months of Bhada (23<sup>rd</sup> of August to 22<sup>nd</sup> of September) and Ahin (18<sup>th</sup> of September to 18<sup>th</sup> of October). SIS such as Puthi (*P. sophore*), Moa (*A. mola*), Pavo (*Ompok pabda*), Hingara (*Mystus tengara*), Lau puthi (*O. cotio*), Koroti (*G. chapra*), Kholihona (*Trichogaster fasciata*) etc. were common in daily

meals during Suman's childhood.



Figure 2. Different types of dried Mola (*Amblypharyngodon mola*).

Credit: S. K. Dubey, 2021

Though 'Hukoti' and 'Namsing' are popular traditional fermented fish products in the region, Suman perceives that 'Shidol hukti' is the pride of the northeastern people. 'Shidol' is prepared exclusively from Puthi (*P. sophore*), a common SIS in this area. The procedure for making Shidol is the most cumbersome of all local preservation processes, according to Suman. Suman notes that women fisherfolk in his village sort the larger Puthi from the smaller ones; the larger ones are for the market, while the smaller ones, once sorted, are given for Shidol. For traditional Shidol preparation, after descaling, degutting and washing, the raw fresh *P. sophore* are allowed to dry partially in the sun for 4-5 days and then placed in the airtight earthen pot, locally known as Koloh or Mutkas. The round-bottomed and narrow-necked earthen pots will have previously been soaked and saturated with Puthi oil (extracted by boiling the gut, viscera etc.). The filled earthen pot is then sealed tightly with clay, creating an anaerobic environment, and left to ferment

for three to four months at ambient temperature. 'Shidol Chutney', also known as 'Shidol Bhorta', is a divine concoction of Shidol, onions, and garlic, seasoned with a liberal amount of red chili powder. It is consumed as a side dish with rice or bread.

Moa and Puthi are the most popular among the four varieties of dried SIS sold by Suman (Figures 2 and 3). Dried Puthi fetches more, at 600 Indian Rupees (INR) per kg, while Moa sells for 500 INR per kg in the Maligaon market. "*1 kilogram of raw SIS like Moa, Puthi, Lau puthi become 300-400 grams after drying*", Suman added. The winter season lasts from October to mid-March and is the most preferred time for dried fish consumers from the Assamese and Bengali communities. The demand for dried SIS peaks from December to February. "*Assam is a genuine treasure trove of open-water ecosystems, with beels (a natural low-lying wetland formed mainly due to meandering action of rivers) and rivers providing the bulk of Moa and Puthi for the dried fish business*", Suman proudly told us. Along with dried SIS, the demand for 'Loitta or Bomla hutki' (dried Bombay duck) and 'Nona Ilish' (dried and salted Hilsa) is also high across Assam (Figure 4). During the summer season, dried Moa is marketed but Puthi is not. Still, the demand for 'Shidol Puthi' remains high throughout the year and fetching 1,000 INR per kilogram. Dried Moa and Puthi are consumed with mixed vegetable curry and are also used to make the mustiest mouthwatering chutney. Suman related the interesting fact that, during the off-season, dried small fish are often purchased by the customers for their pet cats.



Figure 3. Dried Puthi (*Puntius sophore*) and Lau puthi (*Osteobrama cotio*). Credit: S. K. Dubey, 2021

Suman believes that, although few adore it, and many despise it, eating dry fish, particularly SIS, keeps the body warm throughout the winter, enhances immunity, and protects against diseases such as typhoid and malaria. It also appeals to children since it contains few soft bones. Suman sells dried fish from his small kiosk for 18,000 to 20,000 INR per month during peak season, but his sales drop to 5,000 to 8,000 INR during the summer season. In the last two years, he experienced 30-35 percent profit from his total sales. His major concerns are storage and weight reduction of dried fish during the summer season. Suman intends to start a wholesale dried fish business in the future centering on the Maligaon fish market.

The north-eastern region of India is a kaleidoscope of cultural and social assimilation and the Indigenous ethnic communities of this region have cultivated rich Indigenous knowledge systems connected to fishing and ethnic fish-based food products. “Dried indigenous small fishes have a bright future in the context of Assam”, Suman added. He believes that aquaculture production of SIS such as Puthi, Moa, Lau puthi, Koroti, and Hingara will enhance availability, affordability, and consumption of dried SIS while also

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reducing the impact on the natural aquatic ecosystems. Besides incentivizing the small dried fish retailers through various fiscal programs, Suman urged that the government should place a greater emphasis on the protection and conservation of numerous small fishes and their habitat which are becoming threatened as a result of various human-induced interventions.



*Figure 4. 'Nona Ilish' (dried and salted Hilsa) is most famous in Assam. Credit: S. K. Dubey, 2021*