

## **South Indian Rice Forum – The long journey from Kumbalangi!**

*Full Report of the South Indian Rice Forum, Trivandrum, September 21-22, 2009*

This journey began in 2004 with the Indian Workshop on Rice held in a tranquil wetland village – Kumbalangi near Kochi in Kerala. The workshop, which brought together more than 100 people from about 50 organisations across 10 rice growing states of India, was primarily to share the concerns of farmers all over Asia over rice - the food, life and culture of Asia!

That meeting translated into the Save our Rice Campaign which gathered momentum in the three southern states – Kerala, Karnataka and Tamilnadu. Over the last four years, the Save our Rice Campaign has made efforts to address some of the issues and concerns that plague rice farming in the southern states. The more we work on the various facets of the rice conundrum, the greater the realization that the understanding about the issues at various levels of the rice chain is inadequate. The campaign has come a long way and is at a point where we have to evolve into a broad based movement, involving people from all walks of life and all segments of society. The idea of a *South Indian Rice Forum* (SIRF) emerged out of this understanding. We envisage that this Forum will consist of people from various segments of society - farmers, scientists, civil society members, millers, traders, teachers, politicians, students, consumers and various other stake holders from the three states – Karnataka, Tamilnadu and Kerala. The objective of the forum is to provide a broad based platform to address common concerns and issues that are facing the rice culture and cultivation in the region - increasing paddy production and improving farmers' income, potential of traditional varieties, challenges in paddy farming, and trade and economics issues in paddy farming.

Towards this end a two-day workshop took place in Thiruvananthapuram on September 21-22, 2009. The workshop was inaugurated by the Honourable Agriculture Minister of Kerala, Shri Mullaakara Ratnakaran, who said that agriculture is more than about food security and productivity, it is about community and culture and our future. Dr. Nammalwar, farmer, philosopher and the organic agriculture guru, presented the Agriculture Minister with a paddy art festoon in recognition of the farmer-friendly schemes taken up in the state, especially for the revival of rice cultivation, and the farmers' pension scheme, which is the first of its kind in the country.

The inspiring inaugural speech by the agriculture minister of Kerala, who is very supportive of sustainable agriculture, set the tone further when he suggested that the delegates should evolve strategies and solutions to help the poorest farmers in the land. In his inaugural address he pointed to four specific areas to be addressed: food security, income security for farmers, labour/ mechanisation issues and market access.

Dr. Nammalwar in his felicitation address exhorted the delegates to get out of our current mindset and to focus on sustainable development, he pointed out, "we can't forego food, so we need to protect and worship the food producer" and added that "before the 1960s we had agriculture and since then we only have agribusiness".

The deliberations across two days covered the spectrum of rice issues and then some more!

## **Paddy situation in Kerala, Tamilnadu and Karnataka**

Dr. P V Balachandran, Head of Paddy Mission Kerala, elaborated on the paddy scene in Kerala and also briefly explained the Paddy Act<sup>1</sup>, which he said was a good first step, but required stringent implementation. The current paddy situation in Kerala is dire, the area under paddy has come down from 8.5 lakh hectares to 2.2 lakh hectares and the output from 13.5 lakh tonnes to 5.8 lakh tonnes, whereas the requirement of paddy is about 40 lakh tonnes, thereby creating a deficit of 85%. Currently 93.5% of the paddy crop in Kerala comprises of High Yielding Varieties (HYVs). Therefore the suggestions that he put forward to improve the paddy situation in Kerala are: encourage group/cooperative paddy farming, create seed villages, bring in more fallow land under cultivation, innovate and use small mechanical devices to ease the processes and improve irrigation canals and of course increase the minimum procurement price.

Paddy in Tamilnadu (TN) is cultivated in four zones - river basins, tank fed lands, rain fed lands and irrigated lands. The Cauvery basin covering 11 districts of Tamilnadu is the major rice growing area with almost 12 lakh acres under paddy, explained Dr. Nammalwar. Traditionally paddy was cultivated in rotation with legumes and green manure, however the advent of the green revolution processes and inputs have changed many of these traditional practices and now most of the area under paddy cultivation is using HYVs. Mr. Ponnambalam, Managing Trustee of CREATE and an expert in agriculture produce marketing, added that conversion of paddy lands to non-paddy activities has become a significant problem in TN and the state urgently needs a paddy land protection act.

Karnataka is not wholly dependant on rice (unlike Kerala and TN), with millet also forming an important food crop in the dry regions. Paddy provides 35% of the average calorie intake in Karnataka and in a state where 43 lakh tonnes of paddy are consumed, about 86 lakh tonnes are produced. Paddy is cultivated in 14.2 lakh hectares of land of which 10 lakh hectares are under HYVs. 56% of the paddy grown in Karnataka is rain fed while the rest is irrigated, explained Mr. Reghu, food processing expert and organic baby food manufacturer. However, loss of traditional varieties of paddy and disrespect of farmer knowledge and oral wisdom of age-old practices is a problem everywhere, he added.

In Kerala, paddy procurement by the government is done in only 5 out of 14 districts and the low procurement price (the current price of Rs. 11) is not adequate to cover the cost of cultivation. Tamilnadu has a similar problem of procurement where procurement by the government at Rs 10.50 is done in some but not all districts. In addition, many a time farmers are turned back or made to wait many days before their paddy is procured and at other times the assessment of moisture levels in paddy is done arbitrarily and unfavourably to the farmers. This along with low income from paddy is among the main reasons for the drastic fall in the area under paddy cultivation in both states.

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<sup>1</sup> [http://www.downtoearth.org.in/full6.asp?foldername=20080930&filename=news&sec\\_id=4&sid=2](http://www.downtoearth.org.in/full6.asp?foldername=20080930&filename=news&sec_id=4&sid=2)

## **Other issues and challenges**

Across the two days, challenges and problems in rice farming came up from almost all speakers, ranging from lack of availability of seed to neglect of women's role to pesticide use to lack of access to markets.

Women's role in agriculture (previously in all areas except land preparation) is now being marginalised and thereby they have lost their ability to ensure food security. This in spite of the FAO summit in 1996 acknowledging that women are the main contributors to food security and agriculture. Women are paid less than men for the same work and the trend towards mechanisation is eating into the earning opportunities for women from paddy farming said Ms. Sheilu Francis of the Women's Collective.

Use of pesticides in rice is increasing despite the fact that it has been proven time and again that 100% organic paddy cultivation is doable. One of the major areas that the gathering agreed on is the need to grow poison free paddy! One of the primary challenges is that today the focus is only on seed or fertilizer or pesticides; the focus should be at a holistic level, towards agronomic practices and the local conditions including climate and water availability.

Instead of providing subsidies for fertilisers as is the norm today (which benefits the fertiliser companies and farmers who depend on chemical fertilisers) many delegates suggested that farmers should be provided with direct income support, insurance, compensation for losses due to natural calamities and old age support.

The other bottle neck that became apparent is that even after farmers have grown organic paddy, during the procurement or processing stage, it gets mixed up with non-organic paddy. One of the reasons for this is that millers are unable to get sufficient quantity of organic paddy to keep their mills active with only organic rice milling, explained Mr. Gautham, a miller from Nagercoil who is marketing many traditional varieties of rice, particularly those with health benefits.

Lack of an effective marketing network, particularly for organic paddy (traditional varieties) is a continuing problem said Mr. Shetty, President Market Wing of Jaivik Krishik Society, Karnataka. He detailed the efforts they have undertaken through the decades to get organic rice into the mainstream market in urban Karnataka particularly in Bangalore, where, now, there is a new found understanding and appreciation of the many traditional varieties, their qualities like taste, medicinal value, etc.

Another significant barrier for organic paddy cultivation is the lack of awareness among agriculture officers and extension workers about agronomic practices, and their continued propagation of green revolution methods to farmers. So in addition to educating farmers, the officials have also to be educated to propagate sustainable/organic paddy farming.

The use of fully polished rice without bran and the corresponding rampant spread of diabetes among rice eating people is a crisis in the making which all present agreed on. As one of the rice traders from Erode jocularly put it, "we have become used to rice which is as white as our dhoti"; however he hastened to add that sometime back when he was diagnosed with type 2 diabetes he changed to eating rice with bran, on medical advice. Within 3 months he has experienced lowering of his blood sugar levels.

Gautham also spoke about the marketing of his brown rice and how a campaign is needed to make people aware about the health benefits of brown rice.

Dr. K N Harilal, Planning Board Member, explained the conundrum of international trade policies (WTO, ASEAN, etc.) and how they impact small farmers. He said, “The crisis in Indian agriculture sector is bigger than many of the world wars”. In the current scenario, where cartels of big companies are leading to a “destructive competitive downward spiral”, the only way to save the rice economies of the world is through cooperation among rice producers – locally, regionally, nationally and internationally. Traditional farmers were only worried about seed, soil and water, but now they have to also think about trade and marketing. He pointed out that merely increasing productivity and reducing the cost of production is not enough to make paddy cultivation viable in the current international trade scenario. It is also essential to be able to intervene effectively in trade negotiations and make sure that farmers’ voices are heard in trade policy discussions. Dr. Harilal exhorted SIRF to play an active role in working on the issue of trade on one hand and the crisis of rice shortage on the other. He suggested that to begin with, SIRF could explore whether the three southern states can work together to become self reliant in rice!

### **Traditional varieties and their increasing significance**

Research and trials with traditional and indigenous seeds has been one of the highlights and focus areas of the Save our Rice Campaign in the last couple of years. CREATE centre in Adirangam cultivated and distributed about 2 tonnes of seeds of 13 different varieties to about 1,000 farmers from across the state (detailed story in PADDY July 2009). Currently they have sown 47 varieties of indigenous paddy to be distributed to farmers. In Karnataka, Sahaja Samrudha has taken the lead to induct many farmers into seed saving and now they collectively save, conserve and grow 140 varieties of indigenous paddy. Krishna Prasad of Sahaja Samrudha said that we should re-examine the present paradigm of releasing a single variety everywhere; instead local varieties should be identified, tested and used in specific geographical regions.

Dr. Devakumar, Senior Scientist, UAS, Bangalore, who is currently conducting research on the various qualities of indigenous varieties of paddy in Karnataka<sup>2</sup> stressed that his research is pointing towards the fact that indigenous varieties have many superior traits; they are better adapted to the local situation, require less inputs, are resistant to pests and provide large amount of fodder, to name a few traits. Dr. Leena Kumari, Senior Scientist from the Mancombu Rice Research Station, Kerala, detailed her work with stress-tolerant varieties of indigenous paddy. Dr. Leena Kumari said that varietal selection using visible physiological markers to identify stress-tolerant and stress-escaping (maturing in short season) varieties, is one of their strategies. She detailed

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<sup>2</sup> Dr. Devakumar is currently working with 120 varieties of paddy from various parts of Karnataka, mainly from Malnad and coastal Karnataka. Their lab has already collected and conserved 80 paddy varieties. The study is based on analysing features like no. of tillers per hill, yield, height, no. of grains per panicle, disease and pest scoring and so on.

their work with such varieties and different geographies like Pokkali, Modan, Kuttanad and Kole lands.<sup>3</sup>

VOICE in Wayanad began its seed bank to preserve the traditional paddy varieties of Wayanad after they observed starvation deaths among tribal people in 2001. They realized (during interactions) that the tribal people (mainly Kurichiars) used to maintain seed banks and had about 200 distinct paddy varieties in that small region. Most are lost and only about 65 varieties survive today. The seed banks initiated by VOICE are maintained in the Kurichiar tharavads<sup>4</sup> in hay/ bamboo baskets following the tribal traditions. Mr. Louis Figarado, Director, VOICE, said that currently 30 varieties are being cultivated every year and seeds replenished in the seed banks, and going ahead they will be expanding the seed bank to all food crops to achieve their goal of “meals without miles”.

### **Innovations and experiments**

Mr. Abhilash, an Agriculture Officer from Thazhakkara in Kerala, who has pioneered an interesting experiment of homestead paddy cultivation, explained his project with 1,000 households to whom he provided basic kits of paddy seeds and some inputs to grow it in their backyard. The households were able to grow paddy successfully, under his constant guidance. He reported that net income from 18 hectares of homestead paddy was about Rs 6 lakhs.

Mr. Nandish, a successful young rice farmer from Karnataka, talked about his farming method which he calls “legume logic”. He depends on the abilities of legumes and wild weeds to rejuvenate and replenish his lands and uses no external inputs on his paddy lands. He added that using his method one year of post rice manuring creates about 2-3 inches of fertile top soil and 2-3 years of green manuring can revitalize any barren soil. Nandish informed that he earned Rs 4,000 per acre of paddy in 2000 whereas now he earns Rs 45,000 per acre.

### **Outcome of the two day deliberations**

The two days of fruitful deliberations resulted in a few decisions and charted a way ahead for the Forum. The gathering agreed unanimously to support and advance “Poison free Paddy Farming” and formed four working groups to address the major issues raised by the delegates and they will be coming up with their action plan during October.

(a) The group agreed that agriculture scientists who want to work along with farmers for land-to-lab research will work with seed savers, farmers, and farmers groups to identify stress-tolerant and geographically and climatically suitable paddy varieties.

(b) It was decided that more research will be carried out to identify and verify the different qualities of various indigenous paddy varieties. This would provide the farmers

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<sup>3</sup> Diverse rice wetland ecosystems of Kerala

<sup>4</sup> Kurichiars are one of the original tribal communities in Wayanad and have ancient practices related to seed conservation.

with more information about traditional varieties and address fears about productivity, resilience and ability to deal with climate change related stress.

(c) The millers and traders have agreed to create more awareness among consumers about organic rice and brown/ red rice (which is not polished and retains the bran). They promised that they would keep aside capacity to process organic rice with bran. As regards marketing strategies, involving more consumers, profiling the different varieties of rice based on distinctive qualities will be undertaken to expand the market for traditional rice varieties.

(d) Policy advocacy, education and awareness among farmers about changing policies in trade are the need of the hour to enable farmers groups to effectively intervene at a political level. SIRF members will work on this aspect in all the three states.

(e) There is an urgent need to provide direct cash income support to paddy farmers rather than indirect subsidies which benefit the companies.

(f) More awareness and advocacy needs to be taken up on the matter of international trade policies and agreements and their impact on food security.

The discussions were led by Dr. V S Vijayan, Chairman of the Kerala Biodiversity Board, Dr. P.V. Balachandran, Head of Paddy Mission of Kerala, Dr. Nammalwar, Dr. Devakumar, Senior Scientist from UAS, Bangalore, S. Usha, Coordinator of the Save our Rice Campaign, Dr. Leenakumari, Senior Scientist from the Mancombu Rice Research Station, Dr. Gopalakrishnan Nair, Sri Krishna Prasad Director of Sahaja Samrudha, C. Jayakumar, Board member of Thanal, and R. Ponnambalam, Director of CREATE, and on the second day Dr. K N Harilal, Member, Kerala State Planning Board.

A beautiful display by Sahaja Samrudha from Karnataka of 140 indigenous seed varieties including 16 varieties of salt-resistant paddy and 12 varieties of deep water paddy was the highlight of the small exhibition organised at the meeting venue. CREATE brought 47 varieties of seeds from Tamilnadu which they are currently cultivating. The agriculture interns at Thanal displayed 7 varieties of paddy seeds that they are cultivating as part of their seed bank efforts. The exhibition also had simple manual/ semi automatic tools for paddy harvesting and weeding which were brought from Mitraniketan. Display of various varieties of brown and red rice, suitable for diabetics, and beaten rice attracted people who tasted and bought some! Gautham brought this from Nagercoil. Posters from the Campaign and a few posters of the beautiful paddy art from Japan captured people's interest.

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