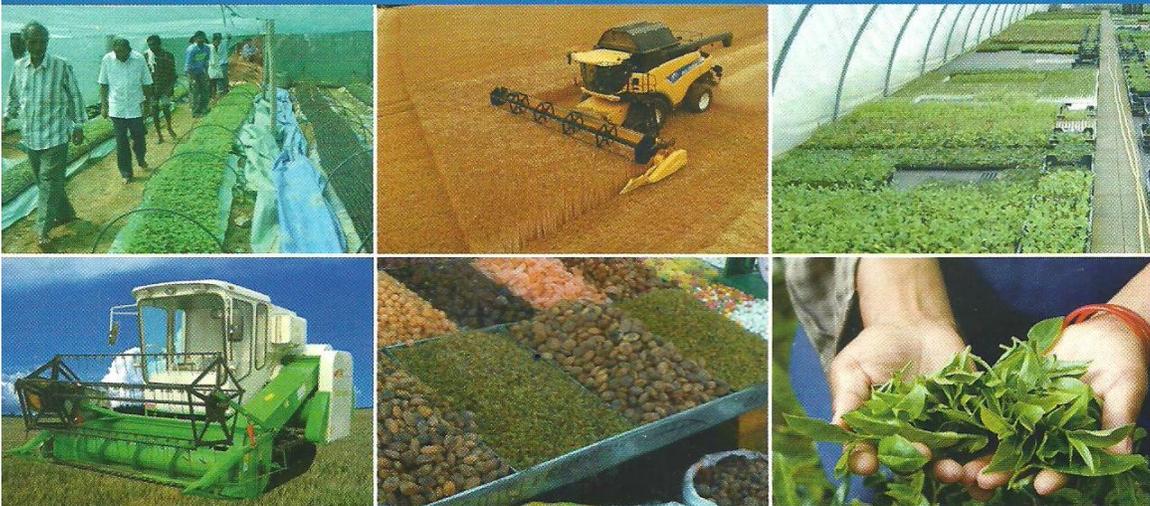


Highlights and Recommendations

NSFI
Global Agri
CONNECT 2011
Conference cum Exhibition
October 14-16 New Delhi

Transformational Changes in Indian Agriculture: The Next Decade



NSFI



Inaugural Session



From left to right
Dr. KD Kokate(DDG Extension, ICAR), **Mr. Sanjeev Asthana**(NSFI),
Mr. Harish Rawat(MoS, Agriculture & Food Processing Industries),
Dr. HS Gupta(Director, IARI), **Dr. Satender Arya**(NSFI)

12. Policy Recommendations:

Highlights and Recommendations

Transformational Changes in Indian
Agriculture:
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Founder and Chairman, National Skills Foundation of India

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Transformational Changes in Indian Agriculture: The Next Decade

Highlights

NSFI in collaboration with IARI organized Global Agri Connect 2011 at Dr B P Pal Auditorium, IARI, New Delhi from October 14th to 16th, 2011. The Co-Organizers were National Horticulture Mission (NHM), National Committee on Plasticulture Applications in Horticulture (NCPAH), North East Regional Agriculture Marketing Corporation (NERAMAC), Ministry of Development of North East Region, (DoNER) National Seed Association of India, (NSAI) Pesticide Manufacturer and Formulators Association of India (PMFAI), National Bee Board (NBB) & Retail Association of India (RAI). The theme of the event was "Transformational Changes in Indian Agriculture; the Next Decade". The background and issues raised at the conference are as follows:

Background

With large bank of cultivable land (160 million hectares), adequate water resources and favourable climate condition suited to most crops, India can be the biggest agriculture producer in the world. In spite of the heavy investment the Status of farmer has not improved. Rising uncertainty in farming is forcing farmers out of agriculture to join the unorganised sector. The issues at hand are:

- Supplementing farmer's income through engagement in farm allied activities like livestock, beekeeping, poultry and diversification to high value crops like cultivation of fruits and vegetables
- Address the concerns of small and marginal farmers
- Shift to cost efficient and novel technologies like precision farming
- Strengthening the input delivery mechanism and farm extension through innovation
- Development of modern supply chains and organized retailing, all as a part of one integrated agri-system in the form of value chains
- Skill development for farmers to be able to respond to the changing market scenario
- Creating a safety net for farmers in terms of credit, insurance and identification measures
- Revamping policy and a new outlook towards emerging regions like North East

Apparently, India would have three objectives in transforming agriculture: Boost Farm Productivity, Increase Smallholder Incomes, and Ensure Food and Nutrition Security. As per the Mid Term Appraisal report of the 11th plan Government has to work on reforming the three "I"s: Investment, Incentives and Institutions to bring about transformational changes in Agriculture. Reforming incentives in the form of competitive pricing of agricultural produce through delinking support price from procurement price, abolition of all levies (on rice or sugar) and free movement of goods across the country would spur private sector participation and attract investment.

The country has been debating this for a number of years, but the system remains full of strangling controls dissuading any major private sector investments in Agri value chain. Agriculture is a way of life in India with farming mostly subsistence and not in the form of a commercial enterprise. The process of transformation entails a multi pronged approach. There is a need to address technological deficit on farm, prompt extension system to educate farmers about latest technology, exploring ways to strengthen agricultural finance, tackling manpower deficit through skill building, an efficient value chain so as to curb wastage of produce and for appropriate returns to farmers. Change happens through intensive thinking, brainstorming, learning and unlearning. Global Agri Connect 2011 was successful in igniting a discourse around the future path of Indian Agriculture.

Conference Focus:

The focus of the conference was to trigger debate on crucial issues shaping agriculture in the next decade, highlight the drivers of change and showcase new ideas, innovations and success stories happening in agriculture not only in India but across the globe. The sessions flagged critical issues at farm level, related to policy and for future development of agriculture.

Themes:

In order to address the above issues, 52 presentations were made in 12 sessions as listed below:

1. Role of Small Scale Producer in Agriculture: Indian and Global Scenario
2. Enhancing Farm Productivity: New approach towards Farm Inputs & Irrigation
3. Water Usage and Exploitation: Challenges for future

4. Creating Demand Driven Research Agenda & Innovations in Agriculture
5. Revamping Agriculture: Farm Mechanization
6. Agriculture Policy Making: Paradigm shift from Traditional to Market Driven Reforms
7. Social Security For Farmers: Emerging Challenges for Next decade
8. Skill Development: The unfolding challenges
9. Supply Chain Management: Emerging Challenges for the Off Farm Sector
10. Access to Markets
11. North East: Changing Trend
12. Growing importance of Allied Sector

KrishiGosthi:

In the Global Agri Connect 2011, "Krishi Gosthi" was organized at the Kisan Mela ground in IARI. The theme of the interactive session was use of advanced & new technologies in Agriculture and Horticulture. Farmers were oriented about new technologies in agriculture through expert sessions from Scientists and Research Workers of IARI. The most important part of Krishi Gosthi was experience sharing of innovative farmers and Presentation of award to innovative farmers. There were open demonstrations of novel technologies in Plasticulture like Drip Irrigation, Protected Cultivation, Pond Lining and Agri Equipments and Machinery for the benefit of farmers.

Exhibition:

An exhibition was also organized along with the Krishi Gosthi. The exhibition was bifurcated into three main arena, viz., Agri Horticulture Technology of North Eastern States, Use of Plastics in Agriculture and Advanced technology development in Agriculture and Horticulture. The exhibition showcased Horticultural products from North East, modern techniques like Drip Irrigation, Weather forecasting and use in

Agriculture, Advanced Food Processing Technology, Flower Cultivation and its importance and usage of ICT in agriculture. There were 78 stalls in three pavilions: North East, Plastics and Agriculture & Horticulture. There were open demos of TAFE, Jain Irrigation, EPC and CIAE.

Participation: 320 delegates from Corporate Sector, National and International Academic Institutions, Government, Department & Not for Profit Organizations participated. International Trade delegations also took part in the conference. Active participation of nearly 16,000 farmers in the "Krishi Goshti" held simultaneously with the conference was overwhelming.



Recommendations:

Inaugural Session:

Giving the inaugural address Shri Harish Rawat, Minister of State for Agriculture and Food processing Industries emphasized the findings of economic survey. As per economic survey 2011 agriculture has achieved 5% growth. The credit goes to all the stakeholders, viz, Extension Workers, Agri Input Industry and Research.

Rain fed agriculture which accounts for 56% of total area has to be given a special focus. Traditional knowledge and local planning must be utilized to develop water harvesting techniques.

Technology is the engine of knowledge economy. There is need for innovation in agriculture. Climate change can be tackled with modern technology.

Retention of youth in agriculture is imperative. Need to make agriculture attractive and viable. Skill development of youth and encouragement to innovative Agri business models is desirable.

Development of secondary agriculture, food processing and stream lined supply chain is required to make agriculture productive.

Small holder farmers, backbone of Indian economy have little marketable surplus. Cooperatives can be developed as producer organizations. Basic infrastructure through rural connectivity, godowns and market infrastructure needs to be developed for linking small farmers to market.

Private sector investment is looked upon to strengthen agriculture. NSFI has to be congratulated for organizing the conference at a very timely moment.

The inaugural session was also addressed by Dr. HS Gupta, Director, IARI; Dr KD Kokate, DDG (Extension) and Mr. Sanjeev Asthana, Chairman (NSFI).



Technical Sessions

Session I: Role of Small Scale Producers in Agriculture: Indian and Global Scenario

Session I, with Shri Pravesh Sharma, MD, SFAC as chair was designed to put forward the issues of small farmers at national and global level to the forefront. The discussions focused around the following topics:

- High Value Agriculture: Way to supplement farm income in light of decreasing farm size
- Affirmative Action Measures in Agriculture: Next practices for strengthening small holders in India

- Small-scale producers and market development in developing and emerging economies
- Small Farmer & Linkages to the Market
- Small Scale producer in Globalized Market

The deliberations centered on creating an enabling environment and appropriate support system for small farmers in India. **Flag ship Issues:**

- Fragmentation of holdings: The percentage of marginal farmers (0.01 – 1.00 ha) has gone up from nearly 38 % in 1953-54 to about 70 % in 2002-03 (NCEUS, 2008)
- Putting small-scale farmers at the centre of delivering on:
 - Securing supplies and food security in an uncertain world – 50% more food by 2030
 - Linking up to new supply chain responsibilities as there are Costs and complexity of organising supply from dispersed producers
 - Exposed to Price volatility
 - Poverty reduction – 450 million small-scale farms worldwide, many in countries experiencing rapid modernisation
 - Creating more employment including youth
- Reducing inequalities between town and countryside – inclusive economic growth, social cohesion, food security Adapting to climate change How to Organise farmers – cooperate to

- compete through making informed choices
 - Raised expectations from private business as development partner – trade not aid
 - The right policies to "make markets work for the poor"
- CONNECT 2Q11**
- Higher profit and higher price realization in vegetables, broilers and milk through contract farming and linkage to corporate. However, there are problems in contract farming like breach of contract, low bargaining power of small holders, asset specialization, dependency on the firm and monopoly in the long run
 - Rethinking the green revolution paradigm which assumes problems of small farmers are only about technology. Farmers are entrepreneurial, and are organised, they only lack agriculture inputs and credit. Irrigation is available as required, does not recognize rain fed farming
 - Developing a new paradigm that recognises the multiplicity of problems faced by small farmers in rainfed areas
 - Not all activities that small holders do require organisations, but might just need organising
 - Some activities require informal groups, and only some require formal organisation
 - Identify Business Opportunity
 - Have market potential
 - A business activity in which poor small holder has distinct advantages
 - Small holder poultry, forest based activities, vegetables
 - Identify and mitigate key constraints to participation of Poor
 - Entry barriers – technology, scale of operations, investments
 - Need for social mobilisation (SHGs and federations) to build solidarity, mutual help and sort out "access" issues
 - Livelihood mobilisation and organisation different from social mobilisation
 - Selecting the 'right' producers
 - Focus on efficiency once the activity is selected to be pro-poor
 - proxy indicators designed on empirical evidence
 - Self-selection during peer interactions
 - Training & Skilling-up
 - Experiential training Infrastructure
 - Accessible and individual ownership
 - Collectivization only where necessary
 - Viability
 - the business needs to be viable both at the individual household level as well as at the collective level separately



Policy Recommendations:

- Reforms to strengthen market institutions; improve land, financial and insurance institutions and to strengthen regulatory framework for food safety and food quality
- Increase investment in Rural infrastructure (such as cold storage, refrigerated vans...) to develop road network and ICT for agriculture
- Reprioritize research agenda as per changing consumer preferences (domestic and global) and improve private sector participation
- Importance of economic empowerment and enhanced producer capacity in the face of unequal balance of power while advocating inclusion of small farmers into modern/ coordinated markets. Collaborative models bring players into contact with very unequal negotiating power. There is a fair share of risk and reward between chain actors in the agri value chain. Hence need for strong producer organizations which are capable of making informed choices in the face of powerful actors (incl. investors) and external agendas

- Organizing poor peoples' collectives require medium to long term support by external facilitator
- The first step is conducting a pilot to strengthen the livelihood prototype and then incubate the institutional prototype before spinning off into an independent producer collective
- Incentivize farming through increasing skilled human power availability which entails investment in Manpower Development
 - More agriculture educational institute
 - 3-6 months certificate / diploma courses in vegetable/ flower/ fruits — Mango, Apple and Banana
- Subsidy: Direct Subsidy based on acreage/ production
 - Case of EU (Common Agriculture Policy (CAP)-60 bn euro)
- Expediting Land ceiling acts — landless farmers no. on rise
- Despite the fragmentation of land holding; small farms can become productive through educating and generating awareness about modern techniques like precision farming



Session III: Water Usage and Exploitation: Challenges for future

Session II: Enhancing Farm Productivity : New approach towards Farm Inputs & Irrigation

In order to ensure food and nutrition security, improve farm incomes, support rural employment, achieve inclusive growth and to contain inflationary trends (food inflation) in the economy farm productivity has to be enhanced. Hence a new approach towards farm input is imperative. Agri Input consumption is expected to increase backed by better farm produce realization, shift towards better seed initiatives, Government initiatives like NHM and Irrigation projects etc. Half a century after the onset of input intensive agriculture much of India's soil have degraded and cereal production is increasingly exceeded by grain demand for a burgeoning human population. There is a need to revisit usage of agri input in agriculture. The session chaired by Dr Gajendra Singh, ISAE focused on the following topics:

- Strengthening Input Delivery: Role of Corporate and Government
- GM technology to Ensure Food security: Indian experience
- Nutrient Based subsidy in Fertilizer : Measure to boost Farm Production
- Informed Use of Agri Inputs: Role of Private and Public Extension

Policy Recommendations:

- Bridging trust deficit between Private (Indian & MNCs)& Public sector
 - Jointly educating farmers about high yielding technologies
 - Leverage wireless technologies
 - Investment friendly environment
- Public education/advocacy to clear myths about technology
- SAU support for testing for expeditious regulatory approval
- Strengthen farm extension for informed usage of agri inputs

The per capita availability of water has declined from about 5277 m³ in the year 1955 to the present level in 1970 m³ due to explosive population growth, large-scale urbanization and industrialization in the country. From a fairly comfortable level of water availability per person in the early stages of development, a significant decline has been noticed in the shares of water availability over the years. In the light of above facts there is an urgent need to relook at conservation of water and judicious use for agriculture. Mr. Krish Iyengar, Joint Secretary NCPAH chaired the session. Discussions from panelists focused around the following topics:

- India's Water Economy-Vision 2030
- Precision Farming: Opportunities for innovative partnerships in Micro Irrigation
- Enhancing water use efficiency at Farm level through Automation
- Water Soluble Fertilizers: Opportunities and Challenges

Flagship Issues:

The session focused on the following critical issues:

- Fast depletion of water reserves and ground water level
- Climate change and impact on rainfall
- Agriculture Sector is going to be the major source of water consumption due to the rising demand for food. As per projections by 2025 demand for water through irrigation would remain slightly lower at 70% as compared to 84% in 2000
- Need for adoption of water saving technology in agriculture through adoption of precision farming, micro irrigation, waste water usage and rain water harvesting

Policy Recommendations:

- Conservation of water: CGWB's Groundwater Recharge Master Plan to increase the Annual natural recharge by 36 BCM can be one option. However, this Plan devotes resources across regions according to availability of input water rather than according to Groundwater deficit
- Generate awareness about irrigation efficiency through measures like rehabilitation of irrigation system, maintenance of water courses, system of rice intensification, laser land leveling, rain water harvesting and waste water usage.
- 1 Promote private-public partnership for water use efficiency. The role of public sector can be the following:
 - To make available the required canal infrastructure and reliable bulk water supply to Private Operator.
 - To provide Gap Funding to make the project

economically viable.

- To make available reliable electricity up to Pumping Stations and scheduled supply. Install separate feeders for continuous power supply.
- To make available installment of CAPEX for the project construction from time to time as per schedule.
- Regulation, monitoring and control.
- To mitigate all the risks such as non-payment of revenue collection etc through sovereign Bankable Guarantee of Central Government
- To make a new regulation/law in respect of revenue collection by Private Operator
- To reduce the water consumption and to increase the area to be irrigated by at least 50% as compared to conventional canal flow irrigation.
- Operation and maintenance of the systems for 15 years
- To issue the bills for the revenue collection to the end users
- To train the end user for operation and



Session IV: Creating Demand Driven Research Agenda & Innovations in Agriculture

The Session chaired by Dr. Gajendra Singh deliberated on the following topic:

- New technologies and innovative

agricultural and farming practices to increase productivity (Case study of weather Insurance)

- Innovative use of mobile technology and use of social media in the agriculture sector to enhance food security and nutrition
- Public Private Partnership for Innovation in Agriculture

Policy Recommendations:

- IARI has a rich repository of technologies for breaking the yield plateau and improved sustainability
- IARI is geared up for Public Private Partnership to make available the improved seed material and other technologies to our industry partners
- IARI is open to collaborations for generation, refinement and up-scaling of technologies
- Development of location & crop specific weather based practice (advisory on risk & irrigation)
- Integration of such module with knowledge hub (viz. agriculture universities, research bodies)
- Need for Innovative weather insurance product
- Creating localized support group for awareness building & best practice mechanism

Session V: Revamping Agriculture: Farm Mechanization

Transformation of agriculture can happen with increased impetus on farm mechanization. The need of the hour is to go for innovative and cost efficient farm equipments with a proper finance model so that farmer is able to bear the cost of farm machines. The sector is witnessing a reduction in farm labour force and these needs to be matched by an increased farm mechanization to meet the demand of the next decade. The session chaired by Dr. Prabhat Kumar, ICRISAT ignited discussion on the following topics:

- Organised Custom Hiring : creating an enabling environment
- Public-Private Partnership in technology transfer and adoption
- Policy reforms for accelerating the pace of farm mechanization & Investments in Farm Mechanization
- Financing Farm Machines: Collective or single ownership; viable approach
- Technological Innovation and propagation of affordable farm machinery-Corporate Experience

Flagship Issues:

- Frugal Mechanization: Need for propagation of affordable, simple to use and maintain and multi utility mechanization
- Government focus is skewed to individual farmers. This has led to "tractorization" rather than mechanization. However, specialized and high value equipment can only be used for the purpose.

Individual farmer can't own it nor use it beyond a few days (Unlike in Europe / USA)

- Non-availability of spare parts at rural level
- Inadequate repair and maintenance facilities in rural areas
- Inadequate training and testing infrastructure
- Custom hiring is required because of predominance of small farm holders. Single farm ownership & use of tractors and machinery on these small farms is economically not viable
- Triggered debate on trade off between subsidy on fertilizers and investment on agriculture mechanization. As per the discussions only 7 % tractors get subsidy as compared to other inputs in agriculture.

Policy Recommendations:

- Business and enterprise friendly policies, laws, and regulations as well as physical and institutional infrastructures which encourage commercial activities and entrepreneurship in farming, input supply, produce handling, processing and marketing as well as in manufacturing will be key factors to success of agricultural mechanization in the different states of India
- Reduce or eliminate all subsidies and invest in infrastructure, mainly, roads, electricity supply, irrigation systems and markets with storage and processing facilities in catchment areas.

- Reduce interest rates on loans and taxes for purchase of equipment & machinery for agricultural operations and food processing.
- A national centre for mechanization need to be established to develop a national level database on farm machinery, monitor development of mechanization in different parts of India in liaison with different stakeholders, and develop mechanization strategy and policy
- The cost of production can be reduced only if the cost of every single factor contributing towards the total cost is minimized. Therefore, the agricultural strategies need the based on the time tested principles of business management and entrepreneurship so that agriculture can be made a profitable venture
- Promote custom hiring and encourage custom hirers through enabling banking policy through considering loan as Agri Credit, Looking at them as Contractors but also provide long term loans at subsidized rates, have a different evaluating mechanism and have equipment as security
- The infrastructure needed for the success of custom hiring operations include servicing network and spatial distribution of machinery ownership. Measures to ease road movement through an all India Permit must act as one
- Create a joint govt. – private sector working group for farm mechanization
- Set up National Mission on Farm Mechanization
- Dedicated extension programs to promote mechanization, under PPP

Session VI: Social Security For Farmers: Emerging Challenges for Next decade

The session chaired by Dr. R Bhaskaran, IIBF brought out social security concerns like financial inclusion, insurance cover and reach of government schemes like Kisan credit card. The focus of the session was on the following topics.

- Efficacy of Kisan Credit Card: Experiences from Field
- Innovative banking solutions for agriculture: Experience sharing from MFI
- Financial Literacy among Farmers: Issues for the next Decade
- Financial Inclusion: Adhaar; Unique Identification

Number

- Role of Private sector in farm insurance Comprehensive Vs Traditional weather based



Insurance

Flag ship Issues

- Rural India lacks access to credit. Only 54 Savings Accounts per 100 persons with all the institutions (June 2007), only 13% availing loans from the banks in the income bracket of less than Rs. 50,000. Critical Exclusion in terms of credit is manifested in 256 districts across 17 states and 1 UT (Dadra and Nagar Haveli).
- There are plethora of reasons cited for this failure which may be Bank-Branch delivery model not able to cater to the needs of all
 - Transaction cost too high – Technology not leveraged
 - Appropriate business model yet to evolve

- Limitation of cash delivery points. Less Participatory Involvement by all Stakeholders
- Remote, hilly & sparsely populated areas with poor infrastructure and difficult physical access
- Distance from bank branch, branch timings, cumbersome documentation /procedures, unsuitable products, language, staff attitude are common reasons – Higher transaction cost and Know Your Customer — documentary proof of identity/ address
- The Kisan Credit card has limited outreach due to the following observations;
 - Small loans are avoided; hence poor small farmer coverage
 - Crop insurance is ineffective
 - The rate of interest is unviable for the banks
 - Because the interest subvention is Rs 3 lakh there is a tendency to restrict loans within that
- High dependence on weather; 40% of net sown area irrigated, 60% dependent on rains
- Most irrigation from non-perennial sources: effective irrigated area only 20%
- Causal analysis of agricultural losses as compiled by GIC's crop insurance cell show that 70% of agriculture losses happened due to draught or low rain fall. Hence need for weather insurance for farmers

Policy Recommendations:

- Provision of specific strategy for rural banking.
- Redressal of three risk i.e. yield risk (or input output risk), calamity risk and price risk by banks.
- A separate information system for transparency.
- A pragmatic, measurable and accountable system for performance measurement for rural bank branches.
- Need of specialized 'Microfinance Credit Technology'
- Customized banking products as per the need of farmer.
- Establishment of Business facilitator; Business Correspondent, MFIs; MFOs, MACS; Federation of SHGs; Kisan Clubs; etc. to play a proactive role in

financial inclusion.

- Provision of 'Employee Incentive Systems'
- Total revamping of Lead Bank Scheme i
- Indian Post Bank' needs to be put in to hyper action.
- Institutionalization of Money lenders, Pawn Brokers, Arahtias, etc

Session VII: Skill Development: The unfolding challenges

The diverse scope of agriculture calls for specialized human resources with in-depth expertise in those focus areas. Skilling would not only play an important role in upgrading the self esteem of farmer but also vital for enhancing income through allied activities. The session was chaired by Mr Anil Sinha, IFC. Deliberations focused on the following topics:

- Unleashing agriculture employment through Skill development
- Capacity Building in Agriculture through involvement of Private Sector
- Changing approach of extension: Ski Ming of Agriculture extension Workers
- Sectoral Thrust in Skill Development (Sector Skills Council)
- Ski Ming of small farmers: Challenges & Solutions

Flagship issues:

- Strengthen farmers' technical skills to increase productivity and quality
- Improve financial literacy to enable access to finance
- Farmer Education is essential which would require the creation of a trained pool of Agriculture Consultants in Rural India
- Trained Manpower is also required in the Agriculture Value Chain
- Development of demand driven location specific programmes to meet the unique requirements of every region
- Traditional Farm extension needs to undergo changes to address the emerging dynamics in agriculture which include a relooking at the clients, training pedagogy, reward and incentives for extension staff and role of extension staff
- Need for Skill gap analysis at various level – Village, block, district and state
- Skill gap Analysis to become a basis of HRD Policy for Extension



Policy Recommendations:

- Need for HRD Policy for Extension: Such a policy would incorporate compulsory training and skill up gradation of all extension functionaries. An effective system of rewards and incentives for public extension functionaries has to be worked out.
- 1 Need for Skill Gap Analysis among extension workers: Skill gap Analysis to become a basis of HRD Policy for Extension
- A long-term training plan should be developed by each state based on skill gap analysis. A massive campaign will need to be launched for skill up-gradation and capacity building of extension functionaries using resources of all training institutes
- Improving the skills of Inputs dealers: Inputs dealers as one of the most important sources of farm information. Training of inputs dealers

- Use of ICTs in training extension workers. Need for content development for web based programmes



Session VIII: Supply chain Management : Emerging Challenges for the Off Farm Sector

An effective supply chain can connect remote rural producers to distant markets. For example, it is through such chains that Mexican producers have become the suppliers of North America's 'salad bowls'.

The session chaired by Mr BB Pattanaik, CWC and co chaired by Mr. Bijay Kumar (IAS), NHB was an attempt to highlight the various issues in developing a robust supply chain in agriculture. The following topics were discussed:

- Investments in Expanding Agri Infrastructure: The Way Forward
- Strengthening Cold Chain infrastructure through

- Risk Mitigation measures for small farmers while promoting high value agriculture
- Direct purchase from Farmers through "Apni Mandis" can also play an important role in curbing food inflation



Session X: Agriculture Policy Making: Paradigm shift from Traditional to Market Driven Reforms

The focus of policy making in India is to ensure food security through affirmative action like food subsidy, minimum support price, subsidies on fertilizers and other farm inputs. In this decade with the entry of private players there has been a shift from subsistence agriculture to commercial farming. The attention is more on high value crops which are labor intensive and yield high income to farmers.

The Session was chaired by Mr Gokul Patnaik, Chairman, Global Agri Systems Pvt limited pointed out the issues and concerns of policy making through the following topics:

- Food Security Vs Farm Productivity The challenge of delivering a balancing act
- Subsidy Versus Incentive: Revisiting delivery of Agriculture subsidies
- Rain Fed Agriculture : The game changer for the next Decade
- Centre- State Relation in Strengthening agriculture sector



Flagship issues:

- The issue of agriculture subsidies came into forefront. Rising agriculture subsidy may not be sustainable. Uneven distribution of fertilizer subsidy; 55% subsidy

cornered by five states. Fertilizer usage is high among small holders as compared to large farmers.

- Institutional issues which cause stagnancy in agriculture are highlighted. Center policies in agriculture are not binding, and thus extension services of State are not responsible. India has not been able to create a unified market for agriculture or systematic investment laws in agriculture.

Rain fed agriculture has high growth potential; hence increase investment and paradigm shift in policy for rain fed regions



Policy Recommendations:

- Farmer should be taken as a responsible local partner for any infrastructural investment in agriculture, through Social Equity Model

- Agriculture needs to represent an attractive investment avenue for new thoughts, initiatives and innovations to flow in
- Refocusing the role of the government to provide appropriate regulatory framework to ensure competition. Bring in private sector to do the management and implementation on PPP mode.
- National level policies in consultation with states with responsibility matrix well defined
- Policies to acknowledge critical issues like rain fed agriculture. Evolve a paradigm of rainfed agriculture development in its own context & merit
- Invest on integrated production systems in rainfed areas
- Recognize that rain fed production systems have their own logic
- Extension of 'known paradigm' of 'mono-species' , external 'intensive' input based models may only extend 'crisis'



Session XI: North East: Changing Trend

North Eastern Region (NER) with a highly diversified and unique agriculture scenario is witnessing efforts for linkages with Private sector and brand the horticulture produce. They have initiated need based state programs to boost agriculture productivity and supplement farmer income in the form of subsidized farm machines, credit to land less laborers. The session chaired by Mr. JNL Srivastava, IFFCCO Foundation highlighted the development challenges of North East:

- Marketing issues pertaining to a latent potential region-North East
- Exploiting untapped potential: Spices, Bamboo , Sericulture & Fisheries
- Development Challenges in North East — Plausible solutions
- Development of Horticulture in the North East

- North East India: Policy Imperative for Agri Infrastructure and Capacity Development



Flagship issues:

- The emerging challenges of Development of Agriculture in North East are existence of small Holding, access to inputs like technology, markets, credit, institutional support is limited
- High Unemployment due to lack of livelihood opportunities and diminishing local organization
- Increased investment in agri infrastructure

Policy Recommendation:

- Equitable investment in all states to prevent sub regional imbalance in growth.
- Facilitation of information dissemination and stakeholder engagement for strong monitoring of investments.
- Incentive and Capacity Development for decentralized infrastructure planning and execution.
- Augmentation of collaboration amongst Institutions for assessment of operating environments, improvement in quality of

production statistics, analysis of trends and future needs
Investment mobilization for skill development to manage infrastructures.

Facilitation of R&D on appropriate technology, knowledge flow for quality and Sustainability of Infrastructure.

Incentive to private sector for infrastructure investment in developed areas.

Interlinking / integration of infrastructure projects with scientific studies

Transformed society and its people

- Build trust & capacity between key stake holders/people/groups
- Broaden dialogues to accommodate multiple perspectives/ perception / interests
- Focus on self-learning – how change happens — make them participatory — group dynamics Incremental intervention
- Altered mental models

an

- From existing ones taking transformational approach from within rather than imposing idealistic blueprints

- Use people's Creativity, Innovation & Entrepreneurship

- Focus on Partnership
Development as evolutionary learning process

- What options work, what did not — also from failures – stress on peer-peer learning- taking people along always

Improved governance

- Focus on performance and accountability

- Networked approach to policy and governance

- Critical role of NECin facilitating such processes

- So as to have a shared commitment to common Goals

Session XII: Growing importance of allied sector

The impact of trade liberalization on agriculture and the global climate change are new challenges. At the same time, new opportunities are emerging for Indian agriculture. Commercialization of agriculture, diversification towards high value commodities and integration with global markets offer new opportunities. On the other side, new opportunities are unfolding in the form of increased demand for agricultural commodities, both in the domestic and global markets as a result of higher economic growth and rising income levels of consumers. In addition, the increasing demand for high value commodities and agri-processed products in domestic and internal markets has put pressure on Agriculture Policy Domain to come out with state of the art grading and standardization facility to ensure food safety for domestic and international Markets. The session

- Dogma driven to data driven or evidence based discourse

- Individual to group benefit –from few influential to masses

- From treating as a part of India to as One India



chaired by Dr DPS Verma (Ohio State university) and co chaired by Mr Siraj Chaudhry,Cargill India deliberated on the following topics:

- Role of poultry in augmenting Farmer's Income
- Creating livelihood opportunity through Horticulture

Apiculture: Business opportunity for Farmers

Policy Recommendations:

- Research & Development in the sectors like beekeeping, poultry and horticulture.
- Infrastructural Facilities: Development of appropriate infrastructure for beekeeping, poultry etc at the village level
- Other promotional activities– Publicity on Radio, T.V, Newspapers, etc. and standardization and certification systems, etc.
- Strengthening of Institutional Frame work/system for promotion of beekeeping, poultry and horticulture as a viable occupation among rural youth

Concluding Remarks:

Giving the valedictory address Shri Paban Singh Ghatowar, Minister for Development of North Eastern Region said that agriculture and allied sector provides employment to 1.30 to 1.40 million people. In the last few decades, India's agriculture sector has witnessed spectacular advances in terms of agricultural production and productivity. India is the world's largest producer of milk and edible oils, and the second-largest producer of rice, wheat and sugar. A record food grain production of 241.56 million tonnes has been achieved in the crop year 2010-2011 due to sustained efforts to improve productivity. India is the

world's second-largest producer of fruits and vegetables. The country's output of fruits and vegetables increased by 3.7 percent to over 21.3 million tonnes in 2010-11 from 205.24 million tonnes a year ago. In this context a platform like Global Agri Connect is apt for a discourse on taking agriculture to Global platform.

It is heartening that the conference was able to touch upon the latent potential of East and North East.

North east provides exciting opportunities for Agri business. Very low uses of fertilizers make our food products organic. North East is bestowed with diverse flora and fauna. The horticulture produce like chilies, ginger, passion fruit, pine apple offer great opportunities for food processing industry.

The Conference ended with a vote of thanks by Dr Satender Arya, NSFI



National Skills Foundation of India



ENABLING SUSTAINABLE LIVELIHOODS

National Skills Foundation of India is a not-for-profit foundation formed by eminent professionals from diverse background with a vision to bridge the gap between supply and demand of skilled labour force in India. NSFI realizes its mission, through enabling large scale demand driven training of unskilled/semi-skilled workers, rural youth, farmers, women entrepreneurs, etc across the nation with the objective of providing them access to growth sectors in formal labour markets.

OBJECTIVES

- Provide demand-driven skill development, training facilities, career consultation, curriculum development in line with industry trends for enhancing skill levels of the work force
- Impart pre and post harvest scientific agricultural practices to farmers, including Global GAP (Good Agricultural Practice)
- Promote agricultural entrepreneurship and support development of Agri-business parks, food parks, Agriculture Export Zones.
- Enable farmers, small and medium retailers and processors to be part of the global and domestic supply chains
- Impart training and capacity building to small and medium food processing entrepreneurs / industries to compete with international players.
- To assist small and medium food processing industries with respect to credit facilitation, branding and market access.
- Create awareness on cold chain practices, cold chain logistics and transport.
- Facilitate small vendors/processors and farmers to reap the benefits of modern warehousing, distribution and logistics.
- Enable small rural entrepreneurs to take up distribution and services as their livelihood through successful business model.
- NSFI has joined hands with leading corporate to ensure placement of trained youth

KEY STRENGTHS OF NSFI

- A team well devoted for Research & Consultancy Services.
- Strong Alliances with Skill Development Institutes, Government, Multilateral Agencies, Chambers, Autonomous Organization, International Agencies, National & International Universities, etc.
- Eminent Board of Advisors.
- Best of Global Professionals.
- A team of Experts, with strong execution capability of handling large projects, nationally and internationally.
- Executives with grass root level experiences in training and capacity building.
- Networking and linkages with industry.

ACTIVITY CHARTER

The activity charter of NSFI is under three main verticals.

- Policy, Research and Advocacy for skill development of unskilled labour force of India.
- Training Program, Evaluation, Certification and Placement.
- Centre of Excellence–For unexplored Sectors e.g. Logistics, Agri Supply Chain, Warehousing etc.

NSFI FOCUS SECTORS

NSFI aims to conduct skill development program in the following sectors

- Agri Supply Chain
- Retail Services
- Warehousing, Distribution & logistics
- Hospitality/Hotel Industry
- Textiles
- Food Processing
- Rural Distribution & Services
- Rural Accounting

KEY CORPORATES AND INSTITUTIONAL PARTNERS

NSFI has signed Memorandum of Understanding with the following organizations for joint projects in area of skill development

- FICCI
- Horticultural Society of India
- Access Development Services **THE FUTURE**

NSFI is poised to become one of the leading skill development providers in India with mega projects in association with Central Government, State Government, Corporates, Bilaterals and Social Organizations. NSFI has entered into partnership with leading corporates for demand driven training and placement of trained manpower.

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