

# livelihoods

*today and tomorrow*

November 2009

## Food for All



Floods move on! 90 centimeters of rain in a day in Tamil Nadu!

Government of India calls it a national calamity. People are joining back into the routines of daily lives as rescue, relief and rehabilitation trail off and processes towards reconstruction of their livelihoods and growth on this foundation have begun!

Two Children's Days – National and Universal! Let us guarantee the future to them! Let us unfree them from all labour! Let us ensure and offer them their rights!

Food is a life force and offers life force energy and a must in survival of any life. From the stage of having food from hunting and gathering, to growing crops, to tending animals and to cooking food, humans moved on. From sharing and looting the food, they moved on. From the stage of every location producing enough for itself, specializations and export/imports began. Willy-nilly market mechanisms started off. Farmers and poor producers decreased in numbers and percentages and people who provide non-food products and services increased. We transcended the stage of eating to survive. Our food intake portfolio includes cereals, vegetables, fruits, milk, eggs, meat and related raw, processed and cooked foods. We learnt to store them and store for long periods. We began to savour food for pleasure.

However, all of us are not bestowed equally and we are fulfilling our food needs in a variety of levels, layers and means. Some are starving; some billion-plus are not able to have a proper/full square meal a day; and some others became obese and struggling to burn the calories and fat they are accumulating. We also see huge wastage and spoilage of food. We are moving from green revolution to sustainable food production practices. Rice at Rs.2 a kg and Re.1 a kg are being offered through public distribution system. 100-day employment NREGA, and self-help groups and other collectives and federations of the poor are improving the food security in a small measure. One in three or four is involved in food production, food value-chain and marketing reaching the food consumer. Their livelihoods are threatened with growing climate change and globalization processes. Food shortages and rising prices are still the key issues. Food purchasing power is still an issue. It is in this context, 'livelihoods' explored 'food'.

MS Swaminathan has been tirelessly working towards improving the food security in India and the world, through green revolution and transcending it now. An effort to include local foods and local eating habits is an important step forward in public distribution. CS (or CS Reddy) is at the forefront of initiating, encouraging and facilitating 'support' to the processes of Women SHGs and their federal structures becoming self-reliant. ICRISAT focuses on research, piloting and extension in dry-land agriculture despite the reluctance of universities and research fraternity at large. Amartya Sen's 'The Idea of Justice' discusses justice and argues that justice should include social equity and justice, freedom and fight against poverty in its fold. A must read for all.

We are increasingly become aware that we need to have more number of lives that appreciate nature and natural flows of the universe as it is. Gandhiji said - we are aware that this earth has got enough to feed all for their decent survival but not adequate to meet their greed. The perspectives and orientations need to be aligned with this idea of justice to all. This would require campaigns and they have to gather momentum. A global ecologically responsive and socially responsible brigade or a force has to evolve. 'livelihoods' remains committed to fulfill its role in this task. With the faith that you remain with us in this effort, I remain.



G. Muralidhar

the 'livelihoods' team

**‘livelihoods’ team**

Editor in Chief	G Muralidhar
Principal Editor	T Nirmala
Senior Editor	K Bharathi
Working Editors	B Madhusudhan K Sridevi
Edit Associates	G Bhargava M Vijaybhasker Srinivas Nilendu Mukherjee Rekha Srinivasan T Venkateswarlu V Muralidhar

The State of Food Insecurity in the World- FAO Report	7
---	---

<b>Cover Story</b>	12
<b>Food for All</b>	
‘World hunger hits one billion’ says the recently released FAO report. Asia-pacific region including India is the worst hit region with 642 million undernourished people. Though India is one of the largest producers of food in the World, it is also house for the highest number of hungry people. ‘livelihoods’ focuses on the food sector to highlight the issues of food security as well as scope for employment generation.	
Ethanol	22
Food Security Interventions	23
All Development Workers are Strategists	27

**For Private Circulation only**

*For enquiries contact:*

**AKSHARA** Network for Development Support Services,

HIG II B-25 F-6, APHB Colony,  
Baghlingampally, Hyderabad - 500044

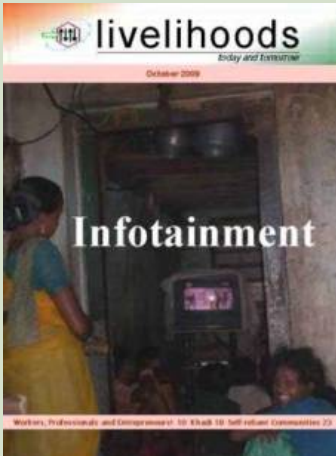
Mobile: 09347802302

www.aksharakriti.org

akshara@aksharakriti.org

Response		4
News		5
Legend	Leading Evergreen Revolution- Swaminathan	8
Intervention	Millets Through Public Distribution System	9
Perspectives	Development Needs Everyone!	10
Interview	Women Have Become More Active Now	17
Value Chain	Ragi	18
Organization	ICRISAT	20
Policy	National Seed Policy 2002	26
The Contrasts	Repairing Services reap	28
	Pounding goes Silent	28
Worker	Strengthening Self Help Groups- CS Reddy	29
Story	Managing Time	30
Trends	Employment in Organized Sector in India	31
Books	The Idea of Justice	32
Resources	Vocational Courses at National Open School	33
Case studies	Multiple Livelihoods Help Ignoring Existing Livelihood Hurts!	34
‘Yoga’kshemam		35

# Response



Congratulations on the 2nd anniversary of Livihoods. Every one of you deserves a big appreciation for the stupendous work you did.

Kota Tirupataiah

Thanks for the Livihood edition of October '09. I find it very informative and useful. My regards to the entire Team.

Edwin

Thank you very much for your huge information.

Stanley Oguri

## Contributions Solicited

If you would like to contribute an article or have something interesting to share, email or mail it to us. If it contains pictures or files please remember to attach them to the email. Please include your name, email, contact information such as phone number, location (nation) and area of expertise. If your article is accepted an editor will prepare the article for publication and may edit it for accuracy, grammar, style, and length.

Email address is [akshara@aksharakriti.org](mailto:akshara@aksharakriti.org) ; please include "livihoods Contribution" in the subject line .

Mailing address is: HIG-II Block 25 Flat 6, APHB Colony, Baghlingampally, HYDERABAD, India 500 044.

## After 55 years of observing the Universal Children's Day!?!





**Norway to Fund UN Project for Women's Role in Panchayats:** The Norwegian government signed an agreement to grant the United Nations Development Fund for Women (UNIFEM) \$9 million for strengthening participation of women in local governance in India. The partnership agreement was signed by UNIFEM executive director and the Ambassador of Norway to India. The grant will be used over a period of three years to initially train 30,000 women elected representatives from six Indian states. 'The grant can be extended to a longer period. 'The government-run National Institute of Rural Development (NIRD) will be in-charge of training to the women. The training could in turn be conducted by the state institutes of rural development. In the three years the project will be implemented in states with varying women representation in local government which will include Andhra Pradesh, Bihar, Meghalaya, Karnataka as well as Kerala.

**Rice Export Volume Rises 33%-** Rice exports increased in volume but declined in value in the first 10 months of the year, according to the Ministry of Agriculture and Rural Development. Exports reached 5.37 million tonnes, earning US\$2.39 billion, an increase of 33.23% in volume but a fall of 7.65% in value compared with the same period last year.

**Presence, Growth of MFIs Uneven, Says Microfinance in India Survey:** The next leg of growth for microfinance institutions will come from places such as the north-east, said a report on the state of microfinance in India. Southern states lead in share in client outreach, as well as loan disbursement and out standings. According to the report, released by Access Development Services, Andhra Pradesh, Tamil Nadu, West Bengal, Maharashtra and Karnataka account for 74 per cent of the total outstanding lending in the country. However, microfinance institutions have not spread to states such as Nagaland, Arunachal Pradesh and Mizoram. It said gaps also existed

in Bihar, Madhya Pradesh and Rajasthan. "West Bengal, Orissa, Uttar Pradesh and Uttarakhand and Assam have been posting better growth rates. However, growth in states such as Maharashtra has already started decelerating," it said. Interestingly, in Karnataka the lending by micro financing institutions exceeded the volume of bank lending to self-help groups in the state. In Andhra Pradesh alone, 20 million microfinance clients were financed to the tune of Rs 12,300 crore in 2008-09. The number of households in Andhra Pradesh is only 16 million. Microfinance institutions recorded 60 per cent increase in clients in India, to 22.6 million in 2008-09, from 14.1 million the previous year. Microfinance lending in the formal banking system, on the other hand, grew only by 15 per cent to 54 million clients from 47.1 million clients in the previous year.

**MFI Awards:** The first annual Microfinance India awards, instituted by NGO Access Development Services and HSBC, were presented recently at a three-day conference on microfinance. West Bengal-based MFI Bandhan, which has now spread its wings to northeastern states and metros like Delhi and Mumbai, won the award for 'institution of the year'. Vijay Mahajan, considered the guru of the microfinance sector, was also awarded for his contribution to the sector.

**Tamil Nadu, the Highest Recipient of World Bank Funds in the Country:** Tamil Nadu, the highest recipient of World Bank funds in the country, has sought an additional assistance of Rs 1,764 crore. Tamil Nadu has been implementing six major projects health, road sector, urban development, tsunami reconstruction, agricultural modernization and poverty reduction - with a total outlay of Rs 9,760-crore assistance from the World Bank. The bank recently sanctioned Rs 440 crore to construct 17,000 houses along the coast line under the vulnerability reduction project. The state has appealed for additional Rs 242 crore for road sector project, citing the spiraling cost of materials; Rs 572.62 crore for

expanding the health systems project by establishing new health centers across the state and Rs 950 crore to extend the empowerment and poverty reduction project (Vazhnthu Kattuvom), which is now under implementation in 16 districts.

**After 12 Years, Credit Grows in Single Digits:** For the first time since April 1997, growth in bank credit has dropped to single-digit levels, an indication that demand is yet to pick up. For the year up to October 23, bank credit flow grew by 9.65 per cent. This is the slowest pace of increase since April 25, 1997 when the growth rate was 9.61 per cent.

**Farm Sector Remains Slow Growth:** India's farm sector has changed remarkably little since the advent of the Green Revolution, while other industries have been transformed over the past two decades. As a result, agriculture's share of the Indian economy shrank to 17.5 percent last year, from nearly 30 percent in the early 1990s. This has raised concerns that India's farm output could lag demand and the country -- which ranks among the world's top three consumers of rice, wheat, sugar, tea, coarse grains and cotton -- will become a large food importer unless yields jump. "At present, most of the farm graduates are either taking jobs in the government, or financial, institut- tutions, or in private sector industry. They are seldom taking to farming as a profession, " said the report India's Food Dilemma High Prices or Shortages by M.S. Swaminathan Research Foundation. The survey showed 40 percent of Indian farmers would quit farming, if they had a choice -- an alarming revelation for a country where two-thirds of the billion-plus people live in villages.

**Portfolio Funds See Growth Opportunity in Rural India:** Rural India has found a new ally in Venture Capitalists (VCs) and Private Equity (PE) funds. Moving away from chic sectors like IT and Real Estate, portfolio funds are making a beeline to invest in social projects for the

economically backward. Micro-Credit firms and Microfinance companies, who invest in social projects, are witnessing large capital inflows from strategic investors. According to microfinance industry estimation, the segment that includes micro-equity investments, has received over Rs.3000 crore or PEVC funds in the past three years. Inflows into microfinance schemes and other social projects have resulted in lending touching \$ 15 billion in 2008. As per PE tracker Venture Intelligence rolls, PE firms have invested about Rs.200 crore in 2009, 21% lower than the same period last year. There are about 10 crore borrowers, 80% of whom are served by existing microfinance institutions.

**India's Rank 113 in Gender Equality Index:** India slipped a notch to 113 the rank, out of 134 countries, in the latest Gender Gap Review of the World Economic Forum (WEF) released recently. The annual review assesses the ability of a nation to distribute resources equally between women and men in its overall population. The review measures gender gap based on four pillars-health, education, economic participation and political empowerment. Among these, India was ranked favorably only in the political empowerment gap, occupying 24th rank. Among the other three

pillars, India was ranked 134th in health gender gap, 121st in educating gap and 127th in economic participation and opportunity gap. In the overall gender gap rating last year, India was ranked one position on high at 113. In 2007, it was ranked 114th. The country was ranked 98th in the inaugural edition of the review in 2006. Among the group of top emerging countries, India was ranked much below Russia, China and Brazil, which occupied the 51, 60 and 82 positions, respectively. Within South Asia, only Pakistan was ranked lower than India.

**28% Unable to Earn Enough to Rise above Poverty Line- Labour and Employment Ministry, Govt of India:** The employment scenario coupled with the population below the poverty line depicts a situation where about 28%, though employed, are still unable to earn sufficient wages to bring their families above the poverty line. There was an open unemployment of 10.8 million out of a total workforce of around 459 million. "Open unemployment in India is not much compared to the size of population, but it is the under-employment in terms of productivity and income which is of great concern.

**A.R. Rahman Foundation Wants to Make Poverty History:** As a first step towards achieving the vision of "strive towards making poverty history", the

Foundation will set up educational institutions and provide world class, state-of-the-art infrastructure and education to underprivileged children who do not have the means to access & fund their education. This will equip them with knowledge and skill sets to pursue specialized higher studies that will provide them career opportunities to build a secure future for themselves and their families.

**India's Annual Food Inflation Rises to 13.7 Percent- Wholesale Price Index by the Commerce Ministry:** The 52-week average prices of onions were higher by as much as 33.4 percent and potatoes became costlier by 27.9 percent. The average prices of vegetables were up 18.6 percent, pulses 16.83 percent, rice 15.95 percent, wheat 5.19 percent, fruits 7.05 percent and milk 7.99 percent.

**RGVY to Cover all BPL Families in Orissa:** As per the Planning Commission estimate, Orissa State has 31.85 lakh BPL families while the Government has recognized 44.93 lakh rural households as poorest of the poor. The State Government had requested the Centre to reconsider the case of the left out 13.08 lakh BPL families for supply of power free of cost under the centrally-funded rural infrastructure development programme- Rajiv Gandhi Grameen Vidyutikaran Yojana (RGVY). ■

### "Tracking Progress on Child and Maternal Nutrition" UNICEF's report revealed Undernourishment issues in India and world

Underlining the dismal state of health and nutrition in Indian children, a UNICEF report says that the country has a whopping 61 million stunted children, the largest in any country. In other words, 3 out of 10 stunted children are from India distantly followed by China that has 12 million children. Stunted growth is a consequence of long-term poor nutrition in early childhood. Stunting is associated with developmental problems and is often impossible to correct. A child who is stunted is likely to experience a lifetime of poor health and underachievement, a growing concern in India that is demographically a young nation. Astoundingly more than 90% of the developing world's stunted children live in Africa and Asia. The findings of the 'Tracking progress on child and maternal nutrition' also point out that under nutrition contributes to more than a third of all deaths in children under five. Under nutrition is often invisible until it is severe, and children who appear healthy may be at grave risk of serious and even permanent damage to their health and development. Linking malnutrition to gender equality, the UNICEF report also says that children's health suffers not just due to poor hygienic conditions and lack of nutritional food but also because the mother herself is suffering from anemia and malnutrition during adolescence and child-bearing. "They become trapped in an intergenerational cycle of ill-health and poverty," says the report. Of all the proven interventions, exclusive breastfeeding for the first six months together with nutritionally adequate foods from six months can have a significant impact on child survival and stunting, potentially reducing the under five child mortality by 19% in developing countries. The report includes data showing that 16 developing countries successfully increased their exclusive breastfeeding rates by 20%, in periods ranging from 7 to 12 years.

## The State of Food Insecurity in the World– FAO Report

In its annual feature of bringing out a report on *The State of Food Insecurity in the World*, Food and Agriculture Organization of the United Nations Rome, has focused this year's report on **“Economic crises – impacts and lessons learned”**, 2009.

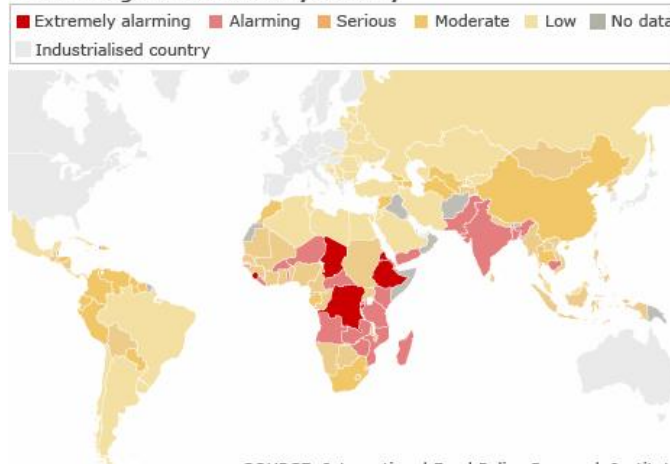
Chapters in the report highlight issues of under nourishment around the world, case studies of countries affected by economic crisis and suggestions towards eliminating hunger. The annexure has tables depicting prevalence of undernourishment and progress towards the World Food Summit (WFS) and the Millennium Development Goal (MDG) targets in developing countries and selected food and financial indicators in developing countries, classified by region. It has interesting box items on topics like; *Are food imports necessarily bad? Impact of the economic crisis on microfinance, How is food security assessed by the USDA Economic Research Service?*

The report estimates that, as a result of the economic crisis, for the first time since 1970, more than one billion people – about 100 million more than last year and around one sixth of all of humanity – are hungry and undernourished worldwide. It is believed that The World Food Summit target of reducing the number of undernourished people by half to no more than 420 million by 2015 will not be reached if the trends that prevailed before those crises continue. The food crisis has propelled agriculture and food security, especially in developing countries, back onto the front pages of newspapers and the top of policy-makers' agendas.

The report says that along with economic crisis the current food insecurity is marred with several other factors. The food crisis in 2006- 08 which pushed the prices of basic staples beyond the reach of millions of poor people, almost 17% increase in commodity prices both at international and domestic markets. The price increases had forced many poor families to sell assets or sacrifice health care, education or food just to stay afloat. As large part of the world is simultaneously affected with the economic crisis the possibilities of using official assistance like currency devaluation or borrowing from unaffected nations to face the effects of the crisis is limited. Developing countries today are more financially and commercially integrated into the world economy are far more exposed to shocks in international markets. They have experienced drops in their trade and financial inflows and have seen their export earnings, foreign investment, development aid and remittances falling.

The report is concerned that this situation will reduce the money available for government programmes that are indispensable to promoting growth and supporting those in need. Faced with the crisis, households will be forced to use coping mechanisms such as replacing more-nutritious food with less nutritious food, selling productive assets, withdrawing children from school, forgoing health care or education, or simply eating less. Based on direct interviews with people who are most affected by food insecurity, country case studies included in the report gives an insight into how households are affected by the fall in remittances and other impacts of the economic downturn. It also shows how governments are responding to the crisis by investing in agriculture and infrastructure and expanding safety nets.

Global hunger index 2009 by severity



SOURCE: International Food Policy Research Institute

The report suggests twin-track approach to achieve and sustain global food security. The strategy seeks to address both the shorter-term acute hunger spurred by food or economic shocks and the longer-term chronic hunger that is symptomatic of extreme poverty. It says that to help hungry people now, safety nets and social-protection programmes like; school feeding or voucher programmes, stimulate local economy by creating jobs, increasing agriculture and local value-added food production must be done. In addition, they should integrate affordable and sustainable best practices. Small-scale farmers need access to modern inputs, resources and technologies – such as high-quality seeds, fertilizers, feed and farming tools and equipment – that will allow them to boost productivity and production. This should, in turn, lower food prices for poor consumers, both rural and urban.

As a long term goal to conquer hunger in the years to come, developing countries must be assisted with the development, economic and policy tools required to boost agriculture sectors in terms of both productivity and resilience in the face of crises. Stable and effective policies, regulatory and institutional mechanisms, functional market infrastructures that promote investment in the agriculture sector are paramount. For instance, local purchase of produce for school meals can generate income and guaranteed markets for smallholder farmers and community grain reserves can serve as a local food safety. Investments in food and agricultural science and technology need to be stepped up. Due attention must also be given to developing the rural non-farm sector in parallel with agriculture, which is another key pathway out of poverty and food insecurity.

The report concludes with the above suggestions and once again highlighting that food, the most basic of all human needs, is no more affordable, leaving more and more people without the means to consistently obtain nutritious food throughout the year. Indeed, if the food crisis was about higher prices, the economic crisis is about lower household incomes, which can be even more devastating, aggravating already unacceptable levels of food insecurity and poverty. The suggestions given will help to save lives and families, although given the severity of the crisis, much more needs to be done. ■



# Leading Evergreen Revolution-Swaminathan

Dr M.S. Swaminathan's contributions to Agriculture Science have made an indelible mark on food production in India and elsewhere in the developing world. With a belief that importing food is like importing unemployment, he led India from one of those food importing countries to become one of the largest producer of food in the world and is recognized as 'The Father of India's Green Revolution'.

Mankombu Sambasivan Swaminathan, popularly known as M.S. Swaminathan, was born on 7 August, 1925 in Kumbakonam, Tamil Nadu. After his father died, he became close to his uncle, a renowned scholar at the Madras University. His early schooling held at native High school, high schooling at Little Flower Catholic High School in Kumbakonam. He earned Bachelor's Degree (B.Sc) in Zoology from Maharajas College, Ernakulam.

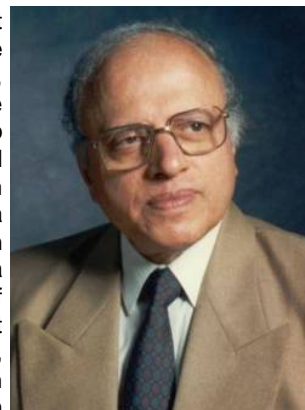
As a teenager, Swaminathan was strongly influenced by Mahatma Gandhi's ideals of non-violence and belief in swadeshi (self-reliance). During the period of wartime food shortages he chose a career in Agriculture and enrolled in Coimbatore Agriculture College where he graduated as Valedictorian with another B.Sc, in Agriculture Science. In 1947, he moved to the Indian Agricultural Research Institute (IARI), New Delhi, as a Post-graduate student in Genetics and plant breeding. After that, he received UNESCO fellowship to continue his IARI research on potato Genetics at the Wageningen Agricultural University, Institute of Genetics in the Netherlands. There he succeeded in standardizing procedures for transferring genes from a wide range of wild species of Solanum to cultivate potato. He earned Ph.D in Genetics In 1952 and returned to India in 1954.

By that time many countries in the world were suffering from food shortages and China lost as many 30 million people to famine. India lived a "ship-to-mouth" existence, subsisting on food grains imported from the U.S. This condition made Swaminathan worried and he decided to work on increasing self-sufficiency in food by increasing the productivity. He believed that importing food was like importing unemployment.

During the period of 1955 to '72, Swaminathan had done a field research on Mexican dwarf wheat. Continuing his research in 1966, he took the position of the Director of Indian Agricultural Research Institute of New Delhi where he used to spend his time in fields with farmers trying to help them to improve their productivity. He invented High Yielding Variety of wheat seeds and brought them closer to the farmers with lot of efforts. The first harvest with new seeds was three times greater than the previous year's production. With his success in wheat, the scientists at IRRI (International Rice Research Institute) accomplished the same miracle for rice.

But by that time the revolution was still incomplete. Only Punjab state had the right irrigation for the new technologies, the state-run food collection and distribution networks were notoriously inefficient, and a new fertilizers and pesticides

were needed, along with credit lines for small farmers. To solve these problems, Indira Gandhi, the then Prime Minister, gave full rights to Swaminathan to organize a new agricultural program to make India free from imports. His programs were a great success and his work in India was recognized as a Green Revolution because of which India grows today about 70 million tons of wheat a year, compared to 12 million tons in the early 60's. The Green Revolution was a technology package comprising material components of improved high yielding varieties of two staple cereals (rice and wheat), irrigation or controlled water supply and improved moisture utilization, fertilizers and pesticides and associated management skills.



Apart from spearheading Green Revolution in India, Swaminathan also established several research institutes like National Bureau of Plant, Animal and Fish Genetic Resources of India, International Plant Genetic Resources of India. At the age of 84, he is still fighting against poverty and hunger through M.S. Swaminathan Research Foundation.

Apart from this, Swaminathan is a prolific researcher and writer. He published so many papers in the field of crop improvement, Cytogenetics and Genetics etc. In addition he has written a few books around the general theme of his life's work, biodiversity and sustainable agriculture for alleviation of hunger. He got various national and international awards viz Padmasri in 1967, Raman Magsaysay for Community Leadership in 1971, Padma Bhushan in 1972, Borlaug Award in 1979, World Food Prize in 1987 and also he holds 58 honorary Doctorate degrees from universities around the world.

He held various important positions in his life in both government and non-government organizations. Currently he holds the UNESCO –Cousteau Chair in Eco-technology at the M.S. Swaminathan Research Foundation in Chennai and also holds the chair of the National Commission on Agriculture, Food and Nutrition Security of India (National Commission of Farmers).

Dr. M.S. Swaminathan led India from starvation to self-sufficiency and continues to inspire many people across the country to work towards food security for all. ■



## Millets Through Public Distribution System

Food security should become an important indicator of development. It is an essential indicator because any change that takes away availability of essential nutrients from the diet of people can harm the well being. There are many reasons for food insecurity like non availability of food grains as they are no more being grown, change in food habits due to availability of cheaper alternatives and others. The issue of food security has gained grounds of late due to the gravity of problem the world is in today. Any intervention that can stop activities that take away food security from people or activities that can restore food security that is lost is a welcome step. Many efforts are being made by both NGOs as well as government in this regard. One such intervention is shared below.

The district of Ananthapur in Andhra Pradesh is the one of the drought prone areas in the country. It receives the second lowest rain fall in the country. Being far from the East coast, it does not enjoy the full benefits of North East Monsoons and being cut off by the high western Ghats, the South West Monsoon are also prevented from penetrating and quenching the thirst of these parched soils. The District occupies the lowest position in respect of Irrigation facilities with only 14.08% of the gross cropped area. Therefore only dry land crops like Ragi, Jowar and pearl millet are the only crops grown by the farmers here. Naturally all the people belong of this area were habituated to eating these millets which was also their staple food.

This food habit changed when rice was distributed through PDS for Rs.2 kilo. People's millets were misplaced and rice occupied that place. As the usage reduced, automatically the production also started reducing. People started buying millets from the market for higher prices which was not affordable for the poor. Millets that were locally available, cheaper than rice and most importantly provided essential nutrients disappeared from people's food intake. This was not a good sign and posed threat to the food security.

To reverse this situation and to add the millets again into people's diet District Rural Development Agency (DRDA) and Watershed Support Services and Activities Network (WASSAN) an NGO working on watersheds development and agriculture decided to start an intervention together. This is one of the several drought relief programs of "Andhra Pradesh Drought Adaptation Initiation" (APDAI). They were helped by Mandal Revenue Officer and Mandal Development Officer.

The objective of this intervention was to help people regain nutrition components into their diet, which is provided by these three millets and get back into traditional food habits of eating millets. As the land in this area is dry, paddy could not be cultivated; naturally people started concentrating on growing Ragi, Jowar and Pearl millet again. As a pilot the program was started in Nallacheruvu and Gandlapenta mandals of Ananthapur district and has a total population of 2,500 families.

They got permission in 2009 from commissioner civil supplies department to distribute ragi, jowar and pearl millets in five fair price shops. A grand inauguration was held to attract people to the shops. Staff of both the organizations campaigned in the villages to create awareness among people. Workshops were also held in which District Administration, District Water Management Agency (DWMA), District Civil Supplies Department, Fair Price Shop dealers, area coordinators of Mandal Mahila Samakhya and representatives from WASSAN participated. DRDA was decided as implementing agency and WASSAN was to give suggestions, and provide technical supports. APDAI would monitor implementation of the program.

The plan was to get MMS committee to procure millets either from the open market/whole sale market or directly from farmers. MMS would directly supply millets to the Fair Price Shop against security deposit placed by the dealer or the procurement centres of Department of Civil Supplies. Millets would sold in the ration shops and supplied at subsidized prices of 3/- per kg irrespective of purchasing cost, transport cost etc. This extra cost is absorbed by APDAI.

All the house holds irrespective of type of card are eligible to buy 1 kg of Ragi, quarter kg of jowar and pearl millets to each member of the house holds. MMS will design and distribute the tokens to the house holds through the respective Village Organizations. Fair Price shop dealer will be paid a commission of 30 paise against one kg grain of millet sold.

This intervention by DRDA and WASSAN is a very integrated approach as it has got all the concerned departments interested in the project. It has also initiated a sustainable process by making a community organization like mandal mahila samakya's to get into the administration of the entire process. We have to wait and see how this initiative will shape up. If this is found successful, one could expect it to be scaled up. Let's hope this intervention will be a model and give inspiration to other organizations to develop such sustainable models of food security. ■

# Development needs everyone!

**Recent Floods have been declared as National Calamity. Further, recent rains in Nilgiris have also been devastating!**

As we live the month, World Development Information Day and United Nations day (24 October), World Vegan Day (1 November), World Freedom Day (9 November), World Diabetes Day (14 November), and International Day for Tolerance (16 November) pass by. World Toilet Day (19 November) is round the corner. 14 November is also the Children's Day in India and 20 November is treated as Universal Children's Day.

During the month, we have rediscovered that we are not having any control on the path we take. We remain ready to flow in the direction of our intent and the universe flows take us in their stride.

Further, employment, entrepreneurship, enterprises, sustainable development/livelihoods/ agriculture, coastal communities, tribal communities, elders, marginalized communities, vulnerable groups, their collectives, the people who work with/for them – staff, volunteers, professionals, entrepreneurs, mentors and the civil society continued to hog the most of the time of our time during the month. The effort to write the material for Resources and Livelihoods Course of the distance mode PG Diploma in Sustainable Rural Development is in progress. Efforts to evolve Socially Responsible Micro-Finance Institution for the Elderly are also in progress. Beyond rescue, relief and rehabilitation, the project for restoring the livelihoods of the flood affected in rural and urban areas is being conceptualized.

The discussions in one village in Medak point out that the youth, as we always thought, are reluctant to pursue the

occupations of the family. Both unemployment and underemployment are highly prevalent in rural areas. But a majority of them have to be absorbed in rural wage employment and traditional occupations. Employers still talk about not getting useful candidates for employment in the areas they look for. The trained youth display three kinds of propensities – job employment, self-employment and entrepreneurship/enterprise development. Some job seekers are looking for jobs in urban areas and some other can opt for jobs in the enterprises of the rural communities. Some of the self-employed can be rural service providers. The key is to go to an area to intervene in this total 'employment' domain rather than looking at this issue in a piece-meal manner.

The poverty reduction efforts in the public domain across the country are taking four basic routes and their combinations. These include – targeting through the existing government machinery like subsidy programs, NREGA etc.; staff-intensive projects like Indira Kranthi Patham, Vazhandu Kattuvom, Jeevika etc.; efforts out-sourced to NGOs as contractors; and National Rural Livelihoods Mission as an extensive mission approach across all the districts with universalization and saturation agenda.

Recent brainstorming deliberations on sustainable livelihoods and agriculture has reminded us of the brainstorming workshop some eight years ago. Then we talked about transition from level 0 (social mobilization) to level 1 (universal and collective businesses at village level). Now the transition is to level 2 (beyond villages, sustainable livelihoods agenda at scale). One issue that came up is the network of structures that support livelihoods agenda. Similarly, there are merits and demerits in both single commodity/function institutions and multi-commodity/function institutions. There is a need to see production interventions and marketing interventions separately when we think of scale. Quality appears to be the key concern.

We continue to remain and stuck at cross roads on the institutional options for the collectives of the poor. Society? Cooperative? MACS? Producers' Company? Company? We need to really dive deeper. If scale is of concern, less than Rs.50 Million private companies, less than five years ago, are now talking about Rs.50 Billion. We do not see growth at such scales in the community collectives. What should we do? May be it is better this way as the community retains control and local market sustains them, reasonably free from complex, less

## Perspectives

G. Muralidhar





certain and unpredictable market patterns.

One hopes, given that it is arguably the best institutional form for the community collective business enterprises, the producer company, a cooperative in its spirit and functioning, will be treated as cooperative and 'no tax' will be extended to it also.

While it is true that certain marginalized sections of the communities like elders, differently-abled, destitute and vulnerable are yet to become bankable on scale, for mainstreamed poor and not-so-poor, there is no dearth of the funds really for their activities. Banks lending up to Rs.0.5 – 1 million to a SHG and Rs.5-10 million to the SHG Federations is becoming the trend. The key question then remains is where and how to invest these funds?

On the other hand, the poor and their collectives are beginning to think about tiny/micro-enterprises that require venture support, in terms of equity, grant, loan, leveraging and handholding support. Windows for this effort needs to be created and kept open at a variety of levels. Now is also the time for digging deep for the institutional structures that support these enterprises.

Related corollary is the staff to work with the community – as service providers, as staff in the community organizations and the support organizations. The range of these individuals is varied from being a service provider like a book keeper of the SHG to being the specialists and chief executives of district/state/national organizations requiring abilities far superior to the abilities of mainstream business executives and managers. The leaders of the organizations have to learn to manage this kind of staff. All this would mean large scale and sustained capacity building and learning effort across the country as a momentum. This is

*We need to cross-fertilize the development domain with the best practices from the corporate world. We need to enlist volunteers from variety of the worlds outside of development domain to give more and more quality time to the poor in a regular, frequent and sustained manner.*

where we see the role of National Rural Livelihoods Mission in rural areas and a similar set-up may have to evolve for urban areas.

We need to build the orientation of livelihoods – feasibility, viability and sustainability in the communities and the people who work with them, A culture of making business plans, plans versus performance monitoring systems and learning has to be nurtured. We need to cross-fertilize the development domain with the best practices from the corporate world. We need to enlist volunteers from variety of the worlds outside of development domain to give more and more quality time to the poor in a regular, frequent and sustained manner.

When millions of women and men are being organized across the country into SHGs and their higher order federal structures and when

we have history of performance considerable number of these institutions more than a decade, we need to attempt a current reality assessment on scale.

We need to employ ICT to bridge knowledge gap/chasm that exists across. It will also enhance the choices before the people. It will also help them to make more informed decisions. We need to augment, rather multiply, information/knowledge sharing through books, literature, magazines, websites etc.

In the near future, we are thinking to start a separate web blog where one can see the latest news in the livelihoods domain every day, in addition to the current e-monthly. Dedicated development/livelihoods channels at state and/or national level are required. Let us gather ourselves to go ahead in this direction, apart from the community radios and audio-video CDs currently pursued. E-learning platforms are being built and they need to be encouraged, expanded and popularized.

Of course, we need cadres of development workers across - we are talking 1 million+ professionals/community professionals @ one per 100 families. We need mentors and mentors of mentors to build them up. It is an easy task if we join hands and get going. We need to tap all sources and resources. We need to make our promising youth leaders to commit to this agenda.

We may be a facilitator, leader, mentor, entrepreneur, integrator, manager or a communicator in this pursuit. **Whatever we are, we need to make it our business to pursue building mentors of mentors, lead mentors, mentors, professionals, leaders and volunteers. We need to learn and mentor learning. Tirelessly! Persistently! Repeatedly! Again and Again! ■**



# Food for All

'World hunger hits one billion' says the recently released FAO report. Asia-pacific region including India is the worst hit region with 642 million undernourished people. Though India is one of the largest producers of food in the World, it is also home for the highest number of hungry people. The increase in the number of hungry people is due to lower incomes and increased unemployment which has reduced access to food. The very long food supply chain in India with many stakeholders involved is neither benefiting the food producers nor the consumers. 'livelihoods' focuses on the food sector to highlight the issues of food security as well as scope for employment generation.





Food is the basic need of all living things and is a major source of employment for many people who are involved in production, processing and distribution activities. Food is any substance normally eaten or drunk by living things. The term *food* also includes liquid drinks. Food is the main source of energy and of nutrition for animals, including humans, and is usually of animal or plant origin. There are four basic energy sources: fats, proteins, carbohydrates and water.

Almost all foods are of plant or animal origin. However water and salt (both inorganic substances) are important parts of the human diet. Salt is often eaten as a flavoring or preservative. Other foods not from animal or plant sources include various edible fungi, such as mushrooms. Fungi or ambient bacteria are used in the preparation of fermented and pickled foods such as leavened bread, alcoholic drinks, cheese, pickles and yogurt etc. Many cultures eat seaweed. Additionally baking soda, food colors and other another inorganic substances, are used for food preparation. While some foods can be eaten raw, many foods undergo some form of preparation for reasons of safety, palatability and flavor.

The kind of food people eat in a particular area depends upon various factors such as culture, religion and environment etc. Although humans are omnivores, many cultures hold some food preferences and some food taboos. For example only kosher foods are permitted by Judaism and halal foods by Islam. In addition, the dietary choices of different countries or regions have different characteristics.

With as many as 20 agro-climatic zones and various soil types, a wide spectrum of food-types is produced in India like - fruit & vegetable, fisheries, meat & poultry, milk & dairy, grain & cereals, beverages and consumer foods in India. However, the food people eat vary from zone to zone. Prominently what ever food that is available mostly in a particular zone becomes the staple food of the people living in that zone. For example fish is the staple food for communities living on the coast. In states like Andhra Pradesh and Tamilnadu, rice is the staple food as it is grown the most. Similarly in some parts of Rajasthan, Maharashtra, Madhya Pradesh, Gujarat jowar and minor millets are the staple food. This variation is also seen in the usage of oil seeds and spices etc. However, there are certain exceptions like Punjab where wheat is the staple food though paddy is the major crop that is cultivated. India with a population of 1.08 billion (growing at about 1.7 % per annum) provides a large and growing market for food products. Food products are the single largest component of private consumption expenditure, accounting for as much as 49% of the total spending.

The India Food Report 2008 prepared by Research and Markets says that the Indian food industry was estimated at over \$182 billion, accounting for about two-thirds of the country's total retail sector. According to the Ministry of Food Processing, India produces 90 million tonnes of milk and 485 million livestock annually, the highest in the world, besides being the second largest producer of fruits and vegetables (150 million tonnes) and third largest producer of food grain (204 million tonnes) and fish (6.3 million tonnes). Millions of people are engaged in these production activities across the country.

Transporting the produced food to the processors/wholesalers/retailers/consumers is another important

activity which is providing employment to many people across the country which includes drivers, hamalis etc. This is one of key activities in the food supply chain which can



influence the food prices as we have seen the increase in food prices when ever the transport workers are in strike.

There are about 12 million outlets selling food both raw food and processed food and related items in the country including head load vendors, push cart vendors, wholesale mandis and neighborhood kirana stores etc. and millions of people are employed in this sector. Apart from food production, about 1.6 million people are employed in food processing industry in India and this number is expected to rise up to 9 million in the coming 10 years.

In spite of the fact that India is one of the largest producer of food in the world, the country is still home to highest number of hungry people in the world and placed in 66th position out of 88 countries in the Global hunger Index 2008. This is a sad contrast indeed!

The problem of food security is not new to India. The world's worst recorded food disaster occurred in India in early 40's. Millions of people died of hunger and the reason was attributed to the acute shortfall in food production. The Green Revolution, spreading over the period from 1967-68 to 1977-78, changed India's status from a food-deficient country to one of the world's leading agricultural nations. There were three basic elements in the method of the Green Revolution - continuing expansion of farming areas, double-cropping in the existing farm land and using seeds with improved genetics. As a result of Green revolution, food production has increased tremendously in the country and there emerged a great need for proper storage and distribution of food grains.

India's Public Distribution System (PDS) was introduced during the Second World War to address food security concerns in the face of scarcity, with the intention of maintaining price stability and countering dishonest practices in private trade. The scheme was initially heavily dependent on imported food. The Green Revolution, coupled with favourable weather, led to the growth of comfortable buffer stocks in the 1980s, through the procurement operation of the Food Corporation of India (FCI), which in turn expanded the volume of food grain provided through the PDS. However PDS is not able to completely fulfill the desired objective of achieving food security due to various reasons such as mismanagement leading to a massive increase in operational cost and market distortion, widespread corruption, illegal sales, creation of false cards and the use of facilities by better-off households etc.

Further the PDS focused mainly on the distribution of rice and wheat. In some states like Andhra Pradesh these grains were highly subsidized and were given at Rs 2 per kilo in 80's which completely changed the food habits of people. As rice

## Some Glaring Contrasts....

- ♦ India is the world's largest producer of milk.
  - ♦ It has the largest number of livestock in the world.
  - ♦ It is the world's second largest producer of fruit and vegetables.
  - ♦ It is the third largest producer of food grain.
  - ♦ It has the third largest output of fish.
  - ♦ It the largest producer, consumer and exporter of spices.
  - ♦ In the beginning of this year, the total food grain stock in the central government's pool stood at 354 lakh tonnes which is way above the buffer stock requirement of 200 lakh tonnes.
- ♦ Over 300 million people in India go without two square meals a day.
  - ♦ As per the Global Hunger Index 2008, India ranks 66th in a list of 88 countries.
  - ♦ India is home to more than 230 million undernourished people– highest for any country in the world.
  - ♦ 43 percent of children in India are underweight.
  - ♦ 30 percent of babies in India are born underweight.
  - ♦ Malnutrition accounts for nearly 50 percent of child deaths in India.

is available at lower prices people started eating rice and stopped cultivation of native and nutrition-rich varieties of food crops like Jowar, Ragi and other millets. Even within rice and wheat lot of hybrid varieties have displaced the local varieties. Another trend seen is the rapid shift to cultivation of commercial crops like sugarcane, cotton, chilly and tobacco etc which is posing a silent threat to food security in the country. Shift from consumption-orientation to market-orientation and from intercropping to mono-cropping are adding fuel to the food insecurity fire. Though India attained self-sufficiency in food production, particularly in rice and wheat, several sub-sectors like oil seeds, pulses, horticulture, animal husbandry fisheries and poultry lag far behind world productivity levels.

The skewed land distribution patterns, increase in the cost of inputs, decrease in productivity of farm land, and increase in labour costs are forcing the small and marginal farmers to move away from agriculture. Further most of these farmers are caught in tied-up sales with the input suppliers/traders and therefore not realizing fair prices for their produce. Also the immediate cash requirements are forcing the farmers to engage in distress sale rather than holding on to their produce for lean periods to realize better prices. Though credit channels have doubled up in the recent past this development in not spread evenly across India and many farmers are still languishing outside the organized credit system and dependent on informal sources at high rates of interest. For instance one can see credit channels including banks, SHGs, microfinance etc proliferate in states like AP



but it is still long way to go for states like UP and Bihar. The situation is dire for other small food producers like fishermen, milk and meat producers etc.

The most important problem that Indian food sector is facing is the highly inefficient supply chain. Inadequate post-harvest facilities including lack of cold chain infrastructure, lack of processing facilities and inadequate transport infrastructure contributes to about 20% of all foods produced wasted in the country. Much of the farm and horticulture produce goes waste or farmers are compelled to dispose them of in distress sales as there is no adequate infrastructure to process and preserve the produce and especially increase its shelf life till it reaches the retail stores. While most countries are processing 70-80% of the food they produce, India is processing just 10% of foods. The wastage level of fruits and vegetables in India currently stands at a whopping 35 percent.

Indian food industry, though one of the largest producers, continues to suffer from poor land productivity, increased cost of inputs, lack of credit facilities, shrinking food crops, poor infrastructure, storage facilities, and post harvest technologies. Most of the value addition happens beyond the villages benefiting the rich service providers/middlemen. These problems are pushing the food producers into dire situation.

On the other side, the consumers of food are suffering with skyrocketing food prices and particularly the poor consumers are forced to take less quantities of food, less nutritious food which is adding to the number of undernourished people in the country. Poor people are trying to cope with this situation by decreasing their expenditure on other important items like education, cloths, housing etc. which is reducing their quality of life. Women are the worst sufferers as food security deteriorates. They may have to spend long hours working outside the home to raise extra money to buy food. They have the pressures of managing the distribution of food within the family and are most likely to go without food themselves so that their children get enough. Food security situation of the elderly poor and destitute elderly is worsening.

Apart from PDS government has taken up programs like ICDS, mid-day meals in schools to ensure access to nutritious food for the people. But the per capita money available under these schemes is less and shrinking further.

Income and Expenditure analysis of two poor families which reveals the expenditure of poor people on food are presented below. It is observed from these two analysis that poor people are spending more than 60% of their income on food. These analysis has been done in the year 2007-08. At the present skyrocketing food prices, any one can assume the situation of these kind of families across India.

Number of family members: 6 (2 Adults and 4 Children)  
Block: Ipuru

Name of village: Dushmanpet Tanda  
District: Guntur  
State: Andhra Pradesh

Source of Income	Amount (per annum)	Expenditure on food	Amount (per annum)
1) Working in Slate stone quarry (Rs 80*20days/month*10months)	16000	1) Rice from PDS (20kgs/month*Rs2*12 months)	480
2) Lease amount on own land (3 acres* Rs 6000)	18000	2) Rice from local store (20 kgs/month* Rs 20*12months)	4800
		3) Vegetables (Rs 400/month*12 months)	4800
		4) Meat (Rs 200* 3times/month*12 months)	7200
		5) Milk (Rs 150/month* 12 months)	1800
		6) Pulses (4 kg/month* Rs 40/kg* 12 months)	1920
		7) Oil, tamarind and other food ingredients (Rs 400/month* 12 months)	4800
<b>Total Income</b>	<b>34000</b>		<b>25800</b>
<b>Percentage of food expenditure in the total income: 75%</b>			

Number of family members: 3 (2 adults and 1 child)  
Block: Shamirpet

Name of the sub-urban village: Jawaharnagar  
District: Rangareddy  
State: Andhra Pradesh

Source of Income	Amount (per annum)	Expenditure on food	Amount (per annum)
1) Construction labour (Rs 130/day *200days/ annum)	26000	1) Rice from PDS (16kgs/month*Rs2*12 months)	384
		2) Rice from local store (44kgs/month* Rs 20*12months)	10560
		3) Vegetables (Rs 300/month*12 months)	3600
		4) Meat (Rs 100/month*12 months)	1200
		5) Milk (Rs 150/month* 12 months)	1800
		6) Pulses (2 kg/month* Rs 40/kg* 12 months)	960
		7) Oil, tamarind and other food ingredients (Rs 250/month* 12 months)	3000
<b>Total Income</b>	<b>26000</b>		<b>21504</b>
<b>Percentage of food expenditure in the total income: 82%</b>			



In addition there are many gaps in their implementation.

Time has come to review agricultural productivity. Natural resource management including soil and water is critical. Integrated efforts are needed to take up NPM/organic cultivation, watersheds, and plantations on a scale. Kitchen gardens need a push. Quality and timely agriculture extension services delivered by experts and professionals are critical. Post-harvest losses need to be slashed. Investment in post-harvest infrastructure and technologies need a serious boost. Non-farm employment needs acceleration to enhance income levels. In a way we need to analyze our farming systems and diagnose constraints and identify opportunities and strategic priorities for agro and rural development. Agriculture production and its relationship to resources, technologies, markets, services, policies and institutions in their local cultural context should be carefully assessed and effective policies followed for increasing food production and productivity, crop rotation and crop diversification, management of natural resources, market and price stability of food grains are all important in ensuring food and nutritional security in India.

The food supply chain in India is complex with perishable goods and numerous small stake holders. In India, the infrastructure connecting these partners is very weak. Each stake holder: farmers, wholesalers, food manufacturers, retailers all work in silos. Also, demand forecasting is totally absent and the farmers try to push what they produce in to the market. Building an efficient and effective supply chain using state of the art techniques will facilitate the possibility to serve the population with value added food while simultaneously ensuring remunerative prices to the farmers. The surplus of cereals, fruits, vegetables, milk, fish, meat and poultry can be processed as value added food products and marketed aggressively both locally and internationally. Investments in cold chain infrastructure, applied research in post harvest technologies, installation of food processing plants in various centers and development of food retailing sector are mandatory for achieving gains in this sector. Data integration, financial flow management, supply-demand matching, collaborative forecasting, information sharing, goods movement synchronization through efficient transport scheduling, are very well practiced in high technology



industries with immense benefits. These best practices should find their way in to the food supply chains.

In addition facilities should be created for doing local value addition as far as possible which will benefit the small and marginal farmers. Facilities for storage and other infrastructure like transport facilities should be created so that the small farmers realize better margins.

The food distribution mechanisms also need to be improved. Though India has lot of buffer stocks in warehouses, it is not being distributed properly to the poor and needy. The PDS and TPDS (Targeted Public Distribution Systems) programs need to be reviewed to make them false proof. Establishing the depots closer to the villages, close monitoring of distribution, distributing local varieties of food like jowar, Ragi etc through PDS which are less costly and help in increasing the nutrition levels, increasing the quota of food grains to each household, eliminating the false cards and controlling the illegal sales are the major steps that need to be taken to improve the efficiency of the system. More transparency and accountability needs to be brought into the system.

It is evident from many studies that poor people spend more than 60 percent of their income on food. Because of this they are not able to spend on other important items like proper shelter, education and health etc. which is further worsening their situation. This concern needs to be addressed through PDS and TPDS programs and also by controlling the food prices. Food security not only depends on the food availability but also on the accessibility. Hence quality food should be made accessible to all people by bringing down the prices. Controlling the prices does not mean paying less remuneration to the food producer. In fact, in the chain of food from producer to consumer, neither the producer nor the consumer is benefiting from the trade. It is only the long chain of supply eating away all the benefits of trade. This chain needs to be trimmed so that the producer realizes a fair share of the consumer rupee spent and the consumer does not spend more than the fair price.

Food producers need to be collectivized to achieve economies of scale and these collectives should be engaged in the activities of collective purchase of required inputs, providing timely credit to small producers, value addition and marketing etc. One can think of single product and multi product collectives. On the other end consumer collectives can come up to take up the activities of purchasing directly from the producers as much as possible. Interventions like ITC e-choupal can be replicated.

India with diversified agro-climatic zones provides a lot of scope to lead the world in the production and supply of a diversified food basket. Sustainable agricultural practices, consolidation of all backward and forward linkages with respect to food producers, expanding the scope of food processing sector, enhancing income levels through both farm and non-farm employment and formulating and implementing policies supporting various aspects of food including production, transport, storage and preservation, marketing, distribution, processing, skill-building, professional assistance etc will go a long way in creating new employment opportunities and in combating the threats to food insecurity thereby increasing the real incomes of the people. Climate change will hijack food security. We cannot give a deaf ear to this threat any longer. The time has arrived to make all out efforts to consolidate and enhance our food production and distribution systems. All our statistics with respect to the number of hungry, number of malnourished and undernourished, farmers suicides are a national shame. With 300 + million going hungry every day India as a nation is set to grossly miss the MDGs and beyond. Can we afford this socially, culturally, politically, economically and above all humanly? ■



## Women Have Become More Active Now

*Swapna, a grassroots development worker, has faced lot of troubles in life. She lost her family members but still fought with life and is showing light to many poor women like her by working as a book keeper for Self Help Groups. 'livelihoods' interviews this lady to know more about her life and about her work.*

Q: What is your name and where do you come from?

A: I am P. Swapna, 38 years old. Basically I belong to Bidar in Karnataka.

Q: Can you tell me about your childhood, where were you born, where did you grown up? Where did you get education?

A: Long back we migrated to Hyderabad. I studied till 10<sup>th</sup> class in Moula Ali Government School in Hyderabad. After that due to financial problems, I was unable to continue my education.

Q: Can you give a brief description about your parents and family?

A: I am the sixth one among the eight children to our parents. I have three elder brothers, two sisters, one younger brother and one younger sister. My mother and father work as wage labourers. My elder brother died just a year after his marriage in an accident. He was a truck driver. My elder brother's death was unbearable to my father; he was shocked and died after few days. Again there was a big tragedy in our family as two of my brothers also truck drivers died in an accident. Then my mother was the only person to maintain our house. My mother used to work as a sweeper in a toddy shop to feed the family.

Q: At present where are you staying?

A: After passing 10<sup>th</sup> class, I was at home only. I neither continued my studies nor took up a job. In 1996, I got married. After my marriage I lived with my husband in a hut at Indira nagar which I got as dowry. As the time passed my brother took back my hut and we had to shift into another rented hut.

Q: How did you know about DWCRA groups?

A: DWCRA groups were started in Indira nagar by Greater Hyderabad Municipal Corporation in 2000. At that time, there was a woman named Mumtaz who was a member in DWCRA group. She had the responsibility of forming groups in our area. So she asked my help in the formation of groups and explained to me the uses of thrift and how it can solve our problems. She also explained benefits of being member in the group. With my husband's cooperation I have been able to form a DWCRA group named "Sai podupu sangham"

Q: Usually what type of work do you have in the group?

A: There were very few literate women in the group and I am also one of them. I was elected as 2<sup>nd</sup> group leader to look after thrifts, loans and to prepare balance sheet. Now I have learnt to write account register also.

Q: Who helped you to learn to write accounts register?

A: I came to know that Dr. Reddy's Foundation was giving

trainings on writing accounts to book keepers. So I went there with the help of Municipal Corporation office and took the training. I have learnt basic computers with encouragement from my mother and husband.



Q: What are your responsibilities as a book keeper?

A: Members of the group give me a plan of the activities. According to that plan, meetings are conducted and I do book keeping at that time. I write about thrifts, loans, schemes. If community organizer suggests, I give suggestions on role of members in the group.

Q: Are there any other activities you do?

A: I act as a book keeper, writing accounts is the main work, forming groups, writing about schemes and activities, writing accounts at the slum clusters in the Kapra division is my work.

Q: Did you have any other job experiences other than book keeper?

A: I have worked for World Vision India, organization as a volunteer for 9 years. There my job was to distribute cloths to people, books to poor students, campaigning about child marriages, sending school drop outs to the school etc.

Q: Say about your family?

A: Our family is of four members. My husband, my two children and myself. My daughter is studying 10<sup>th</sup> class and son is in 8<sup>th</sup> standard.

Q: What about your financial situation?

A: At present it's ok. My husband is working for Vijagro Company as a car painter. He earns Rs. 3000/- per month. I write accounts for 5 to 6 SHG groups. Each group gives me Rs.50/- per month. Some of them give only 30/- per month. Like this I earn Rs.1500/- to 2000/- per month.

Q: What is your opinion about the present SHG groups when compared to the groups previously?

A: 9 years back there were fewer groups and women were also not interested to join the groups. But now the situation has changed. Women have become more active and the participation of women in all the activities has increasing. They know the importance of the groups. Now they join groups without much counseling. I feel groups should be given livelihood trainings along with loans. ■

# Ragi

Ragi, also known as Finger millet, is an important staple food grain crop in some states along with rice, bajra and jowar. Ragi is productive in a wide range of environments and growing conditions. It is an annual crop plant with 60-120 cm long stem. Its root system is fibrous and remarkably strong, permeating soil thoroughly. It can be grown in various climates like cool temperature, moisture, tropical very dry and forest land zones. Ragi grow as a hot weather crop, from May to September and using long duration varieties and grown as a cold season crop, from November/December to February. In India, two crops are sown. The early crop is from May to August, and the main crop from July to November or early December. It is also grown year-around under irrigation wherever water is available.

states in India are Karnataka, Orissa, Uttar Pradesh and Tamilnadu. Across the world (along with other millets) Ragi is cultivated around 38 million hectares. Local varieties of Ragi seeds are used in Andhra Pradesh and Orissa. But hybrid varieties are used in Karnataka.



Ragi grain is an excellent dietary source of methionine and calcium and also high nutritious compare to the raw milled rice. Usually rural people and tribal people use Ragi and Jowar in their food. But rural people's food habits are changing gradually. Rice and wheat become their main food. Ragi consumption was twice or thrice a day, but right now it has come down to once in a day. The other meal is rice. But now a day's urban people are becoming health conscious and using millets, especially Ragi in their diet. 80% of the world's Ragi production is used as food and the remaining is used as seed, beer and waste. The major Ragi products are Ragi flour, Ragi malt, Ragi weaning food and Ragi based energetic foods. Raw Ragi can be cooked like rice. Tribal eats this within 3-4 months of harvest, when it tastes sweet. Ragi can be grind to make Ragi flour through ordinary local flourmills. Ragi flour is commonly used for making Ragi ball, chapatti, dosa and biscuits and also can make delicious dishes with Ragi. It is used especially in summer to keep the stomach cool.

Only 15-20% of Ragi food surplus enters into the commercial marketing system, remaining is kept for own consumption for a year. The surplus Ragi is exchanged for other items of household consumption through barter system. Most of this exchange takes place in the villages between either villagers for other agriculture produces or petty traders for household consumption items. The petty traders exchange Ragi with other goods. These local traders sell Ragi for more profit to the wholesalers. In few cases, family carries Ragi to the local shandy or weekly haat and buys items of other household consumptions from local traders through barter system. The major national market for Ragi is in Yashwantpur, Kolar,

## Comparison of Nutritive Value of Ragi and Rice

S.No	Contents	Quantity of Nutrients for 100gms	
		Ragi	Rice, Raw, Milled
1	Moisture	13.1 gms	13.7 gms
2	Protein	7.3 gms	6.8 gms
3	Fat	1.3 gms	0.5 gms
4	Minerals	2.7 gms	0.6 gms
5	Crude Fiber	3.6 gms	0.2 gms
6	Carbohydrates	72.0 gms	78.2 gms
7	Energy	328 Kcal	345 Kcal
8	Calcium	344 mgs	10 mgs
9	Phosphorous	283 mgs	160 mgs
10	Iron	3.9 mgs	0.7 mgs

Ragi grows in India, Srilanka, Nepal and also in other countries of Asia and Africa. The major Ragi producing

Inputs	Pre-Production	Production	Post-production	Marketing
<ul style="list-style-type: none"> <li>◆ Land</li> <li>◆ Seeds</li> <li>◆ Pesticides</li> <li>◆ Implements</li> <li>◆ Gunny bags/ bamboo baskets</li> <li>◆ Labour</li> <li>◆ Investment</li> </ul>	<ul style="list-style-type: none"> <li>◆ Land preparation</li> <li>◆ Application of manure</li> <li>◆ Watering</li> <li>◆ Seed bed raising</li> <li>◆ Preparation of land for transplanting the seedlings</li> </ul>	<ul style="list-style-type: none"> <li>◆ Uprooting the seedlings</li> <li>◆ Transplanting</li> <li>◆ Broadcasting</li> <li>◆ Weeding</li> <li>◆ Watering</li> <li>◆ Spraying pesticides</li> </ul>	<ul style="list-style-type: none"> <li>◆ Harvesting</li> <li>◆ Drying</li> <li>◆ Threshing</li> <li>◆ Winnowing and cleaning</li> </ul>	<ul style="list-style-type: none"> <li>◆ Selling some produce in the village itself</li> <li>◆ Transporting some produce to the market</li> <li>◆ Selling the produce</li> </ul>

## Gaps

- Lack of improved high yielding varieties.
- The return from investing labour and capital in Ragi production is lower than the gains derivable from such investments in other farm and non-farm enterprises. Limited commercial demand depresses the incentive to use purchased inputs.
- There is no direct policy on Ragi except for announcing minimum support price for Ragi.
- There is national and international market for Ragi but not significant and prices are also highly volatile.
- Low returns for high investment in Ragi.
- Increasing preference for rice in the food.
- Price variability
- Competing products

## Solutions

- Providing high yielding varieties of seeds that are suitable to the local environment.
- Manure should also be applied in right quantities.
- Grading and supply to super market.
- Grinding into Ragi flour, packaging and supply to super-market and retailers.
- Best policy should be designed for Ragi.
- To introduce better quality improved varieties seeds convergence and linkages with research institutes, universities and organizations should be established.
- Banks or any other agency should be looped in to acquire necessary credit for seeds.
- Providing required technical support to the farmers.



Bangalore and Hassan in Karnataka. These centers supply Ragi to Rajasthan, Delhi, Uttar Pradesh, Maharashtra, Chattisgarh, west Bengal and Madhya Pradesh mainly.

organizations are working on Ragi and other millets viz ICRISAT, CRIDA, and local state level and regional level institutes.

Global trade in millet is estimated to range between 200,000 and 300,000 tons, representing roughly 0.1 percent of world trade in cereals or 1.0 percent of world millet production. Since the marketing channels are not strong, it is difficult to figure out the accurate data for Ragi and other millets separately. Proso millet and Bajra together add to about two-third of recorded millet exports. Ragi with other millets accounts for remaining recorded export. The major importers of Ragi along with other millets are developed countries – European countries, Japan, Switzerland and Canada. The primary use of imported Ragi is in preparing Ragi based products, mainly malts – either mixed malts, blended with other commodities or Ragi malt. International trade in millet is controlled by a few specialized trading companies and generally conducted on a sample basis.

There are international, national, state level and regional level institutes, universities, research station and

### Expenditure to cultivate Ragi in one acre:

Ploughing cost : 1 person \* 100/- \* 3 days = Rs 300

Seed bed rising: 4 women \* 50/- \* 1 day = Rs 200

Weeding: 8 members (women) \* 50/- \* 1 day =Rs 400

Urea + Pesticides cost: 420/- + 240/- = Rs 660

Spraying: 1 person \*1day\* Rs 150/= Rs 150

Harvesting cost: 6 women \* 50/- \* 1 day = Rs 300

Cleaning the yield: 3 women \* 50/- \* 2 days = Rs 300

**Total expenditure : Rs 2310**

### Income from one acre of Ragi field:

Total yield: 5 quintals

**Income: Rs 1400/- \* 5 quintals = Rs 7000**

**Profit from one acre: Rs 4690**

Ragi marketing channels are not well developed. The main reasons for this are limited demand in urban areas, lower prices of Ragi, lower margins in Ragi trade, scattered and irregular supplies on account of only food surplus being sold and large distances between producing areas and the main urban centers.

However, there is lot of scope for promoting Ragi as a health food as it has high nutrient value. Urban population are increasingly becoming health conscious and this market needs to be tapped by encouraging farmers to do value addition like making Ragi flour, malt etc. Organizing the farmers can help in achieving the economies of scale and these farmers organizations could be engaged in this kind of value addition activities.

These farmers organizations can be linked to the urban markets directly so that they can realize better prices. Governments should formulate appropriate policies towards encouraging the production and marketing of Ragi not only for the benefit of farmers but also for achieving the larger objective of food security to the country. ■



# ICRISAT

Out of the 142 m ha cultivated area in the country, only 51 m ha is irrigated. Even after complete exploitation of the full irrigation potential of the country, it is estimated that nearly 70 m ha of net sown area will continue to depend upon monsoons. International Crops Research Institute for Semi-Arid Tropics (ICRISAT) is making continuous efforts to serve the poor in the semi-arid areas of the developing world through agricultural research and is contributing to the Millennium Development Goals.

Rainfed areas produce approximately 20-25 m t rice, 2-3 m t wheat, 30-35 m t coarse cereals, and 10-12 m t pulses, thus contributing nearly 65-75 m t food grains and 12-14 m t oilseeds besides significant quantities of cotton, vegetables, and fruits. Yet, nearly 50% of the world's hungry live in India. Around 35% of India's population is considered food insecure. Experts opine that food situation in the country is going to worsen going forward with more mouths to feed, climate changes, declining soil fertility and agriculture productivity, shift to non-food crops etc. In this context International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), a non-profit and non-political research organization making continuous efforts/inroads into serving the poor in the semi-arid areas of the developing world assumes critical significance.



Established in 1972 in Hyderabad, Andhra Pradesh, ICRISAT is one of the 15 Centers supported by the Consultative Group

on International Agricultural Research (CIGAR). With vast expanse of dry land areas, strong national research capacity and skilled work force India became the perfect location for ICRISAT's headquarters. Accordingly a Memorandum of Understanding was signed between the Government of India and CIGAR on 28 March 1972. Since inception ICRISAT has been partnering with various organizations including the Indian Council of Agricultural Research, National Agricultural Research Systems (NARS), universities, NGOs and rural communities and their organizations on several agriculture research and development initiatives.

As an international organization promoting science-based agricultural development, ICRISAT conducts research on sorghum, pearl millet, chickpea, pigeon pea and groundnut – the dry land crops that support the livelihoods of the poor in the semi-arid tropics encompassing 48 countries. The organization also shares information and knowledge through capacity building, publications and information and communication technologies. ICRISAT is supported by over 60 countries and foundations.

With a vision to achieve continued improvement of the well-being of the poor of the semi-arid tropics through agricultural research and contribute to the attainment of Millennium Development Goals (MDGs), ICRISAT has set itself to achieve the following **goals** –

- Reducing poverty through improvement and diversification of crop-livestock-tree systems and enhancement of income generating opportunities from trade and commercialization
- Enhancing food and nutritional security and improving human and livestock health through increased agricultural productivity, gender-sensitive interventions and enhanced food/feed quality
- Enhancing livelihood and ecosystem resilience against drought, degraded environments, desertification, conflict and pests in smallholder agriculture with a view to facilitate long-term recovery and enhance self-reliance
- Building R&D partners capacities through enhanced and more relevant skills that include the ability to prioritize for impact, to implement interventions and to predict trends

## ICRISAT focuses on research programs through four global research themes including -

1. Markets, Policy and Impacts
2. Harnessing Biotechnology for the Poor
3. Crop Improvement, Management and Utilization for Food Security and Health
4. Sustainable integrated natural resource management

In India, over 145 improved crop varieties could be traced to the parental lines developed by ICRISAT. The organization provides over 12,000 germplasms annually to the NARS. In addition, it is involved in watershed development, agri-business incubator park for commercialization of technologies and has a set up a Virtual Academy for Semi Arid Tropic using information and communication technology to reach farmers. Experts in ICRISAT have assisted students several academic and research institutions.

## Some of the specific impacts and achievements of ICRISAT in India include -

- 170 improved varieties of sorghum, pearl millet, chickpea, pigeonpea, and groundnut released in India raising production and small farmers' incomes
- **Chickpea**
  - ♦ Of the 66 chickpea cultivars developed by ICRISAT and NARS, based on improved germplasm released throughout the world, 34 were released by the Government of India alone
  - ♦ Nine of the 10 chickpea varieties released in Madhya Pradesh during the past 10 years are from JNKVV-



ICRISAT collaborative efforts

- ♦ Short-duration pest resistant desi and kabuli chickpea varieties developed through ICAR-ICRISAT partnership
- **Pearl millet**
- ♦ Over 70 pearl millet hybrids cultivated on about 4.5 million ha (50% of pearl millet area in the country) contributed to cultivar diversity and increased the crop's national productivity
- ♦ Development of pearl millet hybrid 'HHB 67 Improved' to extend its economic life
- **Pigeon pea**
- ♦ Extra-short duration pigeon pea is gaining in popularity in the rice-wheat systems of north India
- ♦ A CMS-based hybrid pigeon pea program is expected to increase yield while providing more drought tolerance
- ♦ The mystery of causal organisms of sterility mosaic disease in pigeonpea has been solved and found to be caused by a virus
- ♦ Adopting Integrated Pest Management (IPM) techniques, pigeon pea and groundnut farmers in southern India greatly reduced insecticide use in pilot test areas
- **Groundnut**
- ♦ A new drought tolerant groundnut variety, ICGV 91114, has become very popular in Ananthapur district in AP
- ♦ Spring season cultivation of groundnut is catching up in North India; in Uttar Pradesh alone 85,000 ha are reported to be under the crop
- **Sorghum**
- ♦ The first sweet sorghum hybrid NSSH104 has one parent each from ICRISAT and NRCS
- ♦ Around 30 improved sorghum hybrids (derived from ICRISAT-bred material) led to greater grain and forage production in India
- ♦ Sorghum ICSV 745 and ICSV 112 gave 20% higher grain yield and 35% higher fodder yield than the locally-adopted cultivars in Melghat region of Maharashtra
- ♦ Rise in farmers' annual income from sorghum hybrid JKSH 22 seed (1994-2002) is US\$ 3,060,000.
- ♦ Breeders of Dr Panjabrao Deshmukh Krishi Vidyapeeth and Marathwada Agricultural University released many partnership sorghum varieties

Mapping of genomic regions contributing to shoot fly resistance in sorghum, followed by marker-assisted backcrossing to validate these has provided sorghum breeders the technology to strengthen the genetic component of integrated pest management systems for the most important sorghum insect pest

District-level database of farming systems for policy and land-use planning made available across India

Breeder seed production under the ICAR Revolving Fund Scheme (groundnut, chickpea, and pigeonpea) ensured supply of Breeder seed to sustain the seed production chain in the country

The village level studies conducted by ICRISAT to understand the socio-economic, agro-biological, and

### **VASAT – Virtual Academy for the Semi-Arid Tropics**

*VASAT is a strategic coalition for information, communication and capacity building. VASAT links and mobilizes stakeholders for drought mitigation in the semi-arid tropics. It is an innovative and cost effective medium to educate and support a critical mass of rural women and men spread across vast geographical areas by informing them about drought and desertification. In India VASAT has partnered with Adarsha Mahila Samaikhya, a women's welfare organization in Mahabubnagar district of AP to foster learning and information exchange between rural families and expert institutions. The daily services offered through VASAT at the village information centers include – agro-advisory through web and video conference; subject matter literacy program to various stakeholders through video conference; broadcasting weather data; technology induction program; computer literacy training program for youth and women; education through CDs etc.*

institutional constraints to agricultural development in the semi-arid tropical areas is one of its kind. These studies were conducted in 4 states in India and 40 households from each location were studied for a period of more than 10 years which today constitute the world famous 'ICRISAT VLS Panel Data'.

In 1998, ICRISAT was recognized for its development of high-yielding and disease resistant pigeonpea varieties and in 2002, it received recognition for developing new chickpea varieties with higher tolerance to drought and heat, and better resistance to pests and diseases that provide stable and economically profitable yields. In 2002 and 2004 ICRISAT won two King Baudouin Awards and in the same years also won two Promising Young Scientist Awards.

ICRISAT scientific staff produced thousands of documents to disseminate information among various stakeholders. ICRISAT is involved in a large number of collaborative projects with several organizations in the world.

To combat climate change, ICRISAT in the short to medium term aims to focus on helping dry land farmers to deal with current weather and rainfall variabilities and in the medium to long term the focus will be to develop crop varieties that will be adapted to water-scarce and warmer world.

Most recently ICRISAT launched Harnessing Opportunities for Productivity Enhancement (HOPE) of Sorghum and Millets in sub-Saharan Africa and South Asia to potentially benefit more than two million households. In India HOPE will be undertaken in four states. Through the development and delivery of improved crop varieties and training in crop management practices, HOPE is expected to increase small-scale farmer yields by 35 to 40% during the first four years of the project.

Going forward ICRISAT aims to enhance institutional linkages among research, extension, farmers and markets. The organization also plans to integrate its research with other fields of development such as education, human health, nutrition, energy and water quality. With integrated genetic and natural resource management as its overarching research strategy, ICRISAT aims to continue to work towards attainment of scientific excellence in agriculture in the semi-arid tropics, focusing on key livelihood and income opportunities to improve the well-being of the poor with equity, *multidisciplinary, sustainability and community participation as core principles.* ■

# Ethanol

600 million Indians do not have access to electricity and about 700 million Indians use biomass as their primary energy resource for cooking and ensuring life line. Supply of clean energy to all is essential for nurturing inclusive growth. A sustained economic growth of at least 9 percent over the next 25 years is necessary for India to eradicate poverty.



Presently the use of renewable energy used on actual is 0.98 M toe which is projected nearly 87 M toe for the year 2031-32. As we have observed the fossil fuel stocks are falling oil prices are highly instable. So there is always a pressure on this non renewable sources. Keeping this in mind ethanol can be used as a substitute for petrol to reduce the import burden of Indian government. Ethanol can be blended with petrol and with the help of new technology it may be possible to use even 100% pure ethanol in car engines with some additives, so, that the engines are not effected.

Ethanol is made by fermentation of sugar. It can be obtained from sugar – cane, corn, wheat etc. Ethanol is a renewable fuel. Brazil is already successfully using 50% blend. Today ethanol accounts for 40% of the fuel sold in Brazil. Brazil produces ethanol at half the price of Europe and US . European Union has decided to use ethanol for motor cars by 2010 and also china plans to use 10% bio-fuels by 2010.

We have started with 5% ethanol blend with petrol. The content of the ethanol blending has been increased to 10% at the end of 2005. And again, it will be increased to 20% in the next phase. Our petrol consumption is increasing and it is around more than 8 million tones per year. We need only four lack tones of ethanol to get 5% blend. This can be produced from 8 lakh tons of sugarcane, which is just 0.3% of our total sugarcane production.

One ton of sugarcane produces 100 Kg. of Sugar (worth

Rs.1000) and 50 Kg of ethanol (Worth Rs 900). But the entire one ton of sugarcane, if fed directly into distillery can produce 500 kg of ethanol (worth Rs 9000).

According to 2003 survey around 61% of the world ethanol production is being produced from sugar crops. Sugar yielding eight times as much energy as is needed to produce ethanol. As we know India and Brazil produce sugarcane in large quantity, given their positive energy balance and higher yields it makes more sense to produce ethanol from sugar crops than grains.

Our ethanol need for 10% blend is nearly 0.72 billion litre. This is against annual production capacity of 2.7 billion liters per year and annual consumption of 1.5 billion litres.

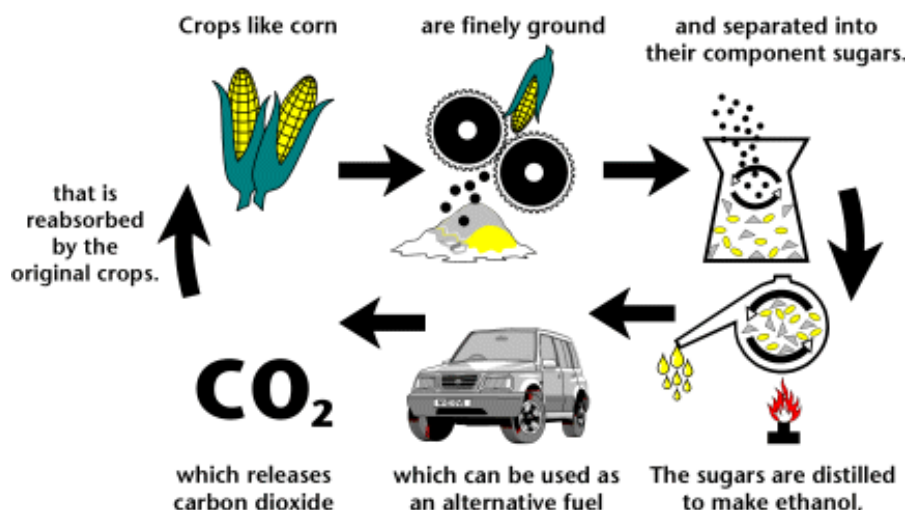
Ethanol may contribute to increase income in the farm sector particularly in the sugarcane growing areas. Replacing petroleum with ethanol can reduce air pollution including emission of fine particulates and carbon monoxide. Ethanol production can improve rural economies by creating new jobs and raising farm incomes.

As a locally produced renewable fuel, ethanol has the potential to diversify energy portfolios, lower-dependence on foreign oil and improve trade balance in oil importing nations. Brazil led the world ethanol production in 2004. In Brazil this ethanol is being used as a 100% gasoline substitute in cars with dedicated engines. The US is rapidly catching up.

We need to learn and adopt this technique or develop our own techniques. This will help India to reduce crude consumption and in exporting ethanol, just as it imports crude-oil from the Middle East. ■

Nilendu Mukherjee

## THE CARBON CYCLE



# Food Security Interventions

India is the world's largest democracy which guarantees to its citizens Right to life, which includes access to and availability of basic needs like food, shelter, health, water and education. Even after 57 years of making this promise people in India still live in uncertainty everyday about availability of these basic needs especially the food. This condition of unavailability of food is also termed as food insecurity.

According to State of the food insecurity report "Food insecurity exists when all people; at all times, do not have physical and economic access to the sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life". Poverty easily coexists with food insecurity and is the main cause of hunger and malnutrition. More than 850 million people all over the world live every day being food insecure. Mal nutrition not only denies people their right to health, it also has serious economic implications. Mal nourished children are less able to concentrate in school and adults are less able to work efficiently.

Food security refers to the availability of food and one's access to it. A household is considered food secure when its occupants do not live in hunger or fear of starvation. According to FAO, Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Community food security is a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice. Government introduced some schemes to give food security to the people. Along with that many private organizations, NGOs, individuals are working with communities regarding food security. Some of the food security models that are implemented in India by both Government and Non-Government organizations are presented below.



## The Public Distribution System:

PDS was first started in 1939. It is a rationing mechanism that entitles households to specified quantities of selected commodities at subsidized prices. PDS is designed and managed by State governments and State governments differ with respect to entitlements, the commodities

offered, the retail price and so on. Its crucial role was realized during the droughts and food shortages in mid sixties. Highlighted the need for strengthening and continuing with a system of food distribution, PDS was made as a universalize scheme in 1970. Today PDS serves total of 222.2 million families with ration cards in the country which is around 454 ration cards per PDS depot. In order to reach out to the neediest, Ration cards (PDS cards) are any grouped into

Pink, white and Anthyodaya cards based on the income of the family.

**Targeted PDS:** Targeted PDS is different from PDS. It groups entire population into people belonging to families that are below-poverty-line and above-poverty-line and poverty line is as defined by the Planning Commission. This program was started in 1997 as per suggestion given by the influential World Bank document, Government of India introduced targeted PDS in order to curtail food subsidy.

**Dual prices:** This refers to the selling of same commodities in two different prices at the PDS shops, this is referred to as Dual prices. Under this program commodity prices for BPL consumers and APL consumers are different. In 2001 another price the third price was introduced for the beneficiaries of Anthyodaya Scheme, who are poorest of the poor.

**Mid-day meal scheme:** It was made part of national policy in 1995. The policy aimed to provide a cooked meal at school or 3 kg of food grains to each child on the condition that the child has 80% attendance in the school. The cooked meal has to provide 300 calories and 8-10 gms of protein each day for a minimum of 200 days.



**Integrated Child Development Scheme (ICDS):** The integrated Child Development Scheme is the first national programme that provides a package of integrated services to children below the age of six. The key services provided by ICDS centers through Anganwadis are nutrition, health and early childhood education. Supplementary nutrition program for infants and school going children. Under this program food and nutritional needs of pregnant and lactating mothers are also covered.

**National Food for work programme (NFFWP):** Under sampoorna Grameena Rozgar Yojana (SGRY) is implemented in 150 most backward districts of the country. The aim is to providing of food security by generating





supplementary wage employments. The work provided was to build need based economic, social and community assets in these districts. is further intensified. More than 5 kg food grains can be given to the laborers under this programme.

**National Rural Employment Guarantee Scheme:** This is a national level program, which guarantees 100 days of work for all poor families. It stipulates payment of Rs.100 for eight hours of work. The scheme is implemented through Grampanchayats. The right holders are provided with job cards which will have entries of number of days and payments made. The objective is to ensure that each family earns a basic minimum of Rs.10,000/- annually so that the family doesn't starve of hunger.

**Community Operated Food Grain Banks model:** The concept of community operated food grain banks was suggested by Dr. M.S. Swaminathan. In this concept villagers can borrow grain loan from the Community Grain Bank, before monsoon and repay back after harvest with 25% interest. This interest is further used as revolving fund to extend the grain bank seed capital (in form of grains) to help other needy villagers. After repeating this process of taking loan and repaying for 4 years, one would have paid back enough stock, when accumulated is enough to borrow in the fifth year. In the fifth year when the repayment is made, 25% interest paid to the grain bank goes to the buffer stock which is used for various purposes. Dr. Swaminathan suggests Union Government to spare just 5 million tons from its 65 million ton buffer to trigger a national movement of "Community grain banks" under the management and control of a community grain bank society or council. Grain bank have other benefits too, the grain bank council can be empowered to act in emergencies to provide immediate relief to people affected by natural calamities. It can also meet the challenge of seasonal slides in livelihood opportunities.

**Market Based Approach to food security:** In order to meet the shortfall, in income and consumption needs, households borrow from money-lenders and traders at very high interest rates, pushing them further into debt trap. Alternatively, the poor reduce the quantity of food consumed. This model of food security is a market based one which offers food as a credit product rather than grant or aid. Food Security Line is a community managed credit and food distribution mechanism to address the food requirement of

the rural poor. The Food Security Line provides a single window within a village for purchase of food grain, packing and distribution of food grains and recovery/ repayment of the outstanding credit, thus making it accessible for the poorest.

**Alternative Public Distribution system through community grain fund:** The basic objective of this jowar based PDS programme was to ensure local production, local storage and local distribution. This was operationalised by advancing financial assistance to the marginal farmers to reclaim their fallow lands through timely cultivation, application of farm yard manure and carrying out other timely farming practices. The agreement was that the money accumulated as interest would be given as advance to the poorest families in the villages. All the decisions were to be made by the community and nothing was to be imposed from outside. The programme also generated a massive additional employment in every village that it was implemented. The extent was about 75 person-days of employment per acre which roughly worked out to about 8000 person days of employment per village.

**Right to food:** This is a rights based program whose objective is to create awareness about various food security programs and empower marginal groups like tribals, women and BPL families to access these schemes. It lays great emphasis on making communities and women better informed and organized. It undertakes various activities to transfer advocacy and bargaining skills in the marginalized and weaker groups of people to take benefits of acts and programs as their rights.

All the above interventions are made to create food security to the families. However the objective of food and nutrition security is not achieved in the country though the country



achieved significant progress in the food grain production.

Universalizing the successful models like community operated grain banks and making the government programs like PDS and NREGS etc. false proof can help in improving the situation. In the context of economic recession and increasing food prices, it becomes important to take up this kind of initiatives for the poor as they are worst sufferers of all these consequences. ■

# The Sobs Of The Starving Children

We know about them from stepping out our door the hungry getting hungrier by the day

But we do not hear the sobs of the starving children because their lives seem so far away

We read the news of the bitter struggles of the hungry children in another town where we say poverty and disease is  
rife

And we feel a twinge of sadness that we cannot help them since we have got our own struggles in life.

Still the sobs of the hungry children are growing louder and not all of them live in Dharavi

Where the distance would make it safe for you and me

The single mother raises her brood on the street and she has to struggle for to make ends meet

And they struggle to survive on the garbage we leave on the street.

Banks and corporations make billions in yearly profits and we read and hear of their financial gain

But they don't help to feed the starving children and the growing scourge of poverty remain

A kilometer from where the billionaire lives there's poverty and hunger yet of their plight he does not wish to know

Still for him to grow wealthier others must grow poorer and life goes on as it did years ago.

To find want you don't have that far to travel for poverty is everywhere and near

And though the starving children keep on sobbing louder their cries for food we do not seem to hear

And sad to say that those who talk and dream of an egalitarian society will never live to see their dreams come true

And in a World where there is want and hunger the majority of the World's wealth still with the wealthy few.

*Adopted from Francis Duggan*

# National Seed Policy 2002

In India the agricultural sector is providing livelihoods to the above 60% of the rural people particularly consisting with large section of poor people. It has made tremendous growth in the past 50 years, raising food grains production from 50 million tones to over 200 million tones. This increase in productivity can be mostly attributed to the High Yielding Varieties of seeds that were introduced in the period of India's Green Revolution. In the process, the country has progressed from food shortages and imports to one of surpluses and exports.

Seed is the most important determinant of agricultural production potential. Sustained increase in agriculture production and productivity is dependent, to a large extent, on development of new and improved varieties of crops and an efficient system for timely supply of quality seeds to farmers. The seed sector has made remarkable progress over the last three decades. The Certified seed utilizing area has increased from less than 500 hectares in 1962-63 to over 5 lakh hectares in 1999 -2000. The quantum of quality seeds has crossed 100 lakh quintals. The traditional methods of seeds preservation has decreasing and dependency increased on certified seeds. This increases the cultivation cost to the farmers. In this context, National Seed Policy 2002 evolved.

The Seed Policy , 2002 prepared for a faster growth in the seed industry and increasing India's share in the global seed export market from the present 1 per cent to 10 per cent by 2015. The main objectives of this policy are providing of an appropriate climate for the seed industry to utilize available and prospective opportunities with safe guarding the Indian farmers and conservation of agro bio diversity, promoting Private and Public Sector Seed Organizations at both Central and State levels and setting up regulatory system which will encompass quality assurance mechanism and felicitating vibrant and responsible seed industry.

Achieving the objectives of the policy some thrust areas are selected for interventions like the development of new and improved varieties of plants and availability of such varieties for a sustained increase in agricultural productivity, suggesting appropriate policy frame work and programmatic interventions which will be adopted to stimulate varietals development in tune with market trends, promoting scientific technological advances and a biotic stresses, identifying location adaptability and farmers' needs, establishing a Plant Varieties & Farmers' Rights Protection (PVP) Authority which will undertake registration of extant and new plant varieties through the Plant Varieties Registry on the basis of varietals characteristics and recognizing the rights of farmers to save, use, exchange, share or sell farm produce of all types of seeds.

The policy suggested a strategy for realizing its objectives. The strategy comprises rewarding farmers/groups of farmers/village communities suitably for their significant contribution in evolution of a plant variety subject to registration, recognizing the contribution of traditional knowledge in agriculture needs to be highlighted through suitable mechanisms and incentives, promoting Plant

Genetic Resources for Food and Agriculture Crops, creating regular interaction amongst the Private and Public Researchers, promoting the Seed Companies/Organizations and Development Agencies which will be fostered to develop and promote growth of a healthy seed industry in the country.

Regarding seed production, the Indian Seed program adheres to the limited three generation system of seed multiplication, namely, breeder, foundation and certified seed. Breeder seed is the progeny of nucleus seed, the State Farms Corporation of India and National Seeds Corporation will be restructured to make productive use of these organizations in the planned growth of the Seed Sector, private Seed Production Agencies will also have access to breeder seed subject to terms and conditions to be decided by Government of India, the 'Seed Village Scheme' will be promoted to facilitate production and timely availability of seed of desired crops/varieties at the local level. Special emphasis will be given to seed multiplication for building adequate stocks of certified/quality seeds by providing foundation seed to farmers.

To assure the seed quality, the Policy suggested to establish the National Seeds Board (NSB) . The NSB will undertake registration of kinds/varieties of seeds that are to be offered for sale in the market, on the basis of identified parameters for establishing value for cultivation and usage (VCU) through testing.

Regarding distribution and marketing, the Policy suggest, to achieve better coordination between State Governments to facilitate free Inter-State movement of seed and planting material through exemption of duties and taxes. The Policy encouraged and motivated private sector to restructure, reorient their activities to cater to nontraditional areas and mechanism for collection and dissemination of market intelligence regarding preference of consumers and farmers. The policy suggest to establish National Seed Grid which will work as a data-base for monitoring of information on requirement of seed, its production, distribution and preference of farmers on a district-wise basis.

The Policy shows more concern on seed industry development to make seed availability to the formers, increase seeds production for export and also promote different varieties of seeds production. It also concern about the human and animal health and bio diversity. It designed very comprehensibly. Though it promote private sector it recognize need of the public sector participation in seed making industry.

The Policy has not stressed on indigenous seed making and saving seeds for next crops. It talks more on quantity of authorized seeds production and export rather than farmer self reliance in seed sector. It is designed more with market orientation than with farmer orientation. The cost of the crop cultivation has been increasing for the past decades. But the farmers are not getting reasonable price in the market for their products. Government has to take more initiatives regarding providing sufficient seeds in season at low cost and promoting indigenous seed making and saving. ■



# All Development Workers Are Strategists

*Investing in development of strategy related skills among their field employees is must for the growth of development organizations working at the grassroots.*

Every organization has its own reason for choosing a particular method or strategy of implementing the interventions. At the time of formulation of the strategy, it would consider the vision/mission as articulated by the organization during its initial (formation) days, past achievements, expertise gained over the years, its relationships with the donor community, need articulation by the community, resources and network that it can generate, etc.

In general, the plan thus generated would cover a set of villages, which could be a few villages in a concentrated cluster or many villages in a large area like district or state. The plan is based on a generalized picture of the entire set of villages, and no amount of care taken during the process of planning can probably bring in the exact situation existing in each village. Hence, at the time of implementation, each village presents a different picture from the strategic perspective, particularly with regard to the people supporting or hindering the project.

To take care of the specificities involved in each village, stakeholder analysis and stakeholder management at the village level emerge as important determinants of the success of the proposed intervention plan. Some stakeholder might like the present, while others may clearly be the protagonists of change. Within each of these categories, the reasons for their supporting or opposing the intervention proposed could be different. Some of the stakeholders may have the potential to influence others while a few others may not have such potential or interest. The following table shows the various categories into which the stakeholders can be divided with respect to the proposed (or continuing) intervention.

**Table: Stakeholder analysis**

Liking	Influence	Present situation	Proposed situation
Likes	Can influence	Cell 1	Cell 5
	Has no influence/ does not want to influence	Cell 2	Cell 6
Dislikes	Can influence	Cell 3	Cell 7
	Has no influence/ does not want to influence	Cell 4	Cell 8

While some people may not like the present situation, they may also not like the alternative so much to canvass for that

alternative. In a similar way, there could be people who like neither the present situation nor the proposed change (or the manner in which the proposed change is to be implemented). Such people might be interested in some other change or a different strategy of bringing about the change.

By changing the level of influence of persons in various cells, support can be increased for a development intervention. When categorized as shown in the table above, persons who are in Cells 1, 3, 5 and 7 can influence others in Cell 2, 4, 6 or 8. The program/intervention would benefit by increasing the influence of persons in Cell 5 while weaning away persons in Cell 2 and 8 from the influence of people in Cell 1 and 7. Further, the program benefits if people in Cell 3 develop a liking towards the proposed change as they any way do not like the present situation. In other words, the number of people in Cell 3 decreases while number of people in Cell 5 increases. Persons who do not want to influence in the direction of change though they like it can be motivated to speak up for change and become protagonists themselves. In other words, several of the persons not in Cell 5 also should be transformed into advertisement agents for the proposed intervention.

All these changes in the influencing behaviours of people need to be brought out.

The task of influencing as above becomes more difficult as (a) the persons coming under each cell may not be static, and (b) persons even within each cell may have different reasons for their choice. One needs to be aware of the new persons coming into various cells. Without being vigilant in this aspect, the environment within a given village cannot be easily managed and the intervention cannot be smoothly implemented. The best person that can be so vigilant is the community level (or grassroots) worker and not the project coordinator or program manager. The higher authorities are likely to visit the villages only occasionally and miss these changes unless some one at the community level points them out. Similarly, the reasons (articulated or not articulated) for a person taking a stand (or taking no stand at all) could be different for different persons. A uniform communication may not work with all of them. On the contrary, it may wean away some persons from actively advocating for and supporting the change. Again, the best person who can talk to the people in a one-on-one interaction often enough to understand the reasons for the stand is the community worker closest to these people. Project coordinators could find lifting the veil difficult is a facade is constructed by the community with respect to any issue.

As any development worker working at the grassroots will have to deal with these issues during implementation of initiatives, the development workers are strategists. For a better functioning, the development organizations involved in grassroots work need to strengthen the strategic skills of the employees at the cutting edge. ■

## Repairing Services reap

Shining livelihoods



## Pounding goes Silent

Declining livelihoods



## Strengthening Self Help Groups-CS Reddy

Tupalli Chandrasekhara Reddy popularly known as CS Reddy is a well known development worker in Andhra Pradesh especially for his contribution in strengthening Self Help Groups and SHG federations. He is also synonymous with Andhra Pradesh Mahila Abhivrudhi Society, widely known as APMAS, an institution founded by him. He was born into an agricultural family of Kalikiri village in Chittoor district of Andhra Pradesh and grew up to study Statistics and Operations (M.Sc) from S.V. University, Tirupathi and a Ph d in the same subject from Central University, Hyderabad in 1988.

In his twenty years of service as a development worker, CS Reddy has worked with two prominent organizations CARE INDIA and APMAS. His first job was that of a lecturer of Statistics and Operations at Central University when he was pursuing Ph d. In 1989, he joined CARE INDIA as national level evaluation and monitoring officer and has held many important positions like Regional Manager of 3 states in projects on nutrition and health and later appointed as CARE INDIA Andhra Pradesh' s State Director to work in partnership with 30-40 NGOs'. In 2001, July



Mr. Reddy started Andhra Pradesh Mahila Abhivrudhi Society or APMAS as it is popularly known as, is a familiar institution working on sustainability of the Self Help Groups (SHGs). It stands as an ideal for several national level institutions working towards formation and strengthening of SHGs. Behind this recognition and success is tremendous effort, struggle and decades of continuous work by Mr. C S. Reddy.

Reddy's work of supervising activities of CARE INDIA took him to many villages and gave an opportunity to see the life of poor people from close quarters. This interested him to work for the people in the villages. He was responsible for giving technical and managerial support to the project, and design policies, systems and supervisory methods for health and nutrition programme. He has played important role in designing big programmes like Credit And Savings for Hold Enterprise (CASHE) and Sustainable Tribal Empowerment Programme (STEP) and also in getting approval for these projects from the European Commission. He has also played crucial role in establishing organizations and developing various training plans and participatory training methodologies to implement these programs. During his work he has also partnered with Governments and has undertaken evaluation of many health projects. He has also developed tools and methods of evaluation and collecting and analyzing data.

CS Reddy is one of the well know evaluators of the projects in the country. While supervising execution of various

projects and conducting evaluations he observed that, organizations are concentrating only on giving aid to the people, but are not doing much in making people self reliant. He found that people's organizations are weak and are dependent on the staff of NGOs and others in their day to day functioning. But people's organization must be strong and self sustainable in order to eradicate poverty. In response to this condition in the poor communities he decided to form an organization to enhance and develop the people's organizations which resulted in the formation of Andhra Pradesh Mahila Abhivrudhi Society (APMAS).

Under the leadership of CS Reddy, today APMAS is a state level technical institution which builds capacities of self micro finance institutions and provides with skills of setting up systems and procedures that would enable efficient utilization of resources. Till date APMAS has trained around 80,000 people, conducted evaluation of 434 samakhya and rated them on their performance which is essential to attract financial resources as well as to upgrade functioning. It has conducted 30 research studies and has organized over 15 state and national level conferences on sustainability of self micro finance institutions. The organization is also partnering with poverty reduction programs like Society for Poverty Reduction (SERP) in 8 districts and Mission for Poverty Elimination in Municipal Areas (MEPMA) in Guduwada, Gunthakal and L B Nagar of Greater Hyderabad Municipality. They are also implementing this project in other states like Bihar, Orissa, Madhya Pradesh and Uttar Pradesh. In all these places Samakhya working under the leadership of APMAS have become role models for other samakhya to follow. .

Realizing the need for synergy between Government and NGOs for effective implementation of any project, CS Reddy has initiated a state level GO-NGO network and a national level network of SHG federations. He has conducted several training programmes for organizations like MYRADA and IRMA and was also part of the Indian policy delegation which went to Germany to study the self reliance concepts in the co-operative system. He has also lead a team to Thailand during Tsunami for rehabilitation work. He has also helped in development of micro finance institutors in other countries like Thailand and African countries. On the request of DFID and World Bank, he had worked as a consultant with them on sustainability and development of micro finance institutions.

CS Reddy strongly believes that poor people can develop only when they are collectivized and guided to utilize the resources efficiently. In today's scenario where people's organizations are facing lot of management challenges in sustaining interest of its members, efficiently managing financial and human resources and taking up tough decisions, contributions of Mr Reddy in designing efficient and sustainable management systems is crucial. Even to date he continues working to spread his dream of building many more self managed and self sustained poor people's organizations tirelessly. ■



## Managing Time

Many of us complain that we don't have time to do certain things that are necessary for our life. In fact, what happens is most of us spend our time and energy on small and unimportant things first and then complain that we don't have time to do important things. To be successful in life, we need to appreciate this reality and prioritize our works so that we have time for the things that are truly most important.

A professor stood before his class and had some items in front of him. When class began, wordlessly he picked up a large empty jar and proceeded to fill it with rocks right to the top, rocks about 2" diameter.

He then asked the students if the jar was full. They agreed that it was.

So the professor then picked up a box of pebbles and poured them in to the jar. He shook the jar lightly. The pebbles, of course, rolled into the open areas between the rocks. The students laughed.



He asked his students again if the jar was full. They agreed that yes, it was.

The professor then picked up a box of sand and poured it into the jar. Of course, the sand filled up everything else.

"Now," said the professor, "I want you to recognize that this is your life.

The rocks are the important things - your family, your partner, your health, and your children -anything that is so important to you that if it were lost, you would be nearly destroyed.

The pebbles are the other things in life that matter, but on a smaller scale. The pebbles represent things like your job, house, or car.

The sand is everything else, the "small stuff."

"If you put the sand or the pebbles into the jar first, there is no room for the rocks.

The same goes for your life. If you spend all your energy and time on the small stuff, material things, you will never have room for the things that are truly most important. ■

## Employment in Organized Sector in India

Though India has made considerable progress in many aspects, the progress towards women empowerment is still far behind the expectations. The following table presents a picture of women participation in organized sector. It is clear that the situation has not much changed over the years.

Year (Ending March)	Total employed (Figures in lakhs)	Percentage of women employment to total employment
1980	223.1	12.1
1981	228.8	12.2
1982	234.9	12.3
1983	240.1	12.5
1984	242.1	12.6
1985	245.8	12.9
1986	250.6	13
1987	253.9	13.2
1988	257.1	13.4
1989	259.6	13.7
1990	263.5	13.8
1991	267.3	14.1
1992	270.6	14.4
1993	271.8	14.8
1994	273.7	15.2
1995	275.2	15.4
1996	279.4	15.8
1997	278	16.8
1998	281.9	17
1999	281.1	17.2
2000	279.6	17.6
2001	277.89	17.8
2002	272.06	18.1
2003	270	-

Source: Directorate General of Employment and Training, Ministry of Labour.

Though women occupies 50% of the population their participation in organized sector is less than 20 percent. This clearly depicts the lack of accessibility of opportunities to women. India as a country is still has to go a long way in achieving women and empowerment. Unless it utilizes the full potential of the other half of its country it can not progress and achieve developmental goals. ■

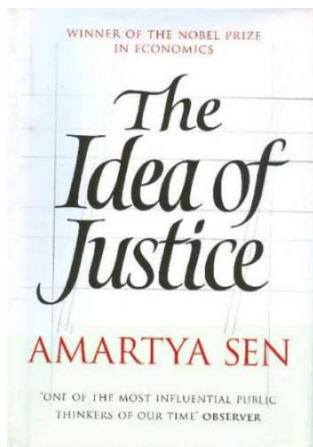
# Books

## Book Summary

Name: **The Idea of Justice**

Author: **Amartya Sen**

Publisher: **Penguin-Allen lane**



As the title suggests the book elaborates on 'Justice' as being an 'idea' rather than an 'ideal', demystifying popular notion of justice as being a monolithic ideal with an endeavor to create a 'just society'.

This thought is illustrated with an example of three kids Anne, Bob and Carla making claims on a flute. Anne says the flute should be given to her because she is the only one who knows how to play it. Bob says the flute should be handed to him as he is so poor that he has no toys to play with. Carla says the flute is hers because it is the fruit of her own labour. The decision of who has the legitimate claims is not an easy one.

The answer, according to Prof. Sen, is that there is actually no one "right" answer. It is not possible to have an "impartial" agreement as to what offers a "perfect" resolution to the dilemma posed by the children's competing claims. Nor, indeed, is there one perfect process to arrive at a conclusion that would be acceptable to all. The problem can be resolved in many ways; through a process of ideological reasoning; on compassionate grounds such as charity; by majority opinion; and even by an arbitrary method like tossing the coin.

In his scheme of things what Prof. Sen elaborates persuasively over more than 400 pages is a central argument that 'Justice' is not a monolithic ideal but a pluralistic notion with many dimensions. He argues "that there is no such thing as "perfect" justice; justice is relative to a situation, place and time. Most importantly he says that instead of searching for "ideal" justice, the stress should be on removing the more visible forms of 'injustice' such as subjugation of women, poverty and malnutrition.

The book is in four segments - The Demands of Justice, Forms of Reasoning, Materials of Justice and Public Reasoning and Democracy. It also elaborates on concepts associated with 'social justice'; like 'Freedom' and 'liberty'. Here the book highlights the obligation of State or administration as well as people with power, in providing other people with necessary resources to lead lives that they themselves consider to be good ones.

Prof. Sen draws fundamental distinction between two competing approaches to justice. Approach to justice propounded by modern political philosophers, which is preoccupied in finding the right rules, institutions and social contracts for a just society which Prof. Sen calls as "transcendental institutionalism" and the other being the 'comparative approach' proposed by Prof. Sen, highlighting the importance of public reasoning and an argument that a system of justice should require the agreement not just of the community which is making laws, but of outsiders who might be affected, or who might have valuable perspectives to offer. According to Prof. Sen the keystone of judging a 'just society' is to assess "capabilities" or, "the power to do something" of people to lead actual lives.

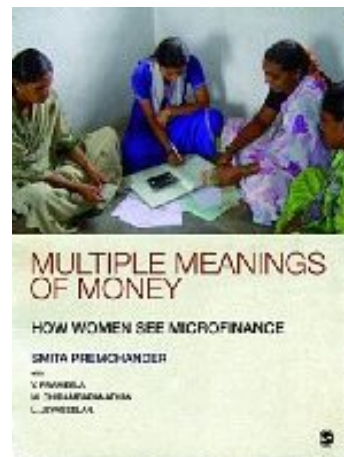
The book is a must read as it helps in widening our understanding of 'what justice should be'. And not to forget a point repeatedly emphasized i.e. looking back into the past in search of justice would not do, one has to take into account the reality we are in today and then ask ourselves, where do we go from here and how? ■

## New Books

Name: **Multiple Meanings of Money: How Women See Microfinance**

Authors: **Smita Premchender, V. Prameela, M. Chidambaranathan and L.Jeyaseelan**

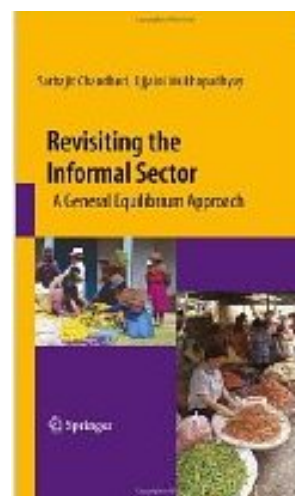
Publisher: **Sage Publications Pvt. Ltd**



Name: **Revisiting the Informal Sector**

Authors: **Sarbajit Chaudhuri, Ujjaini Mukhopadhyay**

Publisher: **Springer**





## Resources

# Vocational Courses at National Open School

### Food Processing Course

Name of the Training	Food Processing Course
Course Duration	One Year, The credit can be transferred against any one academic course.
Job Opportunity	1. Self employment: (as owner of a small food processing unit) 2. Wage employment (as a worker in a food processing unit) 3. Settle as a trainer / teacher.
Scheme of Studies	Theory : 40%
Entry Level Qualification	10 <sup>th</sup> Class Pass.
Passing Criteria	33% in Theory 33% in Practical (separate pass in both Theory and Practical are necessary)

### Technical Courses

#	Name of the Course	Training Language	Modules / Subjects	Eligibility	Fee
1	Electrical Technician	Hindi/ English	House Wiring & Electrical Appliances Repairing, Motor and Transformer Re-winding.	10 <sup>th</sup> or 8 <sup>th</sup> class pass and 2 years experience in relevant field	Rs.4000
2	Radio and T.V. Technician	Hindi/ English/ Urdu	Radio and Tape Recorder TV Repairing	8 <sup>th</sup> Class	Rs.4000
3	Cutting, Tailoring and Dress Making	Urdu	Cutting and Tailoring, Dress Making	Literate	Rs.2000
4	Library Clerk	Hindi/ English	Library and society and Library Organization, Classification, cataloguing Classification, Cataloguing	10 <sup>th</sup> Pass	Rs.1100
5	Refrigeration and Air Conditioning	Hindi/ English	Refrigeration Air Conditioning	8 <sup>th</sup> Class	Rs.4000

All the above trainings are conducted in National Open School, New Delhi, Hyderabad, Kolkata.

For Further Details

National Open School

B-31B, Kailash Colony, New Delhi, India

Phone: 29231181-85, 29241458, <http://www.nios.ac.in>, ■

## Multiple Livelihoods Help

Ramulaiah belongs to Mollagunta village of Repalle mandal in Guntur district of Andhra Pradesh. He was born and brought up in a agriculture family. He has not studied much and started doing agriculture along with his father from very young age.

After he has grown up his father gave him 3 acres of land for doing agriculture on his own. Ramulaiah used to cultivate paddy and other crops in his field and was able to earn a decent amount of money. At that time he got married to a girl who is his relative. Soon Ramulaiah got 2 daughters and 2 sons. As his family size was increasing it became difficult for him to feed the family with the little money he was earning. His income was not at all sufficient to give good food to his children, to give them education etc and this made him worried.

At that time, Ramulaiah happened to meet a friend with whom he shared all his struggles. His friend advised to do any business along with practicing agriculture. Ramulaiah thought about his advice and looked at various business opportunities in his village. He observed that almost all families in his village were going to the mandal head quarters Repalle to buy groceries as there was no single

grocery shop in that village. Then he thought of starting a grocery shop. But he had no money at that point of time to invest in business. He expressed his thought with one or two villagers who are close to him and one of them agreed to give him a loan of Rs 15000 to start his business. With that barrowed money, Ramulaiah started a petty grocery shop in the village.

As Ramulaiah was engaged in looking after the shop, his wife supported him by taking care of their agriculture activities. Soon Ramulaiah's started earning good profits as he was selling good quality items at reasonable prices. He also started credit sales because of which even the poor households in the village started buying from his shop. Ramulaiah is now earning good amount of money both from the shop and agriculture activities and is able to save a minimum of Rs 2000 per month. He repaid his entire loan taken from the villager and expanded his shop recently with his own savings.

He is also giving good education to his children. One of his sons is studying engineering and his daughters are also pursuing their graduation. Now Ramulaiah is leading a happy and decent life by earning both from agriculture and business. ■

## Ignoring Existing Livelihood Hurts!

Mehaboob Basha belongs to Dadepally village of Chittoor district in Andhra Pradesh. He has a wife, two daughters, and a son. By nature he is a nice man and mingles with every one in his community, all of them like him and treat him like their own brother.

Previously he was into tamarind business, he would purchase tamarind from farmers and his wife and children would clean it up and keep it ready for selling. Along with this he would also sell Pungam and Castor oil seeds.

Basha's business was profitable and gave him enough income to lead a decent and respectful life. He would easily earn 2 lakh rupees in a year which gave him backing to manage any fluctuations in the business. He noticed ice cream shop owners were making better profit than his business. He was tempted to give up the tamarind business and start ice cream selling. He approached the ice cream business men to teach him methods of preparing ice cream.

The shop keepers and villagers both advised Basha not to do that business as they felt that he was not suitable for that

business. But he didn't listen to anybody and started ice cream business. He rented two bicycles and employed two boys to sell them in villages. Ice creams were in demand only during summer and in the remaining season, the buyers were less.

At the end of the year, he earned Rs. 70,000/- income and had spent Rs. 20,000/- on investment and made a profit of Rs. 50,000/- enough to invest again to make ice creams and hence made no profit at all.

Basha did not have money to fulfill family needs. At the end of 3 years, he was in total disaster. At this point he decided to go back to his tamarind business. But, some one else had occupies his place in the market. Though he made a start again he failed.

Loss in business has affected his health and disabled him to work anymore. Presently his wife is working as daily wage labourer, his children have dropped out of their studies and his son is working as auto cleaner. He has now become dependent of his wife and son for living. ■

## ‘Yoga’kshemam

The southwest monsoon ends and the northeast monsoon moves in. The fury of the floods moved to Tamil Nadu. It is now official – the food production has come down. The food prices are going up.

The rescue, relief and rehabilitation of the victims of flood have trailed off. The effort is now shifting to restoring livelihoods and enabling infrastructure. Simultaneously, the fury of the monsoon is now in Tamil Nadu taking 100+ lives!

Count of the international days that have gone by – World Development Information Day (24 October)! International Day for Tolerance (16 November)!

Floods, coastal communities, non-timber forest produce collectors, elders, collectives, clusters, slums, skill providers, training institutes, civil society, mentors, teachers, students, volunteers, resource persons, service providers, social entrepreneurs, micro-venture entrepreneurs and writers continued to dominate our thinking space in this month. National Rural Livelihoods Mission is certainly taking mind space.

My ‘fasting’ practice and my struggle with ‘silence’ and ‘thought silence’ continue. I need to still figure out how I handle when I miss the ‘fast’. Further, I need to still figure out the complete protocol to handle myself six days of the week when not ‘fasting’. Can it be left to itself? Also, a routine for ‘silence’ needs to be developed.

This month has taken me to Vivekananda, Aurobindo, Tantra, Vipassana, Atmadarshan and Jeevan Vidya. Vivekananda urges us to be useful to all life in general and the disadvantaged in particular. ‘Savitri’, considered the supreme revelation of Sri Aurobindo’s vision, describes the soul carrying the divine truth within itself but descended into the grip of ignorance, is saved by another soul in their yoga. United they begin a greater age. One moment becomes eternal. Atmadarshan and Jeevan Vidya have asked to focus on a few things but the right ones, significant ones as they occur to us when we remain in the natural flows of the universe. Atmadarshan talks about Chakra Sadhana. Vipassana seeks silent meditation.

Tantra, yoga of wholeness and completeness through our beings at all levels – bodies, minds, hearts and souls, discusses the first moments of tasting immortality and becoming aware of divinity and appreciating and recreating the experience of oneness. It endorses – yoga is good and wholesome merging life force energies. The four basic steps include understanding oneself and each other, guiding breathing, accepting feelings fully and living in the moment

fully. Anticipation, touch with all five+ senses, exploration, feel, silence, harmony, and time together are the critical ingredients. **Self/mutual opening of all the seven chakras and merging and balancing the masculine and feminine energies that exist in each individual is the yoga. Of course, the ultimate is practicing complete surrender to drop being in control, to let go results, to show vulnerability, to suspend judgment, to let go in relationships, to open up and aroused completely for union in all dimensions.**

In the confluence of the souls, and through the gentle flows of universe, **these months of lights and rains** reinforce the need to be ever anticipating and attentive. Be always ready in all our dimensions for the divine soul taking you into it. No one tool suffices. **Build a portfolio of tools. Keep them sharpened. Learn to use them and practice them. Continue to sharpen them. Till you hit the bird’s eye. Keep playing raga after raga, till you transcend towards crescendo of climax and bliss.** Forget not to set the ‘sruti’

befitting the frequency of play of the instrument, including the voice as an instrument of play. Learn to play, practice and play. More and more songs! More and more songs in more and more ragas! More till the crescendo of the climax!

Can we do this? **Yes, if we pursue Atma Yoga.** The focus is not on total expertise in music but on learning, practice, mastery of at least one and not giving up till we reach the crescendo. Bursting creative tension in the strings of the relationship bows of the souls of the universe to merge and dissolve into one! Then what follows is a simple act, without further pre-meditation, of being ready to be lost in being the instrument in their hands without scope for ‘apaswara’ so that you remain in their hands till the crescendo is reached.

Krishna calls for seeking yoga in spirit, feelings, emotions, thoughts, sensations, speech and actions, through surrendering to the master/guru - body, mind, heart, and soul, in the context of confluence of the natural flows of the universe. Krishna confirms – whoever does his/her work that is natural or naturally appeals to him/her in the spectrum of actions towards being useful to all life, attains steady peace and gets purified to flow with the free will of the universe of souls. S/he will have no agenda unfinished thereafter.

**Join us in the world of yoga – celebrating the yoga of wisdom, action and devotion in all dimensions of our being towards complete advaita rasa siddhi and being useful to the life in the way it needs us. You will not regret it. ■**

**G Muralidhar**





# Livelihoods Lost in Floods

