



# Small farms, big values

**Ranjan K Panda and Ajit Kumar Panda**

*Combining rice and fish farming*

Small farmers in Odisha's disaster struck areas are finding new ways to ensure food and nutrition security for their families, and to cope with climate change impacts. Vegetable gardens and rice-fish farming initiatives are helping farmers meet the required food, nutrition and income needs of the farm families.

**S**mall scale farmers, many of whom are themselves among world's hungry people, feed the world's majority. In fact, family farmers not only produce the major share of the food consumed but also help preserve the environment. They continue to farm inspite of facing a number of challenges – like high production costs, lower yields, unsupportive policies, climate change impacts etc.

Farmers in Odisha have to continuously fight against the natural calamities to sustain in agriculture. While it is drought that affects

farmers in districts like Nuapada, it is the recurring floods in coastal districts like Kendrapada which makes farmers vulnerable. Farmers are trying to cope with such climate aberrations with new initiatives like vegetable gardening and integrated farming. This article talks about how these initiatives are helping in sowing the seeds of hope among the small farmers in two different geographical regions.

## **Fighting drought through vegetables**

Banamali Behera of Dohelpada village in Khariar block of Nuapada district owns 2 acres of land. He cultivates vegetables in half an acre all through the year. A dug well irrigates his crops and he uses a traditional water lifting device (*Tenda*) for this. Each member of the family is involved in this farming and two hours of labour for the entire family reaps them vegetables that they can eat and sell. *"It takes at least one hour everyday to irrigate the field and another hour for other works like weeding and digging of soil at root points"*, says Banamali. *"The land repays your labour – more you work, more you get. Thanks to this farming, we not only eat*



*Brinjals for harvest*



*Banamali tending his kitchen garden*

*vegetables regularly but are also able to get some cash income by selling almost half of the produce in the nearby markets,” says Sanjukta, Banamali’s wife.*

Like Banamali, there are several small farmers, around 30 in number, practicing vegetable farming in their backyard, to support the family health, nutrition and income. *“This village is in fact an example for the region”*, says Ashok Pattnaik, a volunteer with KARRBYA and VIKASH, two local NGOs that encourage farmers in their fight against drought. The case is the same with nearby Modosil village as well.

These are villages where rain fed paddy farming has been highly inconsistent and people used to migrate to brick kilns of Andhra Pradesh and other places in search of job. With increased droughts and crop failures, migration has almost become a regular feature. However, the villagers have successfully fought that out with

**Apart from adding to family nutrition, the integrated farming model has helped farmers improve their financial position.**

vegetable farming. And the two NGOs have been trying to help the villagers linking them with appropriate government schemes too.

### **Ponds of fortune**

In Kusumkhunta village of Boden block in the same district, the stories of Chhatar Majhi and Ujal Majhi are worth citing. Both these marginal farmers depend upon wage work for a living and possess very small pieces of land of their own. The rain fed small holding is not enough to meet even basic food requirements. However, things changed for the better, a year back, when these two farmers were selected by the Palli Sabha to get support under the MGNREGS, a government employment generation programme, to dig farm ponds. They received support of twenty thousand rupees each, under the *Mo Pokhari Yojana* (farm pond scheme) on their lands.

Out of the twenty thousand rupees, Chhatar and Ujal got fifteen thousand and fourteen thousand respectively, after deduction of the costs towards material and collateral expenses. Chhatar dug a pond in four decimals of his 70 decimals of land and fenced the entire plot to cultivate vegetables. He cultivated onions in 45 decimals, tomato in 10 decimals and ladies finger, sunflower and some other local vegetables on the embankment of the pond. *“We ate vegetables throughout the year and sold the rest to earn fifteen thousand rupees this year. I don’t have to migrate to far off Andhra again,”* says a visibly happy Chhatar.

Ujal too, now irrigates 50 decimals of his farm to produce onion. He added *Arhar* farming on the farm bunds. Ujal claims of earning fourteen thousand rupees this year and has stopped migrating out. Both these small farmers have dug the ponds using labour of their family members. It means, the wage labour they earned from MGNREGS came to the family itself while the assets were created for themselves. Another eight small farmers of the village have followed the suit. The village is now a motivation for others in the locality.

As Ashok Pattnaik informs, kitchen gardening has been an age old practice of farmers in this area. In the past, every household had a vegetable garden in their backyards, to fulfil the family requirement of nutrition. In due course, the practice ceased, labour shortage being one of the prominent causes for this change. Now, with the efforts of the NGO, in every village one can find at least 20 to 30 percent families engaged in backyard vegetable farming. Most of them also produce marketable surplus which meets their cash needs.

### **Integrated farms of rice and fish**

In Padmanavapatana village of Rajnagar block, Kendrapada district, recurrent floods have restricted farmers to paddy cultivation. But now, farmers have found a new support through a multi-country initiative named ‘PARIVARTAN’ supported by Concern Worldwide and European Union and being implemented by RCDC, a local NGO partner. Small farmers like Kanchan Samal have been supported to add fishery and vegetable farming in their small paddy fields.



*Kanchan with her vegetables*

Kanchan was supported with 2000 fish fingerlings and necessary fish feeds, along with vegetable seeds and plants. In June 2013, she began preparing her 50 decimal backyard farm for setting up integrated farm. The piece of land was converted into a crop field cum pond where both paddy and fish can survive. An inlet and outlet for water was created so that excessive water can be drained out while the fishes stay inside the field. Farm bunds were converted into vegetable garden. Organic manure was used for both crop field and vegetable garden.

Kanchan is now a proud farmer with her income from the small backyard growing by almost two hundred percent, just in an year's time. *"I was earning about five thousand rupees from paddy. This year I have got eight thousand from fish and another three thousand from selling vegetables besides the income from paddy"*, says Kanchan. *"And you see, we did not have to buy vegetables and fishes for the family,"* adds Kanchan. She has helped her children buy bi-cycles, met their education expenses and has helped the family in many other ways. Janmejaya, a field staff of the local NGO says, *"All the small farmers who have been supported under this component have reaped similar benefits. Apart from adding to family nutrition, the integrated farming model has helped farmers improve their financial position."*

Saroj Dash, Technical Coordinator (Climate Change) with the Concern Worldwide, finds these initiatives to be very effective. *"Small farmers in cyclone and flood affected areas in coastal*

*Jagatsinghpur and Kendrapada districts have successfully adopted this composite farming model which helped them address the impacts of the disasters by creating opportunities to supplement family food, nutrition and income. These models have proven effective not only in the Indian coasts but also in Bangladesh. Rice - fish farming is helping to reduce the emissions from paddy fields to the extent of 23 per cent, addressing the larger issues of climate change"*, says Dash.

All these farmers have fought disaster and poverty successfully by ensuring food, nutrition and income security. Well, they may be poor money-wise, but have made a giant stride with their small possessions. Evident enough, land holding however small, matters in addressing the ills of climate change.

**Ranjan K Panda**

BASERA, R/3-A-4, J. M. Colony, Budharaja  
Sambalpur 768 004  
Odisha, India  
E-mail: ranjanpanda@gmail.com

**Ajit Kumar Panda**

Co-Conveno  
Water Initiatives, Odisha