

# Proceedings of the Workshop on Conservation of Rice Diversity & Marketing of Organic Rice for Livelihood Improvement of Smallholder Farmers

Venue: IMAGE, Bhubaneswar

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Organised by



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The state-level workshop titled “Conservation of Rice Diversity & Marketing of Organic Rice for Livelihood Improvement of Smallholder Farmers” started with welcome speech by Mr. Prasant Mohanty, Executive Director of NIRMAN. Mr. R.S Gopalan, IAS, Director of Dept. of Agriculture and Food Production, Govt. Of Odisha, Dr. Jafran Keshari Roy, former Joint Director & Renowned Rice Scientist of CRRRI, Cuttack Odisha and Mr. Natabar Sarangi renowned Organic farmer and conservator of



365 varieties of Rice jointly inaugurated the event by watering the plant. Followed by, Mr. Prasant Mohanty addressed the need for the workshop and rich rice diversity of Odisha. Among 30,000 varieties of rice, collection of two-third was limited only to Chhattisgarh and Madhya Pradesh by Dr. Richaria of which 1600 varieties were high yielding. However, indigenous rice diversity has seen a stark decline over a period of few decades, mainly due to post Green revolution. Conservation of indigenous rice diversity in tandem to explore the marketing opportunities for organic rice has immense potential to benefit the small and marginal farmers and balancing the critical state of Indian farmers and plant genetic erosion.



**Mr. Bhabani Das**, of SWISSAID chaired the forenoon session. **Mr. Natabar Sarangi** elaborated the Rice Diversity of Odisha and shared his experience of conserving local rice varieties. He reiterated the rich diversity of rice in Odisha being the home for 35,000 indigenous varieties. Though, two-third of India’s population eats rice but the rice-diversity has declined significantly owing to Government’s focus on promotion of Hybrid rice. He denied the notion that indigenous varieties give poor yield.

*“Now farmers understand that potential indigenous varieties minimal yield ranges 15-16 quintal per acre in low land, 20-25 quintal per acre in medium land, 10-12 quintal per acre in upland.”* Environmental pollution, soil degradation, and consumer health can be restored by not applying synthetic fertilizers and converting to organic farming practices. In states like, Punjab, Haryana, Western-Uttar Pradesh where soil quality has deteriorated to such an extent that they are being advised not to go for any other crops, except pulses. In spite of existing turmoil in agriculture sector, U.S. Corporatism has an influencing role in formulating the Agri-policy of India. Currently, Govt of India extends rampant actions to East Indian States like Assam, West Bengal, Odisha to bring in second Green Revolution., so we need to educate the farmers to go for indigenous rice. A large quantity of organic manure is a

bottleneck issue for a farmer to go for organic farming, but if he strive to manage for the first 3 years, from fourth year onwards the yield increases as the soil enrich.

He shared his experience of being an organic farmer that the basic technique of organic or sustainable farming- leaving 10-15 inch of stalk of paddy in the field, which rejuvenates the soil. Cow urine is the best treatment for pest and diseases attack. For the past 15 years, organic farming with indigenous varieties of rice sought is the only answer to save farmer, consumer, soil, water, and environment.



**Mr. Syed Ghani Khan**, an organic farmer conserving indigenous rice and mangoes hails Karnataka shared his experience of conservation. Starting with just 40 varieties of indigenous rice in 1996 has elevated his on-farm conservation collection to more than 500 varieties. When he first involved in rice conservation in 1996 with 40 varieties, he discovered two new varieties popping out from the field, which was documented and published with the help of two rice scientists. Agriculture University of

Karnataka gave support for characterization and other documentation assistance, while Sahaja Samrudha a NGO tapped the marketing opportunities. His collection of rice varieties comes from Karnataka, Odisha, Andhra Pradesh, Maharashtra, West Bengal, Kerala and Tamil Nadu. Mr. Krishnaprasad, Director of Sahaja Samrudha exhibited few slides on Ghani's work and expressed how he has inculcated the culture of learning of local bio-diversity among the school children and involved them in collecting data, and also shares seed to neighbouring villages.

**Dr. JafranKeshari Roy**, former Joint Director and Rice Breeder of CRRI (Cuttack, Odisha) shared his academic and professional experiences on collection, conservation, crop improvement, selection and marketing of indigenous rice varieties. During his retirement stage, there were 21,000 indigenous varieties of rice in the dept repository. He stated that Odisha has total 6700 varieties of indigenous rice that include collection from CRRI, OUAT, NGOs and farmers.



He opined that, most of the varieties have cross-pollinated over time due to widespread cultivation of HYVs in order to tackle food security problems. The major challenge would be global warming, climate change, drought, flood, genetic erosion, sustainable food production, and livelihood security. He strongly alleged that the first green revolution focused on increasing production (Through Fair-Weather Technology) mainly in irrigated areas, and the second Green revolution focused on Food Security (Through all/Adverse

Weather Technology) especially in rain-fed areas. Though the Green Revolution has created self-sufficiency in food grain production but it has side effects like degradation of bio-diversity, environment pollution, deterioration of soil health, and decrease in quality of seed. He expressed the perspective of overall production did not increase livelihood security and a respectful life for farming community. His suggestions to alter breeding strategy to enhance livelihood security are as follows,

- Development of small farmer friendly HYV under low input/fertilizer condition
- Pure Line Selection (PLS) of important traditional varieties for enhancing yield potential.
- Pure Line Selection and organic cultivation of specific traditional varieties for enhancing yield and quality.

He commended Mr. R. S. Gopalan, Director of Agriculture and Food Production for taking steps for registration of farmers' varieties. He suggested that there should be identification of gene treasuries, unexplored and under explored areas, conservation of the varieties, collection and adoption of modified breeding strategies for development of low-input efficient HYVs for higher adoption and increasing livelihood security. Most important is to encourage farmer and community for conservation of traditional types and better support price for organic/traditional varieties. He made with some concrete recommendations for conservation of rice diversity which is as follows:

- Identification of widely grown local varieties, for pure line selection for yield enhancement preferably under organic farming.
- Farmer participatory programme may be widened for rejuvenation and in-situ conservation of traditional types.
- For achieving actual Green revolution in Eastern India, rice varieties giving higher yields under low fertilizer level and poor soil in rain-fed condition are required.

At last, he recalled the call of Lal Bahadur Shastriji to leave a meal once in a week when India was importing foods. In same way, he made a request – let us use organic rice once in a week, so that we will create huge demands for organic rice and this will create a very positive stage for farmers practicing organic farming.



**Mr. Sibaprasad Sahoo** of Amhinsa Club, Baragada shared his experience on conservation indigenous variety of Rice. Initially, people discouraged his intent of conserving traditional varieties and passed disheartening comments but his efforts have now started to get recognition among the community. Now, his group has been able to conserve 75 local varieties of paddy,

successfully. He also shared their experience of drought resistance variety of indigenous rice. He admitted that the local paddy variety is capable of surviving at drought times in their operation areas. He also highlighted the issues confronted while marketing the indigenous rice variety.

**Mr. Simanchal Nahak** of Rushikulya Rayat Mahasabha, Ganjam then shared the level of hardship faced by the farming community due to subject in context. He pointed out that the Govt. is not considering paying the Minimum Support Price for conserving indigenous rice variety and organic produces.



**Mr. Ramesh Chandra Naik**, shared the strides of NIRMAN in untrodden areas with 167 farmers for conservation of indigenous rice variety in 10 villages covering 2 Gram panchayats in



Nayagarh district since last 3 years. He emphasized there is a common perception that indigenous variety gives low yield but from NIRMAN's experience indigenous variety with organic SRI gives 18 quintal per acre in average which means 4.5 ton per hectare. He also commented that NIRMAN has developed producer's group and exploring market linkages for organic rice.

Recently, it has undertaken nutritional analysis of 5 indigenous variety of rice and found 2 variety has high iron contents. In future, it will help farmers group in linking them to consumers to market of their organic rice and other organic produces.

**Mr. Harmohan Patra**, an organic farmer under the purview of NIRMAN's groundwork, shared his understanding of conserving indigenous rice through organic practices. He admits that he spends less time in farm compared to farmers practicing conventional cultivation practices. In addition, he reaps good yield from pulses because of the organic way of cultivation. There is no medical expense for his family where as farmers practice non-organic way spends a lot in medical treatment. At the outcast of my success, farmers have slowly started showing interest in local seeds and started cultivating indigenous rice variety, organically.



**Mr. R.S.Gopalan**, Director, Dept of Agriculture and Food Production, Govt. Of Odisha reiterated that there are several indigenous varieties, which have ample potential for high yield, but lack of attention derails the whole





concept. Few years ago, there was a survey of total local varieties available with farmers. It was found that there are 700 varieties in Jayapur and 2000 variety in the entire state of Odisha. But this indicates the importance of conservation of these varieties. Since two years, we have collected and conserved 851 varieties with pure line selection.

He enlightened the farmer conserving indigenous crop varieties about the registration and release of new variety. He also disclosed the technical difficulties faced by farmer in the process of registration and advised them to go through PVC & FRA framework. He insisted the scientific community to be more open-minded in the case of taking forward the research activities in desi crop varieties. The attitude of scientists should respect the concerns of farmers and give them the local varieties for multiplication with a condition to return equal amount of seeds to the dept. In 2001, Govt. of India enacted Plant Variety Conservation (PVC) and Farmer Right Authority (FRA) and created an authority for registration of local variety. He also shared the inordinate delay in the context of registration, drawback in validity of registered variety and state level ownership of the variety. If someone wants to derive commercial benefit out of it, then the share of profit should come to the farmers' group who registered it. He ended his speech saying, 'research planning is in process on characterization of desi variety,' and requested the cooperation of all the farmers in implementing the focused points.

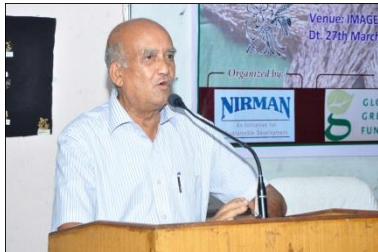
**Mr. Bhabani** Das from SWISSAID summarized and shared the observations of the session that Mr. Natabar Sarangi and Mr. Roy all talked about yield. Replying to their specific subject, whether yield increase or decrease, it all depends upon how extensively the soil had been used. In Punjab, the soil has been used extensively, and the moment they switch over to organic, the production will go down. However, in case of tribal areas, where the soil is not much used to chemical fertilizer, in switching over to organic, the yield will not go down, rather it will augment the production as the micro-bacterial activity increases. The technology and science is fine. But, commercialization of technology is dangerous. To address iodine deficiency, iodised salt promoted and the price has soared up in unprecedented rates and few companies simply benefitted. This kind of situation has come to agriculture as well. We need to keep vigilant of the development.

Mr. Bhabani highlighted budget allocation for revival of agriculture after green revolution in Punjab. Without taking into account of learning from first green revolution, Govt. launched second green revolution in east India states.

Mr. R. S Gopalan analyzed the contribution of agriculture to GDP. He opined that in 2011 Agriculture and Allied sector contributes 15% to GDP, whereas in the same year 55% of populations depend on that sector. So it is clear that to every 100 rupees, 15 rupees go to that 55% of population and the rest 85 rupees go to the 45% of the population. It is asymmetrical. Agriculture is not at all profitable. He highlighted the tradeoffs between GDP and population

that is severing the benefits to the farming communities. At that time, the total GDP of India was 1 crore, so basically 3% of GDP goes to 30 crore people. This is the inequality. He said that unless we don't extend MGNREGS, food subsidy through PDS, then it'll lead to serious situation.

The forenoon session was windup for lunch break.



**Mr. Shishir Parija** explained the question raised by Ms. Anjali Patnaik on pure line selection. He has found an easy method of doing that. He said that all grains are not seeds, though all seeds can be grains. Just pick healthy dhankendas (panicles) and then only take upper one-third portion that are good for seeds.

Mr. Krishna Prasad conducted the afternoon session. At first, participants were asked to pen down the known local paddy varieties, availability and contact details to take in account of number of varieties and quantity in store.

**Mr. Debalu** from "Sanjeevani" an organization working in ArakuValley, Vishakhapatnam, A.P., shared his experience of conserving rice variety and other crops like millets. Since 2000, the entire work focuses in areas, which are close to Nandapur of Koraput District. They used document the characterization of different varieties of crops. This initiative by the community received an award of 10 lakh rupees from Dept of PVC & FRA, Govt of India. They are able to market their products. They are sending their products to organic outlets in Vishakhapatnam, Kisan Bazar in Andhra Pradesh and they have linked up the farmers with market. It started with 2 farmers in 2000, now it has reached to about 450 farmers and their weekly turnover is 6 lakh rupees. So now NIRMAN is taking the market initiative, and he wishes all the success to the farmers.



**Mr Krishna Prasad** addressed that in every workshop the warmth of the discussion lost its spirit in due course. Only conservation of seeds will not yield profit to the farmers. It is possible only when we link farmers' product to the market. Branding will make marketing easier. His presentation displays the different varieties of rice and its innate mythology such as, Nerguli (drought-tolerant), Saline paddy variety to be linked along with the marketing strategy. He accounts that Sahaja Samrudha has been able to map 360 varieties of rice, out of which 131 varieties are available with the farmers now.

He took an example from his wide range of different farmers. Mr. Nandish is a lazy farmer but doing easy farming. He came out with some innovative ways to prepare 100 varieties of green

manure before cultivating paddy. He also made a record paddy yield of 32 quintals per acre, for which he was appreciated by the Govt. of Karnataka and sent him to Europe and Korea for exposure visits. He insists on knowledge sharing among the rice growers to discover, explore and excel in the chosen field. He added that the marketing strategy needs to focus on selected community to sustain at the initial stage, likely software professionals. Nutrition qualities need to be identified in spite of raging competitive forces and to tap the particular section of people. Rice rich in iron, which is good for pregnant women. This is a remedy. Nutritional ratio, attractive photographs, study materials are quintessential for effective marketing and to gain the confidence at first sight.

Mr. Bhabani Das from Swissaid questioned, Is it sustainable if only 10-15% of premium goes to the farmers?

Ans: In the inorganic produces scenario, market and demand is scattered. The price of the goods should be of a centralized rate. Wherein, in the case of organic produce, the less input costs and yield is less so gradually the situation will change to an extent where farmer will derive the maximum share on mutual consensus. By creating a farmer-owned marketing platform where he will decide the reasonable and profitable rates for the produces. Policy advocacy is vital that need to in place to see a real progressive change.

**Mr. Praveen** from ASHA shared the ways to organize a Rice Mela, the essential elements during preparation stage, cost-effective advertising modes, consumer-friendly packaging and selection of varieties, which will receive response among the public. He insisted on popularizing the varieties that has very good health benefits at the initial stage to initiate the cause for example- Red rice, Medicinal rice, Diabetic rice and Black rice. Follow up action plan was discussed and an Organic Mela was planned to be organized in Bhubaneswar in May or June, 2013.



Mr. Prasant Mohanty gave the valedictory address. He said that many learning's from Sahaja Samrudha, Karnataka in the one-day workshop will help us to experience and tap the marketing advantages in organic Rice.

There was exhibition of more than 1200 variety indigenous rice variety by farmers and NGOs and Govt. of Odisha in the outside of the conference hall of IMAGE. These varieties were brought by NIRMAL, SahajSamrudh, Sanjeevani and Ahimsa Club and State Seed Testing Laboratory, Agriculture department of Govt. of Odisha to display in the exhibition.



## List of Participants:

Sl No.	Name	Organisation & Address	Contact No./Email
1	Bhagaban Nayak	Baghara, Nayagarh	
2	Bishnu Charan Panigrahi	Giridipally, Nayagarh	
3	Gokula Chandra Sahoo	Kural, Nayagarh	
4	Achyutananda Muduli	Biruda, Nayagarh	
5	Narayan Muduli	Golagola, Nayagarh	
6	Haramohan Patra	Khairapati, Naygarh	
7	Pramod Mohapatra	Khandugaon	
8	Ramachandra Majhi	Padmapur, Baragada	
9	Gadadhar Barik	Goudaput	
10	Kali Prasanna Bhim Manabara	Kural	
11	Muna Paradhan	Kural	
12	Suresh Chandra Barik	Sikharpur	9238932396
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16	Jayakrishna Mondal	Biruda	
17	Prahallad Palai	Biruda	
18	Simanchal Nahak	UAA, Ganjam	7205513870
19	Ramesh chandra Naik	Nirman	8763869026
20	Pradip Mohapatra	Udyam, Bhubaneswar	9437110892
21	Mochiram Nayak	Nirman, Naygarh	9937828663
22	Ajit Kumar Pradhan	LOK SHAKTI, Bolangir	9937248493
23	P.Devulu	SANJEEVANI,A.P	9849205469
24	Susanta Kumar Jena	Nirman	9090539251
25	GuruPrakash	Centre for collective development	9483530979
26	Antarjami Nayak	Sunalati	
27	Anita Kumari Jena	Nirman	9439848705
28	Kailash Chandra Sahoo	Ahimsa Club, Bargada	7873967481
29	Praveen	Sahaj Samrudh,Bangalore	8050743047
30	Bharati Mohananda	Ahimsa Club, Bargada	9777764658
31	Aneeta Sahu	Ahimsa Club, Bargada	9437918498
32	Chinmayee Sahu	Ahimsa Club, Bargada	
33	Amrut Kumar Prusty	CARE, Bhubaneswar	<a href="mailto:akprusty@careindia.org">akprusty@careindia.org</a>
34	Debendra Kumar Sahoo	Nirman	9237419885

35	Sadananda Sahoo	Ahimsa Club, Bargada	9938855079
36	Mohan Tandi	Ahimsa Club, Bargada	9556453200
37	Bhabani Das	SWISSAID, Pune	9937014193
38	Shiba Prasad Sahu	Ahimsa Club, Bargada	9437918498
39	Krishna Prasad	Sahaj Samrudh, No7,2 cross,Sultanpalya,Bangalore	9880862058
40	L D Swain	XIM, Bhubaneswar	9438470853
41	Syed Ghani Khan	Sahaj Samrudh,Bangalore	9401713351
42	Binayak Swain	BAT NET,batnet@hotmail.com	9556266081
43	Dr. JK Roy	Retd. Joint Director,CRRI,71 Suryanagar,BBSR	9861182567
44	K Dayanidhi	SANJEEVANI,A.P	
45	S Mahesh	SANJEEVANI,A.P	
46	Gobinda Chandra Sahoo	Panderi Patna,Nayagarh	9938396737
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48	Anjali Pattanaik	PRAKRUTI,2RA-15Road 3,Unit -9 BBSR	9439313836
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50	M.Rachanna	s/o-K Malladevru,Karnatak	9481321530
51	Ghasiram Panda	Action Aid, Bhubaneswar	9438341794
52	Dr.BK Maity	Ex. Prof & HOD OUAT	9437632763
53	N K Nehera	DD News	9938824212
54	Natabar Sarangi	Narisho, Niali, Cuttack	9937620883
55	Jubaraj Swain	Narisho, Niali, Cuttack	9937493115
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59	Prasant Mohanty	Nirman	9438294417
60	Kailash Chandra Kadaraka	Budaguda, Rayagada	
61	Nialakantha Kadarak	Budaguda, Rayagada	
62	Miniaka Jiana	Budaguda, Rayagada	

Photo GALLERY





