

# PADDY

SAVE OUR RICE CAMPAIGN

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From the Campaign desk

## LET THE BIRDS FLY OVER PADDY FIELDS AND NOT AEROPLANES! – THE NEED TO CONSERVE LAND AND WATER

March 22<sup>nd</sup> is observed as the World Water Day every year. This year on the 22<sup>nd</sup> of March, Thiruvananthapuram city will witness a state level gathering of people to discuss about water. This is being organized by the Kerala Paristhithi Aikyavedi under the leadership of eminent personalities from the state. This includes Padmashree Sugathakumari, a well known poet, environmental and women's activist, Dr V S Vijayan, an eminent scientist and Chairman of Salim Ali Foundation, Prof M K Prasad, from the Kerala Sasthra Sahitya Parishath, C R Neelakantan, a well known human rights activist and writer and many others from all walks of life. The Save Our Rice campaign is actively participating in this event. Why should the state of Kerala, the land of monsoons with an annual rainfall of 3,000 mm, discuss water? True, Kerala should not have had to worry about water. But, today the people in the state, local government bodies, women, environmental activists and many others are seriously concerned, even alarmed about the water situation in the state.

The Government of Kerala recently declared that the state is drought hit and has sought the support of the Central government. Rainfall in Kerala has become erratic since the last several years, but the amount of rainfall in 2012-13 was about 70 % of the normal. This was reported from September onwards but neither the government nor the experts took this seriously. They were more worried about the development of the state and the investment needed for that. The pattern of development is the same throughout the world, especially since the policies of globalisation-liberalisation have become the driver of development. Economists, political activists and even ordinary middle class people are excited and are dreaming of a Kerala with multiple lane highways, costly cars, palatial houses, tourist destinations, shopping malls etc. Meanwhile what is forgotten is the ecological foundations of the state, social and cultural history of the state, socio-economic sustainability of the state and the food security of the state.

Extensive mining and conversion of land for real estate development has completely destabilised the water flow and polluted all the water bodies. People are queuing up for water from December, merely two months after the end of the monsoons. In many urban and rural areas people have started buying tanker water as well. Private water suppliers have mushroomed and are making windfall profits. Most of them are run illegally and it is being reported that they are supplying bad quality water. After spending crores of rupees on drinking water projects (loans from World Bank, ADB and Government of Japan) and establishing massive infrastructure, problems with water supply continue. Water sources are drying up. Government is even planning privatisation of water thinking that it will solve the problem. It is a fact that wherever water privatisation has occurred, the price of water has gone up. The unfortunate thing is that Kerala should not have reached this situation. We have enough water resources and good rainfall. We have enough expertise to conserve it. But we are not putting this into practice. Kerala is no more a water surplus state. But this is a man made situation. Kerala has experienced scanty rainfall before but the water recharging systems were intact - like perennial river flow, wetlands and paddy lands in natural state, good agricultural practices, people taking care of ponds and wells - hence Kerala has not experienced drought in the past. But the developers are unwilling to recognise the ecological and agricultural uniqueness and fragility of the state and are planning to continue the conversion of wetlands and paddy lands to airports (3 airports are being proposed on paddy wetlands in Kerala), tourism and IT projects, roads and highways and shopping malls. All the rivers are in a sad state due to sand mining and encroachments apart from damming. Industries and urban areas discharge waste into the rivers and other water bodies. Many small and big organisations and local communities are fighting these issues, but the 'land and water mafia' is so strong that they can't be stopped.

We visited Aranmula last week and attended a meeting of the local community against the airport, which is proposed to be built on paddy land. Aranmula is a heritage village known worldwide for a unique mirror (Aranmula kannadi), which has got geographic

indication status from the Government of India. This is an age old craft of a community here. They need soil from the paddy lands to make the mould for the mirrors and they oppose this project. The larger local community is also against the project as they have realized that once the airport comes, they will lose their water and livelihoods . A small patch of 25 acres which is filled up has already impacted the water level in the nearby open wells and resulted in stoppage of paddy cultivation. Planning experts say that rice can be brought from outside the state and Kerala need not grow paddy, but people of Kerala are asking, 'from where will we bring water once the paddy fields are gone?'

## SEED AND FOOD SOVEREIGNTY IN CHHATTISGARH

Dr. Ilina Sen

Rupantar has had the good fortune of having worked with the indigenous communities of south Chhattisgarh for over two decades. The indigenous communities of Chhattisgarh have been food sovereign in ways not fully comprehended by the scientific community right up to the present time. To make an attempt to understand this reality, one has to understand the production and distribution systems in some detail. Chhattisgarh has had an amazing variety of food production systems. It is one of the last places on the earth to have a remembered history of an enormous diversity of food resources. These food resources include many varieties of rice germplasm, a wide range of millets and other dryland crops, pulses, oilseeds, fruits, edible flowers, tubers mushrooms and other gathered foods. Many of these are dependent upon access to and close proximity of the forests.

### The cradle of rice

Chhattisgarh has traditionally been known as the rice bowl of India. The region is known to have grown a very amazing diversity of rice varieties in the not too distant past. These include indigenous rice varieties capable of giving the equivalent of, or even higher yields than the green revolution varieties. These varieties are adapted to various micro ecological conditions, and give reasonable yields under normal conditions and with organic manuring. Individual varieties vary in maturity period ranging from 55 days to more than 180 days, and possess drought resistance and water tolerance capacity. There are low rain fall area varieties and deep water ones; short rices barely 50 cms in height to tall ones that tower over 150 cms. The grain size also varies from short fine to long fine, long bold to short bold and round, oval ones, beaked and awned ones, awned with various colours, sizes and shapes. The kernel may be coloured white, dull white, red opaque and the grain can also be of one of

What Kerala, a resource rich state, is experiencing is not unique; the same is happening in different parts of the country and worldwide. Natural resources, food and water are becoming threatened by the bogey of development. Land grabbing, water grabbing and poisoning the environment have become rampant. We need to reclaim food, water and air! Like the students from a local school in Kerala poignantly wrote to the Chief Minister 'let the birds fly over the paddy fields and not aeroplanes'!!

From the PADDY desk



many possible colours. The grain may be scented or unscented. The world's longest rice *dokra-dokri* is found in Chhattisgarh .

Much of our current knowledge of the diversity of rice strains in Chhattisgarh is based on the research done by Dr R.H. Richharia, the famous rice scientist of the region, whose path breaking work on indigenous rice varieties was put down by the proponents of high yielding monocultures. His research demonstrated quite clearly that it was possible to obtain and maintain remarkably high yields of rice while using indigenous seeds, local resources and skills.

### Diversity in production techniques

The farming communities in Chhattisgarh have held secure this amazing diversity of seed for many generations through their traditional farm practices. Whatever we have been able to do has only been possible through learning from them. Rupantar's<sup>1</sup> own collection and accession of seed varieties exceeds 2000 in number, and each is adapted to a different eco-climatic regime, just as each has its own peculiar requirements for production. This is because the diversity in crops is matched by the diversity in production techniques. There has been a range of technical and production practices that the farmers of Chhattisgarh have practiced .For example, the *bijasi* system of rice cultivation was practiced both in the low lying plains, as well as by the Maria tribal, the original inhabitants in the Abujhmar hills in Bastar. The method was based on the theory that the ploughing of standing crops at a point when the plants were a few inches tall, would flatten the entire field, but that the rice crop with firmer roots would rise up again, while the weeds would die out and be converted into green manure.

There was also a variety of sowing practices known to the farmers. Apart from broadcasting,

there was *laichopi*, in which the seeds were germinated in a controlled environment and then sown. This was useful in areas/years where the rains came early, and the fields did not retain enough warmth for in situ seed germination. To cover seed shortage, the farmers knew the technique of *chaalna*, in which broken ear heads were replanted in the soil using the technology of clonal propagation, that Dr Richharia tried to popularize among farmers who were power drunk with hybrid seeds and canal irrigation, and were quick to forget their traditional knowledge base. Again, the *utera* system in which gram and oilseeds are sown in a planted rice field before it is due to ripen and left to grow with the residual moisture remaining in the rice fields.

### Biodiversity and food security

It is not possible to have a discussion on the biodiversity in food resources without referring to the many kinds of uncultivated foods used in Chhattisgarh. These include many kinds of roots and tubers (*jimi kanda, keu kanda, karu kanda, chind kanda* to name a few), many kinds of greens, and the many seasonal edible mushrooms. There is a large range of leaves from trees, creepers, bushes and shrubs that are eaten here as *bhaji* (edible greens). Some of these like the *tinpania* and *chanori* bhajis grow naturally in the many rice fields after the rice harvest. As a matter of fact, the distinction between what is a *bhaji* and what is a weed is a product of the philosophy of agricultural monoculture that is in complete contradiction to the culture of biodiversity prevalent in Chhattisgarh. These foods

lend richness to the diet and in times of drought and food scarcity it is these food resources that have sustained generations of people. It is this complex heritage that has kept the indigenous people of Chhattisgarh food sovereign to a large extent, and not the highly centralized and inefficient Public Distribution System (PDS)

### Tradition of decentralised distribution

**BLACK RICE** originated in Asia and is known to have been grown since many centuries. In China it was called the 'Forbidden Rice' as it was eaten by the Emperor and the nobles and forbidden for the common people. The grain is glutinous, sticky and dark purple which looks almost black. Recently scientists found that black rice which contains plant compounds can fight cancer and heart disease. It is low in sugar and high in fibre and can be a very effective health food. The rice gets its purple-black colour from the presence of anthocyanin, an antioxidant. This rice is commonly used in Japan and China for noodles, sushi, desserts and also for beautifying food. As with the case of brown rice this rice also takes more time to cook and is chewy in texture.

India also has its own black rice. In India, black rice is grown in Manipur. It is called Chakhao amubi, and is believed to have come with the Meiteis, the people of Manipur. This fragrant rice is used for ceremonial occasions and feasts. It is now quite popular and is available in hotels as a delicacy and rice flakes made from it has also become very popular. Although the black rice fetches a premium price, the yields are generally low therefore it is grown in less than 10% of the rain fed paddy area. Recently there has been an effort to popularize this rice and find new markets for it.

*Adapted from : Aromatic rices of Manipur : <http://agropedia.labs.iitk.ac.in/i3r/sites/default/files/Aromatic%20rice%20of%20Manipur.pdf> & Black rice is the new cancer-fighting superfood, claim scientists : <http://www.dailymail.co.uk/health/article-1306356/Black-rice-new-cancer-fighting-superfood-claim-scientists.html>*

This amazingly complex production system was supported by an equally comprehensive distribution system. The *charjaniha* (literally belonging to several people) is a community based grain bank that is found in several areas of the southern hills, and variants are seen among the different tribal groups of the area. Procurement is through voluntary contributions, and/or preferential collection from the more affluent families, or those wishing in any given year to donate to a public fund. Community collections through the *cherchera*<sup>2</sup> rituals or through groups of women dancing the *relo*<sup>3</sup>, also help build up the collection. The *charjaniha* resources can be held in paddy, in the minor millets, and even in a non-timber forest product (NTFP) like *mahua*, and are used for community functions, as well as for distribution to individual households in drought years.

### Women's role in food production, gathering & distribution

The network of local traders or *kochiyas* were originally the link persons between the many local markets, and were the major agents in the local trade in primary food resources. It is

interesting that the *kochiyas* operating in the food trade were mainly women, while those dealing in forest produce with commercial value or utility items were mostly men. Today, the system exists in a distorted form, with male *kochiyas* having become agents of a centralised trade system. However, the role of women belonging to the *sonkar* (vegetable farmer) community in primary marketing survives up to the present day, and institutions like the *turi hatri* (women's market) of Raipur bear witness to the vibrancy of women centered local distribution networks.

The role that women have played in maintaining these systems is relatively little understood. In Chhattisgarh, women are the major agricultural workers. They work in each and every aspect of crop production, preservation and storage. In certain parts of the state like Abujhmar and Sihawa, women are also known to use the plough, a function that is considered a taboo and prohibited for them in almost all other parts of the country. Apart from crop weeding, maturing, harvesting, women are the leading players in all post harvest and storage operations. Women also play a major role in the collection and processing of the many kinds of uncultivated foods. Many of these foods are collected from the forest, and women use them for maintaining household food security and nutrition needs outside the market system.

Women are the primary gatherers of all uncultivated foods, and inheritors of an ancient knowledge system about food biodiversity. They are also the gardeners and herbalists with primary knowledge and responsibility for maintaining the homestead gardens called the *baris* and the *bakhris*. Again it is the women who take the produce to the primary markets and barter or trade in the items related to primary food needs. Agricultural scientists would do well if they attempted to learn from women about their existing knowledge of seed technologies, varietal preferences, and even breeding experiences and procedures.

### **Women- the seed keepers!**

Women were also the keepers of the seeds. Traditionally, the crop to be harvested for seed was identified in the field of standing crop, and women always took special care while reaping these. A wide variety of seed storage structures were used in subsequent stages, and the exact storage structure used for seed depended on the length of time the seed was needed to be stored, the moisture content, and other factors. Some seeds like rice are even today stored in bamboo *dholgis*

(or *dhongis*), thatched and sealed with cow dung, and kept away. These can last for up to three years. Other seeds like the minor millet seeds or vegetable seeds are stored in sal leaf containers, and often hung up in the kitchen above a wood fire, so that the smoke can act as a natural pesticide and preservative. The extremely complex knowledge of seed storage and preservation including its technical aspects has always been in the hands of the women.

### **Loss of heritage**

Today this entire system, as well as the seed heritage of the people is gasping for life. Misguided government effort aimed at so called maximisation of production, the commercial pressure of the market, of banks and the seed corporations, the so called 'model' PDS of Chhattisgarh that procures paddy from farmers at a flat rate (i.e. regardless of quality or special characteristics) often leaves the farmer with no perceived reason to grow the traditional varieties.

This is apart from the threat of biopiracy by seed corporations. A major crisis in Chhattisgarh occurred when Syngenta attempted to enter into a 'collaborative research project' with the Indira Gandhi Agricultural University at Raipur, where Dr Richharia's own academic work is housed. On that occasion, shortly after the new state of Chhattisgarh was created, it was civil society pressure that led to this plan being aborted. Today, civil society is fragmented on the issue of development options for the new state. Rupantar battles on with its programme of ex situ conservation of rice diversity and its attempts at in situ conservation, but unless there is a validation of the importance of seed diversity and an assured outlet for farmers growing diverse varieties in our system, the task seems really uphill.

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### **(Footnotes)**

<sup>1</sup>Rupantar is an NGO based in Chhattisgarh which has worked on agro biodiversity, community health, education and women's empowerment since 1994.

<sup>2</sup>Cherchera is a festival of community collection after the rice harvest, when groups of dancing young people go around seeking contributions (in cash or kind) from every home in a village over several days. The festival culminates on a particular full moon day when the total collection is measured and valued. The value is used for an agreed community purpose.

<sup>3</sup>Relo is a traditional dance of the Gond tribe in Bastar. It is performed on all ritual occasions.

## KERALA'S BATTLE TO PROTECT ITS PADDY LANDS

Harish Vasudevan

Rice is the staple diet of the Keralite today. Till about two decades back Keralites used to consume millets like ragi, little millet, foxtail millet and also tubers like yam, tapioca etc in large quantities. However, now rice is consumed during all three meals in different forms. Therefore, rice is an important component of life in Kerala, even more important is drinking water. Last year Kerala experienced drought like conditions barely two to three months after monsoons ended in September. This is a shocking state of affairs for a state which gets plenty of rainfall. Both these issues bring us to paddy fields and wetlands.

Kerala's drinking water availability and food security depend on the protection of two factors, first, the Western Ghats which ensure sufficient rains and water to Kerala and second paddy and wetlands which act as natural water reservoirs and allow for the percolation of water into the ground; thereby raising the ground water levels and recharging wells. Currently, both these are in jeopardy; however the threat to paddy lands is acute and extremely serious.

Paddy lands in Kerala have become a desired asset for the capital and cash rich real estate industry. Land has become a prime speculative asset and its price has escalated to astounding levels, therefore the demand for the lower priced paddy fields has increased. People with power are purchasing and converting paddy lands into 'land banks'. It is clear that in many a project paddy lands are acquired not because there are no other lands available, but because the price of non-paddy land is high (thereby reducing profit margins) and investors do not want to deal with issues of vacating people.

### **The law to protect paddy lands exists in its violation!**

In 2008, the Kerala assembly passed a bill to protect paddy and wetlands called *The Kerala Conservation of Paddy Land and Wetland Act, 2008*<sup>1</sup>. Initially, the

Act did prevent the conversion of paddy lands to other uses, but now paddy land conversion is taking place without any checks and balances. This illegal conversion of lands is matched by loss of water bodies and water availability. If one travels through any district in Kerala, levelling of paddy lands (a precursor to conversion on paper) is a common sight. As per the Paddy Land Act there is a provision to issue a "stop memo" against people who level the paddy lands and to seize the vehicles which bring the earth to level the paddy lands. But due to the 'unholy alliance' between

the police force and the land mafia no such cases have been registered and paddy lands are being levelled without any fear.

The state government is also approving projects, which require conversion of paddy and wetlands. Airports in Aranmula, Chikallur in Wayand, Anakkara in Idukki and buildings, industrial parks and cricket stadiums, all require the destruction of our precious paddy fields.

### **Efforts to undermine the Act**

The Kerala government decided during a meeting

on February 8, 2012, to modify the Paddy Land Act of 2008 to regularise all cases of paddy field levelling and conversions up to 2005, after charging a fine. This became controversial and the decision was abandoned. Again on June 13, 2012, the Industries Ministry put forward the proposal to amend the Paddy Land Act and it cited the requirements of the 'Emerging Kerala'<sup>2</sup> projects for suggesting the amendment. It came to light that the Industries Ministry had already recommended projects that would entail conversion of 1000s of acres of paddy land. Its demand was that paddy land conversion should be allowed wherever there is a requirement for industrial projects or tourism. Once again public controversy resulted in shelving the proposal.

However, two months later the same set of recommendations reappeared, in front of the government in another form as the 'land utilisation'

### **Water crisis and paddy**

#### **6,455 hectares of paddy destroyed in drought**

As per news reports, 6,455 hectares of paddy and 91 hectares of vegetables had been destroyed in Palakkad due to drought. Cash crops such as coconut, areca nut and pepper have also been affected.

The Hindu news paper, January 31, 2013

<http://www.thehindu.com/todays-paper/tp-national/tp-kerala/6455-hectares-of-paddy-destroyed-in-drought/article4363851.ece>

#### **Paddy cultivation banned in Tungabhadra command area**

In Karnataka, the Deputy Commissioner has banned the cultivation of paddy as a second crop in the Tungabhadra command area in Bellary district, because of shortage of water in the Tungabhadra reservoir. He has requested farmers in the command area to cultivate crops that require less water, and made it clear that the district administration would not take responsibility for crop failure due to shortage of water if farmers cultivated paddy.

The Hindu News paper, BELLARY, January 11, 2013

<http://www.thehindu.com/todays-paper/tp-national/tp-karnataka/paddy-cultivation-banned-in-tungabhadra-command-area/article4296904.ece>

bill, again sponsored by the Industries Department. The bill among other things also recommended cancellation of the 1967 land utilisation act. The Revenue Minister publicly objected to this new bill and the Law Department withdrew the bill. Decades before the 2008 bill, Kerala had in place a law to prevent conversion of paddy lands. Based on the Central government's Essential Commodities act of 1955, the Kerala government had promulgated the 1967 land utilisation act, to prevent conversion of paddy lands. The 2008 Act to protect paddy lands came into being with the intention of strengthening the 1967 Act. If the 1967 Act was promulgated keeping in view the need for food security, the 2008 Act also took into account the environmental importance of paddy and wetlands to Kerala.

According to the 2008 Paddy Land Act it is a criminal offense to convert paddy lands and it can attract jail term or fines, however the publication of the paddy land data bank, a basic requirement for implementing the Act, has not yet been done. In this situation the Act is a mere paper tiger. Violation of the Act happens when it is established that a person has converted a paddy land which is recorded in the paddy land data bank. The local governments at the district level were supposed to prepare a draft data bank (as soon as the law came into place) which was then supposed to be compared with a satellite image and modified and fine tuned. The final version of the land data bank was supposed to be published in the Gazette within three months, but four years later it has not yet been published. Therefore, the various cases filed by the police against persons who illegally converted paddy lands during the last four years have been thrown out by the High Court. The available draft data bank is full of errors. To rectify these mistakes the satellite image available with the government is inadequate, and a high resolution image is required; but the government has not yet made the purchase. This delay is directly benefitting people who are illegally converting paddy lands.

#### **Does a state have to ensure its food security?**

In the meantime, the prescription suggested by the Deputy Chair of the Planning Commission is that paddy lands in Kerala can be used for all other purposes including tourism, and neighbouring states will sell Kerala the rice it requires. Leave aside his ignorance about the ecological services provided by paddy lands; the simple question is how long will Kerala protect its food security with grains from other states? What if

Andhra Pradesh and Tami Nadu decide to develop by converting their paddy lands? In earlier times, when there was no means to transport food across long distances and when Kerala used to grow its own food, food scarcity was a relatively rare occurrence. Today Kerala grows only one fifth of the rice it needs – 6 lakh tonnes of the 40 lakh tonnes required. In 1974-75 paddy cultivation was taking place in 8.81 lakh hectares and the paddy produced was 13.5 lakh tonnes. As against that only 2.13 lakh hectares is under paddy cultivation today. That means we have lost about 6 lakh hectares of paddy land in the last 30 years. This loss of paddy lands is the biggest threat to food security in Kerala.

#### **Does paddy cultivation need support?**

One of the major reasons cited for abandoning paddy cultivation is that it is considered a loss making proposition. Considering various factors paddy cultivation might seem like a losing proposition, however paddy farmers in Kuttanad (Kerala's rice bowl) say that if paddy is procured and payments are made on time, paddy farming is viable. Their complaint is that even when they are willing to pay, there is no labour available for paddy cultivation. It is a fact that paddy cultivation can never be as remunerative as real estate deals. Today, world over, agriculture is sustained through government subsidies be it in Japan, the countries in the European Union or the United States. All countries that are worried about food security are going in this direction. According to the 2008 Paddy Land Act the government is supposed to provide necessary financial support to paddy farmers, but disappointingly enough, nothing on that front has happened till now.

Paddy fields not only provide food, they are also fresh water reservoirs and store and replenish more fresh water than large dams in our state. During paddy season the fields are the food source and living space for many creatures and birds. Preserving this is not an individual need; it is a societal responsibility.

#### **The solution:**

Sustainability on one hand and mindless development on the other hand are two ways open to us. If we convert paddy lands for temporary benefits, we will be sacrificing long term food security and drinking water availability of the state. Even in developed nations land use patterns are not changed for building activities. We have to accept the fact that we are a land scarce state and we can't allow projects that require large tracts of land. We should put stringent

restrictions on land use and land transactions and place restrictions on indiscriminate buying of paddy land. Any modification of the Paddy Land Act should only be to strengthen the Act. The current situation where even private agencies are using loopholes in the law to convert paddy lands in the name of public purpose should be stopped forthwith. Paddy lands serve many ecological purposes which benefit the society and ecology at large, however any losses that are incurred are borne by the owner alone. Therefore, the government should think of all paddy lands in the state as a 'food reserve' and buy it from people who can't afford to maintain it, and lease it out to people who want to farm. Alternately the government should provide paddy land owners a fixed amount every year to maintain their paddy lands. This will give manifold returns to the society in terms of drinking water availability.

Paddy cultivation has to be promoted and encouraged, farmers should be supported, paddy procurement

should be done at the panchayat level and there should also be facilities for storage. Innovative programs to attract youth into paddy cultivation have to be introduced and eco-friendly farm tourism promoted while making the farmers also beneficiaries of the program. The lacunae in the Paddy Land Act need to be urgently rectified and the draft data bank made publicly available after correcting the errors. Protecting paddy lands which are our food reserves should become a priority.

#### **Harish is a young lawyer and activist working on issues of environment and land use in Kerala**

(This article was written and published in Malayalam in the publication Chandrika, 5-11 January 2013 titled: Malayaliyude Bhakshyasurakshayum Jaladaur balyavum. It was translated and edited for PADDY by Sreedevi Lakshmi Kutty)

#### **(Footnotes)**

<sup>1</sup> Full text of the Act  
<http://faolex.fao.org/docs/pdf/ind118198.pdf>

<sup>2</sup> An initiative launched by the Kerala government to showcase Kerala as a destination for new industries and businesses.

## **PADDY - FROM AROUND THE WORLD**

### **Rice paddies synergize with fish farming**

According to a recent report, rice cultivation with fish farming can improve food security, reduce climate change impact and increase food production and also contribute to economic growth. According to the scientist who carried out the project, "Aquaculture enhances soil fertility from fish waste discharge, contributes to pest control as several fish varieties feed on insects that harm crops and solves climate change crisis."

Source : Rice paddies synergize with fish farming. Naimul Haq, 27 February 2013

[http://www.scidev.net/en/south-asia/news/rice-paddies-Synergise-with-fish-farming.html?utm\\_source=link&utm\\_medium=rss&utm\\_campaign=en\\_news&utm\\_source=twitterfeed&utm\\_medium=twitter](http://www.scidev.net/en/south-asia/news/rice-paddies-Synergise-with-fish-farming.html?utm_source=link&utm_medium=rss&utm_campaign=en_news&utm_source=twitterfeed&utm_medium=twitter)

### **Golden Rice – update from IRRI**

There have been some news reports indicating that Golden Rice is on the way to being approved in the Philippines. The Philippines Rice Research Institute and the International Rice Research Institute (IRRI) have recently finished two seasons of field trials of Golden Rice. However the IRRI has recently confirmed, "Golden Rice will not be available for planting by farmers in the Philippines or any other country in the next few months, or even this year" and also said "it has not yet been determined whether daily consumption of Golden Rice does improve the vitamin A status of people who are vitamin A deficient and could therefore reduce related conditions such as night blindness."

Source : Clarifying recent news about Golden Rice. IRRI, 2013  
[http://irri.org/index.php?option=com\\_k2&view=item&id=12483%253Aclarifying-recent-news-about-golden-rice&lang=en](http://irri.org/index.php?option=com_k2&view=item&id=12483%253Aclarifying-recent-news-about-golden-rice&lang=en)

### **India's rice revolution**

It was recently reported that Sumant Kumar, a young farmer in Nalanda district of Bihar state, harvested an astounding 22.4 tonnes of rice from one hectare of land, using only farmyard manure. The weight of individual paddy stalks was found to be heavier and grains of rice were big. Ravindra Kumar, another small farmer from a nearby village harvested a record breaking wheat crop. These "super yields" are being attributed to a method of growing crops called System of Rice (or root) Intensification (SRI). It has led to yield increases for various crops like wheat, potatoes, sugar cane, yams, tomatoes, garlic, aubergine and many other crops. Bihar is ushering in a "new green grassroots revolution" with farmers, research groups and NGOs experimenting with SRI for various crops.

However, China's leading rice scientist Professor Yuan Longping, known as the "father of rice" has expressed skepticism about this record and the method of verification by the Indian authorities. He said "I introduced the intensification method to China myself. It could increase yields by 10-15% in low-yield fields, but it's not possible for fields that are already producing relatively high yields."

On the other hand, Norman Uphoff, Professor of Agriculture at Cornell University in the United States

has defended the farmers and the Indian authorities. He said that the harvest was done in the presence of a large number of people as high yields were expected. The yield measured was from a specified area within a one acre plot and not from “sample crop-cuts”

Source : Articles in the guardian, Saturday 16&23 February 2013

<http://www.guardian.co.uk/global-development/2013/feb/16/india-rice-farmers-revolution>, <http://www.guardian.co.uk/world/2013/feb/23/india-rice-revolution-questioned>

## RICE MELAS IN KERALA & KARNATAKA

Thanal along with Save Our Rice and Organic Bazaar held an Organic Rice Mela On 15 & 16 of February in YMCA Hall, Thiruvananthapuram. The Mela showcased various varieties of traditional rice including medicinal rice, scented rice and purple rice among others. Many of the varieties displayed are grown by farmers of Wayanad. The Mela was well received by the consumers many of who have never seen these traditional and rare varieties of rice. People were curious to know more about the different varieties. In Karnataka Sahaja Organics, Save Our Rice & NABARD organised a Red Rice



Mela on 19, 20 & 21 of January in Nanjaraja Bahadur Choultry, Mysore. Over 6000 people attended the exhibition and over a 100 different varieties of rice were on sale.

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Campaign Awareness Material - For Private Circulation only

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