



Entrepreneurial behaviour of tribal fish farmers in Assam, north-east India

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Abstract

In many tribal villages of Assam fish farming has slowly moved from being just a way to meet household food needs to becoming an important source of income. This change has not been automatic. It is linked with how farmers think, act and respond to challenges. The way they spot opportunities, take risks, share work within the community and adapt to change conditions together form what is called entrepreneurial behaviour. In Assam, such behaviour is visible when Mising farmers experiment with catfish culture in Majuli, when Bodo families reinforce pond dykes to cope with floods, when Karbi women join hands to sell fish directly in town markets or when Tiwa youth start nurseries to supply fingerlings locally. These examples show that entrepreneurship is not about big businesses alone but about small everyday decisions that help families improve their lives. With supportive policies and culturally sensitive extension tribal aquaculture can become a strong driver of livelihood and nutrition security in north east India.

Key words: Entrepreneurial behaviour, Tribal, Aquaculture, Social, Innovation, Fisheries

Introduction

Fish and fishing have always been part of life in Assam. For tribal groups such as the Mising, Karbi, Bodo, Tiwa, Rabha and Sonowal Kachari, fish is more than just food. It is part of festivals like Bihu and Ali Aye Ligang, it is a common gift during visits and it is closely tied with the rice-based diet of the region. Traditionally, most fish came from rivers, streams and wetlands. Every monsoon, people set up traps and nets in floodwaters. Along with this, many households dug small ponds close to their homes, mainly to ensure a steady supply of fish for family consumption.

In recent years, however, there has been a shift. Growing demand in towns and rising prices have made people see fish farming as a livelihood. Schemes by the government and support from cooperatives and self-help groups, have also encouraged this change. For a tribal farmer, this shift requires more than just digging a pond and releasing fingerlings. It requires a mindset that sees possibilities, takes risks, manages uncertainty and learns from experiences. This

mindset is what makes a fish farmer an entrepreneur.

Tribal aquaculture practices and changes

The natural setting of Assam provides both opportunities and challenges. Floodplains are fertile and full of water bodies, but floods can wash away entire harvests. Tribal households have adapted in their own ways. For example, in Majuli island, many Mising families raise fish in ponds dug on higher ground and keep bamboo fencing around them to reduce losses during floods. In Karbi Anglong, ponds are often combined with pig and poultry units, where wastes are recycled as pond nutrients. These methods reflect innovation born from daily needs.

Community water bodies, locally called beels, also play a big role. In Morigaon district, a Tiwa cooperative manages a leased beel. The members jointly invest in fingerlings and share the harvest. Because everyone depends on the same water body, they plan carefully to ensure long-term returns. Where lease rights are unclear or too short, farmers hesitate to invest. This difference

shows how social and institutional conditions shape entrepreneurial behaviour.

Opportunity recognition in practice

A good example of opportunity recognition comes from Majuli. A few years ago, farmers there noticed that the price of live magur catfish was increasing in Jorhat town. While most people kept rearing only carp, some farmers began small-scale magur farming in tanks. Though feed was costly, the high price made it worthwhile. By selling directly in weekly markets, they earned more than before. Such simple decisions show how tribal farmers connect local opportunities with market signals.

Risk taking and resilience

Risk is part of fish farming in Assam. Floods, disease and sudden price drops make farmers cautious. Yet, many show remarkable resilience. In Lakhimpur district, Bodo households faced repeated losses from floods. Instead of giving up, they strengthened pond dykes with bamboo and soil and planted bananas along the edges to hold the soil. The bananas provided extra income and shade for the fish. They also harvested part of their fish whenever heavy rain was forecast. This way, even if floods came, they did not lose everything. Such strategies show how entrepreneurial behaviour combines courage with practical planning.

Proactiveness and market orientation

Entrepreneurial farmers do not just produce fish, they also think about how and when to sell. In Karbi Anglong, a group of women came together in a self-help group. Earlier, traders used to buy their fish cheaply at the farm gate. The women decided to join hands, harvest together and take their fish to Diphu town. They hired a vehicle and sold directly to shopkeepers. By avoiding middlemen, they earned more. They also timed their sales before local festivals, when demand was high. These actions reflect proactive market orientation.

Mobilizing resources together

Resources are often limited in tribal households. Fingerlings may be hard to get, credit may not be available and transport costs may be high. In such cases, social networks become the key. In Morigaon, Tiwa youth used their group savings to set up a small nursery in hapa nets along a stream. They produced fingerlings for themselves and for neighbours. This saved costs and reduced dependence on distant hatcheries. Profits were reinvested in better equipment. Here, collective action opened a new income source and strengthened self-reliance.

Learning from experience and from others

One of the strengths of tribal communities is their openness to learning from one another. In Chirang district, a Bodo farmer who attended a Krishi Vigyan Kendra training learned about co-culturing mola, a small nutrient-rich fish, with carp. He tried it and found that mola was in high demand among women buyers. Soon, his neighbours adopted the practice after seeing his success. What began as one farmer's experiment spread widely in the village. This is how innovation travels in real life.

Gender and entrepreneurship

Women play a quiet but vital role in aquaculture. In Nagaon district, Rabha women not only feed fish regularly but also keep simple records and manage market sales. Their presence ensures that ponds are cared for every day. In some places, women negotiate fingerling purchases collectively, reducing costs. Through self-help groups, women gain confidence and take part in decisions about when to sell and how to invest profits. Their contribution is central to the entrepreneurial character of fish farming.

Managing uncertainty and climate risks

Climate change is making floods more unpredictable. In Sonitpur district, a group of Mising farmers formed a common risk fund. Each family put aside a small amount during the culture season. When one family lost fish due to dyke damage, the group used the fund to help them recover. This informal insurance encouraged more families to join aquaculture, because they felt less alone in facing risks. Such local solutions show how entrepreneurship is also about building safety nets.

Value chain upgrading

Some tribal farmers are not limiting themselves to just production. In Dibrugarh, two entrepreneurs started supplying ice and insulated boxes to farmers transporting fish in summer. Their service reduced spoilage and gave them a steady income. Others have tried small-scale fish processing, like drying and smoking, for local markets. These steps show how entrepreneurial behaviour can expand beyond ponds into other links of the value chain.

Policy support and its impact

Government programs have been important in encouraging entrepreneurship. The Pradhan Mantri Matsya Sampada Yojana has supported pond excavation and inputs in flood-affected areas like Dhemaaji. State cluster initiatives in Barpeta and Morigaon have encouraged collective stocking and marketing. In one cluster, farmers even branded their fish as fresh and healthy and sold it directly in nearby towns. Such

success stories motivate others and spread confidence.

Conclusion

The stories of tribal fish farmers in Assam show that entrepreneurship is not about large investments or complex business models. It is about recognising opportunities, like catfish culture in Majuli, about facing risks with creativity, like reinforcing pond dykes in Lakhimpur, about mobilising networks, like Tiwa nurseries in Morigaon and about seizing markets, like Karbi women in Diphu. These

everyday actions reflect the true spirit of entrepreneurial behaviour.

What helps is a mix of secure access to water bodies, quality seed and feed, timely credit and supportive extension. Equally important is recognising the role of women and collective groups in strengthening resilience. With the right environment, tribal aquaculture can provide stable incomes, reduce vulnerability and ensure nutritional security. It is not only a livelihood but also a way of keeping traditions alive while embracing new opportunities.