livelihoods
today and tomorrow

September 2009

Majority of Indian Districts are in drought. Big rains and floods are coming now. Crop Loss, Displacement and loss of lives! Negative Inflation, Rising Prices, Flu etc. continue. We hear that 'recession' is yielding.

Flying in an inclement weather to participate in the first Rachcha Banda, a programme in which Chief Minsiter makes surprise and unannounced visits to village, Dr YS Rajasekhar Reddy, Andhra Pradesh along with four colleagues expired on the spot when the helicopter hit the hill near Srisailam and crashed. May their souls rest in peace! Irrespective of what government does otherwise, we can not ignore 'welfare' – this is the mantra adapted by YSR and it became the non-negotiable for all now.

Teachers' Day! The day to remember and recognize teachers who made a difference to our lives! The day to surrender to the path shown by them! This is followed by The **International Day of Literacy** reminding us of the existence of illiterates in the country. More than half of the children in schools do not complete schooling. Many who complete are not equipped with basic 3Rs – reading, writing and arithmetic. Many do not get jobs. If at all they get, they are for survival and not for decent living. All this is troubling us. Kapil Sibal has said no exams for Class X in CBSE. The same needs to be done by State Boards too. Then, the schooling offers joyous learning, rather than being a burden to the child.

Environment and ecology is in danger. It is fragile and is busting in the seams. The man who lives in the nature is no longer visible. Glaciers are melting faster. Sea levels are rising. Untimely rains! Irregular but repeated droughts and disasters! Pollution! Non-decaying garbage and plastics! Chemical and pesticide-filled food! Disappearing species, rare species! Decreasing bio-diversity! Increasing pace, decreasing reserves! Burgeoning population, disparities and needs and depleting resources! Forests are dwindling, drinking water, potable water is disappearing, and earth shakes more frequently. Droughts and floods have become routine. Deserts and drought areas are expanding. Food Security is lost. Urban areas are up and rural areas are down. The occupations and livelihoods are changing. Environmentalists are getting awards, including Nobel. Campaigns seeking inclusion of environment thought in everything we do are mounting.

While we pushed eco-friendly indigenous people deep inside, on to the ridges, or into margins across and made them voiceless, in their native lands, we have begun to feel the pitch of the cracking ecology and environment. We moved from the stage of consuming naturally recycling items to the stage of plundering the nature and the resultant ill-effects are now being felt by many of us in a small way. Some kind of fear of the future has gripped many of us. Fortunately, the time is not completely lost. There is still hope of resurrecting the nature and passing it safely to the next generations. This requires long-term plans and their implementation. In their absence, the people who are losing livelihoods with no fault of theirs, the people who are not having water to drink/survive, people who are suffering the consequences of ill-health etc., are going to revolt. They are in large numbers, in fact, they constitute the majority. Nature wars, eco-wars, water wars are coming!

In relation to this, the livelihoods in environment and conserving and bettering the environment and ecology are growing. Natural Resource Management, Organic Farming, Recycling, Alternative Energy, Labour-intensive industry etc., are growing. They have to grow. It is in this context, the ninth sector, explored by 'livelihoods', is "environment".

The 'Clean Ganga' Veerbhadra Mishra is a natural lover and campaigner! Kartikeya Sarabhai founded Centre for Environment Education is increasing the eco-consciousness and is relentlessly pitching for making environment conservation and betterment a global agenda. Eco-friendly and farmer friendly Organic Farming is becoming centre-stage and expanding rapidly, thanks to the efforts of Ramanjaneyoulu and his organization, CSA. Ananta Paryavarana Parirakshana Samithi's efforts to green 75000-acre common land is an intervention worth replicating. EF Schumacher's 'Small is Beautiful' reminded the world that decentralization and small and individual enterprises only help the nature, the poor and the unemployed.

Father Bogaert has rested, at 81, from the task of producing thousands of social development workers/ professionals in the country. He still will continue to inspire development teachers and institution builders, apart from the development workers, to pursue the task of giving more people to the people, till you breathe your last. **The world has also lost at a ripe age of 95, the person who ensured food to all in this world – Norman Ernest Borlaug!**

The organizations, the groups, and the individuals are needed to cope with the trying and challenging times now and ahead, for better and decent livelihoods. The campaigns for the same have to gather momentum. 'livelihoods' is immersed in this task. With the faith that you lend your hand in this effort, I remain.

G. Muralidhar

the 'livelihoods' team

livelihoods

Inside ...

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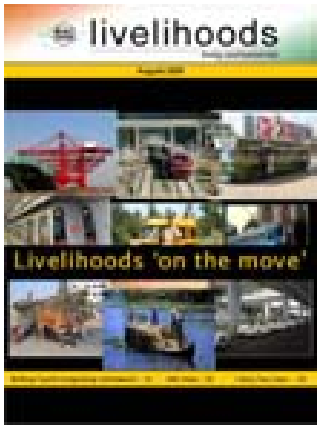
Response



Thank you so much for your e-copy of Livelihood for the month of August 2009. This is really an useful e-magazine in the field of Livelihood.

- Pradip

We are very much delighted to go through the August issue of Livelihoods and it is to note that lot of village people migrate to cities in search of jobs which are even not so remunerative and thus the agriculture is neglected. We would be thankful if you could be able to put some successful village or farmers who have done wonders in agriculture which can be of motivating theme to the development workers including government and NGO's in various parts of the nation.

- Prakash

'Saviour From Starvation' Norman Borlaug Passes Away

Father of Green Revolution and Noble Peace Prize winner Norman Ernest Borlaug died on 12th September, 2009 at the age of 95. Borlaug's discoveries have been estimated to have saved over 245 million lives world wide. He transformed agriculture through High-Yield crop varieties and other innovations that helped more than double the world food production between 1960 and 1990.

The World salutes the Saviour.

Life after Death...

Banana Peel	**: 3 - 4 weeks**
Orange Peel	**: 6 months**
Apple Peel	**: 2 months**
Paper Bag	**: 1 month**
Card Board	**: 2 months**
Milk Cartoons	**: 5 years**
News Paper	**: 6 weeks**
Paper Towel	**: 2 - 4 weeks**
Cotton Gloves	**: 3 months**
Tinned Steel Can	**: 50 years**
Plastic Bags	**: 20 - 1000 years**
Glass	**: 1 - 2 million years**
Cigarette Buds	**: 10 - 12 years**
Leather Shoes	**: 25 - 40 years**
Rubber Boot Sole	**: 50 - 80 years**

Plastic Containers	**: 50 - 80 years**
Wool Sock	**: 1 - 5 years**
Plastic Bottles	**: 450 years**
Disposable Diapers	**: 550 years**
Mono Filament Fishing Line	**: 600 years**

News

Missions on Climate Change ready for implementation: Two of the eight missions in the National Action Plan on Climate Change are ready for implementation through the cabinet-level decisions regulatory mechanisms and even through legislation if necessary, said the special envoy of the Prime Minister on climate change. The National Solar Mission and the National Mission for Enhanced Energy have already been through by discussions and evaluation by the Prime Minister's Council on Climate Change.

Government Promises 70,000 Jobs: Ministry for Rural Development, Law and Parliamentary Affairs promised 70,000 jobs for the unemployed youth.

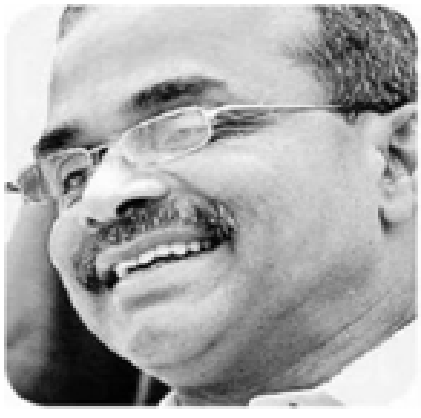
Coastal Erosion threatens Goa's Idyllic Beaches: India's resort state of Goa has been hit by several setbacks in the last 18 months. Moreover, with each holiday season, a greater threat to the tourist trade emerges, coastal erosion is leading to fears that some of the former Portuguese colony's famous white sandy beaches could disappear for good. The Goa assembly heard last month that more than 10 percent of the 105-kilometre (65-mile) coastline was falling into the sea. For Goa's many shoreline tourist bars, the situation could wreck already insecure livelihoods. Flooding due to coastal erosion had already affected trade at some beaches.

Steps to modernize Canal Network in Punjab: The Ministry of Irrigation in Punjab has undertaken the task of modernizing its 14500 Kilometer canal network which is the oldest in the country and has outlived its life. For this a project of Rs. 3469 crore have been prepared and submitted for the approval to the Ministry of Water Resources, Government of India and Central Water Commission. The aim of this project is to optimize utilization of the surface water resources and to minimize the loss of livelihood and lives on account of floods and water logging. This might be a step in right direction in the context of NASA report on the alarming rate of depletion of groundwater levels in Punjab.

Poverty Leads to Poor Health: Rather than climatic conditions or complex epidemiology, specialists note that the major causes of ill health for people in developing countries relate to poverty and underlying political and social conditions. This direct causal link between poverty and ill health has long been recognized by many civil society organizations that highlight poverty as the "biggest epidemic" facing the global health community, thereby emphasizing the importance of economic policy as a health issue. According to the most recent World Bank development indicators, 1.4 billion people were living on less than US$1.25 a day in 2005. A further 2.5 billion people were living on less than US$2 dollars a day, meaning that at least 45 percent of the world's population exist in a state of absolute or relative poverty, including half of the world's children. In contrast, the world's 497 billionaires (approximately 0.000008% of the world's population) have an estimated wealth of US$3.5 trillion (over 7 percent of world GDP). The WHO's Commission on Social Determinants of Health has also recently acknowledged that the high burden of illness responsible for premature loss of life arises in large part because of the poor and unequal conditions in which people live and work. The appalling living environment for millions of people is, in turn, the consequence of deeper structural conditions - what the Commission calls the 'structural drivers' of global health inequality.

Sponge Iron Industry Threatening Environment: Sponge Iron (SI) is a growing industry in India. However, the process of extraction of sponge iron releases many effluents in the air and water, destroying the region's natural biodiversity and pushing the environment to the limit. India has been one of the hot spots for iron ore extraction and for the past three years has been the largest producer of Sponge Iron (SI) in the world. Sponge iron, also known as direct reduced iron, is extracted from iron ore and is used in the making of steel. With the rising global demand for steel there has been unprecedented growth of the sponge iron industry in India. On one hand, steel majors like POSCO, Mittal and domestic majors like Tata, Jindal have already routed huge investments in sponge iron and steel industry. On the other hand, sponge iron units have emerged as small - scale industries requiring least investment. Thus, many illegal and unmonitored units have come up across the country which means it highly potential on threatening the environment.

Corruption and Drought Threaten to wither the Economy of India: From June to mid-August, the rains were 30 per cent below normal, with some areas suffering a 60 per cent shortfall. The shockwaves will be felt across the Indian economy. Agriculture may account for only 18 per cent of GDP, but 60 per cent of Indians - or more than 700 million people - depend on it for their livelihood. The vast cushion of domestic demand provided by these poor rural consumers had been a key factor in allowing India to weather the global credit crunch largely unscathed. Amid the looming crisis, local government officials say that the state



Andhra Pradesh lost its Chief Minister Dr. Y.S. Rajasekhar Reddy on 2nd Septembetr 2009 in a chopper crash. YSR was instrumental in implementing many pro-poor programs such as Jalayagnam, Arogyasri, Indiramma Housing, Pensions,, Pavalavaddi (Interest subsidy), Rs 2/kg rice etc in the state. He is recognized for his 1600 kms of Padayatra across the state which contributed in strengthening Congress Party in the state and he played a key role in bringing the party into power.

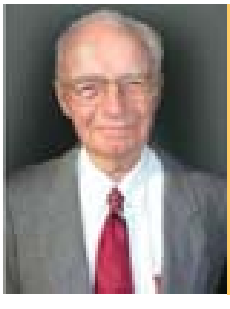
May his soul rest in peace.

has things in hand and will provide financial assistance where necessary. Ministers in New Delhi note that stocks of food grains are ample and should counter against inflation. However, it has done little, if anything, to help farmers to deal with this year's failed monsoon. According to Kishore Tiwari, a local activist, 42 farmers have committed suicide this month in the Vidarbha area of Maharashtra - the region where the tragic Dilip lived. He said that he believed that a key cause has been alleged corruption in the distribution of government subsidies. "The apathy of the local government has been the main cause of the recent despair, along with ongoing massive corruption in the relief packages announced by the central Government," he said. "Nobody is monitoring their progress."

India Cracks Down on Hoarders: India has launched countrywide raids on food commodities hoarders as the government appealed yesterday to consumers not to panic about food shortages inflicted by a poor monsoon. State authorities have conducted sweeping raids in the past days in Maharashtra, Madhya Pradesh and Gujarat in a bid to release foodstuffs onto the market and cool surging prices.

21 Farmers end lives in 40 Days in Andhra Pradesh: Most suicides in Andhra Pradesh have been reported from the arid regions of Telangana and Rayalaseema, where farmers are heavily dependent on rain. Most of the suicides have been reported among farmers who had borrowed heavily from private money lenders at exorbitant interest rates. The loans were taken to dig bore wells to tap ground water for cotton and other vegetable crops in the absence of rain.

The situation has been exacerbated by the falling water table in these districts.



Fr MVD Bogaert, founder of Xavier Institutes has expired at an age of 81. May his soul rest in peace.

Half of India Affected by Drought: Nearly half of India's districts have been hit by drought that could affect the production of rice, the country's farm minister, Sharad Pawar, has said. He added that 246 districts among 600 districts in 10 states had been declared as drought affected. This monsoon season has brought 29% less rainfall than normal. Rice production in the country could decline by 10 million tonnes this year because of the drought.

September 5 is a Teachers' Day, a day to remember your teachers and say a big 'Thank you!'.

Energy Awareness Held at Ukhrul: The awareness program organized by Ecological Useful Productive and Social Development Organization (EUPSDO), Manipur in association with Manipur Renewable Energy Development Agency (MANIREDA), Manipur under the sponsorship of Ministry of New and Renewable Energy, Government of India and Government of Manipur. Highlighting MANIREDA's role and achievement in renewable energy, The Scientific Officer, MANIREDA said 160 villages of the state has been electrified by solar systems. 6500 solar lanterns, 3500 solar home light and 850 solar street lights have also been installed so far. Therefore, the energy awareness program become really important for the community in India.

Training on Solid Waste: A one day Training Programme on Solid Waste Management will be held at Tolen ST Village community Hall, Chandel District, Manipur on 20th September 2009 sponsored by Ministry of Environment and Forest Government of India through Environment and Ecology wing Porompat Imphal East Government of Manipur organized by Integrated Women & Child Development Association and also a one day training program on Solid Waste Management will be held at the Bridge of Hope Tution Centre, Wangbal, Thoubal District Manipur on 20th September 2009 sponsored by Ministry of Environment and Forest Government of India through Environment and Ecology Wingh Porompat Govt of Manipur organized by Environment & Social Development Association Wangbal Harithong.

NREGA Performance, Uneven across States: With the much-hyped National Rural Employment Guarantee Act, the UPA government's showpiece social development program, showing an "uneven" performance across the country, Prime Minister Manmohan Singh asked states lagging behind in implementation of his government's flagship program "not to fail the poor". "We cannot fail the poor of our country particularly at a time when resources are available to provide gainful livelihood security for at least 100 days to the rural poor," he said.

M-CRIL India Indices of Microfinance 2009: Composite index growth of 15 leading microfinance institutions has reached 7857 (March 2002=100, Index uses information of number of borrowers and size of loan portfolio). The index growth continued to be strong in 2008-09 (63.6%) only reduced from the 65.5% average for the previous two years. The largest five MFIs grew at 78.2% (compared to 63.1% earlier) while the next 10 MFIs slowed down substantially. This has resulted from competitive pressures and aggressive growth of the largest MFIs and a slow down in the availability of funds from commercial banks to all but the largest MFIs. ■

1-7 September - National Nutrition Week

Under-nutrition levels in India are among the highest in the world. According to the FAO "State of Food Insecurity in World 2008", India has the highest number of the undernourished people in the world. According to its statistical report, 2003-05, there were 231 million under nourished people, which is the highest number compared to other countries in the world. While the overall state of nutrition and health in India is bad enough, the situation is worse in the poorer states, not to speak of the more deprived regions within these states. Around 40% children have low birth weight and around 47% children are malnourished. It is understood that 60% of Infant & child deaths could be prevented only if we are able to check malnutrition among children.

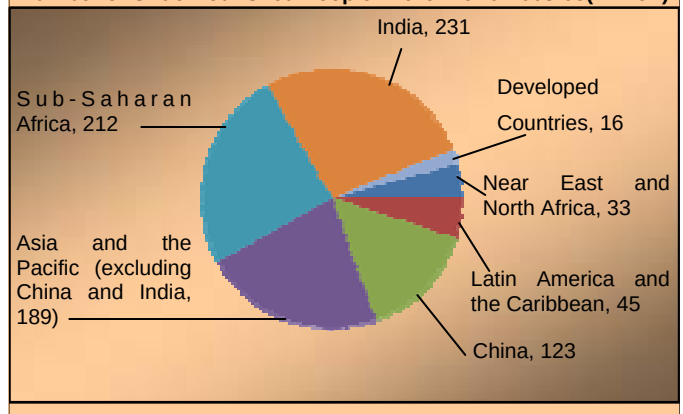
Nutrition refers to the study of food. It is all about how the body extracts energy from food for its growth, nourishment and development. The intake of nutritious food prevents chronic ailments and, in the process, supports a healthy life. An individual must keep proper amount of carbohydrate, fats, vitamin, protein and minerals in his/her diet. These nutrients are necessary for growth and help one to stay away from illness. However, the nutritional need varies from individual to individual. The nutritional requirement of an individual depends on age, height, sex, weight, rate of growth and level of activity. Serious diseases affect the body due to malnutrition.

Under-nutrition is the underlying cause for about 50% of the 2.1 million Under-5 deaths in India each year. The prevalence of under nutrition is the highest in Madhya Pradesh (55%), Bihar (54%), Orissa (54%), Uttar Pradesh (52%) and Rajasthan (51%), while Kerala (37%) and Tamil

Nadu (27%) have lower rates. General under-nutrition, characterized by under-weight among children, is more prevalent amongst rural children, scheduled castes and tribes, and amongst children with illiterate mothers. It is also prevalent among poor family who have a limited access for healthcare. The young-age mothers who marry at early age of 10-14 years, also contribute to the cause of under-weight infants and child because they are not ready yet to be a mother where they have insufficient knowledge of proper care and infant feeding practices.

Malnutrition amongst women is another cause of low birth-weight babies and poor growth. Low birth-weight babies

Number of Undernourished People in the World.2003-05(million)



Source: State of Food Insecurity in World 2008, FAO

who survive are likely to suffer growth retardation and illness throughout their childhood, adolescence and into adulthood, and growth-retarded adult women are likely to carry on the vicious cycle of malnutrition by giving birth to low birth-weight babies.

The contributing factors for under-nutrition are household food insecurity and intra-household food distribution, imbalanced diet, inadequate preventative and curative health services, and insufficient knowledge of proper care and infant feeding practices. The impact of under-nutrition among the people is the productivity losses to individuals are estimated at more than 10 percent of lifetime earnings, and Gross Domestic Product (GDP) loss to malnutrition runs as high as 3 to 4 percent.

Despite substantial improvement in health and well-being since the country's independence in 1947, under-nutrition remains a silent emergency in India, where almost half of all children under the age of three are underweight, 30 percent of newborns born with low birth weight, and 52 percent of women and 74 percent of children are anaemic.

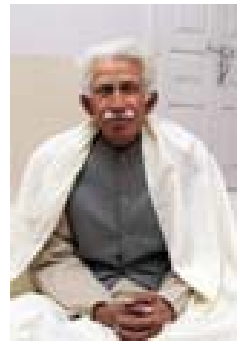
Matters related to nutrition have become an important area for the Indian government to focus on. The government put more efforts to make things better. Some of the programs are Public distribution System (PDS), NRHM (National Rural Health Mission), Mid-day Meal Scheme, Integrated Child Development Scheme (ICDS) a feeding and caring program through Anganwadis etc. As always NGO have also taken up this issue. The program like salt testing to the market and iodized salt campaign, Program on "Positive Deviance", Integrated Nutrition Health Project (INHP), etc are other efforts to provide people with proper-adequate nutrition so that they can live and run the livelihoods for a decent living.

Well-nourished children tend to have a higher IQ and better cognitive ability. While medicines are not a solution, nutrition awareness is the only prevention. Therefore, by notifying 1st to 7th September as the National Nutrition Week, it is intended to remind everyone that we need to boost up the nutrition rate in the country. Together with other days such as Global Iodine Deficiency Disorders Prevention Day (21 October), World Breastfeeding Week (1-7 August), World Food Day (16 October) and Universal Children's Day (14 November), it is a reminder to the people around India to contribute more to the comprehensive efforts to a better nutrition condition in the country. ■

Legend

‘Holy Crusader’ Veer Bhadra Mishra

Ganges is the most sacred river for millions of Hindus. Daily thousands of people bath and pray at the various ghats along the river Ganges. Around 400 million people are living along the Ganges that makes this river the most populous river basin in the world. However the sad reality is that it is one of the most polluted rivers in the world. Professor Veer Bhadra Mishra, whose name is synonymous with the Swacha (Clean) Ganga Campaign, has led a holy crusade through political, social and scientific projects to save this sacred river from pollution.



Eminent researcher, dedicated educationist and internationally acclaimed environmentalist Veer Bhadra Mishra was born on January 10, 1939. He inherited his family job as a priest, the Mahant at the Sankat Mochan temple in Varanasi at the age of 14 when his father died. But he did not want to stop his education. He continued to study when he found some time and completed B.Sc (Engineering), M.Sc (Engineering) and Ph.D. in Civil Engineering from Banaras Hindu University.

Later Mishra joined the Department of Civil Engineering as a faculty member in 1961. In an association spanning over four decades Mishra held many academic and administrative positions in the University including that of Head of the Department and Coordinator of a few technical projects. His achievements in the field of teaching, guiding research and the development of the laboratories and hydraulic section have been outstanding.

Mishra’s name has become synonymous with the Swatcha (clean) Ganga Campaign, a unique effort to clean Ganga by creating an interface between science, technology, culture and faith at the national and international level. As a child he learned the sacred chants and rites--including the importance of a daily dip in the Ganges, the river that Hindus worship for its purity. Mishra cups his hands to scoop up water and lifts it to his lips. But unlike the ancestors who began the ritual, he skips a step. He does not drink the water. Mishra knows that while the Ganges may be holy, it is not pure. It is filled with chemical wastes, sewage and even the remains of human corpses. He decided to clean the Ganga as he treated it as his mother since childhood.

Mishra started his action as the co-founder of the Sankat Mochan Foundation (SMF), a secular, non-governmental organization at Tulsi Ghat in Varanasi dedicated to cleaning and protecting the Ganga, especially from sewage since 1982. With this organization, then, he established the Swatcha Ganga campaign. With support from various countries, Mishra is able to analyze water quality of the Ganga every day.

Mishra with the SMF has mobilized volunteers from all over the world. Aside from the laboratory to test water quality, they have led a large-scale international awareness campaign, utilizing television, radio, print media and the internet. Mishra has traveled the world learning about the plight of rivers and how activists and scientists have tried to clean them. Swatcha Ganga Environmental Education Centre was started by Oz GREEN and the Sankat Mochan Foundation In 1998. It is a direct people to people project which is funded by Australians. They have provided equipment, training and environmental education resources like water testing kits to schools and community groups.

Foundation Members have spoken to thousands of residents along the river front and in the villages nearby, and more than 6,500 local people have signed a petition demanding the interceptor be built. Over 100,000 people have agreed to help build the dam walls for the oxidation ponds, as an act of religious devotion dedicated to cleaning the river. Nearly 10,000 local residents have volunteered to build the type of non-electrical wastewater treatment system advocated by the campaign.

Mishra working with William Oswald, an engineering professor emeritus at the University of California, Berkeley, proposed what is called an Advanced Integrated Wastewater Oxidation Pond System (AIWPS). In his words, it is “a cost-effective and safe system for cleaning the Varanasi stretch.” The non-electric wastewater system would store sewage for 45 days in biological oxidation ponds, using bacteria and algae to eliminate pesticides, heavy metals and deadly coliforms, cleansing the entire 7 km stretch. The system would not only purify water but could be used to irrigate farmland and grow fish. The ponds would be built outside the city limits. Since 2001, campaigners have also cleaned up litter, debris and corpses of humans and animals in the river and along all 77 ghats with their own hands. Numerous sources credit them with improving the situation by one third. They now also provide clean drinking water through new wells to six neighbouring villages whose residents were previously ill by drinking the water of Ganga.

The multidisciplinary movement spearheaded by Mishra has been highly appreciated, by international media like New Yorker, Time Magazine, CNN and National Geographic. He has received many national and international awards and recognitions including UNEP Global 500 Roll of Honour, 7 Heroes of the Planet by Time Magazine and Maharana Udai Singh Award by Maharana Mewar Foundation Udaipur.

Mishra hopes that his Ganges clean-up initiatives will inspire others to clean the waterways they depend on for life. ■

Natural Regeneration of Common Lands

With a belief that the issues of Poverty and Hunger are closely linked to environmental degradation caused mainly by human actions such as market oriented and chemical intensive agricultural practices, deforestation, excessive mining of natural resources etc, Anantha Paryavarana Parirakshana Samithi, a Anathapur based NGO's collective, has been facilitating the development of people's institutions that would actively regenerate and manage common pool natural resources such as village common lands, water bodies, tank beds and stream banks etc through its Natural regeneration of common lands program.

Ananthapur is a semi-arid and drought prone district in the State of Andhra Pradesh. In this kind of district striving for strengthening the natural resource base is very important for sustainable livelihoods of the rural poor with focus on socially and economically marginalized communities. Natural Regeneration of Common Lands program initiated by Anantha Paryavarana Parirakshana Samithi, a collective of 13 NGOs in Ananthapur, is such an intervention aimed at strengthening natural resource base with people's participation.

Under this Natural regeneration of common lands program, APPS adopted 75,000 acres of revenue hillocks (common land) in the district for development of forest through, protection from fire, theft, felling of trees, overgrazing, encroachments, etc. APPS initially formed village level committees called Paryavarana Parirakshana Samithis (PPS) which later got federated as the mandal level Samakhyas. In 2004, a district level people's organization was registered called Anantha Paryavarana Praja Vedika for lobby and advocacy at the district and state level.

The APPS believes in the ability of Nature to heal herself, however this takes a lot of time and is only possible if further destruction and exploitation is first stopped. Therefore the first step was to protect the soil and plants by temporarily fencing it with thorn bushes, thus keeping sheep, goats and cattle out. In the process the members of the community at APPS realized that in order to make real regenerative development possible, they also had to protect the surrounding hills.

After lots of capacity building programs to the PPS, they were able to guide the people in the villages to form into local committees such as Konda committee (Hillock committee) and Chetla Committee (Tree committee). These committees surveyed the identified revenue common lands, marked out the area to be protected by drawing boundaries and protected them by themselves with little cooperation from organizers.

Over a period of time Natural regeneration as a concept for regeneration of forests was encouraged. This method involved protecting natural root stock of already existing tree and plant species along with collection and dibbling of local seed varieties on the revenue hillocks. Growing new plantation varieties raised in nurseries was discouraged. People were encouraged to collect and sow local varieties of fruits, fodder trees, grass and medicinal plant species on these lands.

The natural regeneration work consists mainly the activities that include protection of fires, protection from over grazing, protection from tree cutting, construction of small rock filled dams (RFD) to prevent soil erosion and increase water recharge etc.

Building bottom up linkages through Praja Vedika APPS has enabled the exchange of experiences and problems, the formulation of collective strategies, especially on policies related to livelihood issues like privatization of forest and impact of globalization on marginalized communities.

Under this program APPS is also promoting Eco-clubs with school children. So far 145 Eco-clubs have been formed and the children of these clubs involve mostly in activities like seed collection, seed dibbling and plantations.

With the active involvement of Vedika members APPS completed the construction of 30 water harvesting structures in the common lands. The Vedika leaders have successfully lobbied with the Commissioner of Rural Development, Government of Andhra Pradesh the state government of Andhra Pradesh for a special programme on Development of Common lands under NREGS-AP.

Realizing the importance of women's participation in developmental programs APPS focuses on active involvement of women in this program and encouraged them to be the part of various committees. In terms of usufructs and benefit sharing priority is given to single women and destitute women as well as the DAPs (Differently Abled Persons).

Under this Natural Regeneration of Common Lands Program, APPS and its partner organizations have planted 184160 plants in the Hillocks, 72534 saplings in school premises by members of Eco-club and 93673 plants in villages.

Natural Regeneration of Common Lands Program is a successful and replicable model for strengthening natural resource base through community participation in drought prone areas and is showing a green way for developing those areas.■

Campaigns, Cadres and Collectives!

It is a national drought, last lap rains not withstanding.

As we live the month, Teachers' Day (5 September) and International Literacy Day (8 September) pass by. International Day for the Preservation of Ozone Layer (16 September) is round the corner. We need to remember International Peace Day (21 September), World Tourism Day (27 September), International Day of Older Persons (1 October), International Day of Non-violence (2 October), and World Habitat Day (5 October – first Monday). One more occasion to remember our teachers – World Teachers' Day (5 October)!

Dr YSR's death has prompted to order 12000+ statues! 400+ deaths! So much for his popularity! Combining development/ growth with welfare has been his mantra to popularity, not withstanding a variety of allegations of build-up of assets, and corruption.

During the month, we have discovered that we are frail and fall prey to our egos easily affecting the relationships, results and responsibilities. Further, as in the last few months, 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.

Perspectives

G. Muralidhar

Sustainable Development has been engaging us for a long time. Recent and continued engagement in developing the curriculum, course material etc., for the distance mode PG Diploma in Sustainable Rural Development has forced us to focus on it in depth. The course outline that emerged is a good beginning to scale-up the campaign to **build cadres for Sustainable Development, particularly in rural areas**. The outline of the course looks as follows:

1. Sustainable Rural Development: Themes & Perspectives (4 Credits)

- Understanding rural communities: structure, culture and polity
- Rural social structure and social system; Social inequality and social exclusion; Social conflicts and social change
- Approaches to the study of development
- Development theories and rural polity; Economic growth; Growth with equity; Social development; Sustainable development
- Rural development in India
- Community mobilisation and institution building; Cooperative Management; Corporate social responsibility; Development- induced displacement and rehabilitation; Democratic decentralization
- Sustainable development: global and Indian context
- Communities, state and civil society:

2. Development: Methods and Techniques (4 Credits)

- Approach, theory and methods
- Development processes
- Social mobilization; Empowerment; Negotiations; Partnerships; Advocacy, accountability & transparency; Rights and entitlements
- Formulation of development projects
- Basic statistical Techniques
- Qualitative methods
- Report writing

3. Policies and Programmes for Rural Development (4 Credits)

- Colonial rule and rural India
- Vision for India's rural development
- Planned rural development in India
- Policies and programmes
- Consequences of policies and programmes

4. Resources and Livelihoods (4 Credits)

- Mapping of resources: ownership and access
- Agriculture and other livelihoods
- Animal husbandry and fisheries
- Marketing
- Environment
- Livelihoods

5. Project Planning and Management (4 Credits)

- Introduction to project planning
- Project management systems
- Implementation and monitoring

6. Stakeholders in Sustainable Rural Development (4 Credits)

- Rural development and its stakeholders
- Communities and their organizations
- Cooperatives and other formal and informal organizations
- Projects, stakeholders and power dynamics
- Conflicts and conflict management
- State, PRIs and civil society.

7. Appropriate Technologies and Practices for Sustainable Development (4 Credits)

- Energy: Non renewable and renewable resources, water conservation and sustainable use, drinking water
- Housing: low cost, eco-friendly
- Rural infrastructure
- Use of ICTs for rural development
- Agriculture

- Rural artisans and non-farm sector

8. Project: Guidelines for Formulation & Execution (7 Credits)

- Formulation of sustainable development project
- Project implementation
- Project Evaluation
- Project report evaluation

The same thing is required for sustainable development in urban areas. It becomes critical when the urban population is moving towards crossing the half-way mark.

One important question that has been troubling us has been the form of the collectives. Is it the cooperative? Or can it be Mutually-aided Cooperative? Multi-state cooperative? Can it be producers' company? Trade Union? Association/Society? Trust? Company? Unregistered Group? When Pranab Mukherjee talks about new tax code that talks about no tax on cooperatives, what should we do? When the late Dr YSR proposed to take over any association/society or cooperative or MACS, what should we do?

Under these circumstances, Producers' Company under Indian Companies' Act (Section 581) comes as a relief, if Pranab Mukherjee extends 'no tax' to the Producers' Company also. When poor elders want to come together to meet their credit needs, can we think about this? The objects referred to in Sec 581 include: production/consumption and related, processing and related, education, training and technical services, power, NRM, insurance, mutual assistance, welfare, financing and credit. It allows for individuals and/or incorporated and unincorporated groups/ institutions. It functions like a cooperative on governance and values patronage.

If this is not OK, NBFC can be a difficult option. Scale is an issue. Including welfare measures can be cumbersome.

A 25,000 member community-based MFI, with an estimated credit turnover of Rs.1000 million! What is the way out?

Amidst this, Kapil Sibal announces scrapping examinations for Class X in CBSE. The obvious step should be to make this applicable to all the state Boards. Let us hope he succeeds in convincing the states.

Reservation for women in Local Bodies has been raised to 50% from the current 33%. While we still have the raj of Sarpanch Patis, in many a place, this paves way for more and more women occupying the seats of local governments. Mean while, can we expect the women reservation in Assemblies and Parliament comes about?

Weavers' issues remain unfathomable for many of us. At least Sainath is there to explore dry-land framing and farmers' suicides. Who is there for 'weavers'? When a textile (handloom) park comes near a weaving cluster, when it seeks weavers to work in the factory (park), when it seeks the weaver to specialize in a small part of the value-chain, will it benefit the weaver? Is it OK to make a self-employed weaver, although chained to master-weaver and/or the trader, into a wage worker and strip of his wholesome skills? Is it OK to move family-based occupation individuals out of the family for work? Is it going to benefit the traditional weaving families or the new entrants? Further, can we think of powerloom park? Does it really help the wage weavers? Is it not displacing more handloom weavers out of work? Are there any ways by which we can ensure that the weaver moves up the value-chain? Are there any ways, we can help their spouses?

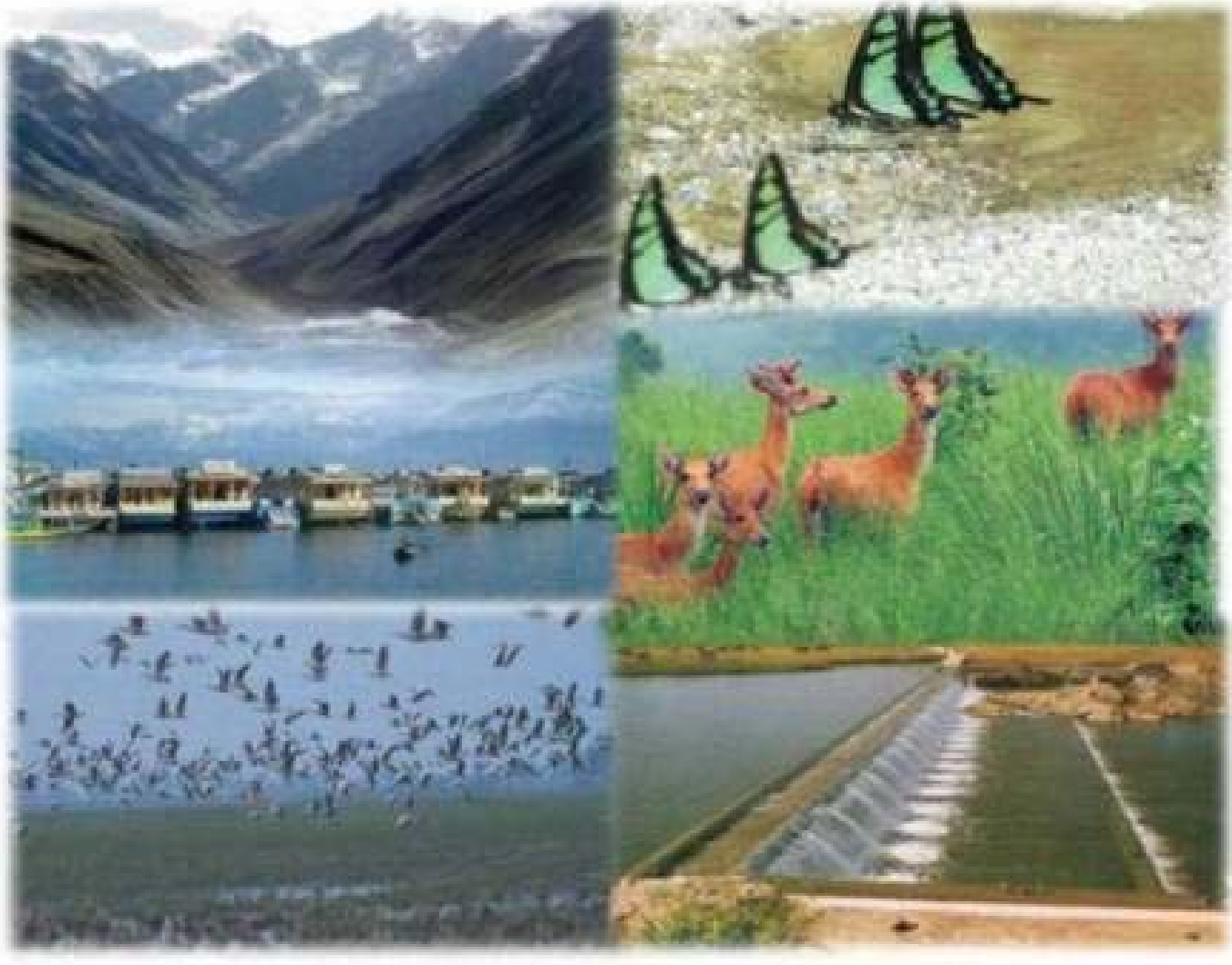
When we need to increase the options before the people for them to make choices, is information, knowledge sharing through books, literature, magazines, websites etc., will suffice? Is ICT going to help? Do we need cadres of development workers?

When we discuss the cadres for sustainable development for India, we are talking conservatively, 1 million professionals @ one per 100 families. If we talk districts, can we think about 100 professionals per district? This would mean 60,000 in total. Plain enough, we need to work with 10+ to ensure that 1 is available. This takes us to 600,000. Let us agree to take a decade to reach this. Then, we need to 'produce' 60,000 a year. If we assume batches of 30, we need 2000 batches a year. If we reckon at least 3 persons to mentor/facilitate a batch or two batches a year, we need a team of 3000 mentors/facilitators/teachers working every year. This would take us the mentors of the mentors or trainers of trainers. Let us take 3-4 years to have 3000 mentors. We need 100 TOTs/MOMs working every year for three years to ensure availability of 3000 mentors. This is the task. We need to work towards. National Livelihoods Mission needs to commit to. Planning Commission needs to commit to. Youth leaders need to commit to. Hope they are listening!

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!** ■

Environment

In India, more than three-quarters of population is directly dependent for their livelihoods on activities based on environment like agriculture, animal husbandry, fisheries and forestry. Creating and maintaining a sustainable environment is very important and the single most pressing issue that is confronting by the world today. Conserving the environment can create number of employment opportunities apart from protecting the livelihoods of millions of people. 'livelihoods' looks into the issues of environment and its relation to the livelihoods of the people especially the poor…



All elements of nature like forest, mountains, water, air, animals and birds are personified as gods in many civilizations. This depicts the importance attributed to nature as well human beings' dependency on them. The word environment is immediately associated with 'natural environment' though there are socio, economic and political environments too. In this article our focus too is on the natural environment. Environment connotes all the things surrounding an organism including humans. It encompasses all living (biotic) and non-living (abiotic) elements like air, land, water, forests, seas, animals and other elements on our planet.

India is recognized as a country uniquely rich in all aspects of biodiversity, ecosystems, species and genetic. It is perhaps the largest array of environmental situations by virtue of its tropical location, varied physical features and climatic types.

In India more than three -quarters of population are directly dependent for their livelihoods on activities based on environment like agriculture, animal husbandry, forestry and fisheries. Poor in urban areas are involved in environmental waste segregation, waste processing and waste handling. Others are dependent on it for food, fuel, industrial output and recreation. Therefore access to and right over natural environment is an important capital/resource for a household or individual. The economic well-being of a household is influenced by productivity of natural resources accessible to them.

It has been reported that the ratio of people to forested land is more than three times higher in low-income countries highlighting the close link of poor with the environment. Abundance in environment plays an important role in preventing people and animals from starvation and provides required nutrients. This dependency of poor on the environment for survival is evident when we observe the availability of food for people living in tribal, rural and urban areas. Poor in tribal and costal areas are better off than poor people living in rural and urban areas as they are closer to the nature i.e forest and sea/river and can get some form of food that prevents them from starvation. Poor people in rural areas are better off than their counterparts in urban areas as they have access to common property resources as well as some forest and water produces. Poor people living in urban areas are the worst affected as they are removed from access to natural resources and have to live in unhealthy environment caused by pollution and dumping of industrial and domestic wastes. A healthy environment is a necessary condition to keep up and sustain the food chain.

Owing to its importance in lives of people, aspects of environment on socio, economic and cultural lives of people is being studied. Understanding of environment encompasses understanding myriad elements of environment like land, water, air, forest, pollution, recycling to name a few. This has given rise to many interdisciplinary subjects like environmental economics; environment and development, environmental law, environmental management and others. Newer concept like 'Green' Domestic product is being talked about by the governments. 'Eco friendly' produces and buildings (green buildings) enjoy a premium place in the market. Though not very popular in all sections of the society increased awareness about importance of protecting environment has seen an increased acceptance by all.

Uses of environment are of two folds. The first is that it has an innate capacity to absorb the affluent. For example plants absorb carbon dioxide and gives back oxygen, degradable waste is degraded in the soil and converted to increase fertility of the soil. The second use is that it provides resources to produce goods, food and energy that are essential for living.

Striking a balance between development, elimination of poverty and non exploitation of environment has been a difficult task. Nature was always assumed to be non-exhaustible and renewable. But exploitation of natural resources like forest produces, crude oil, minerals and water beyond permissible limit has brought it to the verge of scarcity. Similarly careless industrialization which emits effluents, repeated use of chemical fertilizers and pesticides has polluted and eroded the richness of the resources and resulted in unhealthy environment that lead to ill health and extinct of few species. Environmental degradation has made us highly vulnerable to natural disasters such as droughts, flash floods and forest fires. These disasters further degenerate environment forming a vicious circle. The only way out of this circle is conserving environment. This exemplifies the need to maintain a healthy balance between rapid development while conserving rich bio-diversity and natural resources. The world is rapidly realizing that environmental issues such as global warming and ozone depletion, acid rains, marine pollution and the threat to biodiversity are serious issues. Degeneration of these resources and an alarming declining trend has affected the productivity of natural resources.

There are many issues related to environment. Water pollution and contamination is one such issue. Effects of toxic chemicals and minerals such as pesticides and lead in drinking water are serious. It is estimated that 90% of the waste water of the developing world is discharged directly into streams, open drains, rivers and lakes and coastal waters without treatment. Overuse of fertilizers has increased

nitrates and arsenic in groundwater. As a result water –borne diseases – diarrhea, dysentery, intestinal worms and hepatitis are affecting people.

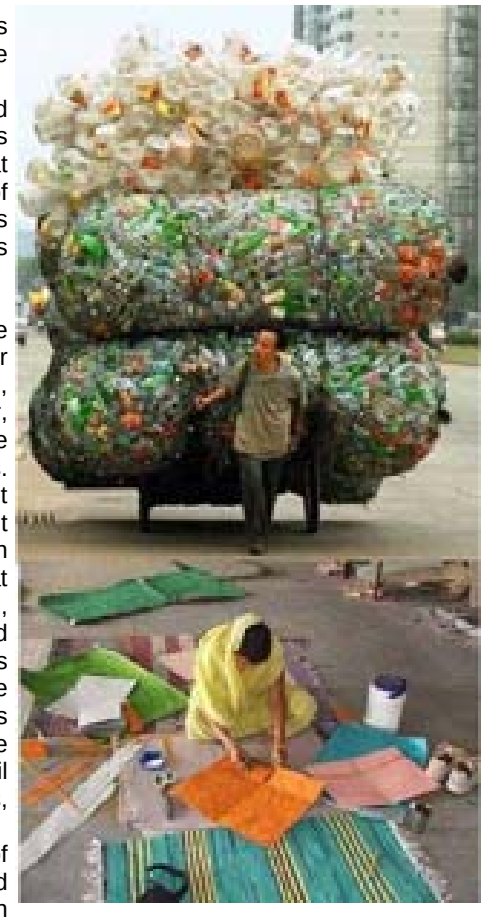
Over 100 million of the world's poorest people depend on fishing for all or part of their livelihoods. Fisheries one of the main sources of livelihood for poor people and of protein for many are being damaged by water pollution. Major declines in fish caches have been demented in rivers heavily polluted by vast quantities of sewage and industrial waste. Many authorities predict that water will become an important cause of war and human conflict in the 21st century.

Air pollution is another issue that is affecting the environment. Air pollution caused by industrial emissions, vehicular exhaust and burning of fuel can cause respiratory damage, heart and lung diseases. Although air pollution is normally seen as problem of industrial countries and affecting towns and cities more than two-thirds of the deaths due to air pollution are in rural areas. Besides harming health air pollution has adverse effects on crop productivity. Air pollution is also responsible for acid rains which have caused damage to the forests and agriculture.

Depletion of the ozone layer has increased the toll of human health and food supplies. The ultraviolet rays of the sun causes skin cancers, cataracts and suppress the immune system. It also damages crop species , penetrates surface of the sea killing plankton which is vital in the marine food chain.

Global warming It is considered as one of the most serious of the environmental issues today. It threatens the stable climate causing changes to the seasons. Failing harvests, growing water shortages and rising seas are impacts of global warming.

Soil degradation is another important issue**.** Soil is a unique non-renewable natural resource that supports life on planet Earth. Agricultural lands are suffering from erosion, water logging, salinity and general loss of fertility posing danger to food security. Soil degradation reduces availability of agricultural land and agricultural productivity and reduces fodder available for cattle. It is estimated that one-sixth of the world's soil has already been degraded. It has been reported (Govt. of India, 1989).that in India, 45 percent of the total geographical area is affected by serious soil erosion. Excessive soil erosion with consequent high rate of sedimentation in the reservoirs and decreased fertility has created serious environmental problems. Mining activity often leads to environmental problems like land degradation, particularly in opencast mining and land subsidence in underground mining. Open-cast mining in areas with forest cover causes deforestation.



Deforestation is also one of the important concerns related environment. It is estimated that about a third of the earth's original forests have disappeared. Forests have been a major source of food, fodder, fuel, fiber, timber medicine and others. Forests are not just trees, but part of an ecosystem that underpins life, economies and societies. Forests provide a wide range of services which include prevention of soil erosion, floods, landslides, maintenance of soil fertility, and fixing carbon from the atmosphere as biomass and soil-organic carbon. They also bind soil to the ground, regulate water supplies and help govern the climate. Cutting them can rob poor people of their livelihoods.

The increasing frequency of floods in India is largely due to deforestation in the catchments areas, destruction of surface vegetation, and change in land-use, increased urbanization and other developmental activities. The main reason, however, is the increased sedimentation and reduced capacity of drainage systems. Consequently, streams and rivers overflow their banks, flooding the downstream areas. These are of frequent occurrence in many parts of India, especially in hilly terrains, causing a disruption of normal life and considerable damage to the productive land system.

Biodiversity refers to diversity of species of life forms. It is important factor in safeguarding the world's food chain/ supplies. It is means of livelihood for many poor, who have no access to other assets and productive resources. It is an important source of medicine. It is estimated that three billion people are dependent on traditional medicine as principal source of cures for illness. There is an increasing trend in loss of biodiversity resulting from deforestation and exploitation of these resources for export oriented markets.

Environmental degradation always hits those living in poverty the hardest. It is said that the overwhelming majority of those who die each year from air and water pollution or floods, storms and harvest failures are poor people in developing countries. The urban poor are affected by environment as they are forced to live in the urban dump yards, the slums. Lack of sanitation facilities and safe drinking water increases

Indian villages in global carbon trading

All countries are required to reduce their greenhouse gas emissions by 5% by 2012 or pay a price to those that do. The idea was to make developed countries pay for their wild ways with emissions while at the same time monetarily rewarding countries with good behaviour in this regard. The World Bank has built itself a role in this market as a manager of international fund flows. The scheme has been entitled Clean Development Mechanism [CDM] or more commonly, Carbon Trading.

Powerguda in Adilabad district Andhra Pradesh has pioneered carbon credit sale to the World Bank for $645. The village has saved 147 metric tons carbon di- oxide based on the bio-diesel they extracted from 4500 Pongamia trees. Using this —instead of petroleum—in oil engines would enhance air quality. World Bank is buying those carbon credits to balance the aviation fuel burnt by aircraft carrying Bank officials.

Emmanuel D'Silva, a former World Bank staffer has been working extensively among Andhra Pradesh villagers, creating awareness about this market opportunity that awaits them. It has been reported to 'Good News India' that five other villages have followed Powerguda and made carbon credit sales.

their health risks much higher than those living in better habitual conditions.

It has also been observed that growing poverty poses challenge to environment. People in poverty are forced to deplete resources to survive in the absence of alternative source of livelihood. This relationship between poverty and environment has another dimension of growing population. Pressure on environment intensifies in proportion to the growth in population. Therefore removal of poverty should become an integral part conserving environment.

Poor are pushed more and more onto ecologically fragile lands, increasing their vulnerability. It is estimated that by the end of next decade a billion poor people may be living with scarce resources and unequal access to natural resources, making it difficult for them to escape impoverishment.

Among the poor, women face greater risks largely because of their social and economic roles and subordinate position in the society. It has been accepted as an undisputed fact that women, rural and tribal, have a very intimate and symbiotic relationship with the ecology around them as they are linked to the natural resources. They are the primary actors in agriculture, collection of forest produce, in livestock management apart from nurturing their families. Predominantly being an agrarian population, Indian people dependent on land and forests for their sustenance and livelihood. Women constitute fifty percent of this population and contribute substantially to this system of livelihood.

In rural and tribal areas women are the principal food gatherers from forests, they collect water, firewood and fodder, forest is their first source of meeting their health needs due to their invaluable knowledge of medical plants and in the leans seasons, the main source of nutrition. Tribal women are dependent on the forest for earning their livelihood through sale of forest produce.

Women's close association with environment is often ignored. Environment degradation has proved to have a direct impact on the lives and health of women. Legally women have no rights over lands or natural resources in our patriarchal system. Condition of displaced women from their natural environment is indescribable. These women who are pushed to take up marginalized forms of labour as maids and servants, as construction labourers or into prostitution. Even rehabilitation packages like cash or land are primarily given to men.

Empowering women to have greater control over their environmental resources seems to be an important way out. There are many examples of how women have played an important role in conserving environment, Chipko movement where the women hugged the trees to prevent them from felling and reclaiming of wastelands and plating trees by women's groups in West Bengal that could also help them in taking up economic activities are few noted interventions made by women's collectives to conserve as well as further its growth.

Given the high vulnerability of the environment to exploitation, natural disasters and its open access has made it necessary for public policy to protect and conserve environment. It is necessary to minimize the impact on human's especially unequal impact on poor people as well as damage to the environment. Policies that can govern use of resources, usage of eco friendly materials, ensuring clean production, poor people's access to natural resources, their rights and entitlements to common property, change in production and consumptions patterns especially by making available goods and services by public sector undertaking are important.

Reconstruction of exhausted environmental resources will have to work towards both conserving environment and elimination of poverty. The ecological tax reform- which substitutes taxes on resource use like carbon trading and pollution taxes on jobs and income could help.

The importance of environment and its link to development and the quality of human life were first addressed on a global level at the Stockholm Conference on Human Environment in 1972. It was the then Prime Minister, Mrs. Indira Gandhi, who focused attention of the Conference on this link, stating that "environment cannot be improved in conditions of poverty". Following the Stockholm Conference, India set up a separate Ministry of Environment and Forests. Recognizing the need for specialized institutions in various fields of environment and development, the Ministry created centers

of excellence in partnership with NGOs and academic institutions. The Centre for Environment Education, established in 1984, was on of the first such institutions. India has also enacted a **National environment policy in 2006.** However policy doesn't specify any particular organization structure or management system for implementing the policy and monitoring its progress, nor has it a coherent vision of genuine decentralized governance and grassroots empowerment. India has also enacted various acts to prevent pollution of Air, water and land.

Internationally environment issue has gained primary consideration. Many international movements and organizations like WWF, Save the planet, Green peace and others are active in highlighting the issue and pressurizing governments to take measures to protect environment. Global warming is another issue that has pressed the alarm button on danger in which our environment is today. World Bank has taken many initiatives in environment management. In partnership with the Global Environment Facility (GEF), the Bank plays a major role to stem climate change, biodiversity degradation, and the impact of toxic and chemical waste.

Except for reforestation program none of the initiatives to protect environment envision role for the poor who are affected the most. Most policy interventions don't recognize or give incentives to the poor who are the least polluters. Technological interventions that are designed to reduce pollution are not economical and don't have efficient service providers (in case of repairs) which deter people especially poor from making use of them. For example use of battery run automobiles instead of petrol or diesel, might be environmental friendly but might not make economic sense for the poor as the cost involved in using such automobiles, maintenance and repairs are much higher.

Need of the day is a comprehensive policy that would envision roles for every one to promote and protection of environment as well as mandatory enforcement of stricter rules to treat industrial and domestic waste.

Many interventions have been made towards conservation of environment. Eliminating pollution at the source and waste recycling basically through technological intervention are important ones. Cleaner production is a new approach to protect the environment. This approach aims at eliminating pollution at the source and conserves usage of raw materials like water, timber and energy more judiciously. The process also aims at reducing impact of production on the environment minimal, right from the extraction of raw materials to their ultimate disposal. Such products are also sold at a premium, where the consumer also contributes to the extra cost involved in ensuring environmental safety.

Recycling can reduce using of new materials. Reusing products, repairing them and increasing their durability are also necessary. Efforts are also being made to transform effluents into commercial products, such as fertilizer which is profitable. Efforts have been made especially in France to reuse and recycle even non-renewable materials there by reducing usage of natural resource by three – fifths.

Just as environmental damage limits the well being of poor people, solutions can enhance it. Technologies that use fewer resources and create less pollution generally employ more people. Recycling of waste can create jobs. Innovative Technology is necessary at this juncture that can reduce pollution and dependency on natural resources and would still enhance efficiency and make goods and services affordable even for the poor. This technology is necessary to help poor breakout of poverty trap.

Government has taken initiatives like watersheds management, Desert Development Programs (DDP), Joint Forest Management (JFM) and Reclamation of Alkali Soil (RAS) etc. These programs aim at strengthening natural resource base and to promote overall economic development of the resource poor and disadvantaged sections of people. These programs also empowers local communities in these activities by bringing in their participation as partners in the implementation and management.

It is very encouraging to see many interventions initiated jointly by governments as well as civil society groups to conserve environment. However, these initiatives don't seem to be enough when compared to the pace at which the environment is degrading. The initiatives like recycling of paper, plastic, metal and other wastes, making vermi compost, waste land development, promoting energy efficient equipment etc need to be scaled up. This will serve the purpose of conserving the environment as well as creates more employment opportunities apart from protecting the livelihoods of millions of people who are dependent on environment. The challenge of creating and maintaining a sustainable environment is probably the single most pressing issue confronting us today. Restoration, judicious use and management of environment are essential to ensure sustainable livelihoods and the well-being of people. Land, water and forests form the basic renewable sources of livelihoods. With the right policy initiatives and resource allocation for raising their productivity, it is possible to ensure livelihoods, in fact augment, for majority of households in India as well as conserve environment. ■

Some Eco-livelihoods

- Plantation
- Nursery rising
- Kitchen gardens
- Construction of watersheds
- Building compost pits
- Desilting of lakes and ponds
- Building water and sanitary drainages
- Building Rain water harvesting technology
- Producing fertilizers from industrial effluents
- Recycling paper
- Recycling waste water
- Making paper bags and cloth bags
- Making recycled cotton and jute bags
- Development of waste lands
- Collection of degradable, non-degradable waste
- Selling plastic and paper waste
- Making of varmi compost
- Recycling of plastic and metal waste
- Collection and selling of iron, glass and other metal waste
- Manufacturing of solar equipment
- Manufacturing of energy efficient equipment

...Change Along With Changing Needs

Somla Naik, who belongs to a poor tribal family, succeeded in his fight with poverty by catching the right opportunities at right time. Once struggling to even feed his family, he is now able to lead a decent and satisfying life by becoming an entrepreneur. G. Janaki interviews Somla Naik to know more about his life and livelihood...

Q: What is your name?

A: My name is Vadite. Somla Naik

Q: Where are you from?

A: I belong to Gangupalli tanda village of Bollapalli mandal (Block) in Guntur district of Andhra Pradesh. But 35 years back many of my villagers migrated to Sitarampuram tanda which is 12 kms away from my native village for better accessibility to the mandal head quarters. I also migrated to Sitarampuram tanda along with them and settled here.

Q: Tell us about your childhood and education?

A: I was born in a very poor tribal family to the couple of Prabhakarnaik and Devlibai in the year 1963. I studied upto 3rd standard. Later I stopped my education due to financial problems.

Q: How did you start your life?

A: When I was in my native village I started to work as a daily agriculture labour. I got married at a very early age. My wife also used to work as agriculture labour.

Q: How many children you have and was your income good enough to feed your family?

A: No, though we both were working we were not able to survive with that little money we earn through our work. I have five daughters. Our income was not even sufficient to feed them properly. We did not even have a good house and used to stay in a small hut which is very difficult to live in especially in the rainy season.

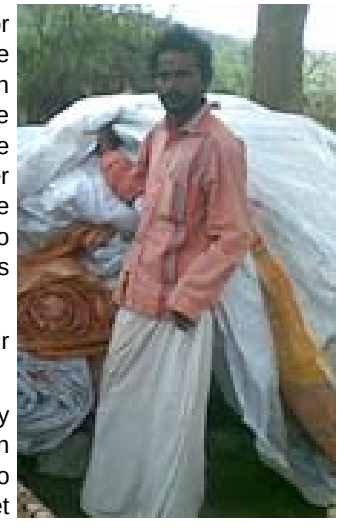
Q: What had you done to come out of that situation?

A: When we were struggling like this many of our villagers started migrating to near by Sitarampuram village and I also joined them along with my family in search of better options to work.

Q: Did you find any better work?

A: After coming to this village I observed some people who were doing the business of renting tarpaulin sheets. This sheets have very good demand as they have multiple uses. I also started thinking of doing this business. Some of my friends who were migrated along with me encouraged me to do this business by giving some amount of money as a loan for investment. With their encouragement I started that business and still continuing in the same business.

Q: For what purposes people take these sheets on rent?



A: These sheets are used for many purposes. People take these sheets on rent in harvesting season to dry the crops on them. When huge buildings are under construction people cover those buildings with these sheets to protect the buildings from winds and rains.

Q: Can you explain about your business?

A: To start this business any one needs at least an investment of Rs 10000. To make one big tarpaulin sheet we need 100 tarpaulin bags and a machine to stitch. I generally buy these bags at Guntur, Warangal and Chennai. Each bag costs about Rs 6/. Hence to make one sheet we need to invest an amount of Rs 600. We cut these bags and stitch them together to make into a bigger sheet. We rent these sheets at a rate of Rs 75 per day. People generally take these sheets on rent for 2-3 months.

Q: How many sheets you have now and how do you store them?

A: I have about 100 sheets now. I pile them on a clean surface and place stones on them to protect.

Q: Is this profession give you enough working days and income?

A: There is a demand for these sheets for 8 months in a year. I don't do any work in the remaining 4 months. But still I am able to earn good income and is able to lead a decent life. Recently I got my elder daughter married.

Q: What are the risks involved in your business and what are your experiences?

A: As in any business, there is always a risk in this business too. Some people don't return the sheets taken by them and some others don't give money properly. I have to go around their houses for getting my sheets and money. But to do a business successfully we need to be able to cope with the risks associated with the business. We need to change along with the changing needs of our customers. Then only we can succeed either in business or in life. ■

Maize

Maize, the American Indian word for corn, means literally "that which sustains life". According to an ancient Indian legend, maize was "the food of the gods that created the Earth". Maize is of American origin having been domesticated about 7000 years ago. Its cultural significance to the region is similar to that of rice to Asia and wheat and barley to the Middle East. It is, after wheat and rice, the most important cereal grain in the world, providing nutrients for humans and animals and serving as a basic raw material for the production of starch, oil and protein, alcoholic beverages, food sweeteners and, more recently, fuel. USA is the largest corn producing country, Argentina and Brazil comes on the 2nd and 3rd places.

Maize is a versatile crop that adapts easily to a wide range of production environments. In India, maize is cultivated in locations where temperatures range from as low as 10oC to as high as 45oC and where rainfall ranges from as little as 200 millimeters per year (mm/yr) to as much as 2,500 mm/yr. It is next to rice, wheat and Jowar in terms of Area and production in India. Indian maize production has traditionally been concentrated in the southern “Corn Belt” states of Karnataka and Andhra Pradesh, where the main maize crop is grown during the summer (*kharif*) season. In recent years, introduction of cold-tolerant varieties has led to the emergence of an irrigated winter (*rabi*) maize crop in the northern states of Bihar and Uttar Pradesh.

India is the fifth largest producer of Maize in the world, contributing to 3% (10.14 millions tons of maize annually) of the global production. The growth in the production has phenomenally increased from less than 3 million tons to 15 million tons because of technology, coupled with diverse usage. However, in India, maize is mainly used for preparation of poultry feed and extraction of starch. Out of total arrivals to the mandis nearly 75% of the produce is bought by the poultry feed manufacturers and 20% is purchased by the starch extractors.

In the year 2004-05, the MSP of Maize was Rs 525.00, and in the year 2008-09 it is Rs 840.00. The MSP for paddy in these years is Rs 560.00 in 2004-05 and in 2008-09 it is Rs 850.00+Rs 50.00 (bonus) for common grade paddy and Rs 880.00 + Rs 50.00 (bonus) for improved and hybrid varieties of paddy .

Every part of the maize plant has economic value: the grain, leaves, stalk, tassel, and cob all can be used to produce a large variety of food and nonfood products. Many forms of maize are used for food, some times classified as various subspecies: Flour corn, pop corn, dent corn, flint corn, sweet corn, waxy corn, amyl maize, pop corn, striped maize. It is served as vegetable in side dishes, salads, garnishes, cakes, ice creams etc. Roadside vendors sell roasted maize in India.

Maize is also a major source of cooking oil (corn oil) and of maize gluten. Maize starch can be hydrolyzed and enzymatically treated to produce syrups, particularly high fructose corn syrup, a sweetener, and also maize is fermented and distilled to produce grain alcohol. The starch can be converted into Glucose which can be fermented into ethanol for fuel or beverages or into many other chemicals. Grain alcohol from maize is traditionally the source of bourbon whiskey. Maize is used to make chichi, a fermented

Inputs	Pre-production	Production	Post-production	Marketing
♦ Land ♦ Water ♦ Plough ♦ Sickle ♦ Fertilizers ♦ Pesticides ♦ Tractor ♦ Seeds ♦ Labour ♦ Investment	♦ Ploughing the field ♦ Apply Manure when ploughing. ♦ Make small canals in the field to flow water. ♦ Sowing the seeds	♦ Looking after the field Ensuring sufficient moisture is available to the crop ♦ Weeding ♦ Applying fertilizers and pesticides ♦ Protecting the crop from birds and other animals	♦ Harvesting the corn three to four times ♦ Keeping the corn in gunny bags ♦ After harvesting three to four times the plants are cut and used as fodder for animals ♦ Storing in clean and dry place	♦ Transporting the corn bags to the market ♦ Selling the corn cobs in the market to the traders

Expenditure for the cultivation of Maize for one acre:
Seeds : 5kg* Rs 75= Rs 375
Manure required : 2 loads* Rs 2000=Rs 4000
Ploughing : Rs 150
Watering : Rs 155
Sowing the seeds: Rs 60* 6 members– Rs 360
Weeding : Rs 60*10 members=Rs 600
Urea : 1 bag* Rs 480= Rs 480
Applying Urea : Rs 60*2 members=Rs 120
Pesticides : Rs 300
Applying pesticides: Rs 60*2 members*2 times=Rs 240
Harvesting : Rs 60*3 members*4times=Rs 720
Filling the corn in bags: Rs 30* 2 members*2days*4times= Rs 480
Total expenditure: Rs 7980
Income for one acre: 1800 kg* Rs 10=Rs 18000
Profit from cultivation of maize in one acre: Rs 10020

beverage of Central and South America; and sometimes as the starch source for beer. Maize is also used as a fish bait, called “dough balls”. It is particularly popular in Europe for coarse fishing. Starch from maize can also be made into plastics, fabrics, adhesives, and many other chemical products. Corn silk is sold as herbal supplements. The corn steep liquor, a plentiful watery byproduct of maize wet milling process, is widely used in the biochemical industry.

Gaps:

* Weeds are ranked as the worst production constraint and can devastate the crop if not properly managed.
* Farmers tend to sell to local traders.
* Lack of appropriate input markets, inadequate information about improved technologies and failure of collective action.
* Non-availability of quality seed
* There is lot of variation between the cost of produce sold by farmer and the cost of final produce
* The farmers are not harvesting the corn at right time
* Unbalanced nutrient use.
* There are certain post-harvest losses at producer level. It is estimated that about 2.45 percent of maize is lost at farmers’ level during harvesting, threshing, winnowing, transportation and storage.
* Naturally maize grows in hill terrain areas. There may be a threat of animal to destroy the crop.
* Inadequate storage facilities

Possible solutions:

* Innovative agronomic practices for weed management could be quickly adopted.
* Need to have more awareness of the maize ravva in the market.
* Winter maize is gaining importance because the crop is invariably grown with less risk under assured irrigation and complemented by best management practices, giving higher yields and more income than rainy season maize.
* Collective effort for transportation and marketing would minimize transportation cost, quick product disposal and fetch higher output prices.
* Adoption of available rat-and termite-control technologies.
* Development of drought-resistant varieties along with appropriate management practices may be the best research strategy.
* Providing institutional credit facilities to the producers

Over the next 20 years, global demand for maize is projected to grow at roughly the same rate as in the recent past. The composition of demand will continue to change, with feed use of maize increasing more rapidly than food use in both developed and developing countries . As a result of projected faster growth in feed use, the market for yellow maize will expand relative to the market for white maize.

There has been continuous increase in the consumption demand of corn mainly owing to increase in the demand from meat and starch sector. Major consuming Nations of corn are China and USA. There is growing requirement of maize from poultry sector, which uses corn as feed. Consumption of corn for both the purpose of feed as well human consumption purpose is increasing.

Providing required infrastructure like seed banks, warehouses, transport facilities etc, controlling the price fluctuations and ensuring that the producer gets due share in the consumer price can benefit the small producers. Governments should encourage the formation of community collectives to take up the activities like value addition, and marketing etc. ■

Centre for Environment Education

Centre for Environment Education (CEE) is a national institution engaged in developing programmes and material to increase awareness about the environment and sustainable development. CEE has inherited the rich multi-disciplinary resource base and varied experiences which have been promoting educational efforts in the areas of science, nature study, health, development, and environment.

Environment is a significant factor of living. The lives and livelihoods of millions of Indians depend on the condition of the environment and any change in this condition affects these people significantly. Therefore, the people have to be educated about environment, so that, they can conserve the environment while utilizing the natural resources for their livelihood. Centre for Environment Education, CEE was created in recognition of this importance of environmental education in India's overall environment and development strategy.

CEE was established in 1984 as a centre of excellence supported by Nehru Foundation and the Ministry of Environment and Forests (MoEF). Its primary objective is to improve public awareness and understanding of the

environment with a view to promoting the conservation and sustainable use of nature and natural resources, leading to a better environment and a better quality of life. CEE is committed to ensuring that due recognition is given to the role of education in the promotion of sustainable development.

To achieve the objective, CEE has works in many areas such as Education for Children; Higher Education; Education for Youth; Experiencing Nature; Communicating Environment through the Media; EE through Interpretation; Knowledge Management for Sustainable Development; Industry Initiatives, Sustainable Rural Development; Water and Sanitation; Sustainable Urban Development; Waste Management; Biodiversity Conservation; Ecotourism; Disaster Preparedness and Rehabilitation; Facilitating NGO and Community Initiatives; Training; Capacity Building and Networking; Initiatives for the UN Decade of Education for Sustainable Development and Material Development etc.

Until now, CEE develops innovative programmes and educational material, and builds capacity in the field of education for sustainable development (ESD). To test the validity and effectiveness of its programmes and material, CEE undertakes demonstration projects in education, communication and development that endorse attitudes, strategies and technologies which are environmentally sustainable.

Sustainable rural development program is one of the CEE programs. The vision of the Rural Programmes Group of the Centre is to contribute to the knowledge and practice of sustainable development of ecologically sensitive, stressed, fragile areas through promotion of equitable and sustainable livelihood strategies. CEE develops, adapts and encourages a variety of natural resource management approaches through its programmes as well as facilitates such initiatives by other groups.

Through its field programmes designed especially for communities living in rural areas, CEE has developed programmes for income generation and better utilization of resources. These include activities aimed at creating awareness among the communities about the ecological significance of the areas around which they live. Projects to demonstrate environmentally-sound, practical alternatives to support sustainable resource management in ecologically fragile areas, including areas around National Parks and Sanctuaries are also undertaken.

Apart from rural development, CEE also works for Sustainable Urban development as Urbanization has become a major concern in recent years. It has led to a virtual breakdown of civic systems and to environmental deterioration. These concerns build up slowly and are critical in the long-term for the well-being of city dwellers. Everyone, from planners to slum dwellers, needs to become more aware of this and do what they can to improve the situation. Therefore, CEE organizes programmes to focus attention on the need for public interest and community involvement in order to improve the urban environment. It facilitates exchange of ideas on urban environment and planning issues through seminars, symposia, public meetings and exhibitions.

Since its establishment, CEE's activities and programmes have been rooted in, and guided by, certain strategies for maximisation of quality, effectiveness and impact:

- Informing EE with state-of-the-art thinking, developments,

Some Major Programs of CEE:

1) Samvardhan II
2) LEAD (Livestock Environment and Development) Advocacy
3) Gram Shilpi
4) Gram Nidhi– Eco enterprises for sustainable livelihoods
5) Agro Ecological Zones
6) Rural Sanitation Program
7) Rain Water Harvesting Structure
8) Air Quality Management Awareness
9) Affordable Housing and Slum Rehabilitation
10) India Urban Initiative

innovations and perspectives in the areas of Environment and Sustainable Development.

- Adaptability to different geographic, cultural, social and economic contexts.
- Partnerships utilising complementary strengths of other organisations to avoid duplication of effort, and to network effectively for synergistic convergence of ideas and goals. CEE tries to ensure that its programmes do not re-invent the wheel .
- Developing programmes and materials to build on existing strategic opportunities and facilities for EE.
- Encouraging and supporting other agencies in the field of EE and ESD to develop similar materials and programmes based on their specific needs and situations.
- Building synergies between Government, NGOs and CEE for comprehensive impact.
- Identifying key entry points for different thrust areas, and key targets for initiating and consolidating gains, to achieve a multiplier effect .
- Facilitating networks at local, national and regional levels, through a number of tools such as dialogues, directories, newsletters, etc.

At the time it began its activities, CEE was perhaps the only organization actively engaged in environmental education in the country. While carrying out programmes in different parts of the country, it was located only at Ahmedabad. Within five years of activities, it was realized that for a country as vast as India and its diversity, physical presence was important for effective implementation. Based on this, the first regional office was opened for the Southern region in 1988-89. Since then it has been a conscious effort to have an office or presence in the geographical area of work. Now CEE is a network of 41 offices across the country, including Regional Cells in the Central, East, North, North-East, Southern and Western zones, as well as several State, Field and Project Offices, and campsites carry out CEE's programmes and projects.

After completing a decade of activities in 1994, it was decided to move more from environmental education to environmental action. This was an outcome of the learning and experiences in the first ten years. CEE began more pilot, field-level and demonstration projects towards sustainable development which could be scaled-up and replicated. Within the next ten years, these projects formed a major chunk of Centre's activities.

Today, CEE works for a wide range of sectors, target groups and geographical areas. CEE sees a major opportunity in the UN Decade of Education for Sustainable Development (2005-14) to further contribute towards sustainable development.

CEE has a Governing Council (GC), comprising, amongst others, eminent persons in the field of environment, education, communication and management. (CEE's Governing Council). The GC guides programmes, approves budgets and designs policy. The Council is assisted by the Standing Committee on matters relating to administrative procedures and norms. It also receives advisory support from the Finance Committee. The head of the Centre is the Director, Shri Kartikeya Sarabhai, who is the chief executive of a team comprising Programme, Technical and Administrative staff.

CEE has developed and produced over 450 educational resources for a variety of target groups, and in more than 20 languages. They range from information and activity manuals and reference material for educators and learners, to reports for national and international agencies. The publications are prepared after extensive research, discussions with experts, peer and expert reviews, as well as field tests, to establish their validity and effectiveness. Rather than spending talent and resources to reinvent the wheel, many of CEE publications take tried and tested material from around the world/country and adapt these to suit local conditions. They are, in turn, designed to permit suitable adaptation for use across the country and abroad. The material is disseminated through education and awareness programmes, workshops, meetings, and also through EDUTECH, the educational products division of CEE.

CEE, through its engagement in environment education programs since 25 years and support in making an element in the poverty reduction and enhancing livelihoods for the poor, is contributing significantly for sustainable India and making environment the global agenda, through its diverse and innovative efforts. ■

DROUGHT *again...*

Drought on one hand and floods on the other are once again ravaging India this year, a sad paradox indeed! Belated cloud bursts could wipe only some tears. Many regions received only scanty rainfall resulting in severe water shortage. More than 450 million farmers in the country look forward to the gray clouds each year. This year, these dry-land farmers whose only source of irrigation is rainwater are feeling helpless. The Government of India announced that close to half of India's 604 districts are affected by drought. The worst hit are the poorest and the populous states like Bihar which declared drought in 26 of its 38 districts. Though Andhra Pradesh in the south received delayed rainfall, parts of it are still dry and struggling.

Drought is not a unique phenomenon to India. It occurs in almost all climatic regions of the world. With varied agro-climatic zones drought/drought-like situation in India cannot be completely prevented. About 16 per cent of the total area in the country is drought-prone. Most parts of peninsular, central and northwestern India receiving less than 1000 mm of rainfall are prone to periodic drought. According to the Ministry of Agriculture nearly 33 per cent of the cropped area in the country receives less than 750 mm rainfall and about 35 per cent receive a rainfall of 750 mm to less than 1125 mm. Drought and drought-like conditions in India therefore cannot be prevented. What can be done however, is to have a robust drought management strategy that will help minimize the impact of drought on the affected communities.

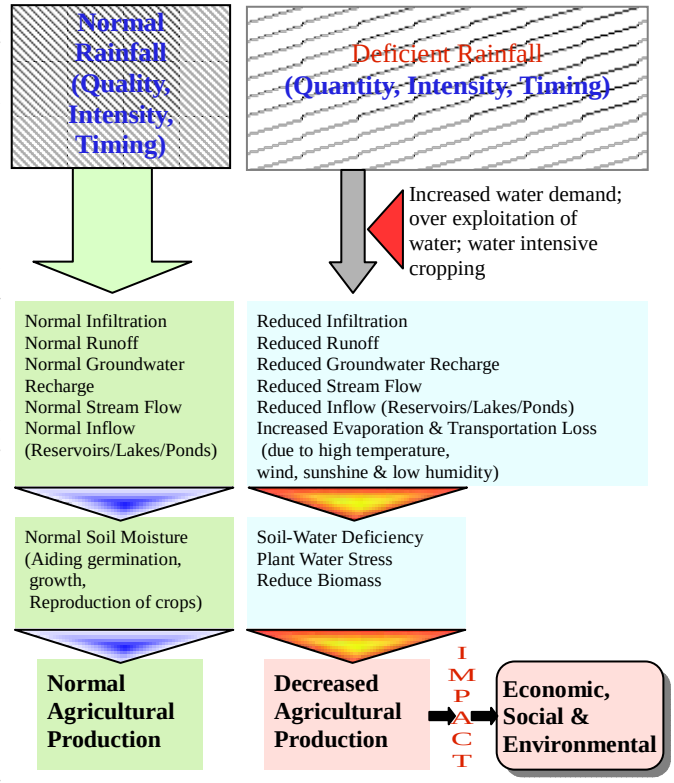
A situation of water shortage for human, cattle and agriculture consumption resulting in economic losses, primarily in agriculture sector is what we term as drought. Droughts can be of three kinds -

Meteorological drought: The actual rainfall in an area is significantly less than the climatological mean of that area. The country as a whole may have a normal monsoon, but different meteorological districts and sub-divisions can have below normal rainfall.

Hydrological drought: A marked depletion of surface water causing very low stream flow and drying of lakes, rivers and reservoirs

Agricultural drought: Inadequate soil moisture resulting in acute crop stress and fall in agricultural productivity

More than 70 per cent of the annual rainfall in the country is received during south-west monsoon that sets in the country between June and September. For Tamil Nadu and Pondicherry much of the rainfall comes from north-east monsoon between October and December. In India drought essentially occurs due to failure of south-west monsoon, which is the kharif season. The early warning indicators of drought during kharif include - delay in the on-set of south-west monsoon; long-breaks in the activity of monsoon; insufficient rains in the month of July; rise in the price of fodder; absence of rising trend in the reservoir levels; drying up sources of rural drinking water supply and declining trend in progress of sowing over successive weeks compared to corresponding figures for normal years. Drought during kharif also impacts rabi season significantly. Most major droughts in India have been followed by recession.



Pre-independence India suffered repeated droughts, famines and food shortages. At least 20 million lives were lost in India in about 20 famines that struck since 1850. This dire situation no longer prevails in post-independent India, thanks to Green Revolution, we do not have famines and food shortages of that order. Today, Indian Food Policy ensures that adequate buffer stocking and operational stock holding of food grains happen. Public Distribution System (PDS) has been introduced to ensure equitable distribution of available food supplies among the poorer strata of the society. The price support mechanism - Minimum Support Price (MSP) insulated the farmers against decline in the prices of their produce. In addition to these long term measures, this year, the Prime Minister of India in his Independence Day speech promised to postpone the date for repayment of farmer's bank loans and to give breaks on interest payments for short term crop loans. This comes on top of the massive loan waiver last year coupled with rise in the MSP of agricultural


Rainfall is erratic in India in 4 out of 10 years. Up to 16% of India's total area is drought-prone. Annually more than 50 million people are exposed to drought.
Up to 68% of the total sown area in India is subject to drought and drought-like conditions. Most drought-prone areas lie in the arid (19.6%), semi-arid (37%), and sub-humid (21%) zones which occupy 77.6% of the total land area. About 33% of India's land area receives less than 750 mm of rainfall and is chronically drought-prone.

products and 100 days of work through NREGA. There is no argument that these measures are critical to confront such crisis but they still remain symptomatic treatments and piece-meal measures at some level. Experts across say we need more than this and we can do better than this by being proactive. Communities themselves adopt varies mechanisms to cope with drought. Their resilience to crisis is simply amazing. But without an integrated government policy encompassing issues related to food, water, environment, agriculture and the like the efforts of the people alone will only yield minimal results. Drought management in India amounts to crisis management, a reactive approach to tackling disasters when they are already upon the nation.

The plight of dryland farmers in India continues to be grim. Drylands constitute about 70 per cent of the cultivable lands and produce about 42 per cent of the country's food. But these farmers stand neglected compared to their counterparts in irrigated areas. As such poor yields and fluctuations in production jeopardize the incomes of the dryland farmers and with drought their situation gets worse. They are pushed into poverty for another 2 to 3 years. Whatever livestock and assets they have disappear. Distress migration sets in. Any little household expenditure on health and education gets slashed. The plight of women and particularly those of elderly in the household worsens. Farmers suicides and selling of children make the headlines.

Livestock plays a major role in the livelihood security of small and marginal farmers. Any harm to livestock assets could have serious implications on the ability of the people to survive. Severe drought can decimate livestock populations. Even for those livestock species that survive the drought recovery is very slow.

The trends in agriculture are not encouraging either. Decline in agriculture production and shift to non-food crops are posing serious threat to the food security in the country. With steady rise in the price of essential food grains, access to food for many has become a critical issue. Even a slightest trace or talk about drought or drought-like situation activates hoarding creating artificial price rise. Today the price to red gram, a significant source of protein for many poor in India, is hovering around Rs.90 to Rs.105 a kilogram, thanks to decline in production coupled with artificial jacking up of prices.

Per capita water availability is declining due to increase in population, rapid industrialization, urbanization, cropping intensity and shift to water-intensive crops and declining ground-water level. This sharp decline in groundwater levels are leading to fall in supply, saline water encroachment, encroachment of fluoride, drying of springs and shallow aquifers.

The Inter-governmental Panel on Climate Change has seen some strong connection between the drought and the global warming. According to the chief of the panel, Rajendra Pachauri, the unusual hot winds have kept the monsoon rain away from a large part of India. And it is the same hot wind that is melting the ice of Himalayas causing flood in Bihar, West Bengal, Bangladesh and Assam. The rapid depletion of forest cover is also one of the reasons for water stress and drought. India' forest cover is less than 23 per cent much below the prescribed global norm of 33 per cent. In addition to this poor irrigation systems, pressure from the increasing industrial use of water and the appalling indifference towards rainwater harvesting are pushing the crisis to the brink.

The GOI devised contingency crop plans which involve choosing of suitable crops or crop varieties, alternative crop strategies and mid-season corrections. However due to uncertainties of mapping climate behavior during kharif season, these contingency plans usually come into play only in the rabi season.

The primary responsibility of managing drought is that of the respective states while the role of the central government is to supplement the efforts of the state governments by providing additional resources. However in reality for more than 80 per cent of the relief money the states are dependent on the center.

Though erratic monsoon without doubt causes drought, today it is widely accepted that drought is more of a management problem than a natural problem. Man-made reasons have aggravated drought and drought-like situations in the country and they continue to do so. Even Cherrapunji, which has the highest annual rainfall in the country and is one of the wettest places on earth, faces water shortages for nine months in a year due to water run-off. What will then be the fate of dry and semi-dry areas? With little or no water from above and little or no water from below what is the way forward? Have we already hit the point of no-return?

It is time to switch efforts from fire-fighting mode to drought-proofing the country. Involving community, civil society and panchayat raj institutions is critical. Where appropriate traditional knowledge in water harvesting and conservation should be leveraged. Revival of Johads in the state of Rajasthan by the local communities which led to increase in the water levels and forest cover cannot be forgotten.

Communities traditionally living in drought-prone areas have evolved drought coping mechanisms over a period of time using traditional knowledge and local resources. Unfortunately the drought management regime today has not taken this traditional knowledge into account. On the contrary it is increasingly making people dependent on the state to cope with drought.

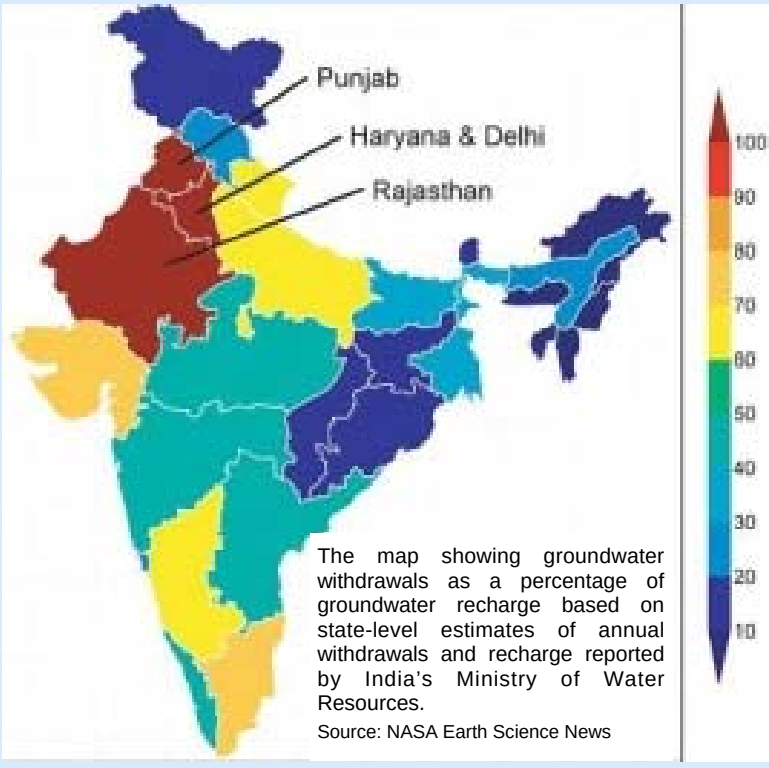
Equal or more emphasis should be placed on harnessing rainwater with simple technologies against the large scale exploitation of rivers and groundwater through dams and tube wells. There is increasing evidence that village-scale rainwater harvesting yields much more than do big dams. Groundwater in India is severely exploited but little has been done to recharge it. Scientists are warning that India's hydrological system is on the verge of collapse.

Drought will come again. It is a natural phenomenon of climate. Unfortunately global warming and consequent changes in the climate can cause droughts more frequently and more intensely. The solution lies not in crisis management but comprehensive management of drought. ■

Groundwater - Now or Never

"India's vulnerability to droughts whenever there is a slight deviation in the monsoon pattern has grown over the years because of excessive groundwater withdrawal to support intensive farming, particularly in the north-western states of Punjab, Haryana and Rajasthan. At present rates of withdrawal, by 2025 all groundwater will have been exhausted" says Devinder Sharma, internationally known agriculture and food security expert. The satellite images of National Aerospace and Space Administration (NASA) of the US confirm the dark news about the dark zones.

NASA images released in August this year show massive depletion of ground water in the three north-western states during the 2002-2008 period. An average drop in the groundwater levels is happening by 4 centimeters a year. About 110 cubic meters of groundwater is lost in the six years between 2202-2008 which is double the capacity of India's largest surface water reservoir, the Upper Wainganga. Another alarming fact is that the depletion rate has been estimated to be 70 per cent faster this decade than in the 1990s. The withdrawals have been mainly for irrigation but rapid urbanization and industrialization are not far behind in the competition. Added to this the poor water management policy of the government is making things worse. If this continues more than 114 million residents of the region will be hit directly with low agriculture output and severe dearth of potable water which in turn would surely sound a death knell for rest of the country as well.



The map showing groundwater withdrawals as a percentage of groundwater recharge based on state-level estimates of annual withdrawals and recharge reported by India's Ministry of Water Resources.

Source: NASA Earth Science News

Quick Notes -

Groundwater comes from the natural percolation of precipitation and other surface waters down through Earth's soil and rock, accumulating in aquifers - cavities and layers of porous rock, gravel, sand and clay. In some of these subterranean reservoirs, the water may be thousands to millions of years old; in others water levels decline and rise again naturally each year.

Groundwater levels do not respond to changes in the weather as rapidly as lakes, streams, and rivers do. So when groundwater is pumped for irrigation or other uses, recharge to the original levels can take months or years.

After long wait the monsoon has finally arrived in the country this year. Delayed monsoon - some say it is because of the usual El Nino cycle and some say it is climate change. A slight shift in the monsoon creates chaos in India - reduced agricultural output, increased food prices, hoarding and black marketing, farmers' suicides, demands for government intervention, bureaucracy scrambling to check the stock of food grains and on and on. Monsoon or no monsoon is not specific to India. It happens everywhere. How are they coping? What does water management policy in India say? According to some activists the policy speaks nothing significant about rainwater harvesting and community management of water resources. Experts across are shouting loud and clear that water resource management is a huge gap in India.

In 2003 Water Cess Act 1977 was changed and water rates were increased but this nominal hike caused hardly any dent to the industries. There is no clear distinction between commercial and non-commercial use of groundwater . Unless the legal pluralism related to the water rights are resolved groundwater misuse will continue. Studies reveal that a 10 per cent increase in the efficiency in surface irrigation systems could significantly reduce the demand for groundwater. Introducing water saving crops will help further. A set of diverse strategies for varied eco-zones are imminent. Based on various hydro-geological conditions in the country groundwater can be artificially recharged in different ways. Artificial recharge involves augmenting the natural movement of surface water into ground water reservoir through suitable civil structures. Watershed development, rainwater harvesting including roof-top rainwater harvesting should be taken up extensively. Building percolation tanks, check dams, de-silting and using village tanks, dug wells, recharge shafts, injection wells etc can go a long way in restoring some of the lost groundwater. Community participation and ownership in all these efforts is the key. Otherwise most structures will either fall into disuse or will be misused. Time has come, it is Now or Never. ■

National Environment Policy 2006

Environmental degradation is a major factor in enhancing and perpetuating poverty, particularly among the rural poor, when such degradation impacts soil fertility, quantity and quality of water, air quality, forests, wildlife and fisheries. The loss of the environmental resource base can result in certain groups of people being made destitute, even if overall, the economy shows strong growth. Urban environmental degradation, through lack of waste treatment and sanitation, industry and transport related pollution, adversely impacts air, water, and soil quality, and differentially impacts the health of the urban poor. This, in turn, affects their capability to seek and retain employment, attend school, and enhances gender inequalities, all of which perpetuate poverty.

In this context a comprehensive policy that would protect the environment and put stringent curbs on exploiters and polluters becomes necessary. In India, the National Environment Policy is a response to our national commitment to a clean environment, mandated in the Constitution in Articles 48 A and 51 A (g), strengthened by judicial interpretation of Article 21. This policy was approved by the cabinet on 18-05-2006.

The National Environment Policy intends to mainstream environmental concerns in all development activities. It briefly describes the key environmental challenges currently and prospectively facing the country, the objectives of environment policy, normative principles underlying policy action, strategic themes for intervention, broad indications of the legislative and institutional development needed to accomplish the strategic themes, and mechanisms for implementation and review.

The principal Objectives of this policy are ;

i. **Conservation of Critical Environmental Resources:** To protect and conserve critical ecological systems and resources, and invaluable natural and man-made heritage, which are essential for life-support, livelihoods, economic growth, and a broad conception of human well-being.

ii. **Intra-generational Equity: Livelihood Security for the Poor:** To ensure equitable access to environmental resources and quality for all sections of society, and in particular, to ensure that poor communities, which are most dependent on environmental resources for their livelihoods, are assured secure access to these resources.

iii. Inter-generational Equity: To ensure judicious use of environmental resources to meet the needs and aspirations of the present and future generations.

iv. Integration of Environmental Concerns in Economic and Social Development: To integrate environmental concerns into policies, plans, programmes and projects for economic and social development.

v. Efficiency in Environmental Resource Use: To ensure efficient use of environmental resources in the sense of reduction in their use per unit of economic output, to minimize adverse environmental impacts.

vi. Environmental Governance: To apply the principles of good governance to the management and regulation of use of environmental resources.

vii. Enhancement of Resources for Environmental Conservation: To ensure higher resource flows, comprising finance, technology, management skills, traditional knowledge, and social capital, for environmental conservation through mutually beneficial multi stakeholder partnerships between local communities, public agencies, the academic and research community, investors, and multilateral and bilateral development partners.

The dominant theme of this policy is that while conservation of environmental resources is necessary to secure livelihoods and well-being of all, it is important to ensure that people dependent on particular resources obtain better livelihoods from the fact of conservation than from degradation of the resource. Important principle on which the policy operates is that the human beings are at the centre of concerns for sustainable development.

The policy expects the State and Local Governments to formulate strategies or action plans consistent with the National Environment Policy. Empowerment of Panchayats and the Urban Local Bodies, particularly, in terms of functions, functionaries, funds, and corresponding capacities, will require greater attention for operationalising this policy. The policy also has instruments that create incentives to minimize wasteful use and consumption of natural resources.

The policy stated that to attain the environmental sustainability the strategies and actions required like, integration of environmental concern in all developmental process, setting the regulatory institutions and frameworks, reviewing the legislation at state and local level and designing regulations for environmental conservation, adopting the institutional techniques, polices and programs and ensuring accountability in all levels.

Access to information is the principal means by which environmentally conscious stakeholders may evaluate environmental standards and legal requirements. They would also be enabled to stimulate necessary enforcement good practices, motivate others to join them and participate in various consultation processes, such as for preparation of environmental impact assessments, and environment management plans of development .

We live in a rapidly changing times especially with respect to the climate, The salient environmental issues may evolve over time. Scientific understanding of environmental matters, changes in economic structure, technologies, resource availability are likely to change.

To set forth an immutable National Environment Policy in this dynamic situation would be unwise. Though the desire of the policy and its intentions are appreciable, a prudent course of action would be to undertake comprehensive review and update the policy every few years. ■

Adaptation to Technology

A New Role for Non-Government Organizations

Vijay Mahajan indicated that there are at least five roles for the voluntary sector in India of the 21st century. These are: (a) public service contractor, (b) collaborator, (c) social innovators, (d) social critics and policy advocates, and (e) building civil society institutions.

In a report entitled 'Global Civil Society – an overview', published by The Johns Hopkins Comparative Non-profit Sector Project, the authors identified twelve different categories of non-profit activity. Out of their study emerged the following International Classification of Non-profit Organizations: culture and recreation, education and research, health, social services, environment, development and housing, civic and advocacy, philanthropic intermediaries, international, religious congregations, business and professional unions, others. Broadly, these can be classified as service functions and expressive functions, with service functions absorbing the lion's share of the activity. (Among the service functions, education and social services are dominant.)

A look at the problems being faced by the society indicates that the voluntary sector is ignoring an emerging and important need of the poor: that of knowing about, adjusting to and coping with emerging new technologies. There is a huge gap in meeting this need, and neither the market nor the state appear to be coming forward to fulfil this gap. Therefore, the voluntary sector needs to take it up earnestly lest the poor permanently remain as technologically disadvantaged in the fast changing world.

The gap is manifest in several ways. Some examples are provided to indicate the issues.

Interactions with women from rural areas trained to provide services of bed-side nursing and migrant women from whom being a full-time domestic help is a feasibility indicate that the main challenge is helping the old/ infirm/ children use 'urban lavatory' and keeping it clean. Not knowing about how to use this new contraption makes them feel highly insecure and makes them resistant to take up the employment.

Roads are getting better and better, while vehicles are getting powerful. The better roads and vehicles should ideally lead to lower accidents. But the converse is true – the accidents, even on the four-lane roads, are on the rise. When a newer and powerful vehicle comes on the road, it is associated with more accidents. It was true of Tata Sumo about 12 years ago and (killer) Qualis about 5 years ago. As the drivers got used to the babies fitted with power steering and higher acceleration, the accidents with that particular vehicle came down.

Though attempts are being made for some time now, the digital divide is yet to be bridged. The rural educated youth still find it difficult to send their resumes by email, and have to incur a higher cost for printing and postage. This dramatically shrinks their search and application options.

During the era where the two wheeler revolution began in India with the arrival of new age 100 cc bikes, the two-wheeler mechanics were at a loss to understand and repair the new bikes. They had to learn it largely by trial and error, causing the consumers a lot of inconvenience. Some manufacturers realised this and started to train the mechanics. But this happened much later.

Development of Pre-fab modular system using bamboo based composites

We now take pride in the penetration achieved by cell phones, even in the countryside. But we do observe a large proportion of people talking over the cell phone with a voice louder than required. Further, studies indicate that the wrong posture used in talking over cell phone is causing some problems with the cervical bones.

One is not sure of the value addition of the increased use of computers. A large number of them are being used only as a replacement to the typewriter – to type in some letter and take a print out. These typed pages are not even stored on disks or capabilities of word processing ever used. But the money that is being made by orthopaedics and physio-therapists by taking classes to educate the computer users about posture corrections is only well known.

Examination of situations like these point to the question: Who should educate the public at large about the appropriate ways to using new technologies when they emerge? Market has occasionally responded to this need with respect to their own products. But where there are several competitors, market actors have been found wanting in making this investment. Though some programs like teaching computers to students in government schools have started, and some funds have been earmarked to retrain the retrenched workers, not much is being done by the government either to disseminate the appropriate use of new technologies among the public at large. Perhaps, the notable exception is agriculture, where the extension wings make efforts to bring results in lab to the land. However, results in even in this sphere are lacking.

Due to the increased pace of technological change in the present age, and as the poor suffer most by not adopting to these changes, there is an urgent need to take up interventions to educate public about new technologies. Since both market and the state have failed to meet this need, Non-Government Organizations should step in provide the required support. Thus, helping people to adopt the new technologies needs to become an important role of NGOs in future. ■

Bustling Water Business

Shining livelihoods

Grounding Grinding Stones

Declining livelihoods

Ramanjaneyulu of Sustainable Agriculture

Around six lakh farmers from 1800 villages have been benefited from the alternative agricultural cultivation model developed and promoted by Dr. GV Ramanjaneyulu. He was pained to see that the technology of using pesticides for cultivation had many adverse effects on the farmers as well as the consumers. It is believed that the usage of pesticides creates a kind of dependency where farmers feel it is necessary to use pesticides for cultivation forcing farmers to continue spending on them whether they can afford it or not. Over a period of time pesticides start failing to protect the crops resulting in crop failure worsening the economic condition of the farmers. The pesticides also settle in the food grains as residue, which are consumed by the ignorant consumers. This state of affairs bothered Dr G V Ramanjaneyulu who pursued research and experimentation to develop an alternative method of cultivation which doesn't require usage of pesticides. The model is popularly known as Non pesticide management (NPM) method of cultivation.

Born in Dhone, Kurnool district of Andhra Pradesh in 1967, Ramanjaneyulu pursued his education in Agriculture at both graduation and post graduation. He also did PhD in agriculture at IARI, New Delhi. Initially he wanted to join civil services, he felt it is more meaningful to create systems useful for the poor people than just governing them. He believes that structural changes are necessary for having long lasting impact that would benefit more people. This mean changes at all levels of the system from policy to field level implementation.

Ramanjaneyulu started his career at Agricultural Research Service Centre, Hyderabad as a scientist. During this period he developed contacts with other organizations working in this field like DDS, CWS and other farmer's organizations. In 1997, he organized many meetings and made presentations on harmful effects of using BT seed varieties. In this context he wrote a book titled "terminator logic".

Year 1997 -98, which saw increased number of farmers suicides, propelled Ramanjaneyulu and his team to take up extensive traveling in the Warangal and Karimnagar districts to understand the situation. They figured out that the culprit behind the suicides was not credit alone but defunct technology of using pesticides and practicing un-organic methods of cultivation. Back from the field study, he wrote his experiences in the book titled "*The Sad Story of Cotton Farmer".*

In 2004, Ramanjaneyulu and his friends registered Centre for Sustainable Agriculture (CSA) as a wing of Centre for World Solidarity. The aim of the organization is to work on technology and policy research with a vision to make agriculture productive, ecologically sensitive and capable of preserving the social fabric of rural communities. CSA works with farmers by amalgamating modern science with the skills and ingenuity of local people and communities to conserve their resources and their rights.

To demonstrate Non Pesticide Management (NPM) as an alternative cultivation model, they under took a project in partnership with SECURE, an NGO and selected Punukula village in Khammam district . The program was the first massive effort to wean people from pesticides and to promote non-chemical, eco-friendly, local-resource-based approaches to farming. The results of the initial stages were encouraging. They motivated and convinced farmers to adopt NPM model. They were given training, technological and financial support to implement the model. As an outcome the expenditure of the cultivation was reduced by 50% and the productivity was good (didn't incur loss).

At the same time government had constituted a commission headed by Jayathi Ghosh to study the agrarian crisis. Ramanjaneyulu met the commission and explained the alternate model developed by them and requested them to adopt it. The commission as well as the state minister for agriculture visited the model and were convinced by the model developed. The AP government with technical support from CSA decided to implement the model through the Society for Elimination of Rural Poverty / IKP project. The implementation of the project was scaled up to eleven districts in 2004. 450 villages, 25,000 acres of land was covered under this program. In 2007 and 08 it was expanded to 1,800 villages covering 7 lakh acres benefiting six lakh farmers.

The organization in the leadership of Dr. GV Ramanjaneyulu has developed extensive documentation on the issue, prepared training modules and has also created network that could support the process. They also provide technical support to NGOs, farmer organsiations. They have been advocating with the state for farmer friendly policies.

Ramanjaneyulu and his team have also formed two important cooperatives. Producer's cooperative to interface with the market, to ensure that farmers are not cheated and get the maximum benefit for their produce. Similarly a consumer cooperative has been formed to increase awareness about organic products and harms of consuming food items produced using pesticides. During previous elections they put together farmers manifesto and presented it to the political parties to accept their agenda. They have also designed website that provides updated information on the alternatives in the farming sector and NPM.

Ramanjaneyulu has written for many local and national journals and has made presentations at many international forums especially in the European Union and South Asian countries. He was also responsible in initiating "Science for People Forum' along with his colleagues. Very few people knew about NPM ten years ago, but now it is a very popular method adopted by many farmers. Efforts of Dr G V Ramanjaneyulu and his team are evident behind such a positive change. ■

Story

An Archer and His Skills

Everyone is better when on solid ground. We are more assertive, more sure of ourselves, etc. But when our stability is taken away, we are simply a child learning everything anew. This story of an archer and a Zen master reveals this truth in a beautiful manner..

After winning several archery contests, the young and rather boastful champion challenged a Zen master who was renowned for his skill as an archer. The young man demonstrated remarkable technical proficiency when he hit a distant bull's eye on his first try, and then split that arrow with his second shot. "There," he said to the old man, "see if you can match that!"

Undisturbed, the master did not draw his bow, but rather motioned for the young archer to follow him up the mountain. Curious about the old fellow's intentions, the champion followed him high into the mountain until they reached a deep chasm spanned by a rather flimsy and shaky log. Calmly stepping out onto the middle of the unsteady and certainly perilous bridge, the old master picked a far away tree as a target, drew his bow, and fired a clean, direct hit. "Now it is your turn," he said as he gracefully stepped back onto the safe ground. Staring with terror into the seemingly bottomless and beckoning abyss, the young man could not force himself to step out onto the log, no less shoot at a target.

"You have much skill with your bow," the master said, sensing his challenger's predicament, "but you have little skill with the mind that lets loose the shot."

Learning is most powerful when your knowledge is tested under many different circumstances. The young archer was skilled under very specific conditions, but he was unable to apply that skill in an unfamiliar environment.

The boy was a good archer but he seemed to be doing it only for the competition. The old man did it because he enjoyed it, not to prove anything. This gave him a sense of control.

The key is not that the champion was a braggart. He was better at archery than the master. However, everyone excels at something. The master at controlling his fear and the champion at shooting a bow. What makes the master wise is that he could put the champion at such a disadvantage by maximizing his own skills while minimizing the braggarts.

The old man in the environment he was in might have experienced defeat. By bringing the man to the area he did, he brought him to his area where he might make the odds more in his favor. The old man must have walked over the vast opening many times and gained confidence in his action. He might have even taken a few shots at the target. The younger man was removed from his comfortable area and put into the comfortable area of the old man. The lesson I learned was if a situation confronts me, I'm better off trying to give myself the edge.

Everyone is better when on solid ground. We are more assertive, more sure of ourselves, etc. But when our stability is taken away, we are simply a child learning everything anew. ■

Sector-wise NGOs/VOs working

S. No.	Sector	NGOs	
		No.	Percentage
1	Education & Literacy	7927	0.67
2	Health & Family Welfare	7003	0.59
3	Children	6148	0.52
4	Environment & Forests	5497	0.47
5	Women's Development & Empowerment	5372	0.45
6	Rural Development & Poverty Alleviation	5269	0.45
7	HIV/AIDS	5249	0.44
8	Agriculture	4476	0.38
9	Vocational Training	4471	0.38
10	Drinking Water	3807	0.32
11	Micro Finance (SHGs)	3761	0.32
12	Human Rights	3681	0.31
13	Art & Culture	3484	0.29
14	Labour & Employment	3253	0.28
15	Legal Awareness & Aid	3236	0.27
16	Youth Affairs	3132	0.27
17	Disaster Management	3009	0.25
18	Information & Communication Technology	2814	0.24
19	Dalit Upliftment	2714	0.23
20	Aged/Elderly	2673	0.23
21	Panchayati Raj	2593	0.22
22	Civic Issues	2567	0.22
23	Food Processing	2543	0.22
24	Nutrition	2491	0.21
25	Animal Husbandry, Dairying & Fisheries	2336	0.20
26	Micro Small & Medium Enterprises	2303	0.19
27	Tribal Affairs	2265	0.19
28	Minority Issues	2217	0.19
29	Urban Development & Poverty Alleviation	2197	0.19
30	Water Resources	2019	0.17
31	Sports	1963	0.17
32	Differently Abled	1936	0.16
33	Right to Information & Advocacy	1892	0.16
34	Housing	1879	0.16
35	Land Resources	1770	0.15
36	Science & Technology	1728	0.15
37	New & Renewable Energy	1364	0.12
38	Biotechnology	1360	0.12
39	Any Other	1230	0.10
40	Tourism	872	0.07
41	Scientific & Industrial Research	764	0.06
42	Prisoner's Issues	332	0.03

Indicative; Accessed at http:// ngo.india.gov.in/ngo_sector_ngo.php, on 02-09-2009

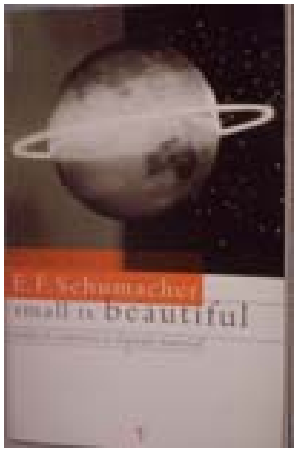
Books

Book Summary

Name: **Small Is Beautiful-A Study of Economics As If People Mattered**

Publisher: **Vintage Publisher**

Author: **Dr E.F.Schumacher**



'Small Is Beautiful- A study of economics as if people mattered' is written in 1973 by a German author Dr E.F.Schumacher . This book is essentially a collection of essays and speeches written and given over number of years, more or less cobbled together as a series of overlapping snapshots.

Though it was written more than 30 years ago, the concepts discussed in this book are still relevant even today. Countless people from different countries have been deeply inspired by this little book, impressed by the clarity of its key ideas, and moved to do more in their own homes or work places as a different consequence of it. In fact, Schumacher's philosophical economics are the foundation of many modern concepts of ecological economics.

Small is Beautiful looks at the economic structure of the western world in a revolutionary way. Schumacher maintains that Man's current pursuit of profit and progress, which promotes giant organizations and increased specialization, has in fact resulted in gross economic inefficiency, environmental pollution and inhumane working conditions. Schumacher challenges the doctrine of economic, technological and scientific specialization and proposes a system of intermediate technology, based on smaller working units, communal ownership, and regional workplaces utilizing local labour and resources.

In this book, Schumacher argues against the conventional economic principles that economic growth and development of technology will hold the solutions to all our problems. He also argues for more decentralized control of large enterprises, a form of nationalization that can successfully compete with conventional profit-driven businesses but with the welfare of employees and the commonwealth in mind.

Conventional economics argues that economic growth and expanding GNP will alleviate global problems of unemployment and poverty. In fact continued growth is only leading to an increasing gap between the rich and poor as a result of profit-minded businesses overwhelming small-scale local business enterprises. Schumacher suggests the use of intermediate technology in third world nations will better guarantee that economic aid is able to reach those most in need.

Schumacher also argues that it is incorrect to assume that improvements in technology will be able to solve problems of the present sometime in the future. More often we have seen that new technologies have only created more environmental concerns rather than eliminate those existing. Economic growth and new technology are more often the culprit rather than the solution to environmental woes.

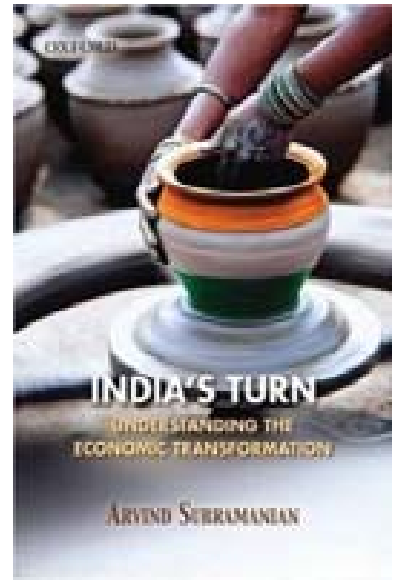
The underlying premise of Schumacher's work is that unlimited economic growth in the pursuit of meeting a never-ending stream of consumer demands is "unnatrual" in the deepest possible sense. It goes against the grain of human nature in that it won't satisfy our deepest longings, and it threatens to destroy the fragile biosphere upon which we and all other life depend. Only a reorientation of our economic and political life toward proper human ends – joy, wisdom, peace – can stave off an ecological disaster. His vision spawned scores of organizations, and still serves as the grounding for much of the NGO movement attempting to redefine economics and society today. ■

New Books

Name: **India's Turn: Understanding the Economic Transformation**

Publisher: **Oxford**

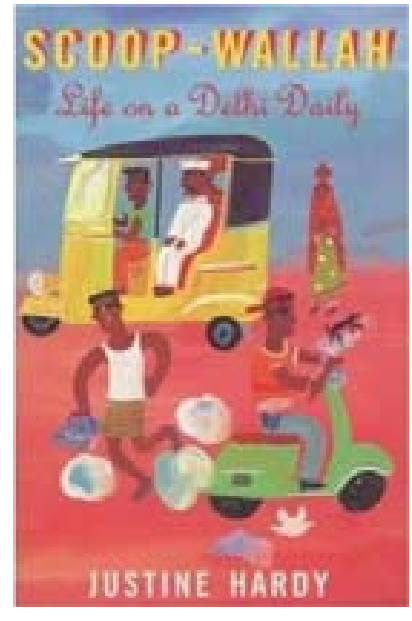
Author: **Arvind Subramanian**



Name: **Scoop-Wallah: Life on a Delhi Daily**

Publisher: **John Murra**

Author: **Justine Hardy**



Certificate Course in Conservation Ecology

Certificate Course in Conservation Ecology

Eligibility : Graduate

Programme Fee : Rs. 2000/-

Duration : 6 (six) months

Issue of Forms : 10th September 2009 onwards

Admission Date : 6th October 2009

Commencement of Classes : 12th October 2009

Price of the form: Rs. 200/- (two hundred) only in cash or a demand draft/ banker's cheque in favour of Principal, Darrang College, Tezpur. Request for application forms by post should be addressed to the Course Coordibator, CCS, Darrang College, Tezpur – 784001 or WWF-India, Parvati Nagar, Tezpur – 784001. The form fees should accompany downloaded form.

Application form duly filled in should reach the Principal, Darrang College on or before 6th October, 2009. Sponsored candidates may also apply.

Institution held the course: WWF India

For more information, please contact: T: +91 3712-220014; M: +91 9435521589

Website: www.wwfindia.org

Source: WWF India

Upcoming Training Programmes

Enhancement of Livelihoods and Natural Resource Management through Community Based Organizations

Date of Course: 5th - 9th October 2009

Venue: Anand, Gujarat

Institution offering the course: IRMA (Institute of Rural Management)

For more information: T: +91 2692-260391/261502; email: bcp@irma.ac.in, pcdave@irma.ac.in, oliver@irma.ac.in

Website: www.irma.ac.in

Solar Energy - Energy Solution for Rural Branches and Avenue for Lending

Date of Course: 21th -22th December 2009

Venue: Lucknow, Uttar Pradesh

Institution offering the course: BIRD (Bankers Institute of Rural Development)

For more information: T: +91 522-2421047, +91 522-2421176 (Academic); email: bird@sancharnet.in, bird@bsnl.in, birdindia@yahoo.co.in

Watershed for Livelihood Promotion

Date of Course: 5th - 10th October 2009

Venue: Anantpur, Andhra Pradesh

Watershed for Livelihood Promotion

Date of Course: 17th - 22nd November 2009

Venue: Koraput, Orissa

NTFP based Livelihood Promotion

Date of Course: 7th - 12th December 2009

Venue: Jabalpur, Madhya Pradesh

Institution offering the course: The Livelihood School

For more information: T: +91 40-3051 2500-01; email: info@thelivelihoodschool.org

Website: www.thelivelihooschool.in

Source: Sa-DHan Training Calendar 2009-10

Out of Poverty

Education + Skills = (-) Poverty

Ambati Kiran Kumar belongs to Narayanapuram village of Dachepalli mandal in Guntur district. He studied up to 10th standard. Later his parents forced him to stop education because of their financial problems. But Kiran did not want to stop his education. He was very bright at education and keen on studying well. So he convinced his parents that he will study in a Government college for which he need not invest any money.

By seeing his interest on education, Kiran's father allowed him to pursue higher studies. Kiran joined in Government Junior college of Dachepalli. At this juncture Kiran's mother passed away. Then Kiran's father married to another woman who did not treat Kiran well. But Kiran never complained against her and focused on his education and completed Intermediate with good grade. Later Kiran thought of stopping his education and doing some work to support his father.

Kiran asked many of his relatives to show him some work. One of them helped him to join in a cable network office where he has to collect monthly fees from the customers and respond to their complaints if any. Kiran used to get a monthly salary of Rs 1500/- apart from his food and travel expenses. Kiran worked for one year in the same position in cable network office. He got good name by behaving well with the customers and providing timely and responsible service to the customers. By recognizing this his master increased his salary to Rs 2500 per month.

Since his college days Kiran was interested in learning Photoshop course but hesitated to ask his father because of their financial position. With the closeness Kiran had with his master he told him that he is interested in learning Photoshop. Then his master sent him to his friend's computer institute and convinced the owner so that Kiran can learn the course in his free time with no cost. Kiran utilized this opportunity and whenever he had some free time he went to the institute and completed the course with in short span of time.

Then Kiran's master found a job for Kiran in Macherla town with a good monthly salary of Rs 5000. There Kiran got to work in a photo studio as a CD and album maker. There also Kiran got good name by working hard and completing what ever assignments were given to him in time though he had to travel everyday from Dachepalli to Macherla.

By observing his talent and hard work his master gave him some money to buy a new computer and asked Kiran to work from home. His master thought that it will save Kiran,s everyday travel time and he can work better. Kiran proved it true. He is now working from home and is earning about Rs 10000 a month.

Education changed Kiran's life and made him to travel from poverty to prosperity. His determination and hard work paid him well in life and he is now able to lead a decent and happy life. ■

Broken Lives

Absence of Feasibility Study Hurts

Sriramulu Reddy belongs to Mallasamudram village of Punganur mandal of Chittoor district in Andhra Pradesh. He has a wife and three children. When he was 25 years old , he started Jaggery business. His job is to procure Jaggery from the farmers and sell it to the traders.

Very soon Sriramulu gained so much expertise in this business that he increased his volumes and used to procure about 40 – 50 loads of Jaggery in each season (from April – Aug). Selling one load of Jaggery was fetching him a profit of Rs2000. This translated to an income of Rs80,000 per annum. Sriramulu's life was going smoothly with good income every year. For his business, he continued to go around the nearby villages to procure Jaggery.

Some five years back , some of his friends and relatives suggested him to do vegetables business instead of Jaggery because vegetables are available in their own village. They suggested him "Any way you know the marketing techniques. If you start doing business in vegetables you need not go around the villages." Sriramulu thought about this idea and decided to shift his business as he is also growing old.

He started vegetables business without any knowledge about that business. Some other friends suggested not to shift his livelihood but Sriramulu did not listen to them. He failed to understand the difference between Jaggery and vegetables business. As vegetables are perishable items, timely transport is very important. Not able to understand the nitty-gritty of this business, Sriramulu suffered huge losses. In the initial two years he was able to earn around Rs35, 000 per annum. But from the last three continuous years, his annual income fell down to Rs10, 000 – 15,000.

When his income was good, he could give good education to his children. His son completed his M.com degree and elder daughter studied up to intermediate. But he stopped her younger daughter's education after 9th standard because of the present financial problems.

Sriramulu's son joined as a manager in a hotel recently to support his father. Now their family is struggling a lot to survive. Sriramulu is now 55 years old and is regretting for shifting his business without understanding the new profession properly. ■

'Yoga'kshemam

The monsoon finally arrives. It addresses drinking water and electricity deficiencies to an extent. On the farm front, it adds to the drought. Whatever little crops that are there have been lost!

Andhra Pradesh sees the death of incumbent Chief Minister, Dr YS Rajasekhar Reddy when he tried to fly to participate in the first 'surprise' visit (named Rachchabanda) to districts and villages. His helicopter hit Nallamala hills, around Srisailam, crashed and all the 5 travelers – Dr YSR, Dr Subramanyam, Wesley, Bhatia and MSN Reddy have lost their lives on the fateful 2 September 2009, confirmed on 3 September 2009. 4 September 2009 has been observed as a day of National mourning. AP continued to observe mourning till 10 September. Amidst mourning, Roshaiah has sworn in as the interim Chief Minister and his cabinet colleagues have resworn in as Ministers. The pitch for anointing Dr YSR's son Jagan as the 'political heir' has been mounted within hours of the confirmation of the death of Dr YSR. At the same time, many followers seem to be heart-broken and leaving their lives!

G Muralidhar

The second batch of 52 students of one-year post graduate diploma in rural development management in NIRD has begun their learning journey. Within a week of their classes, they have been to villages for their village stay as part of their induction fieldwork. The first batch of the Food and Agri-business School is beginning their first classes shortly. I have got a letter from Mahatma Gandhi University, Nalgonda stating that they are starting a PG course in Social Work. NIRD and University of Hyderabad are jointly launching the PG Diploma in Sustainable Rural Development in a distance mode. Many more institutes are responding. However, these constitute a fraction of our need, of thousands per year. We need to scale up, scale deep and scale spread to achieve these numbers. Many more players, a spectrum of them, need to work towards this. Father Bogaert, who has contributed to creating the largest pool of social development professionals in the country through establishing and mentoring Xavier institutes across the country, takes leave of all of us, at the ripe age of 81, still on the job. May his soul rest in peace! He remains an inspiration to many of us!

Teachers' Day on 5 September made us to re-surrender our complete being to the teachers to guide us and show direction for way forward in deeds, words and thoughts. International Literacy Day on 8 September reminded us not to forget the campaign to ensure 3Rs – Read, Write and Arithmetic – to all.

Marginalized communities, non-timber forest produce collectors, elders, vulnerable key population, collectives, MFIs, clusters, slums, skill providers, civil society, mentors, teachers, students, volunteers, social entrepreneurs and writers continued to dominate our thinking space in this month. Drought, prices, flu, **austerity** and 'out of recession' statements are on top of our minds. Food Security, Nutrition, Migration, and Urban livelihoods took some time away. Civil Society Get-together to discuss 'Opportunities in Challenging Times' has explored the trends, possibilities and constraints for the people, for the people's institutions and the civil society-at-large going forward.

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'.

In the confluence of the souls, and through the gentle flows of universe, **these months of Krishna and Sakthi** reinforce the need to sharpen the tools, before we use them and continue to sharpen as long as we use them. **Learn to use the tool first, practice it and then use it. Till you hit the bird's eye. Set the 'sruti' before we play the instrument/flute. Learn to play, practice and play. Till the crescendo of the climax!**

Can we do this? **Yes, if we pursue Atma Yoga.** The focus is on learning, practice, mastery and not giving up till we reach the crescendo. Crescendo of the creative tension in the strings of the relationship bows of the souls of the universe! Then what follows is a simple act, without further pre-meditation, of releasing the arrow with enough momentum to last the duration of the flight and strike the eye.

Krishna calls for seeking yoga in spirit, feelings, emotions, thoughts, sensations, speech and actions, through surrendering to the master/guru - body, senses, heart, mind, intellect and soul, in the context of confluence of the natural flows of the universe. Krishna confirms – whoever does his allocated work in being useful to all life, fixed in yoga without attachment with an even mind in success and failure – attains steady peace and gets purified to flow with the will of the universe of souls.

Join us in the world of yoga – celebrating the yoga of wisdom, action and devotion in all dimensions of our being in rasa siddhi in the flows of the souls of the universe. You will not regret it. ■

How can you buy or sell the sky, the warmth of the land?... If we do not own the freshness of the air and the sparkle of the water, how can you buy them? Every part of the earth is sacred to my people…… So, when the Great Chief in Washington sends word and he wishes to buy our land, he asks much of us. The Great Chief sends word he will reserve us a place so that we can live comfortably to ourselves... So we will consider your offer to buy our land. But it will not be easy. For this land is sacred to us…….. If we sell you land, you must remember that it is sacred, and you must teach your children that it is sacred and that each ghostly reflection in the clear water of the lakes tells of events and memories in the life of my people. The water's murmur is the voice of my father's father. The rivers are our brothers, they quench our thirst. The rivers carry our canoes, and feed our children. If we sell you our land you must remember, and teach your children, that the rivers are our brothers, and yours and you must henceforth give the kindness you would give any brother.

We know that the white man does not understand our ways….. But if we sell you our land, you must remember that the air is precious to us, that the air shares its spirit with all the life it supports. The wind that gave our grandfather his first breath also receives the last sign. And if we sell you our land, you must keep it apart and sacred as a place where even the white man can go to taste the wind that is sweetened by the meadow's flowers…… The white man must treat the beasts of this land as his brothers….

What is man without the beasts? If all the beasts were gone, man would die from a great loneliness of spirit. For whatever happens to the beasts soon happens to man. All things are connected.

You must teach your children that the ground beneath their feet is the ashes of our grandfathers, so that they will respect the land. Tell your children that the earth is rich with the lives of our kin. Teach your children what we have taught our children, that the earth is our mother. Whatever befalls the earth befalls the sons of the earth…..

…. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web he does to himself….

But in your perishing you will shine brightly, fired by the strength of the God who brought you this land and for some special purpose gave you dominion over this land and over the red man. That destiny is a mystery to us, for we do not understand when the wild buffaloes are slaughtered, the wild horses are tamed, the secret corners of the forest heavy with scent of many men and the view of the ripe hills blotted by talking wires. Where is the thicket? Gone. Where is the eagle? Gone.

The end of living and the beginning of survival.

Excerpts from the 'Chief of Seattle'

livelihoods