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**Research-Extension-Farmer
and Market Linkages Needs for
Commercial Cultivation of Prioritized
Medicinal Plants in India**

**Adapting to
Climate Change
in the Drylands:
Research and Policy Solutions**

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EDITORIAL

Dear Reader,

Role of Corporate Social Responsibility in Rural Transformation

Corporate Social Responsibility is considered to be a voluntary approach that business enterprises take to meet stakeholder expectations by integrating social, ethical, and environmental concerns together with the usual measures of revenue, profit, and legal obligation. According to CSR Asia's Asian Sustainability Ranking (ASR), India was ranked fourth among the top 10 Asian countries that are paying an increasing importance towards corporate social responsibility (CSR) which was topped by Australia.

A report of Ministry of Corporate Affairs report on voluntary Corporate Social Responsibilities suggests that the corporate social responsibility (CSR) policy of the business entity should provide for an implementation strategy that should include identification of projects, time schedule and monitoring, setting measurable physical targets with time-frame, organisational mechanism and responsibilities. *"Companies could partner with local authorities, business associations and non-government organisations and may influence the supply chain for CSR initiative and motivate employees for voluntary effort for social development,"* says the report.

A survey commissioned by Times Foundation on implementation of CSR obligations, has brought many emerging practices and trends to light. The survey covered 11 PSUs, 39 private national agencies and 32 private multinationals from various sectors. The survey highlights that most of the companies implement CSR projects through their own CSR project management divisions, with just about 29 per cent involving voluntary organisations and over one-tenth of the companies giving financial support directly to community or community-based organisations. The findings of the survey place education, health and environment as three of the most popular areas of intervention for companies as part of their CSR initiatives.

The survey revealed that some of the challenges faced by the companies in implementing CSR programmes pertain to community participation and capacity building within the organisation as well as those of NGOs that they tie up with. Especially in the rural areas, companies face the problem of lack of well-organised civil society groups that could identify the real needs of the society and work to address them.

The way out would be to hold a dialogue with the Government and see how India Inc could dovetail their activities by playing a supplementary and complementary role to the efforts of the Government in the specific sectors.

In order to deliberate these issues, AFC is organising a Seminar in New Delhi on January 21, 2010. We request Corporate India, NGOs and Policy Makers to participate so that a clear vision emerges on what corporates can do in Rural Transformation.

A. K. Garg
Editor-in-Chief

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Adapting to Climate Change in the Drylands: Research and Policy Solutions

By William D Dar*

A 'perfect storm' is brewing

The semi-arid tropics (SAT) spans 750 million hectares in 55 developing countries across the globe. The region is home to more than 2 billion people. Of these, 1.5 billion depend on agriculture for a living, with 670 million comprising the poorest of the poor. It also houses nearly 50% of the world's undernourished and more than 70% of its malnourished children.

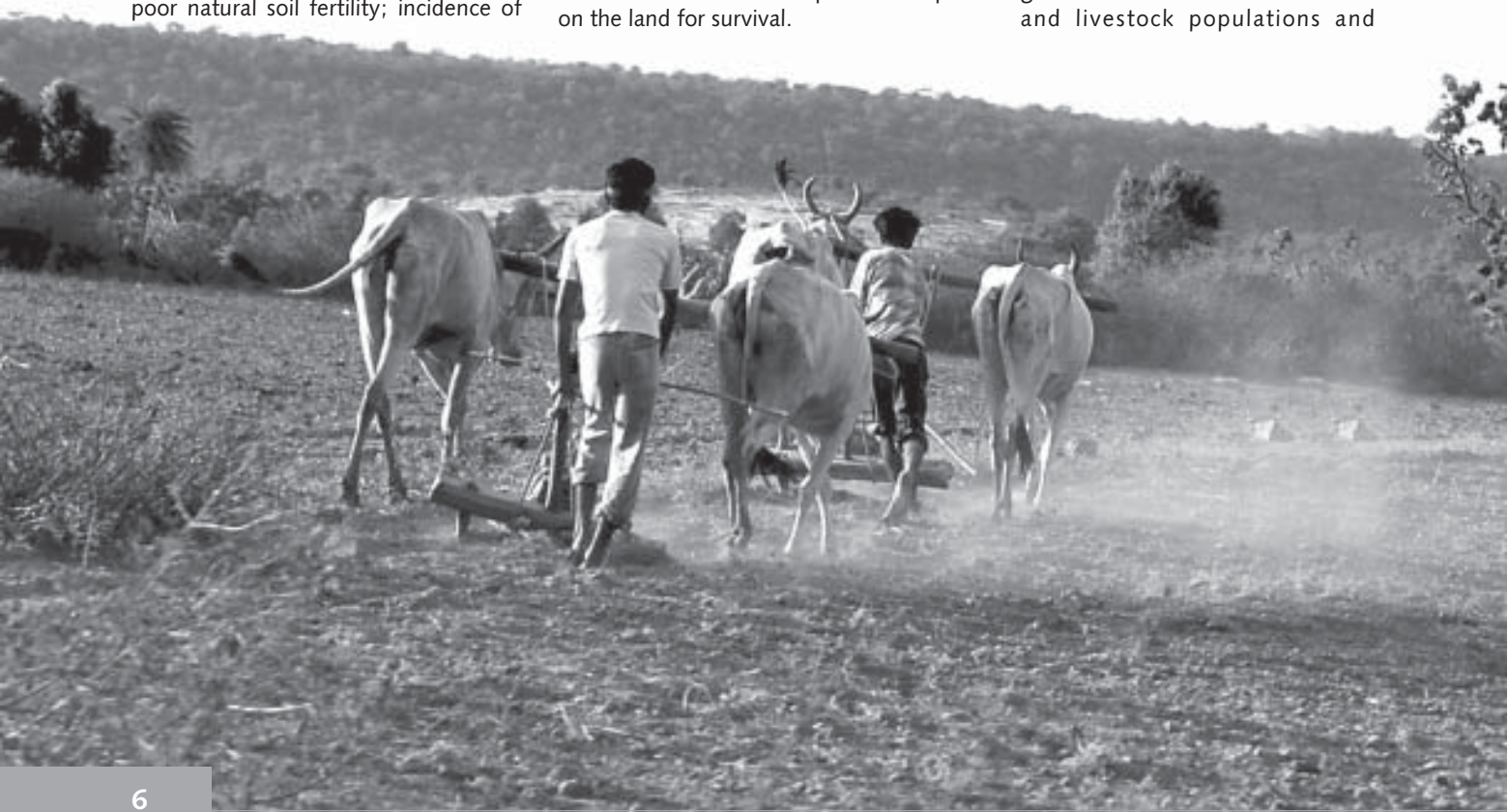
Since every 1% increase in agricultural productivity translates to an average decrease of absolute poor by 6 to 8 million, agriculture is the engine for overall economic growth and empowerment of the poor in the SAT. Yet farmers here face substantive risks — very short growing seasons, separated by very hot and dry periods during which crop growth without irrigation is difficult; poor natural soil fertility; incidence of

pests and diseases that are often difficult to control; a dearth of local infrastructure and national policies that do not adequately and effectively promote agricultural growth and development. Since such risk-entailed dryland rainfed agriculture is practiced on approximately 80% of the world's agricultural area and yet, generates 60-70% of the world's staple food, addressing the needs of rainfed farming is critical in improving the livelihoods of the resource poor in the SAT.

However, the SAT is facing a 'perfect storm', with a number of huge problems converging around land issues. Beyond the anticipated population increases, the recent food price spikes, disruptions of financial markets and economic stagnation, energy demands, dwindling biodiversity and effects of climate change create a more difficult environment in which agriculture must operate. At the center of this storm are the poor who depend on the land for survival.

Rockström (2009) has proposed a framework based on nine planetary boundaries which define the safe operating spaces for humanity with respect to the Earth system and are associated with the planet's biophysical systems or processes. Of the boundaries, three — climate change, rate of biodiversity loss and interference with the nitrogen cycle — have transgressed their threshold limits. This, according to him, could have irreversible consequences such as abrupt environmental changes and be detrimental to human development.

The SAT poor are highly vulnerable to both current and future climate change impacts, given their high dependence on agriculture, strong reliance on ecosystem services, rapid growth and concentration of human and livestock populations and





relatively poor health services. The factors limiting increased agricultural production and sustainability are only expected to worsen with the frequency and intensity of extreme events (tropical cyclones, floods, droughts and heavy precipitation). Unless farmers have access to seeds of a range of improved varieties of crops, fertilizer and other inputs, farm labor, and information on weather predictions, and access to markets and market information, they stand a slim chance of emerging out of poverty.

Climate change is already inevitable, but in the absence of robust adaptation strategies, will almost certainly exacerbate food insecurity. Millions of people in countries that already have food security problems will have to give up traditional crops and agricultural methods as they experience changes in the nature of the seasons, for which, over time, they have developed coping strategies that have enabled them to survive.

Climate change also threatens poverty reduction efforts because poor people depend directly on already fragile ecosystems for their well-being. They also lack the resources to adequately defend themselves or to adapt rapidly to

changing circumstances, and more importantly, their voices are not sufficiently heard in international discussions, particularly in climate change negotiations. Environmental effects such as desertification and rising sea levels triggered by climate change can lead to increased conflict for resources, which in turn can displace people.

Climate change will not wait for policymakers and research investment – we need to act urgently to address major gaps in data, information, and knowledge about agriculture and climate change.

Technical solutions

Climate change being a threat multiplier, adaptation and mitigation strategies need to be urgently integrated into national and regional development programs. *Developing countries need to participate in a globally integrated approach to this problem.* Policies on adaptation include changes in land use and timing of farming operations, adaptive plant breeding and crop husbandry technologies, irrigation infrastructure, water storage and water management. Mitigation measures may include better forecasting tools and early warning systems, improved crop and

livestock management practices including improved input use efficiencies (such as ICRISAT's microdosing), crop systems diversification and improved water management.

Policy solutions

More investments in agricultural research and infrastructure.

Considering the role of agriculture in the social and economic progress of developing countries, and the vulnerability of agricultural systems to the impacts of climate change, a renewed agenda for agricultural research, more aggressive investments in and better management of agricultural research and knowledge can make significant improvements in food security goals. A progressive policy environment should also include more investment in infrastructure and education and research that improves understanding and predictions of the interactions between climate change and agriculture.

Water management. Almost 95% of the developing countries' water

Climate change also threatens poverty reduction efforts because poor people depend directly on already fragile ecosystems for their well-being

withdrawals are used to irrigate farmlands. Therefore water policy to make more efficient use of water for agriculture is crucial. This involves understanding water flows and water quality, improved rainwater harvesting and water storage and diversification of irrigation techniques. Such considerations will need to be framed in the context of rapidly expanding populations that are predicted to exacerbate inter-sectoral competition for abstracted water supplies. Robust irrigation infrastructure may be necessary to cope with climate change risks in the short to medium term. Maintenance of existing infrastructure too deserves early attention.

Land use practices. Land-use policies to encourage diversification and natural

resource management, including protection of biodiversity, are critical. Erosion control and soil conservation measures, agroforestry and forestry techniques, forest fire management and better town planning are some steps that can be initiated to blunt the impacts of climate change. Reducing and sequestering terrestrial greenhouse gas (GHG) emissions are possible by enriching soil carbon, farming with perennials, climate-friendly livestock production, protecting natural habitat and restoring degraded watersheds and rangelands.

Weather and climate services. The role of weather and climate services and products in developing adaptation solutions is crucial. Stock-taking of available climate information in developing countries to ascertain where the systematic observation needs are most pressing, collaboration between national and international providers of climate information and users in all sectors and generating awareness among different user communities of the usefulness of such information are essential. Climate change assessment tools are needed that are more geographically precise, that are more useful for agricultural policy and program review and scenario assessment, and that more explicitly incorporate the biophysical constraints that affect agricultural productivity. Packaging this data for its effective use and rescuing historical meteorological data are equally important. In this respect, the National Meteorological Services in the developing world must be encouraged and enabled to become fully integrated into research and development initiatives.

Engagement of the private sector. Policies that encourage holistic approaches including the engagement of the private sector should feature in any national and international approach to address climate change and facilitate the transition to a low-carbon economy. The private sector can invest in clean new technologies and develop innovative market mechanisms to combat climate change, particularly the dangers from GHG emissions.

Capacity-building and collective action. Policies that enhance the effectiveness of rural institutions at the local, national and international levels will be a central concern as they seek to

speed up the pace of agricultural adaptation. Unless steps are taken to initiate and strengthen cooperation among academic and research institutions, regional and international organizations, and NGOs to provide opportunities for strengthening institutions, dealing with climate change impacts may be cumbersome. Involving local communities, education on climate change and raising public awareness are key to combating climate change.

Economic diversification. Economic diversification to increase the economic resilience of and to reduce reliance on vulnerable sectors is crucial. Reducing dependence on climate-sensitive resources is an important adaptation strategy that must be promoted. Improved food security through crop diversification, developing local food banks for people and livestock, and improving local food preservation need to be encouraged.

Database of adaptation options. Given the diversity of agro-ecological zones and their inherent problems, it is also essential to assemble, document and disseminate a comprehensive and action-oriented database of adaptation options of different farming and livelihood systems and agro-ecological zones.

Access to credit and crop insurance. Since farmers are often constrained by access to credit, policies that enable better access to credit (micro-finance) and agricultural inputs in order to

intensify integrated production systems need attention. Catastrophic or weather-risk insurance and index insurance (insurance linked to a particular index such as rainfall, humidity, or crop yields rather than actual loss) can be used as new climate risk management tools in developing countries.

Gender diversity. While underscoring the vulnerability of poor women to climate change, policies that cater to the rural poor and recognize the important role of women in agricultural production should be acknowledged. By virtue of the valuable knowledge in water, forest and biodiversity management that women have acquired over the years, and their important role in supporting households and communities to mitigate and adapt to climate change, their contribution to the identification of appropriate adaptation and disaster mitigation processes could be very useful. Women's environmental resources, knowledge and practices can be key elements in climate change processes.

Contributing to value chains. Policies that contribute to value chains in the agricultural sector and smallholder farmer participation in these value chains is fundamental to efforts to deal with climate change.

The CET opportunity. The emerging market for carbon emissions trading (CET) offers new opportunities for farmers to benefit from land uses that sequester carbon. Policies that encourage



and enhance participation in carbon emission trading schemes must be put in place.

ICRISAT's role

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) serves the poor of the semi-arid tropics in Asia and sub-Saharan Africa (SSA). It recognizes that vulnerable rural communities need to adapt to climate change, beginning with enhancing their ability to cope better with the rainfall variability associated with current climates. ICRISAT has developed and continues to develop tools and technologies enabling the resource poor to improve livelihoods. It uses sophisticated techniques of predicting and forecasting the monsoons in the context of climate change; enables collective action and rural institutions for agriculture and natural resource management; upscales and outscapes its community watershed management model; rehabilitates degraded lands and diversifies livelihood systems for landless and vulnerable groups and initiates government support for water saving options.

ICRISAT already has on hand crops that are adapted to high soil and air temperatures; knowledge and understanding of flowering maturities; information on genetic variation for water use efficiency; short-duration varieties that escape terminal drought and high-yielding and disease-resistant varieties. For instance, we have developed short-duration chickpea cultivars (**Figure 1**) ICCV 2 (Shweta), ICC 37 (Kranti) and KAK 2 and



Fig 1. Director General William Dar examining a heat-tolerant chickpea line

short-duration groundnut cultivar ICGV 91114 that escapes terminal drought. We recently developed a super-early pigeonpea line that flowers in 32 days and matures in about 65-70 days. We have integrated shrubs and trees into traditional annual cropping systems to help reduce the impacts of winds and to protect soils from erosion.

ICRISAT has developed crop varieties that resist pests and pathogens such as downy mildew-resistant pearl millet hybrid HHB 67-Improved in India (**Figure 2**); wilt-resistant high-yielding pigeonpea ICEAP 00040 in Tanzania, Malawi and Mozambique and rosette-resistant groundnuts in Uganda, to name a few.

Guiding our crop adaptation work are tools such as INSTAT and GENSTAT, MARKSIM and APSIM/DSAT that analyze climate data and produce high-quality information and products



Fig 2. An Indian farmer pleased with his downy mildew-resistant improved pearl millet hybrid HHB 67 crop

tailored for agricultural applications and to quantify the relationships between climate, crop, soil and water resources.

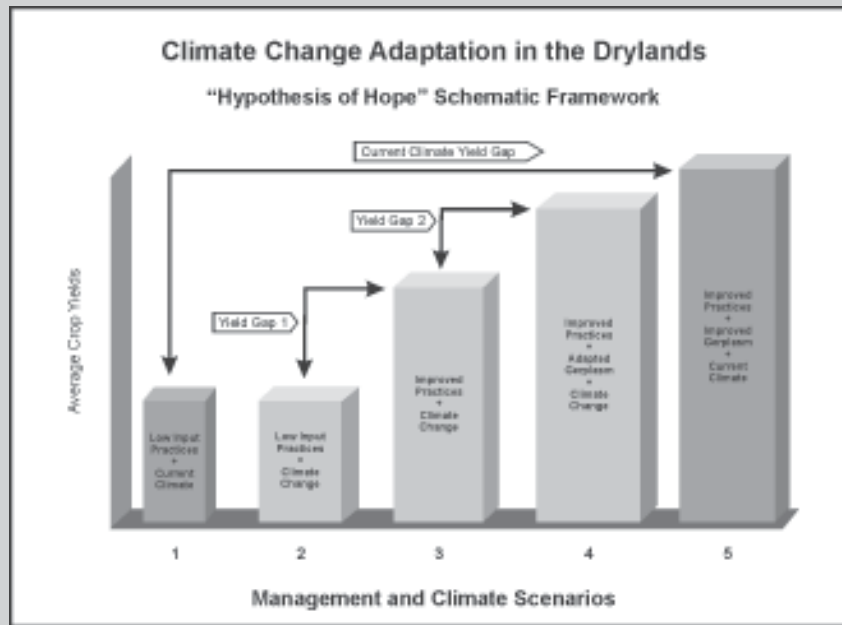
What we need to better understand is the physiological mechanism underlying heat tolerance; identify wider gene pools to develop crops with wider adaptability; and develop more effective screening techniques of germplasm for desired traits. ICRISAT's genebank holds more than 119,000 accessions from 144 countries that will help safeguard and exploit genetic diversity in order to enhance adaptation.

Biofuel production

ICRISAT is also responding to the challenges by exploiting the potential of 'pro-poor' opportunities for biofuel production. Its BioPower initiative encourages more investments in bio-energy crops and systems to provide a major impetus for

A climate change “Hypothesis of Hope”

ICRISAT’s scientists have used a range of proven models to provide insights on the potential impact of climate change on crop productivity. Out of this, ICRISAT has identified yield gaps that ICRISAT must address in seeking solutions to both current and future climate-induced production risks as crop management practices and adapted crop varieties are used under current climate and climate change scenarios.



The first and last columns show the yield gaps between low input and improved practices and germplasm under the current climate. The three columns in between show yield gaps with various crop management practices and adapted germplasm under climate change. Column 2 indicates lower yields due to climate change if farmers continue using low inputs. Columns 3 and 4 show that better yields are possible even with climate change if farmers utilize improved crop management practices and climate-adapted crops. On the whole, high yields are still possible under climate change if farmers combine improved practices with climate-adapted crop varieties.

Hence policymakers should take notice that better formulated and targeted policies that facilitate and support the adoption of agricultural innovation today assume even greater urgency. Not only will they improve the welfare of rural population today but will do a great deal to mitigate the impacts of future climate change.



sustainable development; empowering the dryland poor to benefit rather than be marginalized, so that farmers can better cope with stresses, climate change or otherwise. The current activities include developing higher-yielding sweet sorghum varieties for food, fuel, feed and fodder; pilot-scaling pro-poor commercial startup company partnerships in sweet sorghum bioethanol production and research-to-development alliances for pro-poor *Jatropha* plantation development for biodiesel.

Conclusion

If developing countries are to contribute meaningfully to efforts toward adaptation and mitigation of climate change impacts, they will need the strengthened capacity that comes with development. A conducive and comprehensive policy environment that enhances opportunities for smallholders needs to encompass all levels – farm, basin, regional, national and global. It must include adaptation and mitigation strategies, more investment in agricultural research and extension, rural infrastructure, and access to markets for small farmers, among other things. The bottom line is to ensure resilient ecosystems, resilient crops, resilient livestock and resilient communities.

** Director General
International Crops Research Institute for the Semi-Arid
Tropics (ICRISAT)*

Research-Extension-Farmer and Market Linkages Needs for Commercial Cultivation of Prioritized Medicinal Plants in India

By Harjeet Singh and R. K. Sharma*

*Modern agriculture is a complex and demanding profession requiring inputs from a series of institutions and individuals. In essence, the technology developed by various research institutions is transferred to the farming community through extension. In the prevailing agriculture production scenario in India, the cultivation of medicinal plants is increasingly gaining importance. For successful large scale cultivation, NMPB should design **Comprehensive Strategy Plan** for ; a) enabling JFPMCs to undertake cultivation of medicinal plant species along with the cultivation of traditional crops ; b) to **establish at least 25 farmers groups in each FDA** and convince them regarding availability of QPM and linkage with the market to cultivate at-least 50 ha of area in each FDA; and c) **setting up Front Line Demonstration Plots of size 0.40 ha in the farmer's field / one in each Forest Development Agency (FDA) for cultivation and primary processing. Considering this, Research-Extension-Farmer and Market Linkages has been recognized as an important instrument through which the farmers can grow the best profitable medicinal plant species on their land and earn reasonable income.***

Introduction

National Medicinal Plants Board, Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homoeopathy (AYUSH), Ministry of Health & Family Welfare are coordinating the activities relating to development of medicinal plants sector and formulation of schemes, extending financial support to various State Governments., R&D institutions, Universities, NGOs and Growers. The Board has funded a large number of projects since 2002. These projects are generally implemented through State Medicinal Plants Boards (SMPBs).

The National Medicinal Plants Board is implementing two types of schemes *viz.* promotional and contractual farming schemes. The former is aimed at bringing awareness about the importance of medicinal plants and medicinal plants sector as a whole, besides covering projects in areas like inventorisation, applied research and development, *in-situ* and *ex-situ* conservation, production of quality planting material, value addition, studies on demand and supply and market studies etc. The contractual farming scheme is meant for farmers/ growers for cultivation of medicinal plant species farming on a large scale, with assured markets. The subsidy for cultivation of identified medicinal plants is provided to growers/farmers throughout the country @ 30 percent of input cost.



Vision towards Empowerment of Farming Community

Modern hi-tech agriculture is a complex and demanding profession since it is the outcome of a series of efforts from different institutions and individuals. It has in its regime improved cultural practices, associated inputs particularly quality planting material, soil nutrients and irrigation support. In essence, the technology developed by various research institutions is transferred to the farm community through extension.

Furthermore, before an appropriate technology is evolved, a lot of effort from different individuals and institutions needs to be put together. Once the technology has reached the field, the farmer requires integrated services from a series of technical units. How to grow a new variety in the field coupled with apprehension on its performance offers a vast challenge for the farmers. Undoubtedly, therefore, the knowledge pertaining to the agronomic, pathological, soil related, irrigation, post-harvest and marketing parameters is a precondition in this context. Besides, availability of credit and necessary inputs are also important for achieving maximum output.

The main actor in any agricultural development system is the cultivator who is basically a traditional individual but open to adopt new technology and new crops if he is convinced about their economics. For him it is easier to go ahead with what he has been cultivation rather than indulging any changes. When we say change in technology, the farmer has to adopt a lot of new practices to attain success which are as follows:

- i) **Extra financial resources** to acquire additional inputs needed under new technology.
- ii) In several instances employ more skilled labour for which **training and capacity building is required.**

- iii) For high production technologies, irrigation should be ensured, fertilizers should be available, seeds/planting materials should be of high quality and management should be sufficiently rich in training and equipped with know-how.

- iv) **Productivity per unit of land** which is the main focus of high technologies

- v) **Timely marketing of their usufructs** at reasonable price

Whatever the scientists are contributing in this sector, if the farmer does not adopt it, no progress/success can become possible. The farmer is surrounded by a unique set of circumstances in which there may be a lot of problems, constraints and opportunities. He, therefore, needs both motivation and facilitation on the way to adopting new practices.

Coordination while sanctioning the Projects

For speedy development of medicinal plant sector by way of increased coverage and wide adaptability by farmers, it is felt that a sort of linkage should be worked out between implementation of promotional and contractual farming schemes. It has been observed that there is lack of coordination while sanctioning the projects between research & development, *in-situ* & *ex-situ* conservation/herbal garden, production of quality planting material under promotional schemes and commercial cultivation under contractual farming scheme.

Major Area of Concern

The decision of farmers to go in for cultivation of non-traditional crops is influenced by factors like agro-climatic conditions, price support, market intervention, risk factor and relative profitability of these crops vis-à-vis the traditionally grown crops.

- 1) **High cost of planting material and other inputs:** Due to the high input cost particularly of planting material, especially the poor farmers are not adopting these crops for cultivation.
- 2) **Lack of knowledge about cultivation:** Due to lack of technical information on cultivation of medicinal plants including Safed-musli (*Chlorophytum borivillianum*), farmers are in a dilemma. Rich farmers have started experimenting in their own fields but it is not possible for the poor farmers to take the risk.
- 3) **Lack of knowledge about market:** The existing marketing structure of medicinal plants is unorganized to a large extent. This problem is common in almost all areas of the country since the market is dominated by middlemen. Farmers are not aware of proper market to sell their produce.

It is painful to record that the agencies/buyers with whom MoU had been signed, were interested only in the sale of the planting materials. After production, they refused to buy the crops from the farmers as per the agreed terms and conditions under some alibi. The marketing of the medicinal plant species/their parts is a complex business due to undefined marketing infrastructure. The producers (cultivators) who are based in the remote areas are not aware where to sell their produce, and are compelled to sell their produce at lower cost as compared to the open market prices.

4) **Non-availability of HYV:** Non-availability of high-yielding varieties is also a major constraint. The planting material is resulting in irregular growth. This is the reason why the farmer's product is not fetching good prices in the local, national or international markets. In Chhattisgarh where a good number of the farmers opted for the cultivation of medicinal plants, no organized approach has been followed for collection and selection of different locally available Safed musli (*Chlorophytum borivillianum*) species. It may be mentioned that Dr. Bordia of the Rajasthan Agricultural University, Udaipur has done a lot of work in the field of Safed musli (*Chlorophytum borivillianum*) cultivation and developed some improved varieties of this crop for commercial cultivation. It is felt that there is a strong need to evaluate the suitability of these varieties. Majority of the farmers are not aware of these varieties.

5) **Increasing infestation of insects and diseases:** Initially there was no problem of insect pest and diseases in Safed-musli (*Chlorophytum borivillianum*) crop. But now since last two to three years, many root-rotting fungi and tuber-eating insects have started attacking Safed-musli crop. As it is organically grown, Safed-musli fetches very high rates; farmers are not using any synthetic chemicals for pest management. Due to lack of knowledge about eco-friendly way of managing these pests, farmers are unable to save their crops. The cultivation practices of some other important medicinal plants should be provided during the training program under promotional projects.

6) **Technical education:** The technical education requires immediate consideration for capacity building of farmers for undertaking non-traditional crops i.e. cultivation of medicinal plants species through modern agriculture practices. The challenges and demand in the technical education sector needs to be addressed through implementation of *Capacity Building Programs (CPB)*.

7) **Improper utilization of technical resources:** SMPBs has very meagre staff strength. Provision should be

made for the strengthening the staff with technical resource personnel at in all the SMPBs for catering to the requirement of the beneficiaries, at different phases of growth of the crops and through a host of line departments.

8) **Linkage with other line department:** The policy initiatives have to deal with the provision of various types of infrastructure facilities necessary for the development of this Sector. An effective network with other line departments and research institutions is absolutely necessary to achieve the desired success with regard to contractual farming scheme.

Major Challenges

It is strongly felt that for proper implementation of these projects in all the major States of the country, funding



It is painful to record that the agencies/buyers with whom MoU had been signed, were interested only in the sale of the planting materials. After production, they refused to buy the crops from the farmers as per the agreed terms and conditions under some alibi

agency should have properly designed "Comprehensive Strategy Mechanism Plan" especially for technology transfer, establishment of front line demonstration plots, technical unit for capacity building, timely availability of QPM/other inputs at reasonable rates vis-à-vis area approved under medicinal crops cultivation, sensitization of banking sector/financial institutions for extending financial support to the farmers at reasonable interest rate, cultivation and procurement through Joint Forest Protection and Management Committees (JFPMCs), formation of farmers' group, buy-back arrangement with pharmaceutical companies e.g. Jhandu, Hamdard, Himalayan drugs, etc. for procuring the medicinal plant products.

To address these challenges, a '**Broad framework of Extension Modalities' should be based on the analysis of the frontline extension system of the state agricultural Institutions/Universities/NGOs** and experiences in working with self-help groups, the federation with farmers' groups, the quality-upgrading program of medicinal plant growers and in **public-private partnerships**.

The primary feature of the framework should be focused on farmer-centred and farmer-led, reducing the function of the main extension system to a facilitating role that provides technology assessment and refinement through innovative farmers' clubs/farmer's group. As well, there is emphasis on micro-level dissemination of technology through homogenous farmers-group and use of it for providing market intelligence. The framework includes emphasis on quality upgrading, training/capacity building and gender perspectives in the formation of farmers' organizations, flexibility in planning, programming and funding through resource interdependence, collaborative professional activities and plurality of information providers.

The main factor is Research-Extension-Farmer and Market Linkages which is not being undertaken in a serious manner. Though, there is an interaction between extension and farmers, between research and extension; but interaction between research and farmers is very much lacking. This area demands greater focus, since investment in technology

generation has to take into account farmers' needs, context and the opportunities available. The integration of Research, Extension, Farmer and Market linkages, need to be addressed by undertaking research and extension activities through the participatory technology development mode, creating a Research-Extension-Farmer and Market coordination committee at state level to take necessary policy initiatives to enable and establish linkages. At district level R-E-F-M linkages would be ensured through Agricultural Technology Management Agency (ATMA).

Suggestions for Boosting Area under Commercial Cultivation

NMPB should focus on the promotion / establishment of "Farmer Groups" in the village community, especially those who are living in the vicinity of the forest areas for undertaking the cultivation of medicinal plant species on commercial scale. The farmer community who is also the member of Joint Forest Protection and Management Committees (JFPMCs) can play vital roles pertaining to conservation in sustainable manner on one hand and cultivation on commercial scale on the basis of the requirement of the Ayurvedic Drug Industries on the other.

The objectives of the project are given below:

Besides this, NMPB need also to focus on the following parameters for increasing the area under commercial



Objectives for the Establishment of Farmer's Group

- *To reverse the process of degradation and depletion of natural resources through illegal exploitation, by community led initiatives for conservation of rare and endangered species in the forest areas.*
- *Enable JFPMCs to undertake cultivation of medicinal plant species along with the cultivation of traditional crops (without deviating from the food grain production).*
- *To establish at least 25 farmer groups in each FDA and convince them regarding availability of QPM and linkage with the market to cultivate at least 50 ha/FDA of area under medicinal plant species.*
- *To establish small and micro enterprises.*
- *To upscale the status of JFMCs/Farmer*

cultivation of prioritized species.

- i) Develop a partnership between cultivator, buyers, R&D Institutions, Government departments, Ayurvedic drug industries, and financial institutions.
- ii) Develop comprehensive strategic plan for *a) area-wise and crop-wise availability of QPM/technical support from SMPBs; b) collection of the produce from the farms and provision of warehousing so as to address the problem of inadequate storage capacity; c) setting up of retail outlets for better access to inputs; d) value addition by setting up of food processing units and cold storage chains; and d) strengthening the mandis for procurement agencies network for better marketing facilities' e) to establish a linkage for transfer of technology from Research institutions/Universities to farmers field etc.*
- iii) Organize inter-departmental workshops for generating awareness amongst other line departments about NMPB schemes.
- iv) Implementation of projects under promotional Schemes e.g. **setting up**

Front Line Demonstration Plots of size 0.40 ha in the farmer's field / one in each Forest Development Agency (FDA)

Simultaneously, it is also important to organize trade-related capacity building program for boosting business potential and growth of medicinal plant species for the establishment of linkages with the buyers. Themes of the training program are as follows:

a) Agribusiness / agri-clinic opportunities of medicinal plant species through establishing linkage between farmers, buyers, R&D Institutions, Govt. departments and financial Institutions

b) Promoting Industrial Utilization of Medicinal plants through Information exchange and Networking

c) Development of sustainable strategies for protection and conservation of medicinal plants for Rural Development

d) Technological options in cultivation, harvesting, processing, storage and marketing of medicinal plant species and value added products

e) Technical and financial evaluation for promotion of cultivation, processing and marketing of Medicinal schemes with other line departments

f) Procurement of data at district level regarding availability of raw materials for drug industries

The target groups/beneficiaries of the program are as follows:

- *Farmers/entrepreneurs;*
- *Officers of Department of SMPBs/ Forest/Agriculture/ DRDA etc.;*
- *Officers of banks and Financing Institutions*
- *Ayurvedic Drug Industries/ Processing industries;*
- *Research institutes /Universities ; and*
- *Traders/NGOs*

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An Exploratory Study on Doubling of Agriculture Credit in Tamil Nadu

By K.Mani¹, S. Selvanayagi², P. Balaji³, and R. Premavathi⁴

Non institutional lending agencies like professional money lenders and landlords still play a dominant role in rural areas and in order to strengthen institutional efforts in rural areas, the Government of India announced a credit package during mid-2004 which proposed to double the flow of credit to agriculture in three years. The new credit policy emphasized the need to support new farmers and tenants, extend more investment credit and credit relief measures. The results indicated that the disbursement under Agricultural Gold Loan (AGL) was more when compared with that of Kisan Credit Card (KCC) and Agricultural Term Loan (ATL) by both commercial banks and RRBs. In terms of numbers, nearly half of the borrowers were marginal farmers while in terms of amount, a major portion (43.6%) went to the small farmers. Term loans more directed towards dairy development followed by farm mechanization. Although the farmers could withdraw the KCC loan amount as and when required, they have withdrawn it only once in a year.

Introduction

Agricultural credit dispensation has been a vital financial intervention to make the farm sector a key contributor to national income and wealth creation. Persistent government efforts have been made to strengthen institutional lending so as to relegate the exploitative non – institutional lending agencies. Recognizing the need to increase the flow of institutional credit to agriculture, the Government of India, in addition to other measures, announced a credit package during mid-2004, which proposed to double the flow of credit to agriculture in three years. Accordingly, the banks were instructed to step up farm credit - Rs. 80,000 crores in 2003-04 to Rs. 1,05,000 crores during 2004-05,

Rs.1,41,000 crores during 2005-06 and Rs. 1,75,000 crores during 2006-07.

The performance of the credit package for doubling the flow of credit to agriculture during 2004-05 to 2006-07 was quite impressive as could be seen from Table 1.

The increase in agricultural credit during 2003-04 to 2006-07 by commercial banks and Regional Rural Banks was more than 100 percent in both Tamil Nadu and India. But the performance of cooperatives vis-à-vis doubling of agricultural credit was not impressive, i.e., there was decline in agricultural credit flow by co-operatives (-25%) in Tamil Nadu and at an all India level, the increase in the flow was only 58 percent.

In order to test verify the performance of financial institutions as against the targets set in the new credit initiatives of 2004, a study with the following specific objectives was taken up

Objectives

The specific objectives of the study are:

- To study the trend of ground level credit flow in agriculture, number of loan accounts since 2003-04 (base year);
- to study the existing Management Information System (MIS) used by Rural Financial Institutions (RFI) for reporting number of farmers/new farmers covered and suggest changes for ensuring effectiveness of the reporting system

Table 1: Flow of Agricultural Credit in Tamil Nadu and India

Rs. in Crores

Year	Tamil Nadu				India			
	Commer- cial Banks	Regional Rural Banks	Co- operative Banks	Total	Commer- cial Banks	Regional Rural Banks	Co- operative Banks	Total
2003-04	5,018.8 (70.3)	332.0 (4.7)	1,784.3 (25.0)	7,135.1 (100.0)	52,441 (60.3)	7,581 (8.7)	26,959 (31.0)	86,981 (100.0)
2004-05	7,682.7 (73.5)	507.8 (4.9)	2,261.8 (21.6)	10,452.3 (100.0)	81,481 (65.0)	12,404 (9.9)	31,424 (25.1)	1,25,309 (100.0)
2005-06	10,654.0 (78.1)	710.6 (5.2)	2,281.8 (16.7)	13,646.4 (100.0)	1,25,859 (69.7)	15,223 (8.4)	39,404 (21.8)	1,80,486 (100.0)
2006-07	13,960.5 (86.5)	831.8 (5.2)	1,345.2 (8.3)	16,137.5 (100.0)	1,40,382 (69.1)	20,435 (10.1)	42,480 (20.9)	2,03,297 (100.0)
Percentage Change	178.2	150.5	-24.6	126.2	167.7	169.6	57.6	133.7

Figures in parentheses indicate percentages to their respective totals.

Source: NABARD, Chennai and Economic Survey-2006-07 and 2007-08.

The present study aims at analyzing the magnitude of credit disbursed and issues relating to agricultural lending system of different banking institutions. Hence, it was decided to select those districts where all the three types of lending institutions namely, commercial banks, Regional Rural Banks (RRBs) and Co-operative Banks were functioning.

In Tamil Nadu, the RRBs were functioning in only 12 districts and for these twelve districts, a Composite Development Index was constructed using the data pertaining to agricultural development indicators like total geographical area, net and gross sown areas, net and gross irrigated areas and banking performance indicators like number of bank branches in rural and semi urban areas, agricultural advances and priority sector lending using data from various secondary sources.

Based on the Composite Development Index, one district from a developed region (Cuddalore district) and another from a relatively backward region (Virudhunagar district) of the state were selected for the study.

One block in each of the selected districts was selected purposively where all the three financial institutions viz., commercial banks, co-operative bank and Regional Rural Bank were present and the flow of institutional credit during

Table 2: List of Selected Financial Institutions

District	Cuddalore District	Virudhunagar District
1. Commercial Banks	Indian Bank, Kurinjipadi	Union Bank of India, Seithur
2. Regional Rural Banks	Pallavan Grama Bank, Kurinjipadi	Pandian Grama Bank, Rajapalayam
3. Primary Agricultural Co-operative Banks (PACBs)	PACB, Ayeekuppam	PACB, S.Thiruvengatapuram

operative banks within a period of three years from 2004-05 to 2006-07 and hence, for the present study, the year 2003-04 was considered as the base year.

Banking Development in the Selected Districts

i) Advances Outstanding

An analysis on the loan product wise outstanding advances from 2003-04 to 2006-07 (Table 3) would indicate that the percentage increase in Kisan Credit Cards (KCC) loans and Agricultural Term Loans (ATL) both in terms of average number and outstanding amount per branch was higher in commercial bank when compared to that of Regional Rural Bank and Co-operative bank and Infact the co-operative bank witnessed a negative percentage change during the study period (between 2003-04 and 2006-07) under both the products. The

Under the percentage growth of total advances also, the commercial banks were leading the way followed by the RRBs. Here again, the co-operatives set in a negative growth during the study period both in terms of number and amount advanced. The main reason for the decline in the financial assistance provided by the co-operatives in the state to the priority sector, especially to farmers through crop and term loans was the lack of loanable funds available with co-operatives, which again was due to loan waiver scheme implemented in March 2006.

ii) Agricultural Advances

The percentage of agricultural advances to total advances in terms of number increased from 60 percent in 2003-04 to 95 percent in 2006-07 in commercial banks which were located in places like Kurinjipadi and Rajapalayam where agriculture was the predominant activity (Table 4).

Table 3: Percentage Changes in Average Advances Outstanding per Branch in Cuddalore and Virudhunagar Districts between 2003-04 and 2006-07

(percent)

Particulars	Commercial Bank		RRB		Cooperative Bank	
	No	Amoun	No	Amount	No	Amount
KCC	183.59	252.32	26.06	27.72	-77.40	-85.96
ATL	701.79	1884.07	-19.89	132.42	-1.16	-83.85
NFS	-	-	84.75	234.94	-4.55	7.97
Other Priority	76.21	112.80	205.59	235.32	0.80	43.98
Total Priority	187.64	255.52	104.88	159.30	3.35	39.41
Total Advances	176.71	242.28	91.30	124.93	-18.94	-56.21

the period of doubling of agricultural credit was relatively higher. One branch in each of the commercial bank, RRB and Primary Agricultural Co-operative Bank in each block was selected based on the similar criterion (Table 2).

The Government of India proposed to double the flow of agricultural credit through commercial banks, RRBs and co-

Regional Rural Bank set a commanding growth under the other priority sector and stood next to commercial bank under the total priority advances. In case of co-operative bank, there was an increase in the amount of non farm, and the number and amount of other priority and total priority sector lending, although they were much lower than that of the other two banks.

In terms of amount also, it was 49 per cent in 2003-04 and 77 per cent in 2006-07. Among the agricultural advances, Agricultural Gold Loan (AGL) amount was highest followed by Kisan Credit Card and Agricultural Term Loan in 2006-07. As regards the number of farmers who availed different types of agricultural loans, marginal farmers were more in number followed by small and large

Table 4: Average Advances made per Branch of Commercial Banks in Cuddalore and Virudhunagar Districts

(Total Amount in Rs.Lakhs; and Amount / Account in Rs)

Type of Loan	Type of Farms	2003-04			2004-05			2005-06			2006-07		
		No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account
Kisan Credit Card	MF	228.5	30.5	13333	383.5	55.1	14374	664.5	116.4	17515	1964.5	174.4	8880
	SF	27.5	10.4	37727	48.0	15.4	32052	59.5	29.3	49252	98.5	40.4	40975
	LF	12.5	7.6	60600	33.0	11.1	33712	46.5	27.8	59731	55.5	46.3	83459
	Total	268.5	48.4	18032	464.5	81.6	17575	770.5	173.5	22513	2118.5	261.1	12326
Agricultural Term Loan	MF	18.5	2.3	12243	21.0	5.2	24881	57.0	20.1	35263	180.5	30.4	16861
	SF	4.5	2.5	55889	10.0	9.8	98400	18.0	25.2	140083	17.0	23.1	136029
	LF	2.0	8.0	400000	8.0	11.6	145313	15.0	67.8	451833	17.5	70.4	402143
	Total	25.0	12.8	51120	39.0	26.7	68436	90.0	113.1	125656	215.0	123.9	57644
Agricultural Gold Loan	MF	544.5	63.4	11646	748.0	97.8	13080	1049.0	138.2	13173	1670.0	296.8	17774
	SF	38.0	8.2	21526	54.0	10.8	19981	119.5	22.7	19004	193.0	46.9	24285
	LF	11.0	6.5	59091	27.5	16.6	60509	46.0	21.1	45891	73.0	40.8	55945
	Total	593.5	78.1	13158	829.5	125.3	15102	1214.5	182.0	14986	1936.0	384.5	19862
Agricultural Advances	MF	791.5	96.1	12147	1152.5	158.2	13726	1770.5	274.7	15513	3815.0	501.7	13151
	SF	70.0	21.1	30100	112.0	36.0	32156	197.0	77.2	39203	308.5	110.4	35771
	LF	25.5	22.1	86569	68.5	39.4	57504	107.5	116.7	108521	146.0	157.5	107901
	Total	887.0	139.3	15703	1333.0	233.6	17524	2075.0	468.6	22581	4269.5	769.6	18025
NFS		14.0	2.5	17857	17.0	5.5	32353	20.5	3.5	17073	63.0	9.0	14286
OPS		59.5	56.1	94361	89.5	103.9	116050	115.0	82.3	71583	172.0	99.5	57820
PS		960.5	197.9	20607	1439.5	343.0	23825	2210.5	554.4	25079	4504.5	878.0	19493
TA		1472.0	286.0	19431	2001.0	437.5	21865	2569.5	654.1	25455	4504.5	1002.4	22254
Percentage Agricultural To Total Advances		60.3	48.7	80.8	66.6	53.4	80.1	80.8	71.6	88.7	94.8	76.8	81.0

NFS - Non Farm Sector; OPS - Other Priority Sector; PS - Priority Sector; TA - Total Advances; MF - Marginal Farmers; SF - Small Farmers; LF - Large farmers.

farmers. As regards the agricultural loan amount per account, it was Rs. 15,703 in 2003-04 and it rose to Rs. 18,025 accounting for an increase of 14.8 percent.

In case of Regional Rural Banks, which were also located in semi - urban areas like Kurinjipadi and Rajapalayam, the percentage of agricultural advances to total advances in terms of number increased from 29 percent in 2003-04 to 71 per cent in 2006-07 (Table 5).

In terms of amount also, it drastically increased from 19 per cent in 2003-04 to 70 per cent in 2006-07. The loan amount per account increased from Rs 11,565 to Rs 19,939 accounting for an increase of 72.4 percent. Among the agricultural advances, Agricultural Gold

Loan (AGL) amount was highest followed by KCC and ATL similar to that of commercial banks in 2006-07. As regards the number of farmers who availed different types of agricultural loans, small farmers were more in number followed by marginal and large farmers.

The percentage of agricultural advances to total advances in terms of number had declined (Table 6) contrary to the other two banks, from 23 percent in 2003-04 to 14 percent in 2006-07 in Primary Agricultural Co-operative Banks. In terms of amount also, it drastically decreased from 54 per cent in 2003-04 to 28 percent in 2006-07.

Similar was the trend in loan amount per account also, i.e., it declined from Rs

45,540 in 2003-04 to Rs 28,919 which accounted for a decline of 36.5 percent. Among the agricultural advances, obviously KCC loan was highest followed by Agricultural Gold Loan (AGL) and ATL. As regards the number of farmers who availed different types of agricultural loans, small farmers were more in number followed by large and marginal farmers during 2006-07.

Analysis of average advances made per institutional agency in Cuddalore and Virudhunagar districts (Table 7) would indicate that there was an increase of 115 percent between 2003-04 and 2006-07 in total amount of advances made by all banks.

However, in terms of number of accounts, it was only 93 percent. In case

Table 5: Average Advances Made per Branch of Regional Rural Banks in Cuddalore and Virudhunagar Districts

(Total Amount in Rs.Lakhs; and Amount / Account in Rs)

Type of Loan	Type of Farms	2003-04			2004-05			2005-06			2006-07		
		No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account
Kisan Credit Card	MF	5.0	1.5	30000	5.0	1.5	30000	10.0	3.0	30000	15.0	8.0	53333
	SF	13.0	5.2	40269	16.0	7.3	45875	25.5	10.5	41098	38.0	21.2	55776
	LF	4.0	4.3	108500	3.5	5.3	150000	8.0	6.6	82188	10.5	8.6	82143
	Total	22.0	11.1	50341	24.5	14.1	57510	43.5	20.1	46103	63.5	37.8	59559
Agricultural Term Loan	MF	18.5	3.5	18919	42.5	11.0	25882	53.5	12.5	23364	65.0	11.0	16923
	SF	2.5	1.5	60600	2.5	2.4	94600	4.5	4.0	88333	6.5	4.1	63692
	LF	1.0	2.4	240000	2.0	4.7	236500	1.5	3.9	256667	1.0	2.0	200000
	Total	22.0	7.4	33705	47.0	18.1	38500	59.5	20.3	34160	72.5	17.1	23641
Agricultural Gold Loan	MF	254.0	7.5	2953	547.5	29.5	5388	798.0	44.0	5514	1660.5	55.0	3312
	SF	776.0	84.6	10900	1526.5	281.9	18470	2118.0	376.7	17786	2954.5	707.4	23943
	LF	141.5	30.0	21201	305.0	92.0	30164	428.5	152.0	35473	923.5	314.0	34002
	Total	1171.5	122.1	10421	2379.0	403.4	16959	3344.5	572.7	17124	5538.0	1076.4	19436
Agricultural Advances	MF	277.5	12.5	4505	595.0	42.0	7059	861.5	59.5	6907	1740.5	74.0	4252
	SF	791.5	91.3	11539	1545.0	291.7	18877	2148.0	391.2	18211	2999.0	732.7	24432
	LF	146.5	36.7	25078	310.5	102.0	32844	438.0	162.4	37083	935.0	324.6	34720
	Total	1215.5	140.6	11565	2450.5	435.6	17777	3447.5	613.1	17784	5674.0	1131.4	19939
NFS		410.0	43.5	10613	301.0	38.0	12626	400.5	44.0	10988	410.0	43.5	10613
OPS		1413.5	255.6	18081	1630.5	170.5	10458	1628.0	213.0	13085	1084.0	256.2	23635
PS		3039.0	439.7	14467	4382.0	644.2	14700	5476.0	870.1	15890	7168.0	1431.1	19965
TA		4165.5	739.2	17746	4919.5	912.2	18542	5604.5	1180.4	21062	7955.0	1622.7	20399
Percentage Agricultural To Total Advances		29.2	19.0	65.2	49.8	47.8	95.9	61.5	51.9	84.4	71.3	69.7	97.7

Table 6: Average Advances Made per Branch of Primary Agricultural Co-operative Banks in Cuddalore and Virudhunagar Districts

(Total Amount in Rs.Lakhs; and Amount / Account in Rs)

Type of Loan	Type of Farms	2003-04			2004-05			2005-06			2006-07		
		No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account
Kisan Credit Card	MF	52.0	7.2	13808	14.5	1.7	11724	10.0	0.9	8650	8.0	0.8	10375
	SF	160.5	51.9	32349	100.5	38.3	38075	57.5	22.1	38348	55.5	9.9	17793
	LF	157.0	112.2	71471	133.0	98.5	74060	108.0	66.1	61245	55.0	34.6	62936
	Total	369.5	171.3	46360	248.0	138.5	55833	175.5	89.1	50746	118.5	45.3	38245
Agricultural Term Loan	MF	9.0	1.1	11889	8.0	0.8	9750	8.0	0.9	11563	3.5	0.5	15000
	SF	0.0	0.0	0	0.5	0.1	10000	0.0	0.0	0	0.0	0.0	0
	LF	0.0	0.0	0	0.0	0.0	0	0.5	0.9	170000	0.0	0.0	0
	Total	9.0	1.1	11889	8.5	0.8	9765	8.5	1.8	20882	3.5	0.5	15000
Agricultural Gold Loan	MF	0.0	0.0	0	0.0	0.0	0	22.5	2.5	11267	34.0	5.5	16132
	SF	0.0	0.0	0	32.5	3.2	9831	81.5	15.9	19448	49.5	8.1	16444
	LF	0.0	0.0	0	0.0	0.0	0	28.0	7.8	27732	46.5	13.4	28828
	Total	0.0	0.0	0	32.5	3.2	9831	132.0	26.2	19811	130.0	27.0	20792
Agricultural Advances	MF	61.0	8.2	13508	22.5	2.5	11022	40.5	4.3	10679	45.5	6.8	15033
	SF	160.5	51.9	32349	133.5	41.5	31094	139.0	37.9	27266	105.0	18.0	17157
	LF	157.0	112.2	71471	133.0	98.5	74060	136.5	74.8	54769	101.5	48.0	47310
	Total	378.5	172.4	45540	289.0	142.5	49304	316.0	117.0	37021	252.0	72.9	28919
NFS		7.0	2.4	34286	9.5	4.1	43526	12.5	3.5	28320	10.0	4.8	48350
OPS		1224.0	129.5	10578	1170.5	121.1	10348	1307.5	126.5	9676	1449.0	159.9	11038
PS		1609.5	304.2	18902	1469.0	267.8	18227	1636.0	247.0	15100	1711.0	237.7	13890
TA		1623.5	317.4	19551	1483.5	277.4	18698	1681.5	257.8	15334	1768.0	260.8	14753
Percentage Agrl. to Total Advances		23.3	54.3	232.9	19.5	51.4	263.7	18.8	45.4	241.4	14.3	27.9	196.0

of KCC, the percentage increase was 249 percent, but it was only 49 percent in terms of amount. The lower increase was due to negative trend realized by PACBs in the study area. However, in case of ATL, AGL, Total Agricultural Advances and Total Priority Sector lending there was more than 100 percent increase in both number and amount during the study period. In PACBs, there was an increase in the number of total advances made but there existed a negative change in terms of amount of loan disbursed. Thus, there was a significant

increase under KCC, ATL and AGL in terms of both number and amount sanctioned in the selected banks during the period 2003-04 to 2006-07.

In terms of number of accounts, marginal farmers were on the higher side in all the three types of loan products (KCC, ATL and AGL) pertaining to the commercial bank (Table 8).

The percentage to total amount was also at the higher side for KCC and Agricultural Gold Loan while the large farmers dominated the Agricultural Term

Loan in terms of amount.

In contrast, for the Regional Rural Banks it was observed that the small farmers topped the list both in terms of the number and amount in KCC and Agricultural Gold Loan products while the marginal farmers were in huge numbers with respect to the Agricultural Term Loan.

The results showed that the PACBs advanced more to large farmers both in terms of numbers and amount under the Kisan Credit Cards, marginal farmers

Table 7: Percentage Changes in Average Advances Made per Institutional Agency in Cuddalore and Virudhunagar Districts between 2003-04 and 2006-07

Particulars	Commercial Bank			RRB			Cooperative Bank			All Banks		
	No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account	No	Total Amount	Amount Account
KCC	689.0	439.3	-31.6	188.6	241.5	18.3	-67.9	-73.5	-17.5	248.6	49.2	-57.2
ATL	760.0	869.8	12.8	229.5	131.2	-29.9	-61.1	-50.9	26.2	419.6	566.0	28.2
AGL	226.2	392.4	51.0	372.7	781.7	86.5	130.0	27.0	100.0	330.8	643.3	72.5
Agricultural Advances -Total	381.3	452.5	14.8	366.8	704.8	72.4	-33.4	-57.7	-36.5	311.0	336.5	6.2
NFS	350.0	260.0	-20.0	0.0	0.0	0.0	42.9	101.5	41.0	12.1	18.5	5.7
Other Priority Sector	189.1	77.1	-38.7	-23.3	0.2	30.7	18.4	23.5	4.4	0.3	16.9	16.5
Total Priority Sector	369.0	343.6	-5.4	135.9	225.5	38.0	6.3	-21.9	-26.5	138.6	170.4	13.3
Total Advances	206.0	250.5	14.5	91.0	119.5	14.9	8.9	-17.8	-24.5	92.6	114.9	11.6

Table 8: Performance of Financial Institutions during the Doubling Period (2004-2007)

Type of Loan	Type of Farms	Commercial Bank				RRB				PACB				All Financial Institutions			
		No	Total Amount (Rs. Lakh)	Percentage to Total		No	Total Amount (Rs. Lakh)	Percentage to Total		No	Total Amount (Rs. Lakh)	Percentage to Total		No	Total Amount (Rs. Lakh)	Percentage to Total	
				No	Amount			No	Amount			No	Amount			No	Amount
Kisan Credit Card	MF	3013.0	345.9	89.8	67.0	30.0	12.5	22.8	17.4	32.5	3.4	6.0	1.2	1025.0	120.6	76.4	42.0
	SF	206.0	85.1	6.1	16.5	79.5	39.0	60.5	54.2	213.5	70.3	39.4	25.8	166.3	64.8	12.4	22.6
	LF	135.0	85.2	4.0	16.5	22.0	20.5	16.7	28.5	296.0	199.2	54.6	73.0	151.0	101.6	11.2	35.4
	Total	3354.0	516.2			131.5	72.0			542.0	272.9			1342.3	287.0		
Agricultural Term Loan	MF	258.5	55.7	75.1	21.1	161	34.5	89.9	62.2	19.5	2.2	95.1	71.0	146.3	30.8	80.8	28.7
	SF	45.0	58.1	13.1	22.0	13.5	10.5	7.5	18.9	0.5	0.1	2.4	3.2	19.7	22.9	10.9	21.3
	LF	40.5	149.8	11.8	56.8	4.5	10.6	2.5	19.1	0.5	0.9	2.4	29.0	15.2	53.8	8.4	50.0
	Total	344.0	263.7			179.0	55.5			20.5	3.1			181.2	107.5		
Agricultural Gold Loan	MF	3467.0	532.8	87.1	77.0	3006.0	128.5	26.7	6.3	56.5	8.0	19.2	14.2	2176.5	223.1	42.0	23.9
	SF	366.5	80.4	9.2	11.6	6599.0	1366.0	58.6	66.6	163.5	27.2	55.5	48.2	2376.3	491.2	45.9	52.6
	LF	146.5	78.5	3.7	11.3	1657.0	558.0	14.7	27.2	74.5	21.2	25.3	37.6	626.0	219.2	12.1	23.5
	Total	3980.0	691.8			11262.0	2052.5			294.5	56.4			5178.8	933.5		
Agricultural Advances	MF	6738.0	934.6	87.8	63.5	3197.0	175.5	27.6	8.1	108.5	13.6	12.7	4.1	3347.8	374.6	50.0	28.2
	SF	617.5	223.6	8.0	15.2	6692.0	1415.6	57.8	64.9	377.5	97.4	44.0	29.3	2562.3	578.9	38.2	43.6
	LF	322.0	313.6	4.2	21.3	1684.0	589.0	14.5	27.0	371	221.3	43.3	66.6	792.2	374.6	11.8	28.2
	Total	7678.0	1471.8			11572.0	2180.1			857.0	332.4			6702.3	1328.1		

under Agricultural Term Loan and small farmers under Agricultural Gold Loan.

The overall scenario shows that, in terms of numbers, nearly half of the borrowers were marginal farmers while in terms of amount, a major portion (43.6%) went to the small farmers.

It is observed that Agricultural Gold Loan had contributed much to the total agricultural advances in case of the commercial bank (47%) and RRB (94 per cent). In PACB, the major amount was going to Kisan Credit Card (82%) followed by the Agricultural gold loan (17%). Therefore, the disbursement under Agricultural Gold Loan (AGL) was more when compared with that of KCC and ATL by both commercial banks and RRBs. This could indicate that the institutional agencies preferred more to lend against securities like gold jewels.

iii) Investment Lending

Over the years, there was an upward growth both in the average number of accounts and the amount of agricultural term loan provided by the commercial bank in both Cuddalore and Virudhunagar district (Table 9). It could also be seen that the commercial bank had started financing to plantation and horticulture development since 2005-06. More term loans, in terms of number, were financed by the commercial bank for dairy development for all the years and continued to contribute substantially over the years. In terms of amount of loan, farm mechanization contributed maximum in view of its higher unit cost.

Similar to that of RRB, the Primary Agri. Co-operative Bank also focused on the dairy development activity alone under the agricultural term loan lending as can be seen in (Table 10).

However, unlike RRBs, there was a decline in both number and amount under dairy loan through PACBs between the study periods. However, term loans were disbursed separately by Primary Co-operative Agriculture and Rural Development Banks which were not covered by the present study.

In sum, term loans were more directed towards dairy development followed by farm mechanization. The number of term loans through all banks increased by 366 per cent while, the term loan amount increased by 312 percent during the study period. The term loan amount per account declined from Rs 38,105 in 2003-04 to Rs 33,718 in 2006-07 accounting for a decline of 11.5 percent.

iv) Kisan Credit Card scheme

Parameters like number of new and existing KCC accounts, KCCs renewed

Table 9: Activity wise Average Agricultural Term Loan Disbursed per Branch by Commercial Banks and RRBs

(Amount in Rs. lakhs)

ATL Activities	Commercial Bank								Regional Rural Bank							
	2003-04		2004-05		2005-06		2006-07		2003-04		2004-05		2005-06		2006-07	
	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount	No	Amount
Minor Irrigation	1.5	2.2	0.0	0.0	1.5	2.0	4.0	5.0	0.0	0.0	1.0	2.0	0.0	0.0	0.0	0.0
Land Development	0.5	0.5	0.5	0.5	2.5	4.0	4.5	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Farm Mechanization	0.5	2.5	0.5	2.5	1.5	5.0	3.5	16.5	3.5	3.9	4.5	7.1	6.0	7.8	3.5	4.1
Plantation and Horticulture	0.0	0.0	0.0	0.00	0.5	0.5	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dairy Development	4.0	0.5	9.5	1.0	13.0	1.3	85.0	11.5	18.5	3.5	42.0	9.1	55.0	12.6	70.5	13.8
Total	6.5	5.7	10.5	4.0	19.0	12.8	99.0	41.0	22.0	7.4	47.5	18.2	61.0	20.4	74.0	17.9

Table 10

ATL Activities	PACBs								All Financial Institutions							
	2003-04		2004-05		2005-06		2006-07		2003-04		2004-05		2005-06		2006-07	
	No	Amt	No	Amt	No	Amt	No	Amt	No	Amt	No	Amt	No	Amt	No	Amt
Minor Irrigation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.2	1.0	2.0	1.5	2.0	4.0	5.0
Land Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	2.5	4.0	4.5	6.0
Farm Mechanization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	6.4	5.0	9.6	7.5	12.8	7.0	20.6
Plantation and Horticulture	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	2.0	2.0
Dairy Development	9.5	1.4	8.0	0.8	8.0	0.9	4.0	0.8	32.0	5.4	59.5	10.9	76.0	14.8	159.5	26.1
Total	9.5	1.4	8.0	0.8	8.0	0.9	4.0	0.8	38.0	14.5	66.0	23.0	88.0	34.1	177.0	59.7

and KCC limit enhanced were, on an average, increasing in commercial banks and RRBs while there was a declining trend in PACBs (Table 11).

The overall scenario indicated a progress in all these parameters during the study period. The number of dormant KCC had increased in commercial banks while, it was almost constant in RRBs during the study period. In case of co-operatives, there was no dormant KCC. However, the dormancy of KCC was increasing in the study period and this would indicate that further efforts are needed to improve the awareness on the utility of KCC among the farmers. In 2006-07, share of number of new KCCs, KCCs renewed, KCC limit enhanced and Dormant KCCs to Existing KCCs accounted for 128, 59, 15 and 3.5 percent respectively.

As far as the loan amount disbursed under KCCs was concerned, the

percentage of disbursement under new KCC to total disbursement, on an average, in Cuddalore and Virudhunagar districts increased from 6 percent in 2003-04 to 19 percent in 2006-07 (Table 12). The share of new to total KCC disbursement increased in commercial banks and PACBs while there was a downward trend in RRBs.

v) Bankers' Opinion on Rural Lending

Some of the common views as expressed by the bank branch officials are as follows:

a) According to the sample bank officials, for opening a KCC account, the farmers found it difficult to produce some of the land documents like 10 (1) extract, title deeds etc., as the land holdings were not clearly divided and documented among the legal heirs of the family though the possession and cultivation were taken up separately.

b) The bankers were fixing the credit limit for KCC as per the guidelines considering the scale of finance and the type of crop and the area cultivated by the farmer for each season. In fixing the repayment schedule also, the bankers were adhering to the guidelines considering the scale of finance. However, there was a huge mismatch between the actual cost of cultivation and the scale of finance which might not be sufficient enough for carrying out all the inter-cultural operations.

c) Although, KCCs are designed such that farmers could withdraw the loan amount within the credit limit as and when it is required sample bankers indicated that the farmers have withdrawn only once in a year.

d) The KCC has been designed to bring integration between the short term crop loans and term loans under one single product, but in practice, it is often viewed as synonymously with crop loan.

e) The staff members of the Primary Agricultural Co-operative Banks themselves felt that during most of the seasons, the mixed and composite fertilizers supplied by the PACBs were either not suitable to the crops cultivated during the current season or not provided at the appropriate time period. Some farmers immediately sold these fertilizers to private fertilizer dealers at lower prices and repurchased them (if needed) later at higher prices as they did not have proper storage facility for fertilizers.

f) Few of the bankers also felt that the non-performing assets under the term loan category are comparatively higher due to the longer repayment schedule for such loans. Even in case of crop loans, especially for sugarcane loans, the bankers often have an opportunity to enter into tripartite agreement with the sugar factories in which case the bankers are sure about the repayments.

g) In most cases, the bankers were prepared to extend loans only to those farmers growing sugarcane under tie-up with any of the nearby sugar factory in which case, the repayment of the loan was assured from the bankers' point of view. But this makes a mandatory condition for any farmer willing to obtain loan from a bank to cultivate sugarcane.

Table 11: Average Number of KCC Accounts per Branch in Cuddalore and Virudhunagar Districts

Number

Particulars	Period			
	2003-04	2004-05	2005-06	2006-07
Commercial bank				
No. of New KCC	129.0	224.0	321.0	423.5
No. of Existing KCC	140.5	273.5	449.5	630.5
No. of KCC Renewed	124.5	248.5	354.0	497.0
No. A/c Limit Enhanced	35.5	17.0	122.5	180.0
No. of Dormant KCC A/c	13.5	22.5	42.0	50.0
RRB				
No. of New KCC	614.0	1263.0	1834.0	3771.5
No. of Existing KCC	432.5	822.5	1167.5	2534.5
No. of KCC Renewed	291.0	560.0	778.5	1350.0
No. A/c Limit Enhanced	76.0	136.0	197.0	302.0
No. of Dormant KCC A/c	66.5	70.0	81.0	65.0
PACB				
No. of New KCC	23.0	16.0	15.5	12.0
No. of Existing KCC	528.5	584.0	542.5	122.0
No. of KCC Renewed	516.0	565.5	526.0	97.5
No. A/c Limit Enhanced	5.0	7.0	7.0	0.0
No. of Dormant KCC A/c	0.0	0.0	0.0	0.0
All Banks				
No. of New KCC	766.0	1503.0	2170.5	4207.0
No. of Existing KCC	1017.0	1680.0	2159.5	3287.0
No. of KCC Renewed	1016.0	1374.0	1658.5	1944.5
No. A/c Limit Enhanced	116.5	160.0	326.5	482.0
No. of Dormant KCC A/c	80.0	92.5	123.0	115.0

Table 12: Average Amount Disbursed under New and Total KCC Accounts per Branch in Cuddalore and Virudhunagar Districts

(Amount in Rs.Lakhs)

Banks	2003-04	2004-05	2005-06	2006-07
Commercial Banks				
Disbursement under New KCC	6.6	15.1	61.1	97.9
Total Disbursement under KCC	47.9	77.2	126.8	202.2
Percentage of New to Total Disbursement	13.8	19.5	48.2	48.4
Regional Rural Bank				
Disbursement under New KCC	16.5	25.0	45.5	109.0
Total Disbursement under KCC	83.0	305.0	424.5	875.5
Percentage of New to Total Disbursement	19.9	8.2	10.7	12.5
PACB				
Disbursement under New KCC	4.2	5.3	8.4	2.6
Total Disbursement under KCC	334.1	360.3	344.6	44.3
Percentage of New to Total Disbursement	1.3	1.5	2.4	5.8
All Banks				
Disbursement under New KCC	27.3	45.4	115.0	209.5
Total Disbursement under KCC	465.0	742.4	895.9	1122.1
Percentage of New to Total Disbursement	5.9	6.1	12.8	18.7

Management Information System (MIS)

Regarding the Management Information System (MIS), although each financial institution is trying to improve the format and the methodology of preparing the monthly, quarterly and annual statements taking advantage of technology and computer software, still they have a long way to go. Since the format that is being submitted to the State Level Bankers' committee by the institutions remains the same, at institution level also there can be a common format so as to avoid discrepancies in reporting. Apart from this, some of the classifications such as categorizing the farmers according to the size of the holding, possession of the property, etc., could be linked with the software so that the data will be readily available.

The banking information had been computerized in commercial banks and RRBs. All bankers suggested that all the banking information should be made available at one apex level institution. Computerization of vital banking statistics is being taken up recently in PACBs and it should be further strengthened in all bank branches.

The available information was highly truncated and it would be very difficult to make any policy decision based on the available information. The banking information system is inadequate due to lack of uniformity in the data provided by different financial institutions and wide variations in the definition of various banking parameters. In some returns only 'outstanding or cumulative' information was available, while in some other returns only 'current year' information was available. Although, the information on agricultural advances extended to marginal and small farmers and other weaker sections of the rural community are required for policy making, such information were either not available or incomplete. In some returns, only number of accounts was given, while in others amount of loan disbursed alone has been given.

In view of the above inadequacies in the existing MIS, the following suggestions are made:

- i) A web site may be created by SLBC for Tamil Nadu for providing banking development indicators
- ii) There is an urgent need to computerize all banking related information at the grass root level.

iii) Bankers need to be adequately trained in collection of banking information.

Policy Recommendations

The following are the policy recommendations based on the results of the study.

i) Often, the term loans are not covered under the KCC and the credit component for consumption purpose was missing in almost all the cases. Hence, awareness needs to be created among the farmers regarding the KCC product through farmers' club and self help groups.

ii) In analyzing the term loan advances by the institutional lending agencies, it was observed that very minimum focus was rendered to long term advances, and that too the major share in this was going for dairy development. Hence, it would be the apt to encourage farmers to take up some of the other allied activities suited to their agro climatic conditions. This necessitates steps to be taken up by both governmental and non-governmental organizations (NGOs) to create the awareness and to realize the results, which will in due course encourage the farmers to take up other allied activities and the bankers also get a chance to widen their scope of lending as well as the successful repayment record.

iii) As a hint from past success stories of good repayment record in sugarcane, tie-up loans could be extended to other agro processing sector by encouraging the entrepreneurs to start such industries in some of the promising lines of business such as processing of medicinal plants, food processing industries, etc where in there is a scope for a definite and rapidly growing market demand. In doing so, a PPP (Public Private Partnership) approach can be adopted to get the expected outcome.

iv) The general experience of good repayment track record under lending to SHGs could be thought of in agricultural advances by introducing a group lending sort of model where the peer group pressure will improvise the repayments and also would create awareness among the farmers, apart from providing access to institutional credit to many farmers.

v) Management Information System for strengthening the data base on agricultural credit as discussed earlier may be taken up.

Impact of Micro Finance in Reduction of Domestic Violence in the State of Sikkim

Success Story of Self Help Groups of Lower Tokdey

By Manas Bhattacharjee*



Introduction:

Lower Tokdey is situated in a very remote part of South Sikkim district, where regular transportation is not available. People come across the road from very far away places. Drinking water and other facilities are not easily available. Credit delivery mechanism at the grass root level especially in the remote areas can be considered to be in the initial stages. Everywhere in this locality, tremendous un-employment exists. Availability of land is a problem and scientific utilization hasn't been developed yet. Lack of technical knowledge, proper irrigation facilities, poor infrastructure, are the major constraints. It has been aggravated by the lack of credit facilities. Banks or any other financial institutions are not performing well because of high

transaction cost coupled with poor recovery of loans. This has limited reach of formal credit to the grass root level. Faced with these drawbacks, poverty has spread very fast, and people are living in a melancholic way.

Concept of SHGs and Role of NGOs

Acute poverty prevails in the houses of residents. As a result, male members are always frustrated and frequent violence occurs in domestic lives. Women self-help group members tried to mitigate the problems amicably but in vain. Some times, the male dominated society is asked to sort out their problems but desirable results are not obtained. Women members have to put up with types of domestic violence and they are

almost confined to their houses. Some women members tried to protest by lodging complaints with their respective panchayat/local leaders, but nothing was done to remedy the situation. Socio-economic condition is so wretched that livelihood is miserable.

At the beginning, some formal casual discussions were held, but all members of the groups did not recognize that it would be an effective measure to combat the poverty and rescue themselves from their tormentors'. Sometimes, male members became furious when women assembled together with the other women members and gossiped and discussed their day to day problems. Some intelligent women gave some solution and reduce their violence in a very sketchy way. Later on they tried to help with a very small amount which gave some temporary relief to the victims. Gradually under the influence of NGO's representative, they made a habit of collecting a subscription of Rs 2/- per member in every week. The same was deposited with one of the chosen leaders, who was considered dependable. Leadership capacity was also developing very fast. NGO gave some money which was added to the beneficiaries' own contribution and inter-loaning was initiated.

To initiate the Dairy unit, the group members had to put in hard efforts. They do not have sufficient money. Little bit of experience with their traditional cow did not yield any good return

Bad times did not prevail long. Women members groups within a very short period accumulated their own contribution and started inter-lending system amongst the group members with an interest of Rs 5 per month. Author had got the opportunity to directly interact with the beneficiaries of the following groups to know the impact of the MFI scheme to women and its impact on women in reduction of domestic violence in the said locality.

Gradually, the inter-lending was running full fledged, and most of the group members have easy access to the accumulated fund for their loan with recovery being almost 100 percent. They took the said loan for growing short duration of crop, like jowar, maize and potato. They were able to produce the fodder, because of high demand of the same for their cattle. Male members got an opportunity to involve themselves in the agricultural farm. Comparatively,

groups, still they have set up a rule that if members failed to repay, others would support the defaulters and her contribution would be shared by other nine members. When the situation would improve the defaulters will repay her overdue. With the amount of 15,000/- each they started to purchase Hybrid Jersey Cows. Some of them purchased a conceived cow, some milch cow, some of them purchased heifer cow, according to their financial capacity. Those who have purchased milch cow immediately started to earn some money. Repayment of their EMI was not a problem those who purchased conceived cow, they had to wait for 3-4 months and after delivery they earned some profits. Gestation period was longer in those cases when heifer cow was purchased. Yet they managed to maintain their cow, because the cost was comparatively lesser than those who had purchased milk cow. Members who did not invest the entire loan amount to purchase cow, invested the remaining in fodder cultivation. In due course, the fodder grew up to maturity and was sufficient to feed the cow very easily.

Name of the Group	No. of Members	Loan Amount Sanctioned	Loan Amount Repaid	Remarks
Kanchanzang Self Help Group, Block :Lower Tokdey, Lingmo, GP: Nei Mazing. Dist. South Sikkim, Sikkim	12	Rs.1,50,000	1,20,000	Group Formed in Dec 2002Involved in small trade, like Dairy, poultry, goatery etc.

At the initial stage, NGO's activities did not give any fruitful results. After repeated persuasion and follow up action, people of the locality of Lower Tokdey in Lingmo of South Sikkim district realized that something was required to be done so that they might escape poverty. However, motivation of the people was restrained because male members were reluctant to accept the idea. Under the aegis of Rashtriya Gramin Vikas Nidhi- an autonomous Non-profit Organization, a few pockets of the locality were chosen to give the knowledge of SHGs concept among the local idle women, who were basically facing domestic violence from their drunken male counterparts. Women members were to bear with such types of domestic violence unwillingly and they were almost confined to their houses. Since the number of children were more, male members' income was not sufficient, sources from agriculture was not up to the desired level, the women members of the society decided to form a group and initiated to collect a very small amount of contribution @ Rs 5/- per member with the support of Rashtriya Gramin Vikas Nidhi an autonomous body of the society.

Adaptation of Income Generating Activities:

frequency of visits to the liquor shop was minimized.

When the Group Members thought that their fund have sufficient balance, idea of Dairy Unit was taken up by one the Self help Group, viz Kanchan Zonga Self Help Groups, whose President is Smt Subhadra Chettri.

To initiate the Dairy unit, the group members had to put in hard efforts. They do not have sufficient money. Little bit of experience with their traditional cow did not yield any good return. Most of the time, they had to incur a loss, because the quantity of milk produced by the domestic cow is not up to the desired level. Moreover, maintenance cost was more than the income earned.

It was then that RGVN members come forward to finance them with an amount of Rs. 1,50,000/- for a period of 1.5 years @ annual interest of Rs 12 percent. The group members since they become experienced and matured with the inter-lending process, immediately after receiving the said loan from RGVN, distributed the amount to the group members at Rs 15,000/- each. Being a ten member group, all members agreed to repay the said loan @ EMI of Rs 1,050/- with duration of 16 months. Although they are very loyal to the

Impact of Micro Finance:

Being regular members, frequency of availing of loan was rapidly increasing. Repayment along with accrued interest was very regular. Accumulation of fund was rising very fast. Because, the accrued interest was not distributed among the beneficiaries rather it was added to the contributed fund along with NGO's fund, where substantial amount was placed for re-finance purposes with an interest of 12 percent per annum on the Monthly Reducing Balance System.

On an average, a milch cow gives around 20 litres per day and it is sold @ of Rs. 12 kg per litre to the local broker who sells in the nearby Gangtok Town. Daily income from a milching cow is 240/- per day. Cost of fodder consumption is minimum Rs. 35/- to Rs. 40/- per day. Maintenance of cow boys and their recurring expenditures comes to Rs. 20/- per day. From milk per day income, an expenditure to the tune of Rs 150/- to 160/- is incurred. Among with these, beneficiaries had to incur some indirect expenses like insurance coverage, cost of Artificial Insemination, construction and maintenance of cow-shades etc. Some revenue is also generated out of

manures and vermi-compost replaces the use of chemical fertilizers. Average monthly income from a cow is at least Rs 3,000/- to Rs, 3,500/-. Repayment of EMI has not become a problem. Situation like miscarriage, abortion etc. is taken care of by the insurance schemes adopted by the beneficiaries.

All members are very happy, and tried to convince their male counterparts effectively. Now they are very much able to save some amount which is ultimately spent for urgent domestic requirement. Accordingly, when their income goes up, male members realized its benefits and participated in sharing their contribution to combat the alarming situation of poverty. Domestic violence has reduced significantly and men give due respect to their wives and have also given up on their drinking habit. They have also started to cooperate with wives in construction of cow-shed, maintenance of cow-sheds, arranging for fodder, working in the agricultural fields etc. They have become very useful to their families who were like monsters in the past.

Impact on the member:

Author had got the opportunity to directly interact with SHGs members and it is revealed that the above group member is involved in the activities for dairy and on an average income ranges between Rs 3000/- & 4000/- per day. Loan taken from Rashtriya Gramin Vikash Nidhi (RGVN) is almost nearing repayment. Only a small amount is left, which is likely to be repaid very soon.

They communicated that there is very good scope to adopt a dairy unit and in a group they try to install a chilling plant in the nearby locality in which local unemployed youth would be engaged in this trade and to process the same in a more scientific and hygienic manner. The author observed that repayment of loan is encouraging in the said locality, because of high return in the local small business activities. Small trade like curd, sweet making stall is considered to be very lucrative because there is a very good demand in the big cities like Gangtok, Siliguri, close to the production belts. Raw materials like fodder and straw are abundantly available in the nearby locality. The milk is boiled in local chullas (oven), and the concentrated liquid is placed into indigenously made earthen dice to give different shape on cooling for making milk products. Dry leaves/ grass is used as fuel for the purpose. The finished products which are locally called *chhana/panir* are very tasty and used for sweet making items. Demand for this delicious sweet is not only in West Bengal, but also in the neighbouring states like Assam, Bihar, Orissa and Bangladesh. It has high export value and is highly remunerative as reported by the beneficiaries.

Conclusion

Concept of Micro Finance scheme to uplift the status of the down trodden people through providing financial assistance by the NGOs/other agencies is very much encouraging. There is no doubt that Micro Finance has come a long way and still has miles to go.

However, it needs to include strategies and funding for building the capacity of SHGs to manage savings and credit, accelerating vocational skills, and creating partnerships for social security to ensure inclusive growth. Achievements of micro finance programmes in the state have been impressive and performance of SHGs and MFIs has been much better. However Micro-Credit institutions have not been completely successful in their pursuits either because of inherent weaknesses and restraints, or some limitations. It is very much essential for speedy action to remove these obstacles. Successful achievement would be considered only when all the marginalized people of the society would be included. The rapid economic growth process should accelerate the Micro Credit access to services like education and health, empowerment of women for the neglected or marginalized citizens. Support of the Local NGOs is very essential, since it is virtually impossible to organize Training Program at the doorstep of the beneficiaries and quick delivery of financial assistance because of its limited manpower. Identification of needy beneficiaries would become easier for the local NGOs. Accordingly, the constraints/problems faced by the NGOs need to be addressed in a proper way by the concerned authority. Economic development of untapped human resources especially the destitute/ downtrodden is considered to be a major achievement of this scheme, and would go a long way for the welfare of the society. However, reduction of domestic violence did not have much impact either due to ignorance of existing law or the refusal of societal acceptance to protect the women by the authority concerned. Even the beneficiaries did not want to disclose their privacy openly because of their peace loving affectionate attitude, showing extreme loyalty to their male counterpart. Women being biologically superior and creator of future generations, require creation of a climate of proper respect not only from their male partners but society as a whole.

Ref: Annual Report of Rashtriya Gramin Vikash Nidhi – 2007-08

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Achievements of micro finance programmes in the state have been impressive and performance of SHGs and MFIs has been much better. However Micro-Credit institutions have not been completely successful in their pursuits either because of inherent weaknesses and restraints, or some limitations



NREGS-KEY ISSUES

By D. Muthamizh Vendan Murugavel*

NREGS (National Rural Employment Guarantee Scheme) is a historic employment scheme in India for providing 100 days guaranteed wage employment for all employment seekers above 18 years of age and willing to do work. The scheme came into force on 5th September 2005 in 200 districts of India and was later extended to another 130 districts. NREGS empowers the citizens to demand employment; to get employment within 15 days of their demand. It provides the right to be paid statutory wages prevalent in the state and also to work-site facilities like drinking water, sheds for children and first aid.

The Panchayat Raj Institutions (PRIs) have a principle role in the planning and implementation of the NREGS. This central role for PRIs would go a long way in energizing local self-governance and

will also ensure that the labour spent by the people would be for welfare schemes and projects that the local people feel a need for. With community ownership of development works in mind, the Act provides for an institutional mechanism to ensure transparency and accountability through Social Audit. National Rural Employment Guarantee Act requires that the employment be given within 5 km of the applicant's residence; if not, then additional wages must be paid. The Act also requires that one third of the beneficiaries of the program are women.

The immediate objective of NREGS, which is to provide manual employment and decent wages to the neediest in a conducive environment – has been more or less realized. In the short term, its potential is for reducing income poverty and provision of basic minimum needs to the core poor of the country. In the

Implementation of NREGS is done by the State Governments in accordance with the Employment Guarantee Scheme formulated by each State. Therefore, all complaints received in the Ministry are sent to the concerned State Government for taking appropriate action in accordance with the provisions of the Act

medium term, the goals are more difficult to attain – that of providing improved livelihoods to the poor essentially through natural resource management. Here, the linkages have to be worked out and systems and institutions have to be put in place so that the benefits flow back to the workers. For this to happen the focus has to be on Human Development so that the beneficiaries of the scheme can broaden their capabilities and access their entitlements. Finally, in the long

A grievance redressal mechanism has been set up. A National toll-free telephone Helpline under NREGA has been established which receives complaints and queries relating to NREGS. State Governments have also been requested to set up similar helplines at the State and district levels. Helplines have been set up in Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Orissa, Uttar Pradesh, Uttarakhand, West Bengal, Goa and A&N

The National Rural Employment Guarantee Scheme involved building check dams, digging ponds and doing odd jobs like road repairs to ensure jobs for at least 100 days for poor villagers. But the scheme was mired with corruption as complaints galore about this project

Table-1 Standing of NREGS

Particulars	2008-09	2007-08	2006-07
Employment demanded by households (in crore)	4.54	3.43	2.12
Employment provided to households (in crore)	4.5	3.39	2.1
Person days (in crore)	216.04	143.68	90.51
Total available fund (including O.B. in crore)	36263.46	19278.78	12073.56
Expenditure (in crore)	27180.63	15858.44	8823.36
Works completed (in Lakhs)	12.11	8.2	3.97
Works in progress (in Lakhs)	15.11	9.61	4.45

Source: NREGA Bulletin; OB-Outstanding Balance

term, what is expected is a significant and sustainable movement out of poverty into productive livelihoods and even higher form of development.

Complaints under NREGS

The Ministry of Rural Development has so far received 674 complaints regarding the implementation of NREGS since its launch in 2006. The maximum number of complaints has been registered from Uttar Pradesh at 204 while Madhya Pradesh comes next with 128 complaints. Implementation of NREGS is done by the State Governments in accordance with the Employment Guarantee Scheme formulated by each State. Therefore, all complaints received in the Ministry are sent to the concerned State Government for taking appropriate action in accordance with the provisions of the Act. The Ministry has an independent Monitoring mechanism through National Level Monitors (NLMs). These NLMs visit various districts to assess the implementation of the Act. In cases of complaints of serious nature, the NLMs are deputed to enquire into the matter.

Table-2 Complaints under NREGS

State	No. of complaints received in 2006-07	No. of complaints received in 2007-08	No. of complaints received in 2008-09	No. of complaints received in 2009-10	Total
Andhra Pradesh	2	2	7	1	12
Assam	1	5	10	1	17
Bihar	7	26	39	4	76
Chhattisgarh	2	10	14	2	28
Gujarat	2	4	3	1	10
Himachal Pradesh	0	0	6	2	8
Haryana	1	2	13	0	16
Jharkhand	6	12	35	2	55
Karnataka	1	4	0	1	6
Kerala	0	0	0	0	0
Madhya Pradesh	7	37	50	14	108
Maharashtra	4	4	5	0	13
Manipur	0	1	2	0	3
Mizoram	0	1	0	0	1
Orissa	4	12	12	0	28
Punjab	0	1	1	1	3
Rajasthan	2	7	30	17	56
TamilNadu	1	2	1	1	5
Tripura	0	0	2	0	2
Uttar Pradesh	17	40	119	28	204
Uttarakhand	0	0	3	1	4
West Bengal	1	8	6	4	19
Total	58	178	358	80	674

Source: Ministry of Rural Development



islands.

Social Audit under NREGS

Social audits are a process where teams visit NREGS worksites in every gram panchayat and physically crosscheck the work done with the records. Each team is led by district resource person and consists of 4-5 people drawn from civil society organisations. The point of an audit is that it should be conducted by people from outside the Government. Social auditing involves consolidating the muster roll – the register that records the amount of work done by each person and feeding it into software that verifies it with the pay order to detect discrepancies. The social auditing process has brought down fraud at the muster roll level and ensured that the rural poor receive money for work done. After the discrepancies are found a mandal-level public meeting is held where the wrongdoers have to publicly confess to their misappropriations and return the money, which goes into the NREGS recovery account. They are then dismissed from service without cases being filed against them.

Most of the social audits revealed that the scheme’s performance was not up to the mark due to some irregularities.

The success of the National Rural Employment Guarantee Scheme depends on its beneficiaries getting the wages due to them, and doing so on time. Provisions for maintenance of muster rolls and job cards, payment of wages in front of all the labourers, providing access to all government records, and social audits are aimed at achieving exactly this.

Key Issues in NREGS

- A common complaint from people wanting to work under the National Rural Employment Guarantee Act (NREGA) is that no one accepts their work applications;
- Fake Muster Roll;
- Under payment Wages;
- Complaints of rip-offs and payment delays;
- Bad infrastructure;
- Inordinate delay in release of sanctioned rural development funds;
- Embezzlement of NREGS funds;
- Violation of NREGA guidelines;
- Irregularities in Tree Plantation;

- Irregularities in implementation of NREGS;
- Failure to pay unemployment allowance as per provisions of the Act;
- Manipulation of job cards;
- Cutting in panchayat funds;
- Misuse of funds by forgery;
- Use of Machinery instead of Labour in some places;
- Muster rolls are not given in time to the village;
- Recording of non-existent workers;
- Under utilization of funds;
- Poor selection of work;
- Asking money for NREGS work;
- Poor quality of work;
- False entries in Daily Attendance Register;
- Favouring or discriminating against people in allotting type/location of work;
- Taking up of non-priority works;
- Failure to do advertisement as per the conditions of tender under NREGA;
- Issuance of job cards non-labourers under NREGS;
- Non-implementation of NREGS in some states;
- Violation of the spirit of NREGA;
- Monitoring;
- Human Capacity.

When the government decreed that all payments to beneficiaries under the National Rural Employment Guarantee Act would be made through banks and post offices it thought it had plugged the leaks in the system. But bank accounts too can be manipulated, as a social audit carried out found that signatures on withdrawal slips were forged to access money in the beneficiaries’ accounts in banks and post offices alike, without the beneficiaries’ knowledge.

The CAG (Comptroller and Auditor General of India) review said in as many as 70 percent of the villages checked, there were no proper records available on number of households who demanded jobs and the actual number

of people who benefited from the job guarantee scheme.

Despite its progress in improved implementation and governance, the NREGA still has to deal with the corruption and other improprieties that have come to be associated with any Government program in India.

The National Rural Employment Guarantee Scheme involved building check dams, digging ponds and doing odd jobs like road repairs to ensure jobs for at least 100 days for poor villagers. But the scheme was mired with corruption as complaints galore about this project. Many inspection teams were even not able to locate the ponds that were allegedly dug under the NREGS.

World Bank's Report on NREGS

The World Bank has described the much-acclaimed National Rural Employment Guarantee Scheme as a policy barrier hurting economic development and poverty alleviation which discourages migration as lifting people out of poverty requires shifting populations from villages to cities in its 'World Development Report 2009'.

"Various schemes of the Indian government like NREGA, watershed

programmes and schemes for development of small and medium towns are acting as "policy barriers to internal mobility", the bank said in its 'World Development Report' 2009.

The report argued that *the internal mobility is necessary as "lifting people out of poverty requires shifting populations from villages to cities" and the process of migration should be encouraged*. *"Negative attitudes held by (the) government and ignorance of the benefits of population mobility have caused migration to be overlooked as a force in economic development,"* it said.

The report further said *"economic benefits of migration are not always recognised by policymakers and, in fact, two forms of policy have been attempted in India to counter migration."*

"The first response has been to increase rural employment, in an attempt to stem movement out of rural areas. These measures include the recently introduced National Rural Employment Guarantee Programme," it said.

The report, which recommends concentration of production and mobility of people, said, *"Current policies do not allow communities to fully capture the benefits of labour mobility."*



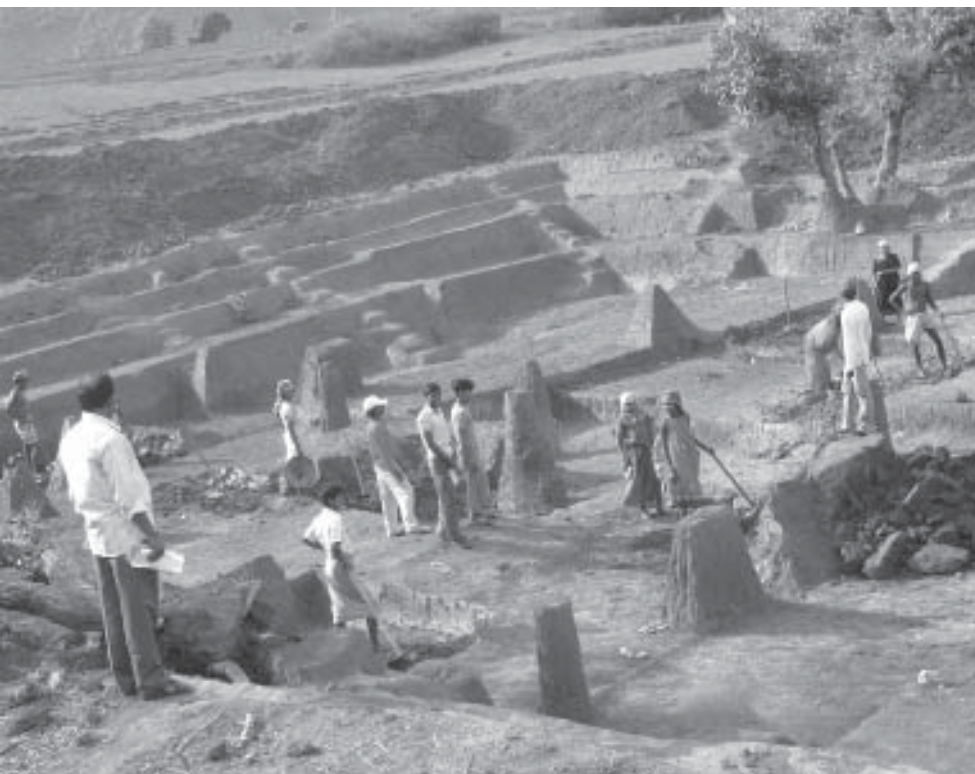
Conclusion

Despite the fact that NREGS has been very successful in a few states, it is not free from critical issues in its implementation. Success in the creation of productive and useful community assets, which can promote livelihood in rural areas, is not possible without people's participation in the planning, execution and evaluation of works. This participation is possible only when processes are transparent and authorities are accountable to the people. Moreover, there was no coordination between the state and centre in implementation of NREGS. So, large amount of money had gone down the drain without the knowledge of the Union Government. Most government officials do not give publicity to the scheme as they want to show that labour is not easily available. The importance of awareness and transparency in implementation of the programme and the participation of the people and their representation in the planning process and implementation are the important elements for successful implementation of NREGS.

References:

World Bank's "World Development Report 2009: Reshaping Economic Geography", www.worldbank.org, Business Standard, www.nrega.nic.in, www.economicstimes.indiatimes.com, www.indianexpress.com, www.business.rediff.com, www.rural.nic.in, www.righttofoodindia.org, www.ihdindia.org, www.mrd.nic.in, www.merineews.com, www.google.co.in

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India Needs Greater Diversification of Crop Patterns

By G. Kalyan Kumar

India needs a long-term farm policy to ensure that the current crop patterns are diversified and use of chemicals and pesticides are gradually discouraged and replaced with environment friendly materials.

Making this demand recently, the Associated Chambers of Commerce and Industry of India (ASSOCHAM) suggested that such a farm policy should prescribe a time period of 3 years to yield desired results and prepare Indian agriculture to deliver radical changes to boost the rural economy.

Dr Swati Piramal, Assocham president said "Such a long-term farm policy laced with enough incentives can integrate farmers with animal husbandry and poultry and introduce short-term commercial crops comprising floriculture, horticulture, cultivation of herbs and spices for raising rural farm incomes".

The proposed policy should also promote farmer-industry interaction by putting in place efficient supply chains to connect farmers to urban consumers and processing industries.

In addition, it should aim at creating a stake for retail stores in farmer prosperity and introduce drip irrigation facilities and intensify focus on crop diversification patterns in order to motivate farmers to replace chemicals with environment friendly materials, to ensure higher yield.

New agricultural management should move farming from tradition to a steadily income generating activity under a long-term policy. He wanted steps to promote corporate farming, using land as a share and business like farming practice.

According to Assocham, the new policy should also address the problem of heavy farm indebtedness. Between fiscal 2000 and 2007 investment in agriculture as a percentage of GDP

has come down from 2.4 to 2.1 percent. The share of private sector in gross investment in agriculture continues to be above 70 percent though it has come down from 82.3 to 72.7 percent.

The share of the public sector has been rising sharply, yet at 27.3 percent it is still inadequate. Dr Piramal wanted the food processing industry to be recognised as hi-tech industry and the government should facilitate establishment of model agro processing centres.

Netherlands Ready

Meanwhile, Netherlands has expressed interest in taking Indian partners onboard for its joint ventures in the Eastern and North-eastern states in sectors like food processing, food retailing, floriculture, horticulture, among others. Hans Wolff, Agriculture Counsellor, Embassy of Netherlands in India recently attended the Agro Protech 2009 in Kolkata. He said, "The East and North-East states in India have growth potential in food processing and related sectors, and Netherlands being one of the global leaders in these sectors, can become investment or joint-venture partners with interested companies."

Naren De, minister for agriculture, government of West Bengal, supported the proposal of the Netherlands Embassy. De emphasised a proper strategy to attain a 4-5 percent growth in the agriculture sector in the short to medium term. "Hybrid, high-yielding seeds and other modern agricultural technology inputs must reach the farmers, and a second green revolution is the call of the hour," De said.

Availability of proper irrigation facilities and reduced dependence on rainwater for agricultural productivity is a top requirement.

Cold Chain Development Summit

By Diptiman Dewan



'Making Cold Chain Development a reality in India: Infrastructure for Value Creation in Horticulture' was the theme of the *Cold Chain Summit – 2009*, held on 9th and 10th of December 2009 at the Imperial Hotel, New Delhi, under the aegis of the Confederation of Indian Industry (CII), in association with the Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India and the Ministry of Food Processing Industries, Government of India.

The agenda of the first day was discussion of the present scenario of Cold Chain in India and the challenges ahead, various technical and other standards, both available and those in the making, schemes available for the sector to be taken benefits of, and the perspectives from the states, sharing the problems and areas of improvement. Panels comprising of stalwarts from the Government, industry and various representatives of councils and boards across the country discussed the topics at length. Day two,

was a technology discussion, with various available technologies in the horizon, and presentations from companies in the Cold Chain and related industries, about enabling value addition and increasing efficiency in the Cold Chain vertical.

It is noteworthy that perishables (comprising of fruits, vegetables, dairy and milk products and marine and aquatic products), are one of the fastest growing segments amongst the food and grocery vertical in India. The growth and success of it depends largely on the Cold Chain development, primarily encompassing the distribution and storage of perishable commodities which require application of controlled temperatures through the entire cycle of the perishables - from their procurement to consumption.

The facts and figures point to the enormous amount of wastage (estimated 25-30 percent of the total production) of fruits and vegetables in India, the largest producer of fruits (63.5 million tonnes), and second-largest producer of vegetables (125.89 million tonnes) in the

world. India is also the largest producer of milk (105 million MT), produces 6.5 million tonnes of meat and poultry, and 6.1 million tonnes of fish. The agricultural sector is experiencing major transformations and growth owing to the impetus from the government, and public-private partnership. The National Horticulture Mission, for example, set up as a part of the India Government's special emphasis on crop diversification, has resulted in a boost in the production of fruits and vegetables in the country.

In the light of the current scenario, the conference discussed need for an effective and economically viable Cold Chain solution to create a total integration of food supply chain linkages from the production (farm level) to consumption centres (end customer or the retail level). This will, in turn, reduce physical wastage and loss of value of perishable commodities.

The Chairman of CII initiative on Cold Chain Infrastructure Development and Chairman of the Board, Ingersoll-Rand India, Mr. Daljit Mirchandani, in his address, started with the challenges that the industry faces. He said that protein shortage and the wastage of perishables are the most important challenges facing the country today, as one looks towards the future

Current scenario of cold chain in the country can be summarised as follows:

- The perishable products transaction volume in India is estimated to be around 230 million MT
- Fresh fruits and vegetables comprise maximum share of this total volume amounting to 56.5 percent followed by milk segment occupying 39.1 percent of the total share.
- The fresh meat and marine sector comprises nearly 3.1 percent of the share followed by poultry, ice cream and vaccines which occupy almost 1 percent of the share.
- As per industry estimates approximately 104 million MT of perishable produce is moved in the country in a year, out of which around 100 million MT goes through non-reefer mode and remaining four million MT goes through reefer transport. Out of this approximately two million MT of this load is for export markets, one million MT enters the retail sector and becomes available in consumer markets. The remaining one million MT enters the cold storages and is stacked as inventory for further distribution.
- Value wise, the reefer transport business in India is estimated at about 1000 - 1200 crore which includes reefer transportation demand for export as well as domestic purpose.
- It is estimated that about 25000 vehicles are involved in perishable products transportation of which dairy (wet milk) constitutes about 80 percent, thereby leaving only about a fleet of 5000 refrigerated transport vehicles for all other categories put together.
- Cold store capacity in India is expanding due to public and private investments, the integrated cold chain network in India is almost non-existent with reefer transportation and stand alone cold storage facility, both working independently. Only a few integrated cold chains are established in India, including two serving the dairy industry (Gujarat Cooperative Milk Marketing Federation, and Mother Dairy Foods Processing Ltd), one serving the franchises of McDonald's India, and Snowman Frozen Foods Ltd, which operates the only countrywide cold storage and refrigerated transport network.
- Most cold storage and refrigerated transport capacity is operated by small, non-integrated firms that do not make use of state-of-the-art technology or management practices.

The seminar was inaugurated by K.V. Thomas, Minister of State for Agriculture, Government of India, and was attended by Mr. T Nandakumar, Secretary (Agriculture), Government of Agriculture and Mr. Ashok Sinha, Secretary of Ministry of Food Processing Industries, Government of India, besides other dignitaries from the industry and Agricultural Boards in the country.

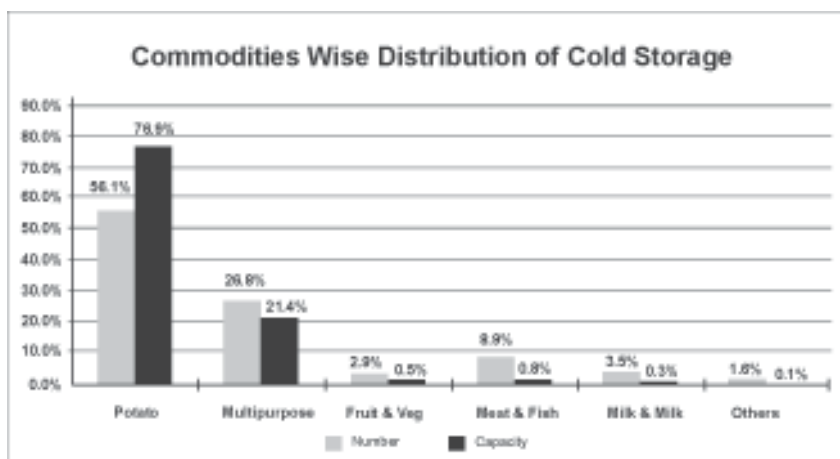
In his address, the Minister lauded CII for holding the conference with the help of the ministries, at an appropriate time. He said that the perishable industry in the country is one of the largest in the world, having a share of around 11 percent of the perishables and 15 percent

of all fruits in the world. He stressed that the launch of the National Horticulture Mission will augment the growth, and ensure an end-to-end approach having backward and forward linkages. The mission will also help bring reserves, production, post harvest management processes, and marketing under one integrated umbrella. He said that the development of direct marketing will provide better prices to the farmers while providing better availability and quality of produce to the end-consumer. The government will also be setting up state-of-the-art market complexes for perishable fruits and vegetables in a private-public participation mode. The

Government is also in the process of identifying areas for setting up of modern improved warehouses and implementing other important measures to enable farmers avoid distress-sales. The minister urged that the private sector has a great role to play in the growth and development of the sector and in Cold Chain development, and should work as partners for development of the same. The Government would on its part, strive to provide as much help as possible.

The Chairman of CII initiative on Cold Chain Infrastructure Development and Chairman of the Board, Ingersoll-Rand India, Mr. Daljit Mirchandani, in his address, started with the challenges that the industry faces. He said that protein shortage and the wastage of perishables are the most important challenges facing the country today, as one looks towards the future. Whatever one does, the industry requires an economically viable solution that will also have energy efficiency and will be scalable. Without these fundamentals in place, no solution will really address the problem. Going back to the beginning of the Cold Chain initiative, he said that it was in 2007 that CII and Ministry of Agriculture visited four states to judge the ground situation instead of relying on desk data, and to determine what the states' plan of development of horticulture was and the underlying technology interventions for both stationary and mobile applications.

Cold store capacity in India is expanding due to public and private investments, the integrated cold chain network in India is almost non-existent with reefer transportation and stand alone cold storage facility, both working independently



“At that juncture there were no existing standards and hence it became imperative that minimal mutual technical standards be developed keeping in view the farm sector, the Government and the industry, without bias,” said Mr. Mirchandani. He also assured the Government that the industry would work with timelines and set an action plan to be able to judge the progress of

this summit.

The Summit also laid the broad reasons why, while on the one hand, the necessity for the Cold Chain is well established, the existing infrastructure is under-utilized and has financial problems, on the other hand, which are as follow:

- High Capital Investment;

The perishable products transaction volume in India is estimated to be around 230 million MT

- Low level of affordability owing to high operational costs;
- Highly seasonal nature;
- Problems of optimization in reefer transport.

A synopsis of the policy and initiatives from the Government for promotion of investment in this sector include:

- Tax Concessions – which ensures that an organisation involved in the Cold Chain business will be eligible for 100 percent deduction of profit and gains for five years; Companies setting up export oriented infrastructure under EPCG scheme is entitled to import plant and machinery at zero percent import duty subject to meeting export obligations; and,
- Financial Assistance – under National Horticultural Board, National Horticultural Mission, Ministry of Food Processing Industries (MOFPI) and Agriculture and Processed Food Products Export Development Authority (APEDA), all of which have been set up towards this end, by the Government.

It was also announced in the Summit that Mr. Bijay Kumar, Managing Director of National Horticultural Board, Ministry of Agriculture, Government of India, and his colleagues from NHB and the industry put together a standard in an inclusive model, which is slated to become a reality and come into force by early 2010.

The major mission of the summit was met, and the stakeholders had a major takeaway of increasing awareness about the concept of integrated cold chain and its importance in becoming and retaining a globally competitive position in the world in terms of perishables for India.

Particulars	Year 2012-13				Year 2015-16			
	Prod.	Req. Capacity**	Add Capacity Req.	Est. Inv. (Rs. in Cr.)	Prod.	Req. Capacity**	Add Capacity Req.	Est. Inv. (Rs. in Cr.)
Apple	2,575	386	346	1,558	2,958	1,183	1,143	5,144
Other long term storage fruits (eg. Citrus etc.)	9,379	1,407	1,287	1,544	10,581	4,233	4,113	4,935
Other Fruits	64,369	9,655	9,655	1,352	71,330	28,532	28,532	3,994
Total	76,293	11,444	11,284	4,454	84,820	33,928	33,768	14,073
Potato	40,545	26,760	8,210	6,624	44,600	35,680	17,200	13,760
Other long term storage Veg. (eg. Carrot etc.)	650	98	68	54	750	300	270	216
Other Veg.	107,240	16,086	15,586	2,182	118,117	47,247	46,747	6,545
Total	146,639	22,296	3,216	8,860	163,808	83,227	64,217	20,520
Multipurpose Storage		8,424	1,944	3,888		9,720	3,240	6,480
Transports Containers		36,052	28,882	4,833		91,195	84,025	14,000
Grand Total				22,035				55,074

* Production & CS capacity in 000 MT

** Estimation targeting 15% of total production except Potato (66%)

*** Estimation targeting 40% of total production except Potato (80%)

Source: GAPL Analysis



AFC Foundation
Presents

A Seminar on

SOCIAL RESPONSIBILITY OF CORPORATE SECTOR IN RURAL TRANSFORMATION

21st JANUARY 2010

CONTEXT

In this era of inclusive growth, Corporate Social Responsibility (CSR) has become an integral part of corporate agenda to show its profound social outlook and urgency to tackle social issues arising out of 'operation business'. The classical view of businessmen and enterprises restricting themselves to their core job of doing business is gone. That view is obsolete as more and more enterprises world over are viewing CSR in a holistic form.

The social commitment of CSR manifests in many forms—poverty alleviation, skill development for the under privileged, reduction of carbon emission, community development, creating opportunities for weak, women and children. In the words of noted management expert CK Prahalad, "taking care of the bottom of the pyramid is an alternate way of creating new demand through empowerment and purchasing power."

More than 70% of India's population lives in villages with Agriculture as their prime forte for livelihood. Although being the prime producers of fruits and vegetables and cereals, our rural India is till starving and seeking towards responsible bureaucrats and volunteers for solutions to transform their lives. CSR in this context has a great role to play herewith.

Much of poverty is caused by injustice and its alleviation requires economic, social and structural interventions. Poverty alleviation has a global agenda. It is a collective effort. Internationally, global agencies like UN and OECD have provided useful guidelines on CSR. From monetary assistance to forging partnerships with organisations working on development, humanitarian aid, policy, advocacy and public education programmes. CSR assumes many facets at the grass root level.

OBJECTIVE

The seminar on "SOCIAL RESPONSIBILITY OF CORPORATE SECTOR IN RURAL TRANSFORMATION" will throw up a number of solutions soaked in different perspectives, examining the effective ways and means to advance the benefits of development to the rural and urban poor with special focus on sustainable agriculture.

The target audience will comprise Corporates, Donor agencies, International organizations, Financial Institutions, Private Sectors, PSUs, NGOs, voluntary organizations, academics in development cooperation and any other stakeholder having a genuine interest in these topics. The CSR sector offers huge opportunities to make a difference not only through monetary contribution but also through appropriate programmes and action plans.

Sponsorship Opportunities are Available

For further details, please contact:

Dr. Vandana Tatra (Mob: 9718235701,

Email: vandanatatra.afc@gmail.com)

Ms. Ritu Khanduri, Event organiser

(Mob: 9891173723, Email: ritu@lbassociates.com)

TAKE AWAYS

- Role and Scope of CSR
- A Wide Spectrum of Perspectives
- Possible Areas of Action
- Available Programmes
- Avenues of Partnership
- Strategy for Execution
- Opportunity for Networking

WHO SHOULD ATTEND

- CSR/ CORPORATE PLANNING heads, Managers and executives who are involved in implementing and evaluating the CSR PROGRAMMES in their individual organizations.
- NGO'S & DONORS and other funding (International & National) and implementing agencies.
- Govt. policy makers (Ministries of Corporate, Rural, Agriculture, Heads of cooperatives / SHG's / Pachayati Raj institutes.
- Educational Institutes / Fellows and Students pursuing Masters in Social Work/ Rural Development/Agriculture / Business Management

ADMINISTRATIVE DETAILS

Date: 21st JANUARY 2010

Venue: Galib Conference Hall, SCOPE Complex, Lodhi Road, New Delhi

Regi Timings: 9am - 9.30am on 21 January 2010

Seminar Timings: 9.30am - 5.30pm on 21 January 2010

PARTICIPATION FEE*

(in Rs.) Per participant

An Early Bird discount of Rs. 500* per participant can be availed by registering 15 days before the seminar.

Category	For 1-2	3 & Above
Indv./Corporates/ Agencies etc.	2500	2200
Students and Academicians	1500	1200

* This includes seminar kit, material, luncheon & other expenses for the non residential seminar. Nomination fee is non-refundable. However, participation by a substitute is allowed.

* Remittance of fee in advance is Compulsory. The nomination will be confirmed only after receipt of nomination fee.

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PM Calls for Better Water Management for Agriculture Growth

By G. Kalyan Kumar

Prudent management of India's water resources is crucial to ensure its rational and sustainable use. For this, action is required at many fronts and coordination across different sectors of the economy.

This was the message of the Prime Minister Dr. Manmohan Singh's inaugural address at the fifth 'Asian Regional Conference of the International Commission on Irrigation and Drainage on improvement in efficiency of irrigation projects through technology up-gradation and better operation & maintenance' held in New Delhi on 10 December 2009.

Water Conflict

Dr. Manmohan Singh noted that "just

as the conflicts of the 20th century were often over the sharing of scarce petroleum resources, those of the 21st century will probably be over the sharing of water. Some estimates suggest that world food demand could double in the next two decades. That will translate into a huge demand for water. Further stress on scarce water resources will be caused by population growth, the majority of which will be dependent on agriculture industry and will lead to urbanisation. Nowhere are these challenges more pressing than in Asia".

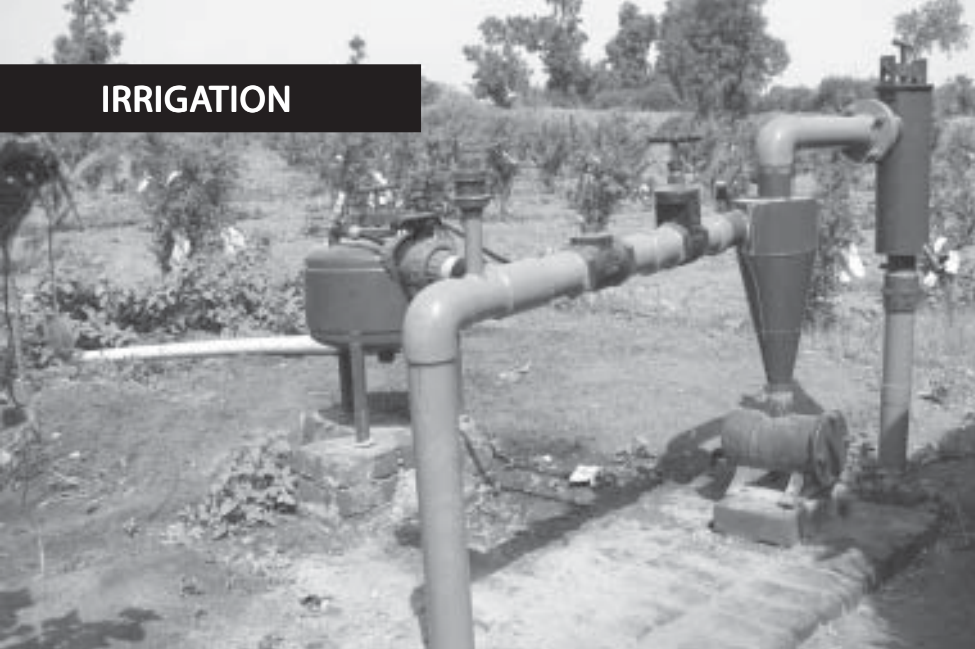
The Prime Minister observed that "efficiencies of surface water systems can be improved from the present level of 35 to 40 percent to about 60 percent and that of groundwater systems from

the existing 65 percent to about 75 percent. Similar situations prevail in most developing countries in Asia and we have a great deal to learn from each others experience. Utilization of created irrigation potential is another crucial issue. In India only 84 percent of the created irrigation potential has been utilised thus far. Efficient use of crop water can increase the gross irrigated area, either by increasing the irrigated cropped area or the intensity of irrigation".

Second Green Revolution

Dr. Manmohan Singh said that the target of doubling the annual rate of growth of agriculture in India to 4 percent during the Eleventh Plan Period of 2007-2012





is a top priority for the government. "To achieve this, we are sharply increasing public investment in agriculture. The most important area for investment in agriculture relates to the provision of water and its efficient use. In fact, we hope to be able to add about 16 million hectares to the irrigated area during the Eleventh Five Year Plan," the Prime Minister added.

"The first Green Revolution came from innovations developed in the public sector. The second Green Revolution will come from technologies developed in the private sector. It is therefore essential that private investment and innovation be incorporated within a broader vision and strategy of development in the agriculture and water sectors. We need to increase investment in agricultural technologies, particularly those related to improved crop practices, water savings, design of storage structures and more efficient farm implements," Dr. Manmohan Singh said.

It is equally important that developed technologies reach the farmers, particularly the poorest farmers. "I am very happy that the Ministry of Water Resources has launched a Farmers' Participatory Action Research Programme" through Agriculture Universities and Agriculture Research Institutes to demonstrate available technologies for increasing productivity and profitability of agriculture. Such programmes need to be expanded," the Prime Minister said.

Climate Change

The spectre of climate change will also

have an unpredictable consequence on the water regime. Various studies point towards its adverse impact on the hydrologic cycle that could result in the intensification of both temporal and spatial variations in precipitation.

India is already struggling every year with floods in one part of the country and droughts in other parts.

"This year, we had severe floods in Karnataka, Andhra Pradesh and elsewhere. At the same time around 300 districts of the country were declared as being drought affected. These imbalances will only intensify with climatic distortions that are now on the horizon. Moreover, there are concerns that climate change may also adversely impact on the groundwater table and its quality, affecting thereby productivity of the cropping systems," the Prime Minister said.

National Water Mission

"To address these complex inter-relationships of the water sector to development and growth, we have set up a National Water Mission, which is one of the eight national missions that are part of our National Action Plan on Climate Change launched recently by the Government of India," Dr. Singh said. The Prime Minister said that the main objective of National Water Mission would be integrated water resource management by conserving water, minimizing wastage and ensuring its more equitable distribution both across and within various states of our union. Its mandate will cover the following:

- Placing of a comprehensive water data base in the public domain;
- Assessment of the impact of climate change on water resources;
- Promotion of citizen and State actions for water conservation, augmentation and preservation;
- Focused attention to over-exploited areas;
- Increasing water use efficiency by at least 20 percent; and,
- Promotion of basin level integrated water resource management.

The Water Mission will also seek to develop new regulatory structures, combined with appropriate entitlements and pricing of water. It will seek to optimize the efficiency of existing irrigation systems. Incentive structures will be designed to promote water-neutral or water positive technologies, recharging of underground water sources and adoption of large-scale irrigation programmes that rely on sprinklers, drip irrigation and ridge and furrow irrigation.

Pawan Kumar Bansal, the Union Minister of Water Resources in his address said, "Sustainable development of water resources and its most efficient use is a critical challenge before us today".

Dr. Chandra Madramootoo, President, International Commission on Irrigation and Drainage, also addressed the conference. About 700 professionals from 45 countries including India participated in the conference to deliberate on issues like: Modernization of public/state operated irrigation system and services; Public Private Partnership in irrigation development and management; Integrated approach in agricultural drainage; Capacity Development for modern irrigation management; Impact of climate change on water resources availability and crop productivity; and, legal aspects in sharing of water resources.

The PM concluded his speech by saying, "We should work together, learn from each other and harness all our scarce resources to give substance to the slogan *"More Crop and Income per Drop"* .

AGRI NEWS

Female farmers take root



A few customers have looked at Elaine Lemmon - all 5-foot-6 and 120 pounds of her - and made an assumption.

They figure she couldn't possibly produce, by herself, all the crops she sells at her farmers' market stand.

"Who helped you grow all this" they ask?

"Just me," she says.

The 33-year-old is the primary operator of her own farm. And she's not the rarity some might think she is.

Farming by women has increased rapidly this decade - throughout the US and in York and Adams counties.

In a profession stereotypically defined as male, about 30 percent of today's farmers are women, according to the U.S. Department of Agriculture. The number of females working the land increased 19 percent between 2002 and 2007.

Since 2002, the number of acres farmed primarily by women in York County increased 53 percent, although the number of female farmers in the county decreased slightly.

In Adams County, acres farmed primarily by women increased 75 percent and the number of female farmers jumped 32 percent.

The explosion of female farmers during this decade coincided with surging interest in local and organic crops sold direct from farmer to consumer, said Carolyn Sachs, a professor of rural sociology and women's studies at Penn State.

At her Everblossom Farm in Reading Township, Adams County, Lemmon works 14 acres, growing organic fruits and vegetables where her father used to harvest grain.

Vegetables generate more profit per acre than grain or livestock. So Lemmon needs less capital and land to make a living.

"Many women have been able to get into farming that way," Sachs said.

Lemmon started her Community Support Agriculture program in 2004. This year, 66 families purchased crops from her, and she hopes that will expand to 100 families next year.

Susan Daly, 42, has created an even more specific niche for her farming passion.

She sells cage-free eggs and heirloom vegetable plants at her micro-farm in Chanceford Township.

"The world has shrunk," she said. "People pay more attention to . . . where their food is coming from."

Changes in farm society have also encouraged more daughters to join the family business alongside their brothers.

"It used to just be the older son got the farm," Sachs said. "Then, it was whatever son was most interested got the farm. Now, it's more negotiated. Now, if the girls are raised on the farm, and they're interested, they have a much better chance of inheriting the family farm."

Julie Flinchbaugh, 25, became a co-owner of her family's 200-acre Hellam Township farm a couple of years after graduating from Penn State with a horticulture degree and a minor in agribusiness. Life as a female farmer doesn't feel revolutionary to her. Several of her female classmates also planned to return to the family farm, and her parents never treated her differently from her brothers.

"It was always an open door," she said. "They did not have different expectations for different kids."

Lemmon said the female farmers she knows didn't enter a demanding occupation to make some kind of political statement, but because they feel a passion for agriculture.

But don't get her wrong, she enjoys defying the American farming stereotype of a big sturdy man in overalls.

"It's fun for the small shock value it carries, being a woman," she said. "But really that's not the thrill of it; it's caring about the land and the community and raising good food and having people tell you they like your food. That's what I strive for. The novelty of being a woman is a sidelight."

Facts about female farmers

- About 30 percent of all farmers - in York County and nationally - are women.
- Women are more likely to grow fruits and vegetables or raise goats and sheep.
- Women are less likely to grow grains or raise cattle and hogs.
- Female farmers are most common in the Northeast and West Coast.

Source: U.S. Department of Agriculture and Carolyn Sachs, professor of rural sociology and women's studies at Penn State/Evening Sun

Montek Ahluwalia wants subsidies diverted to agricultural and rural infrastructure

Deputy Chairman of Planning Commission of India Montek Singh Ahluwalia on Thursday emphasized that electricity and fertilizer subsidies should be diverted to agricultural and rural infrastructure to raise public investment in agriculture and strengthen its foundations.

Dr. Ahluwalia said this while inaugurating the three-day 69th Annual Conference of Indian Society of Agricultural Economics (ISAE), organized by Punjab School of Economics of the Guru Nanak Dev University Amritsar.

On this occasion, Ahluwalia highlighted the need for improvement in land quality, input management, improving access to water, watershed management, improved road connectivity and extension system in agriculture. He also brought out the role of structural changes in seed industry and growth of biotechnology and optimization of crop-mixes to encourage scientifically feasible farming in the country, which can more than double the agricultural output. He said that four percent growth rate of agriculture, as envisaged in the 11th Five Year Plan is achievable even when the country witnessed a drought this year.

Dr. Ahluwalia further stated that leasing out of land through appropriate legislation as many small and marginal farmers may wish to quit agriculture for better opportunities outside. He appreciated Indian Society of Agricultural Economics for undertaking research activities in agriculture and highlighting the problems and required priorities of agriculture.

The conference was attended by renowned agricultural economists and policy makers 300 delegates from different

parts of the country including from agricultural universities, agricultural departments of State Governments, officials from Union Ministry of Agriculture, members of Agricultural Price Commission, former Vice-Chancellors and directors of various institutions.

Dr. D.K. Marothia, the Conference President, while delivering his presidential address brought out the need for decentralization of natural resource management in India. He emphasised that Panchyati Raj Institutions (PRIs), user associations, stake-holders and NGOs be given the property rights to manage natural resources in optimal manner. He also hinted at the effect of climatic change on agriculture and other natural resources and made an impassioned appeal to conserve the environment.

Dr. (Mrs.) Isher Judge Ahluwalia, Chairperson, Indian Council for Research in International Economic Relations, Chairperson of Committee for Urban Infrastructure and the Guest of Honour for the inaugural session, brought out the linkages between agriculture and industry in the context of Punjab State. She emphasized the need for cultivating the synergies through development of agro-processing, biotechnology and growth of rural and urban sectors.

A book titled "Managing Rural Finance in India" edited by Dr. G.S. Kainth, Director, Guru Arjan Dev Institute of Development Studies, Amritsar was also released on the occasion.

Source ANI

Farmers outsmart nature, adapt to weather shifts

Farmers are also planting more flood-tolerant rice, giving them two harvests a year where they once had one, and diversifying from traditional crops to vegetables such as peas, spinach, tomatoes, onions and potatoes

As world leaders and top scientists in Copenhagen debate how to deal with climate change, farmers a world away in flood-prone areas of northern India are taking it into their own hands to adapt to shifts in the weather.

For decades, inhabitants of Uttar Pradesh state have been witnessing erratic weather, including increasingly intense rainfall over short periods of time.

The rain, combined with heavy

mountain runoff from nearby Nepal, which is also seeing heavier-than-usual rains, has inundated villages, towns and cities in the region.

The flooding often results in thousands of people being displaced, homes damaged and possessions destroyed. It has also brought major livestock and crop losses for many of India's poorest farmers.

But farmers in Manoharchak village, on the banks of the Rohini river, are outsmarting nature and using simple but effective techniques to deal with negative impacts of climate change.

"For the last three years, we have been trying to change our ways to cope with the changing weather," said Hooblal



Chauhan, a farmer whose efforts to adapt have included diversifying his farm production from traditional wheat and rice to incorporate a wide variety of vegetables.

'We are doing what we can to help ourselves'

"I don't know what those big people in foreign countries can do about the weather, but we are doing what we can to help ourselves," said the 55-year-old from Manoharchak, situated 56 miles (90 km) north of the bustling city of Gorakhpur.

Villagers in Manoharchak have raised the level of their roads, built homes with foundations of up to 10 feet (3 metres) above ground, elevated community hand pumps and created new drainage channels.

Supported by the Gorakhpur Environmental Action Group - a research

and advocacy organization interested in environmental and resource management issues - farmers are also planting more flood-tolerant rice, giving them two harvests a year where they once had one, and diversifying from traditional crops to vegetables such as peas, spinach, tomatoes, onions and potatoes.

The diversity of crops, they say, is particularly beneficial when their wheat and rice fail. And the vegetables give them not only a more varied and nutritional diet but help in earning an income when excesses are sold.

Increasingly intense rain means farmers in the region also have to contend with water-logged soil. Vast swathes of fertile land in the area have been turned into massive ponds.

The water-logging is a serious problem, experts say, and is caused not only by the low-lying terrain but by build-ups of

silt which restrict water flows, leaving farmers unable to work their land for months until the water has drained.

But 50-year-old widow Sumitra Chauhan, who grows about 15 different vegetables as well as rice and wheat on her two-acre plot, says she has learned ways to overcome the problem.

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Source: Reuters/livemint.com

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AGRI TECH NEWS

All India Coordinated Research Project on Ergonomics and Safety in Agriculture

Ergonomics is the scientific study of relationship between a person and his/her working environment. The term environment includes his/her tools and materials, his/her method of work, ambient conditions and physical environment of work, and also the organization of work. In most of the developing countries human workers constitute as one of the important sources of farm power. Besides, they also operate animal drawn equipment, tractors, power tillers and self-propelled as well as power operated machines. Therefore, in agriculture, the application of ergonomics can help in increasing the efficiency and thereby productivity of the workers without jeopardizing their health and safety.

Farm mechanization along with increased application of other agricultural inputs such as seeds, fertilizers, pesticides, insecticides etc. has enhanced the productivity and

production on farms. But on the other hand it has also led to increased casualties and injuries due to accidents while carrying out different agricultural activities. About 6.5 percent of the power used in crop production and related activities in the country is contributed by about 241 million workers, of which about 42 percent (i.e. 101 million) are female workers. At present, the agricultural machinery population in the country is estimated at about 150 million, which includes about 3.5 million tractors and other self propelled equipment. In addition, there are more than 400 million hand tools such as pickaxe, spade, hand hoe, sickle etc., which are extensively used by agricultural workers. Thus, the human worker play a major role in country's agriculture and due attention needs to be given to their capabilities and limitations during design and operation of various farm equipment so as to get higher productivity, enhanced comfort and better safety. Therefore, considering

the importance of ergonomics application as well as the vast number of people involved in agriculture, the All India Coordinated Research Project on Ergonomics and Safety in Agriculture (formerly known as AICRP on Human Engineering and Safety in Agriculture) was started by ICAR during the year 1996. The Coordinating Cell of the project is at CIAE Bhopal and there are seven cooperating centres those being located at CIAE Bhopal, TNAU Coimbatore, OUAT Bhubaneswar, PAU Ludhiana, MPUAT Udaipur, NERIST Nirjuli and IIT Kharagpur. Three new centres are being started in XI Plan, those being at Dr. BSKKV Dapoli, CSKHVKV Palampur and CAEPHT Gangtok to address the productivity, comfort, occupational health and safety issues of agricultural workers in hill agriculture and horticulture.

Source: ICAR

Food processing can increase farmer's income many times

Farmers can increase their income many times by adding value through processing of food, said Dr S.K Nanda, Project Coordinator (PHT), Central Institute of Post Harvest Engineering and Technology (CIPHET), on inaugural function of training on "Post Harvest Technology for Rural Catchments" for farmers sponsored by Agricultural Technology Management Association (ATMA), Taran Taran.

The five-day training program will cover subjects of grading and milling of grains, milling technology for pulses, preparation of snacks food, processing of onion/ginger, technology for making green chili powder, soyabean processing and storage and processing of other crops.

Speaking on the occasion, Dr S.K Nanda said that from same crop one can earn more by processing of food. He said that same food was sold in the market at high cost after adding value through processing. "Farmers should sell products instead of produce," he advised. CIPHET Head Transfer of Technology (ToT) Dr Deepak Raj Rai said that they would also call experts from other institutions during the training program to further enhance knowledge of farmers and assured that CIPHET would be providing them all kind of help.

On the occasion, farmers shared their views regarding areas of agriculture they want to improve. Most of them showed

interest in knowing more about soybean processing, bee keeping, storage, cultivation of mushroom. They were given presentation regarding mandate of CIPHET and various works undertaken by the institution since its inception. Dr Sangeeta Chopra, Senior Scientist CIPHET, coordinated the talk. As many as 20 farmers from Taran Taran district are participating in the training.

Source: CIPHET

New Rice Variety for softer Idlis

What if your favourite steaming hot idlies, the famous South Indian break-fast dish, could be made more tastier and the flour yeild increased with a new rice variety developed by TN Agriculture University college, officials said.

Trials of "TRY (R) 3" developed by the Anbil Dharmalingam Agricultural College and Research Institute of TNAU had shown that idlis prepared using the rice were much softer and tastier and the flour yield increased by 20% compared to conventional varieties.

According to college dean G. Kathiresan, the rice was of coarse grain in nature and would have a 120-135 day cultivation period.



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