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Back to Jabarrah

A closer look at the evolution of successful Aquaculture Self-Help Groups in rural West Bengal, the discovery of new uses for local resource systems and the energizing effect of flexible rural credit

Written by Satyendra D Tripathi, Graham Haylor and William Savage in consultation with Jagdish Saran Gangwar, Virendra Singh, Gautam Dutta and Prabhat Kumar Pathak

The village of Jabarrah, and a cluster of neighboring villages of Hura block in Purulia District, lie approximately 20 km east of Purulia town in rural West Bengal, in the rainfed eastern plateau of India. About 1,200 people live in Jabarrah in 220 households surrounded by 400 ha of farmland. A 3-km track, running through once-forested undulating hills, joins the village with the nearest metalled road. During the June-October monsoon, the road is muddy and after heavy rain, a river prevents the passage of people and vehicles.



The road to Jabarrah Village, Purulia District, West Bengal

A Visit during the Mid-1990s

In 1996, as Aquaculture Development Specialists with the Eastern India Rainfed Farming Project (EIRFP), Satyendra Tripathi and Graham Haylor were taken to Jabarrah by the Aquaculture Field Specialist Gautam Dutta to see its 12 small tanks. At that time, now eight years ago, 60% of households were unable to secure food for the whole year, and most men and some families migrated seasonally to labor for a few cents daily. About a quarter of these households were also indebted to moneylenders, usually having raised emergency loans for food or medicines. Children were walking four kilometers to school; the nearest bank – should anyone have thought to venture there – was five kilometers away.

The Community Organizer Prabhat Kumar Pathak, told us that the local paddy crop always seemed to face a dry spell at the time of flowering and yielded little in the sandy laterite soil. The climate, people said, was unpredictable, with many recent memories of floods and drought. In spite of this, three-quarters of Jabarrah households farmed rice; others (and many rice farmers too) sold their labor mainly for *kharif* and *rabi* season agricultural work, brick-making and drumming at weddings. Two-thirds of the men of Jabarrah could read, but less than a third of the women could. However, traditional views about education and marriage, we were told, were changing – “literate brides were popular” – and literacy rates among girls were up to 38%.

Supporting People Farming in Rainfed Areas – By Building Social Capital



Jabarrah Village

rainfed areas – by building social capital. As Virendra Singh puts it, “Social capital is built by and within the community with a high degree of motivation and awareness campaigning from dedicated Community Organizers.”

Much social capital was already in evidence. About half of the village belonged to so-called scheduled castes and scheduled tribes. There were Kalindi and Sahi scheduled castes and social groups belonging to ‘other backward classes’ including Mahato, Gorai and Mandal. Some of the newly built social capital was also emerging, including a Vegetable Seedling Raising Group, a Nursery Raising Group and one aquaculture project was run by a village committee.

On Returning in 2003

In September 2003, we had the opportunity to return to Jabarrah together with the Gramin Vikas Trust (GVT), the NGO that had evolved from the EIRFP, and Ajit Banerjee, the branch manager from the Maubhum Gramin Bank in nearby Ludhurka. This time our party included Kuddus Ansary, a *jankar*¹ from Kaipara in West Bengal, Bhim Nayak and Ras Behari Baraik, fisher group leaders from neighboring Jharkhand state, and William Savage, who has been facilitating aquaculture farmers groups in the eastern region to contribute to policy change and service provision processes. We gathered in a small meeting hall constructed in Jabarrah with GVT support. From three fledgling groups had grown more than forty well-organized Self-Help Groups. In addition, support had now reached not only the villages in Jabarrah cluster (Jabarrah, Budhudih, Kulabahal and Panchudih), but also since 2000 to twenty-four neighboring dissemination villages.

¹ A *jankar* is a farmer who has received specialist training and who usually heads a farmers group.

The 'Doba System'

Seven of the Self-Help Groups were now conducting aquaculture. One group called Nabodaya had started since 1998 to rear fingerlings in seasonal ponds for stocking in larger ponds and tanks. We asked Nityo Gopal, the group *jankar*, about the experiences of the group over the last five years. He said the idea was introduced by EIRFP, and was called the 'doba system'. Shamlal Yadav, the State Coordinator for GVT in West Bengal, said that research on people's aquaculture options and the use of *dobas* and seasonal tanks had been conducted in collaboration with a DFID NRSP project called *Integration of Aquaculture into the Farming Systems of the Eastern Plateau of India* from 1996-2000. A street-play called *The Pond of the Little Fishes*, commissioned by the project, had been written by a local tribal playwright, Rakesh Rahman, highlighting the lives of villagers and the potential low-season village-based activity of rearing fish seed in *dobas*, as an alternative to migration. A *doba* is a small pond, a dug-out depression where water collects; many farmers have these near to their houses or amid their rice paddies.

Nityo Gopal said that in the town of Bankura, the group had purchased fish seed of India Major Carps (the three species of Rohu, Catla and Mrigal sold together). The fish, which eat slightly different pond organisms, also occupy different parts of a pond, effectively using all the pond space and resources; they are also popular food fish. The first problem had been to find other villages that also wanted fish seed because one delivery from the town was sufficient for 3-4 villages.

Only a Rich Man Will Own a Perennial Tank

Like many local families, members of the Nabodaya Group neither owned nor had exclusive access to large perennial tanks for classical fish rearing as extended by the Fisheries



Rubu Mukherjee (STREAM India Communications Hub Manager) discusses with Nityo Gopal about one of the seasonal ponds in Jabarrah used for nursing and raising fish

Department. "In rainfed areas," said Nityo Gopal, "Water is much in demand – only a rich man will own a perennial tank." They have several *dobas* and use five seasonal ponds for their business, which involves releasing seed and rearing them up in the *doba*, then in several small seasonal tanks to fingerling size. Depending on the rains, they use 2-5 *dobas*.

Before the fish arrive, the *doba* is made ready to receive them. At first this was done just by adding cow manure, but over time the group had adapted the system by adding lime, organic fertilizer, urea and superphosphate to create a rich soupy plankton of natural food organisms and by additionally feeding rice bran every 2-3 days. Nityo Gopal explained that the fish were easy to care for in the small *doba* but as they grew they quickly became densely packed together and needed to be thinned out into a seasonal pond, prepared in a similar way.

If We Get Rains in September-October, the Water Usually Stays until January

After five years of fish rearing, the group was now quite experienced and Nityo Gopal described some of their routine tasks with confidence:

We prepare the doba early, from December. Then as soon as the rains come we buy seed. We test water quality by using litmus paper. If the paper goes pink or red we add lime. We also use a plankton net with a collecting tube every 3-7 days (if the density of fish is high we do it more often). If the tube is full with plankton, we reduce the bran feeding. If it's low, we feed more and add more fertilizer. From April sometimes through June, as the fish density becomes high, we keep 'thinning out' the fish into other seasonal ponds. After that, we grow the fish up until September-October, when there's about ten fish to a kilogram. If we have Silver Carp or Common Carp, they will be about 250-300 g; the Rohu, Catla and Mrigal will be 50-100 g. Then if we get rains in September-October, the water usually stays until January. Then the Indian Major Carps are 250-300 g, and some of the Silver Carp and Common Carp are over 500 g.



A group member mixes cow manure with water before channeling it into the seasonal fish pond in the background heavily stocked with Indian Major Carps

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If You Need to Eat Meat, a Goat is for Many but a Fish Will Feed One or Two

“What is your main market?”, we asked. “We eat fish”, said Nityo Gopal, “It's only Rs 30/kg, whereas poultry is Rs 100/kg. If you need to eat meat, a goat is for many but a fish will feed one or two. We sell many products. Fingerlings vary in price; big ones early in the season go best. When we stock too many in a seasonal pond they become stunted. Everyone knows that when these fish are set out in a bigger pond they grow extra fast [a phenomenon which fisheries biologists call ‘compensatory growth’], so perennial pond owners will buy these from us for Rs 90-100/kg. Harvested fish we sell at the pond for Rs 20-30/kg. Big ones we sell for Rs 60-70/kg to pond owners to release as brooders.”

The Energizing Effect of Flexible Rural Credit

In May 2000, the Reserve Bank of India issued a circular of great interest to Self-Help Groups. It concerned micro-credit in the rural banking sector. The circular instructed rural development banks to work towards the launch of local financial products directly suited to Self-Help Groups. These would be in the form of rapidly sanctioned loans (within three days), not restricted to individuals but available to groups, requiring no collateral, with flexible repayment schedules where groups can repay any or all of the loan at any time up to a repayment period of three years. The annual interest rate of 12% compared to moneylender terms typically of 5-10% per month. The bank can sanction loans from as small as Rs 500 up to several hundreds of thousands. Now groups could nominate 2-3 people to visit the bank

with the group's 'Resolution' certificate (proof of the existence of the group) and details of their savings, their plan (including the amount of the loan requested), and the purpose for which it would be required. The bank would need a loan agreement to be completed and a document called a 'Demand Promissory' note. Any groups repaying 100% of their loan would be eligible for a second.

Self-Help Groups Raising Fish Have the Highest Savings among the Groups



A perennial tank with repaired bund owned by the village of Jabarrah

The Reserve Bank rules limit the loan to a sum not exceeding four times the value of the group's savings. Ajit Banerjee, the branch manager at Ludhurka, said that the Self-Help Groups raising fish had been especially successful and have the highest savings among the groups, and therefore tended to receive larger loans. For example, the Sidhu Kanu Fishing Group (named after a tribal hero) had assets exceeding Rs 40,000, over and above the value of the tank which they operated. In the Santal tribal village of Deoli, the fishing group Ainul Shalmet, with assets in excess of Rs 200,000, had just applied for a loan of Rs 30,000 for fish culture inputs including feed. The Nabodaya Group itself has assets including a 0.8-ha tank recently purchased by the group and had used a loan for the Rs 16,000 tank registration fee and to stock 2,400 fingerlings.

Loans are Now Considered by Groups as Assets to Utilize and to be Repaid

"A big change," said Ajit Banerjee, "Is that loans are now considered by groups as assets to utilize and to be repaid, not 'sticky' bad loans." About 80% of groups repay loans on a monthly basis (e.g., for pan *masala* sellers, bamboo crafts and small animal husbandry) and since August 2002, the Bank Manager comes at the end of the month with the Rural Development Officer. An example is the all-women Mahamaya Group which is involved in various income-generating activities such as grinding spices and packaging them for local sale. The group had taken a loan of Rs 6,000 for a grinding machine so that it would save both time and hard labor and also result in increased production. Each member of the group presently earns around Rs 500-600 per month.

One Can Save Only if One Has a Strong Will and It is Each Paise that Matters

A number of the Self-Help Groups have only women members. Thanda Mahato, a *jankar* and one of the most progressive women in the village, said that her group purchases seed from different sources and supplies it for stocking into village ponds that have a 100% share of all villagers. She also sells fish that her husband catches from natural sources or from village ponds and earns a good income personally. "I firmly believe that one can save only if one has

a strong will and that it is each paise that matters,” she said. She indicated that she has a bank deposit of Rs 40,000 in her name. There are five families in her group who do not have enough to eat and it is remarkable that they are supported.

Loans to fish culturists are generally repaid on harvest. According to Ajit Banerjee, the forty Self-Help Groups in Jabarrah currently have savings totaling millions of rupees and bank loans of hundreds of thousands of rupees. The sanctioned loans of the many groups are displayed on posters on the walls of the meeting room; a certain amount of peer pressure ensures repayment so that no one jeopardizes the system for others.

We are Happy that We are Listened to and Respected

Talking about changes, one woman said, “The months of the rainy season were a curse, when we would have no money and nothing to eat. We had to mortgage our utensils, bicycles or whatever valuables we had to get a loan from the *mahajan* at exorbitant interest rates. Today, we have no worries of the kind that we faced yesterday.”

In reference to group formation, Lalita Mahato, an elderly woman, said, “There was a time when we could not dare to talk to the men folk of the village not to think of strangers! Today, we can go to the bank and ask for the loan, approach the *Panchayat*² authorities and put up our grievances and can boldly face the challenges. We are happy that we are listened to and respected.”

The people we met were listened to and respected by all those who had traveled to Jabarrah. Kuddus Ansary was deep in conversation with fellow *jankars*, some of whom he had met previously at gatherings like *kisan melas* (farmers fairs). Ras Behari Baraik, a well-known fish seed producer from Silli block in Jharkhand, was impressed but also concerned to learn that the women’s group was losing about 30-50% of the seed during transport. He suggested that he could provide them with expertise to transport fish seed without mortality, as from small beginnings he now transports about 13-14 tons of fish seed annually. He also encouraged the group to think of seed production locally.



Kuddus meets with jankars from Jabarrah

Bhim Nayak, from Bundu block in Jharkhand, was greatly impressed by the progress that the Jabarrah women had made and wanted them to inspire the women in his village by their example. He invited them to visit his village. “I am also happy that not even one person in the village was drinking [alcohol], the bane of all development in my village,” he said. He showed his eye that he said was spared by God’s grace when he was attacked by a drunkard in his boyhood and had to have eight stitches.

² Local administration

To Implement Ideas that Just a Few Years Ago were Only Dreams

The patient support to self-selected Self-Help Groups – by EIRFP and now GVT Community Organizers – is the backbone of a development process in Jabarrah. As part of the process, now that the community is strong, the Community Organizer's role was withdrawn in 2001.



School in Jabarrah, 2003

This support together with appropriate, flexible technical research by farmers with DFID NRSP support – and much improved micro-credit opportunities guided by the Reserve Bank and implemented with careful vigor by the Maubhum Gramin Bank - has provided several key opportunities. The road to Jabarrah is still blocked after heavy rain but so much has changed. Opportunities have been realized for women and men to gain respect and a voice, to generate income, savings and security, to avoid seasonal

migration, to engage with the formal banking sector, and to implement ideas. A few years ago, these were only dreams.

For more information about building social capital, the Eastern India Rainfed Farming Project or the NGO Gramin Vikas Trust, please contact Amar Prasad CEO, or J S Gangwar Additional CEO, at GVT Noida, or Virendra Singh, Project Manager, GVT East, Ranchi, Jharkhand.

For more information on participatory aquaculture research conducted in Jabarrah, contact DFID Natural Resources Systems Program. Also see Malene Felsing, Graham Haylor, Gautam Dutta, Brajendu Kumar, Smita Shweta, A Natarajan, Gulshan Arora and Virendra Singh (2003) Carp Production in Seasonal Water Bodies in Eastern India. *Asian Fisheries Science* (16)(1): 1-15. This can be downloaded from www.streaminitiative.org

For more information about the 'Doba system' contact ghaylor@loxinfo.co.th Also see the video *The Pond of the Little Fishes*.

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