

## Browntop Millet Brings Hope To Karnataka Farmers in Mandya District, Karnataka

**P**uttaswamy, a farmer from Haleboodanuru village of Mandya district, says, *“Millets don’t require much water and are easy to cultivate compared to paddy. I sowed Korale (Brown top Millet) this time but did not expect much yield because of intense summer heat. But to my surprise, the harvest was good and the crop also withstood the drought. Also, none of these farms were affected by pests or diseases”*. He remembers millet being the staple food in Mandya district, but nowhere to be found now. Maybe, rice and wheat replaced it completely in the last few decades.

For C.P. Krishna, farmer from Gulurudoddi, in Mandya district, experiences have been similar. *“Hardly any expenses were incurred, as I had to purchase just seeds. There was no need for fertilizers or pesticides. Now I am convinced that farmers may benefit from these hardy crops, to win over shortage of water”*.

Raghu of Hendore village, Sira taluk in Tumkur district earned the name ‘Korale Raghu’ for his attempts to popularize Korale – the Brown Top millet. Apart from cultivating Korale, Raghu is also engaged in supplying seeds, value addition and marketing. He says, *“Korale cultivation is cost effective. Even with minimum investment, farmers can earn good returns.”*

Korale is gaining popularity in some parts of north Karnataka as well. Many farmers in various districts of Karnataka have taken to cultivating the crop.

According to Sahaja Samruddha, a Karnataka-based Farmer Producing Company, a subsidiary of which also shares Korale seeds with farmers claims that in 2019 at least 2000 farmers have taken to cultivating the ‘lost’ crop across Karnataka.

This new-found hope of water-deficit areas – Korale or Browntop millet, commonly called signal grass is native to India and flourishes in the dryland tracts of Karnataka-Andhra Pradesh border.

However, there are some challenges that the cultivators need to overcome, to get better incomes from cultivating the crop. Processing is the major road-block; there are no machines available in the local processing units which can break open the hard outer cover of the Korale grains. Earlier, grinding stones were used to separate the grain from the seed. Today, grinding stones have almost disappeared and Korale seeds are processed in the flour mills that process finger millet. Small size of Korale grains makes processing difficult in machines made for bigger grain size. As a result, farmers get just 40 to 50 kg of grain from one quintal of Korale seeds. Even after processing, the bran is left on the grain which needs to be disposed through winnowing. The size of Korale rice is also very small and separation of stones is difficult. This processing bottleneck has created a need for adoption of suitable technology. Many are of the opinion that difficulty in processing was one of the reasons why people stopped cultivating brown top millet in favour of groundnut; a crop which is easier to process and has a good market.

## What is the Average Yield in Millets Under Traditional Method?

Koraput enjoys the reputation of being Odisha's Mandya or Ragi (finger millet) capital, as the crop is cultivated in large tracts of land and is also the staple diet of tribals living in the region. Inability to update the farming methods, led to decline in yields. Most farmers then chose to shift to paddy cultivation, a crop with assured incomes, in the wake of the Public Distribution System.

Enrolled with Odisha Millet Mission, Bijaya Muduli a farmer from Raising village of Raising Gram Panchayat in Nandpur block adopted millet cultivation through system of millet intensification, over 2.5 acres of his land. Seeds were of Karnataka variety; a traditional landrace. Calculations after crop cutting done under supervision of Block AAO and Scheme officer revealed that in that season, Bijaya grew 11.6 kilograms (9.6 kg in dry weight) in 25 square meter of land. According to this calculation the yield comes to 32.80 Quintals per hectare.

### What led to the increase?

SMI or System of Millet Intensification is based on the principles of SRI, which entails transplantation of a younger sapling in the farm, with greater distance maintained between two consecutive saplings. In the pre-transplantation process, seeds are treated with Jeevan amrut (a mixture of cow dung, cow urine, and nutritious organic material) before they are raised to

seedling stage on the nursery bed. Seedlings were transplanted in field after 15 days, instead of 30-45 days as done in traditional method. Also, three weedings are carried out after every 10-12 days. After each weeding, Jeevan amrut is applied and a log is rolled over the plants. The rolling bends the stalks so that new tillers crop up. Presence of more tillers intensifies the roots, helping the plant to take up more nutrients from soil and grow more produce.

This method also helped Raghu Sisa of Mangrel Village in Raising Gram Panchayat of Nandpur Block, who took to millet cultivation on 1-acre land. Seeds he used were of Bhairabi variety. Based on crop cutting done under the supervision of Block AAO and Retired Scientist OUAT, finger weight yield from 25 sqmt was 11.5 kgs and fresh grain weight was 8.2 Kg. This was dried for seven days and threshed to collect grain. Dry grain weight came out to be 7.2 kgs. This calculation gives the yield of 28.80 Quintals per acre.

Many benefited from adopting this method, earning a little more from the surplus produce.

*(This case study was sourced from Pragati – an Odisha based non-profit).*

## The Religious Way Promoting Millets

Local non-profits, part of the Odisha Millets Mission set up stalls during festivals to popularize millets.

Kandhamal is one of the millet districts in Odisha among the seven millet districts. On the auspicious day of Rath Yatra (June 2017), Dr Brunda D,

Collector & District Magistrate, Kandhamal District inaugurated the Special programme for promotion of millets in tribal areas for Kandhamal District. The programme was attended by the district officials from agriculture department, horticulture department, NABARD, Panchayati Raj Department.



*Collector and District Magistrate inaugurating the Programme*

A stall was put up to rouse interest about millets among farmers in the district. As part of the celebrations, attendees were served with prasada (sacrament) made from millets. ATMA, with support of Programme secretariat and programme facilitating agencies of the Kandhamal District, also put up a stall to display the variety of seeds that the farmers can choose from.

Ahinsa Club, a Jharkhand based NGO was roped in as a resource agency for preparation of hot cooked millet items. Millet biscuits and other bakery items prepared by Programme Secretariat (WASSAN) were also served. Along with this, 60 varieties of indigenous seeds were displayed by Ahinsha Club which included; Millets, Pulses, Vegetables, Rice etc.

Jagruti, a local NGO put up a stall for processed ragi flour; while NIRMAN another local non-profit showcased millet seeds and millet recipe booklet.

Millet products were highly appreciated by the Collector & District Magistrate. Collector & District magistrate suggested starting a new biscuit making unit in Kandhamal district, so that supplies can be sent to ST SC Welfare hostels. Programme Secretariat agreed to submit a proposal for the same. About 500 people visited the stall and enquired about the millet products. This event generated considerable interest on millet consumption in the Phulbani town. Event was also covered widely in the media.



#### CASE STUDY - 4

## District Level Agriculture Products Fair In Kandhamal District of Odisha

"Reviving millets can ensure nutritional security of the Adivasi households", quipped Shri Damodar Raut, Minister, Agriculture, Government of Odisha. He was the chief guest at the district agriculture products fair organised in Kandhamal District by ATMA on July 5-6, 2017. Collector & District Magistrate, Deputy Director Agriculture, Deputy Director Horticulture, and Chief District Veterinary Officer also attended the event. A total of 2000 people attended the fair, including farmers and locals. The fair was organized by local non-profits who are working in tandem with the state government in promoting millets through

Odisha Millets Mission and was aimed at sensitizing farmers about the latest technologies in agriculture.

A millet stall was set up at the fair by the programme secretariat with support of Facilitating Agencies of the programme. Multiple millet products and local seed varieties were displayed by FA partners i.e. Jagruti and Agrabamee. DDA Kandhamal shared the progress of the millet programme in the district with the Shri Damodar Raut, Minister, Agriculture and Collector & District magistrate, Kandhamal District.

Millet stall received positive responses from the attendees. Over all, the agriculture products fair was a huge success and received great response from the farmers.

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*Hon'ble Minister, Agriculture, Fisheries and Animal Resource visited Millets stall in Kandhamal on 5th & 6th July 2017*