

## CASE STUDY - I

## Karnataka farmers 'go back to roots' with traditional seeds

### KARNATAKA

**B**ada Bagh, the 15-acre farm was a gift from the Tipu Sultan to Syed Ghani Khan's family; a sixth-generation farmer living in Kirugavulu village of Mandya District in Karnataka. Today, the farm is home to 850 varieties of rice, 120 varieties of Mangoes and other fruits; a hub for biodiversity enthusiasts and seeds savers. Syed thanks Sahaja seeds, a brand of Sahaja Samruddha, a Karnataka based farmer producing company, for providing seeds for some varieties and the technical support they extended.

Up until five years ago, Nagappa, a farmer of Makari village, Haveri district, relied only on commercial crops which required excessive use of chemical fertilisers. He even grew BT cotton. He soon realised he would not make much profit. Fed up, Nagappa decided to search for alternatives. He learnt of the millet seed bank set up by Ishwarappa Banakar, a farmer of Hireyadachi village of Hirekerur taluk, at his house. Inspired Nagappa participated in the field visit to Ishwarappa's field. He was thoroughly impressed with the variety of finger millets he saw. Without wasting much time, Nagappa began searching for seeds and Sahaja Samrudha helped him. Soon, he sowed 31 varieties of millets.

Sahaja seeds, maintains a seed bank for heirloom seeds; varieties developed by farming communities which are well suited to the local climatic conditions. Sahaja took up this task to save varieties that are facing obliteration, in the face of mono cropping taking over agriculture.

The seeds are grown following the guidelines set by the National Programme for Organic Production -

being 100 per cent organically grown. Though a brand, Sahaja does not claim ownership over the seeds. The farmer producing company's website claims that the seeds are in 'public domain'. So, anybody can borrow seeds from the bank and use it, even work towards improving the variety.



The brand has helped farmers from different parts of Karnataka to tinker with the heirloom seeds and even develop new varieties; better suited for their local conditions and market needs. The examples stated above are two such farmers. Through a network of enthusiastic farmers, Sahaja maintains a repository of heirloom seeds for cotton, paddy, millets and even vegetables.

*(This case study is sourced from Sahaja Samruddha - a Karnataka based farmer producing company).*

## CASE STUDY - 2

## Seed Saver Non-profit Helps Tinkering Farmers in Bhandara

BHANDARA DISTRICT, KARNATAKA

Maruti Maske, a middle-aged farmer from Vakeshwar village of Bhandara district turned to growing Dubraj; a traditional paddy variety in 2018, having learnt that its scent and thin grain is preferred by local buyers. But the seeds were hard to find. Maske turned to Gramin Yuva Pragatik Mandal (GYPM) for help and borrowed seeds for 2 acres of land.

Vina Amrut Kumbhre is a 34-year-old widowed tribal farmer, trying to sustain by growing vegetables in her backyard; 2 acre of forest land claimed under Forest Rights Act. In her backyard, Vina grows rare-to-find gourds and beans. Her love for rare vegetables like different kinds of okra brought her in contact with GYPM, a Bhandara-based non-profit.

Radhelal Wadve is a farmer from the Gond tribe. The septuagenarian farmer was the only one in the block to have preserved seeds of Hiranakki; a traditional paddy variety characterized by a black dot on its tip. He continues to grow the crop for his household consumption. In 2014, he contributed his seeds to the seed bank being created by GYPM for promotion of traditional land races among farmers.

Avil Borkar, a veteran agriculturist and activist founded Gramin Yuva Pragatik Mandal, a Bhandara based non-profit in 1987. Since the inception the organization has worked towards improving

livelihoods of farmers, especially tribals living in Gondia, Bhandara and Chandrapur districts of Maharashtra, through projects like Wadi.

Starting 2014, GYPM initiated a programme to revive traditional land races in Bhandara, Gondia and Chandrapur districts. The organization also received help from Maharashtra Gene Bank Project; a State Government programme aimed at preserving biodiversity.

During the initial phases of the programme, GYPM collected seeds of 40 distinct landraces from farmers. Of these, two paddy varieties, one pulse variety and two oilseeds varieties were selected for promotion, looking at the demand in the market. Over the four year of GYPM's engagement, about 100 farmers experimented with growing seeds and thus learnt intricacies of seeds production; including DUS tests – the standard procedure of seed certification prescribed under PPVFR Act.

By 2018, it was noticed that some farmers, obtained higher yields in their Hiranakki farms. The yield went up from 800 kilograms per acre to about 1300 per acre.

*(This case study is sourced from GraminYuvaPragatik Mandal, a Bhandara based non profit).*

## CASE STUDY - 3

## Odisha Farmers 'Celebrates' the Bounty of Traditional Seeds

BARGARH DISTRICT, ODISHA

Dabarudhar Majhi, a farmer from Bargarh district of Odisha took to cultivating traditional landraces. His initiative has drawn more farmers to experience the benefits of these native seeds.

### Bargarh District

Aspiring to earn a living, Dabarudhar Majhi a farmer, in his thirties, from Bargarh district migrated to Gujarat. Having faced abuse at work, he had no option but to return home.

Looking for livelihood options, he got in touch with Ahinsa Club; a Bargarh based non-profit working towards saving traditional landraces. Convinced with the club's approach, he took to cultivating traditional landraces using organic methods exclusively.

It's been seven years now since he started cultivating traditional crops. He has a treasure that includes 60 varieties of rice seed, 8 varieties of millets, 20 vegetable seed and 5 oil seeds and seeds of other local varieties; a total of 106 seeds.

Soon, people from his community too adopted the practice. Since last two years, in association with the club they conduct 'Desi Bihan Parab' or Indigenous Seed Festival in their village.

**Ahinsa Club** has been saving heirloom seeds since the past 18 year. The Club has been organising Desi

Bihan Parab since 2008 to create awareness among farmers about the benefits of heirloom seeds. The festival was instrumental in making agricultural scientists, Government department and farmers aware of the benefits of indigenous seeds. The Club was also awarded the **Genome Saver Award** of Rs.10lakhs at Champaran in Bihar, as an encouragement of its work. .

Now Ahinsa Club stores 400 varieties of indigenous seeds which includes 170 paddy seeds, 90 vegetable seeds-, 40 pulses, 26 millets, 35 oil seeds and many varieties of country bean, tubers etc.

*(This case study is sourced from Ahinsa Club – an Odisha based non-profit).*

#### CASE STUDY - 4

## Gaining Control over Heirloom Seeds to Keep them Free

CHANDRAPUR DISTRICT, MAHARASHTRA

A Hyderabad based think tank emphasizes on the need to document the breeding process of traditional cultivars to evade hijacking from profit-making seed corporations.

HMT, a scented paddy variety, is fast gaining market in Vidarbha region of Maharashtra. It was developed by Dadaji Khobragade, a farmer from a backward community of Nagbhid Taluka of Chandrapur district in Maharashtra. A kilogram of this variety fetches upto Rs. 60.

Byadagi is a deep-red, long chilli from Karnataka, which is thin, wrinkles on maturity but isn't very pungent. This chilli has three variants, Kaddi, Daggi and Dyavanoor – all developed by farmers from Byadagi; a small town and headquarter of Haveri district in Karnataka. The chilli's yield of 20 quintals per acre is a good source of income for the farmers here.

Bhoot Jolokia, a tiny, plump chilli from Assam, has earned the name of 'ghost pepper' across the globe; for its extremely pungent flavour. Nobody knows from where the variety came. Perhaps it grew in the

forests and became a cultivated variety due to its unusual flavour.

Centre for Sustainable Agriculture (CSA) – a Hyderabad based think tank, documented the characteristics of these varieties with the aim of keeping them out of control of seed corporations seeking to gain control through patents. In this process, the farmers are deskilled and become passive consumers of expensive industrial products including seeds, sold by profit-making organization. This raises the input costs significantly, making agriculture unsustainable for small and marginal farmers.

CSA suggests that an Open Seeds Foundation be constituted to document the characteristics of heirloom seeds and make them available for farmers and institution who seek to use them. They may use them for cultivation or for developing better varieties from them. After all, humans domesticated over 300 species plants/trees and 72 animals to meet their needs. But in the last 3,000 years, despite technological advancement in last two centuries, not a single species has been added to the list of domesticated biota. It is time, farmers are given

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opportunity and recognition for tinkering and developing new varieties; something that even progressive legislations in India such as PPVFR Act (Protection of Plant Varieties and Farmers' Rights Act) and BDA (Biological Diversity Act) fail to do.

CSA comments that both these legislations are basically located within the IPR framework, which primarily seek to uphold breeders' and researchers' rights, while granting the farmers residual rights.

*(This case study is sourced from Centre for Sustainable Agriculture – a Hyderabad based non-profit).*