

Save our Rice Campaign



Empowering communities for sustainable food security in
the rice regions of India

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“Nel Thiruvizha” – the Festival of Paddy





In the erstwhile Tanjavore delta area, the rice bowl of Tamilnadu in 2006, Jayaraman, a farmer and trainer at the consumer group FEDCOT, motivated by his Guru in organic farming, Dr Nammalvar, a scientist turned organic farmer and leader, started his small collection of indigenous varieties of paddy. A patch of his land, leased out to him by a philanthropist in his village Adhirengam in Thiruvavur District.

These were times when no conventional farmer in Tamilnadu would even dream of cultivating indigenous varieties, though the names of so many of the varieties and the memories of cultivating and consuming them still evoked nostalgia and a sense of loss. Jayaraman who had donned the role of State Coordinator of the Save our Rice Campaign (SoRC) was clear, as much as his mentor was, and as was the objective of the campaign, that indigenous seeds hold the solution to the issues plaguing agriculture during those days.

He had by then collected from far and near about 15 indigenous varieties of paddy, including the versatile Kattuyanam and Mappilai Chamba. Both, he found were excellent for cultivating in his region and yielded tasty rice. Farmers who adopted Kattuyanam found that it had the hitherto unheard of quality of being both drought resistant and flood tolerant, and as for Mappilai Chamba, it was known in traditions as a medicinal variety and was good for increasing muscle strength. Modern doctors nowadays recommend Mappilai Chamba as a food for patients with muscular and neural disorders including parkinsons disease and various rheumatic ailments.

Jayaraman's collection of seeds was highlighted in a farm magazine, and soon he was inundated with calls from all over Tamilnadu. Atleast 600 farmers needed the varieties, and the only way he could reach it out to them was to invite them all together on a day at Adhirengam. Thus the 'Nel Thiruvizha' - one of the largest paddy seed festival in India, was born in 2007. That year they had 600 farmers come, collect 2 kgs of an indigenous variety of their choice and promise to return 4 kgs the next year for further distribution.

This became an annual event, in the calendars of farmers in Tamilnadu. Each year it not only grew in numbers of seed varieties and farmers, but also added new events. Seminars, agri-exhibitions, food festival, rally and policy discussions became highlights of the festival. People from all walks of life, celebrities, students and even IT professionals started making a route to this village festival. In its 12th edition in 2018, more than 8000 participants from across all districts of Tamilnadu came to look, select and collect indigenous varieties of paddy from a collection which had by then grown to 175 numbers.

Apart from this, the stalls in the exhibition ground also had varieties from West Bengal, Kerala, Karnataka, Chattisgarh etc. More than 60% of farmers who take seeds return it in double the quantity for further distribution. As per records, till 2018, more than 40,000 farmers from across Tamil Nadu and from other states have directly collected seeds from the Nel Thiruvizha and at least 1 lakh farmers indirectly. The Nel Thiruvizha had grown into a national seed festival.

This also became a flagship programme of the SoRC in Tamilnadu. Through the year, Jayaraman, his farmer friends and seed savers were also conducting farmer field schools and training of trainer workshops for organic farming and indigenous seed conservation. Outreach programmes for schools, colleges were also conducted all through the programmes under SoRC. They even maintained an insitu field of varieties every year, cultivating them in a Rice Diversity Block (RDB). A local seed bank was also maintained. Many farmers who saw this willingly started maintaining RDBs and Seed Banks. Nammalvar, until his death in 2015 was a leading facilitator in these programmes.

Jayaraman had by then become an icon in the State. Half way through these years, he came to be known as Nel Jayaraman (meaning Paddy Jayaraman), and he was Trustee in CREATE, the organisation that was spearheading the campaign in Tamilnadu. Last year, in 2018, a tragedy struck. We lost this beacon of revival and hope to a deadly cancer in December 2018, after two years of struggle with the disease. But by then the campaign was so rooted on the ground. The farmers and seed savers in the region have now come together and in the memory of Nel Jayaraman they organised the festival, the 13th edition, on 8th and 9th of June 2019. The community gave their most heartfelt tribute to him with a festival that was bigger than ever.

Estimatedly, more than 10000 farmers attended the festival, paid their homage, collected and shared seeds and committed to follow the path he had opened up. This campaign's success also did not remain at what it achieved directly. Taking the movement forward, in 2018 alone there were atleast 100 such small and big seed festivals organised by various groups across the length and breadth of Tamilnadu, thus ensuring the spread and adoption of indigenous varieties of not only paddy, but of other crops as well.

Rainbow on the field – Rice Diversity Block

Rice Diversity Block (RDB) was an idea of the Seed man – Krishnaprasad, who is Director of the collective called Sahaja Samrudha, a partner in the SoRC. His idea of maintaining conservation fields of indigenous paddy varieties – called the Rice Diversity Block (RDB) was taken up as a tool in the campaign. In the RDB, all the varieties that need to be conserved are sown in small plots for each variety. To avoid cross pollination, a method of Flowering Asynchrony, as developed by Dr Debal Deb, a well know ecologist and rice scientist from the rice collective called Basudha in Orissa was used.

Dr Deb trained the seed savers in the campaign and many of them maintain RDBs across the rice campaign states. As of today, more than 26 such RDBs with a total of 1552 indigenous varieties of paddy seeds added together are conserved insitu by farmers and farmer-based organisations. They also maintain as many seed banks, some in the farm houses, and some in proper rural seed banks.

One such RDB, a visual treat in itself and which was widely appreciated was at Panavally in the Thirunelly Panchayath in Wyanad. Here in the last season, 336 paddy seed varieties were conserved, of which 180 varieties were indigenous to Kerala. Visited by farmers and scientists, with a busy field week in November, this seed diversity block has become a model in the state of Kerala where slowly young educated men are coming into farming. In 2016, the beautiful multi-hued image of the seed diversity block captured from a drone camera went viral, becoming the defining visual image of paddy conservation and one of the iconic images of the Campaign, giving a stunning glimpse to people about what paddy diversity looks like.

These RDBs are not just visual treats, but also learning centres for farmers who come, look at the performance of the varieties and chose the variety they would want to test in their farms. This way, thousands of seeds have moved hands into thousands of farmers in the fields of the Rice campaign states. In 2018, a book compiling the characteristics of 112 of these varieties were published. This was again a first in the State. The RDB triggered of many farmers and groups to maintain their own RDBs. This also motivated the Minister of Agriculture, V S Sunilkumar to initiate an RDB in the Research Station of the Kerala Agriculture University, at Wyanad.



Seed Savers Networks

Today, we have more than 1,00,000 farmers across seven states who have adopted indigenous paddy varieties in their fields, and cultivating them organically. Many of them are also selling these traditional varieties as seeds and rice. This is now expanding as more and more seed festivals, indigenous food festivals and harvest festivals are spreading the message among farmers and consumers in these states.

Farmers have gone from being just seed consumers to seed breeders, producers and sellers. We have over 100 seed savers across the Campaign states. The resilience and sustained production from indigenous seeds, their special characteristics and an attached memory and revival have made farmers confident, and they are also now being recognised not only at local level, but many of them also won awards, including the Genome Saviour Awards and have been featured in the media. They have also been recognised by the government as expert organic farmer trainers and seed savers. Five farmers have also developed their own varieties. They are multiplying these seeds and are selling in the seed market.

Nabadigantha – a new dawn in paddy cultivation

Nabadigantha farming system was an idea that developed from a desire to take up farming without the use of pesticides, by 20 farmers in the remote Mammadpur village in the Hingalganj Block of the Sundarbans in West Bengal, an ecologically fragile landscape, a global natural heritage. The SoRC had started its activities as early as 2006 in West Bengal through the collaboration with the Society for Equitable Voluntary Action (SEVA), then led by Sri Chandan Mukherjee. Alauddin Ahamed, who joined us as the field organiser in the campaign later became its State Coordinator, after he left SEVA.

As in all the states that the SoRC established its campaign, in West Bengal also followed the same route of large motivational meetings, exploration of indigenous seeds, reviving them for use according to their suitability in local conditions, maintaining Rice Diversity Blocks as conservation and demonstration fields, conducting ToTs, Farmer field schools and large number of outreach programmes to address diverse people and sectors in the society.

This meant that the leaders in the campaign had to travel to these villages and have meetings that

ranged from small farm side ones to large organised meetings. One such trip was to this village of Mammadpur. The group that called themselves Nabadigantha Krishak Samithi was led by a non-descript but intensely passionate farmer Tushar Das Kanti. Tushar and group wanted to keep pesticides off their farms, and they believed that their traditional system of farming – which was an integrated model of rice and fish could be revived. He had read about Permaculture model of farming, through a book which Alauddin Ahamed had shared with him. He experimented that model in his field. This was an agro-ecological model based on land shapping, improving agro-biodiversity, adopting indigenous varieties of paddy and using local farm inputs.

It integrates paddy, fruits, vegetables, fish, poultry and cattle in a predominantly paddy wetland area and has achieved not only climate resilience but income improvement as well. The SoRC supported the conversion of the farms for adopting this model for the 20 farmers in the group, and set the foundation for this model to be adopted wider. SoRC also motivated and supported the group to maintain their RDB and a Seed Bank, both have become centres for more farmers to learn about indigenous varieties and collect them as well.

Climate Change is one of the most serious threats in the Sundarbans Delta area in West Bengal in India and parts of Bangladesh. The Delta area is predominantly wetland paddy cultivation area, highly vulnerable to floods, brackish and sea water intrusions and destruction of crops. The land shaping method and adoption of locally suitable indigenous varieties has created much better resilience to the farmers. Land shaping is done by digging a pond on the land and using the soil to make raised bunds on the 4 sides, where the farmers grow fruit trees, vegetables & green manure crops.

The main crop is paddy with rotation of oilseed and pulses. Fish is cultivated in the ponds. Water, nutrition as well as income need is taken care of in this method. On an average 50% land is used for main crop, 35% for fruits, vegetables, green manure crops etc, 10% for pond and 5% for cattle. Farmers have gained 3 to 4 times increase in income within 2-3 years of adoption. They have also become sufficient in availability of seeds, manure, water and nutrition through diverse food. 140 farmer families have now adopted the Nabadiganta farming Model in Mamudpur.

The name 'Nabadigantha' meaning 'New Dawn' was given by the farmers themselves. The model is now spreading into other villages after this group got adopted into the Paramparik Kishi Vikas Yojana (PKVY) of the Government of India. Tushar Das Kanti is now a well known trainer and farmer consultant for the agro-ecological model of farming.

In West Bengal, apart from the Mammadpur area, work expanded to Sagar Block, and the Patharprathima Block, where a larger block level conversion to organic farming and adoption of indigenous paddy is happening through the efforts of Sudanshu Dey, a farmer and a homeopath, whose organisation SDSAT also maintains a large collection of seeds in their RDB and a well maintained seed bank.

Climate Resilient Agriculture

Such experiments in Climate Resilient farming were also facilitated in other rice campaign states. In Tamilnadu, many farmers have been encouraged to experiment on climate resilient agriculture and some wonderful local specific models are developing in various regions in the Cauvery delta area.

It must be said that the setbacks (crop failures, losses, seed loss, climatic impacts) suffered by farmers doing paddy cultivation using chemicals and high yield seeds has resulted in farmers wishing to take up trials with select indigenous varieties and with systems like the Alangudi Perumal method – an agronomic practice developed by a farmer in Tamilnadu, which is being widely adopted by farmers in Tamilnadu, achieving increased yields with lesser quantity of seeds.

Nandish, a farmer in Shimoga follows a legume based climate resilient farming system where his indigenous paddy and a legume based soil improvement system is now well acclaimed. The SoRC helped spread the method through publications, and outreach programmes as well as exposing his method through workshops, papers and presentations.

Farmers themselves used their learnings to adapt to climate vagaries and make their farming resilient to climate. Many indigenous varieties of paddy in their own regions were inherently climate resilient, and adoption of the right agronomic practice including selection of crop, crop cycling and rotation worked to their advantage.

This needs more exploration and validation, and is an area that opened up later in the campaign.

Protection of Paddy Ecosystems

Kerala is the only state which has a specific Act to protect its paddy wetlands with the objective of ensuring food and water security. The Act itself was a result of relentless struggle where the SoRC took a very active role. The Kerala Paddy and Wetland Conservation Act which came in 2008, has seen all attempts to sabotage the same since then by various vested interest but has been strongly challenged by the Campaign and its associates.

The Aranmula Airport project envisaged on the heritage Aranmula paddy wetlands and the Methrankayal eco-tourism project over traditional paddy wetlands of kuttanad were dropped by the State of Kerala, and today cultivation has restarted in these wetlands.

Organic trade networks, markets and food melas

When the SoRC started we realised that rice, a high nutrition staple had been reduced to mere starch, thanks to modern milling and post green revolution policies to industrialise and modernise rice processing and value addition. It ended up with most rice consuming indians eat polished rice, devoid of the nutritious bran. Rice also became a white food, whereas the bran in its various colours – red, pink, brown and even black, all differently and naturally fortified with nutritional elements, minerals and essential vitamins.

The campaign ran various programmes to highlight the dangers of polished rice and the need to consume semi-polished and unpolished rice, as an important source of nutrition. We even had Red Rice Mela's and Desi Rice Mela's to highlight the importance of red rice and indigenous rice. Later we even ran campaigns on black rice and its importance. This led to shift in market preferences in rice in most regions where the campaign was active.

Many varieties of paddy rice were introduced into the market - Mappilai Samba, Kattuyanam, Kichadi Samba, Thooyamalli, Mysore Mallige in Tamil Nadu; Raktasaali, Thondi, Gandhakasaale, Thavala Kannan, Kuruva, Mullankazhama and others in Kerala; Rajamudi, Sidda Sanna, Dodda Batha in Karnataka; Dudhesh-

war, Kerala Sundari, Gobindabhog and Tulai-panji in West Bengal have become popular with the farmers and consumers. These are currently being sought out by name and bought by consumers. This was something new, ever since the Green revolution.

Organic outlets in all the Campaign states now procure, stock and sell large quantities of indigenous rice. The campaign could also encourage and in some cases even help start indigenous paddy rice producing collectives and trade networks. 21 such networks have developed across seven states. In addition numerous informal farmer networks got created to share seeds and for marketing collectively.

In many meetings, farmer families report having started eating the rice which they grow. Earlier, the practice was to sell the paddy they produce to the Government procurement agencies, and they buy cheap rice from market to consume. With indigenous rice, the families were encouraged to retain a portion of the production for their own consumption. This also means that many farmers associated with the campaign are eating organic food instead of food laced with chemicals.

In some regions, farmer led businesses like farmer producer companies were started. Three farmer producer companies: Sahaja Organics, Thaiman Agriculture Producer Company and Thirunelli Agri Producer Company grew out of the Campaign. Numerous farmers associated with the Campaign have become successful organic rice traders in their individual capacity and through small, informal trading networks. Farmers also do value added products from paddy and rice and market them. The markets for indigenous rice was mostly opened up in the small and medium retail sector there by supporting more livelihoods and equitable economic gains rather than the profits going just to the food majors. There are thousands of such shops in the major cities of India, and most of them now sell indigenous rice of the region.

The Policy Action

The SoRC always believed that no amount of efforts taken by NGOs or farmer groups would eventually be able to shift the paradigm and clinch large scale success in the campaign unless it targets policy change and Governments recognises and adopt the ideas. When the campaign goals started seeing success in the fields, in most

states, it had a direct influence, literally bottom up, and we saw policy circles becoming sensitive to the need to conserve indigenous paddy and paddy eco-systems. The SoRC could influence varied efforts to protect wetlands, conserve water, demand state level policies for organic farming, prevent genetically modified organisms in agriculture and promote organic farming with traditional seeds. In Kerala the Campaign team members were involved in the formulation of the Paddy and Wetland Act and the Organic Farming policy for the State. In Karnataka, the team has been part of various programmes of the Government to promote organic farming. In Tamilnadu, Jayaraman was member of various state level committees for similar objectives. We could also bring indigenous paddy seeds to the attention of scientists and state governments.

Three university campuses in Karnataka have initiated seed banks of indigenous paddy varieties on their campuses. The Government of Tamilnadu has been supporting farmers to attend the Nel Thiruvizha every year. Inspired by our RDB in Panavally, Wayanad, the Agriculture Minister of Kerala asked the Kerala Agriculture University to initiate their own diversity block with indigenous paddy varieties. This was a huge success in 2018.

The Campaign also actively engaged with the national movements on sustainable farming. It was a founder member in both the Alliance for Sustainable and Holistic Agriculture (ASHA) and the Bharath Beej Swaraj Manch (BBSM), a indigenous seeds platform. It also was an active participant in the movement to keep India free of Genetically Modified Crops (Coalition for a GM-Free India). In all this we played a critical role to formulate the policy of the missions.

Long Term Impacts and Sustainability of the Campaign

In any programme of this magnitude, two questions that are asked is “What long term impacts do you see ?” and “Will the outcomes sustain ?”

As Usha Soolapani, the architect of the campaign says “The tools of the campaign like RDBs, Community Seed Banks, annual seed festivals, harvest festivals were all those that farmers could identify themselves with. In most places its become part of their activity and schedules, and hence they would continue and even sustain with local resources. The methods are simple and relatable, and outcomes are on

the field and in their lives. The benefits are theirs and so it would sustain”

Restoration of indigenous varieties of seeds in the villages ensures its continuum in its locality, and hence continuum of the evolutionary process, and with it the related traditional knowledge on its practices of cultivation, properties and use. Such seeds also respond better to climate change and many of them are inherently resistant to locally prevalent pests and diseases, and is also suitable for local nutritional needs.

Some of these characteristics have been found and documented, but more work need to be done to explore as well as validate them. These varieties evolve better, and hence its continuing cultivation in the regions may even enable it to develop resistance to new pests and diseases. This was curtailed when they were taken away from the land, leading to extinction of so many varieties. The revival in that sense has long-term impacts. “When we began the Save our Rice work very few people were doing conservation. What the Campaign did was to simplify and demystify conservation of rice. We showed farm-



ers that they could take it up. We demystified rice diversity blocks and rice conservation was simplified and made accessible to any farmer with a passion.” says Krishnaprasad, who was instrumental in designing the seed conservation work.

The campaign has right from beginning adopted a knowledge-and-empowerment based approach and not an extension based approach which has resulted in the natural process of sharing seeds, knowledge and methods to people and areas much larger than the targets. This ensures sustainability and growth.

In conclusion the campaign has set the foundation for revival of indigenous seeds and its adoption in agroecological farming. It has demonstrated that sustainable farming with improved incomes are possible. It has also demonstrated that what is needed is a knowledge-centric locally specific and adoptable methods. The campaign also taught us how actually rural programmes can be designed and executed in a country like India, so as to ensure adoption and sustainability, both being challenges even now for Gov-

ernment agencies and NGOs. The future work must be to explore climate resilient agriculture, sustained maintenance of the conservation activities, increased access and adoption of diverse rice in mainstream markets, mainstreaming indigenous seeds and agroecological agriculture further into policy adoption. A full success and sustainability of the project would depend on how these streams can be worked on in the future both by community and by governments.

The campaign has also been able to demonstrate the relevance of small and medium farmer collectives, retails and markets in localising the economy as much as it has done through the small and marginal farms in comparison to industrial farms and big agribusiness. In that sense, the campaign has been able to challenge the large agri-business model, that has caused the collapse of the local food and agriculture systems. The Save our Rice Campaign has been able to demonstrate in its regions that a local food systems approach is possible and this is very relevant, and has to be further taken forward.

