

# PROCEEDING

7<sup>th</sup> National Extension Education Congress, 2014

## “Translational Research-Extension for Sustainable Small Farm Development”

8-11th November, 2014

Society of Extension Education, Agra

7<sup>th</sup> National Extension Education Congress 2014 (NEEC 2014) on “Translational Research-Extension for Sustainable Small Farm Development” was inaugurated on 8<sup>th</sup> November 2014 at ICAR Research Complex for NEH Region, Umiam, Meghalaya. The Congress is being jointly organized by Society of Extension Education, Agra and ICAR Research Complex for NEH Region, Meghalaya in collaboration with Central Agricultural University, Imphal and Assam Agricultural University, Jorhat from November 8 – 11, 2014. About 400 delegates representing different institutions and organization of National Agricultural Research System (NARS) from different parts of the country and International delegates from countries like Nigeria are participating in the congress. Society of Extension Education conferred several awards to distinguished delegates during the inaugural function.

Inaugurating the Congress the Chief Guest Mr. Rowell Lyngdoh, Honourable Deputy Chief Minister, Government of Meghalaya highlighted the importance small farm development and dissemination of improved technologies to the smallholders. He also emphasized the outcome of translational research to be taken to the farmers through innovative extension approaches.

Dr. Mangala Rai, Former Secretary DARE and Director General ICAR in his key-note address highlighted on translational research-extension as a paradigm shift in conventional research-extension spectrum. He called upon the scientists and delegates of the Congress to deliberate upon how to translate research into usable technology development and take it to the farmers. He

highlighted the importance of systems approach in technology development integrating crops, horticulture, livestock etc. He urged for “Clean Agriculture” should be a part of SwachhataAviyan for managing farm wastage, wastage of food grain and pesticide residue by following Good Agricultural Practices.

Guests of Honour, Dr. G. Trivedi, Former Vice Chancellor, RAU, Samastipur, Dr. K. Narayan Gowda, Former Vice Chancellor, University of Agricultural Sciences, Bengaluru and Mr. Sunil Deodhar, President, My Home India stressed on the importance on robust extension methodologies for smallholder farmers for their livelihood security. They reiterated that the extension approaches should take in to account the integrated farming systems and community mobilization for group action. Mr. Deodhar called for overall socio-economic development of the region as well as the country as a whole.

Earlier Dr. S. V. Ngachan, Director, ICAR Research Complex for NEH Region, welcomed the dignitaries and delegates of the congress. In his welcome address he emphasized the ecological diversity of the northeastern region and importance of increasing productivity and profitability of smallholder farmers of this region. Dr. Jitendra Chauhan, General Secretary of the Society presented a brief report about the Society and its activities. Dr. A. K. Tripathi, Head, Division of Social Sciences, ICAR Research Complex for NEH Region and Organizing Secretary proposed the vote of thanks. The technical programme was divided into five themes and a lead paper session. Mr. A. L. Hek, Honourable Minister of Health & Family Welfare and IT and Personnel, Government of Meghalaya was the chief guest of the valedictory session.

### **The recommendations of the Congress that emerged out are as follows:**

- Small and marginal farmers face challenges such as fragmented holding, low marketable surplus, marketing and need support in terms of infrastructure, input, technical guidance, marketing and information. Emphasis should be given on custom hiring services, effective fundamental linkages, direct

marketing from producers to buyers and promotion of commodity based associations.

- Animal husbandry needs more attention in terms of technology support and also need insurance too as these are major assets of the farmers and frequently met with accidents. Separate planning is required as this area is more prone to natural hazards. There is a need to focus on quality meat production which is more important as 60 per cent diseases are common in human and animals.
- Keeping in view of the low production and productivity of small farmers, it is needed to focus on i) technical opportunities comprising of technical inputs, entrepreneurship development, rain water harvesting, protected agriculture and protection of bio diversity, ii) economic opportunities include market accessibility, value addition and provision of loan and subsidies for small farmers, iii) social opportunities in terms of co-operative farming and formulation of small groups and iv) extension opportunities such as participatory technology development, whole family approach and training should be on priority.
- In order to address small farm complexities and priorities for sustainable economic development the research and extension should focus on strengthening research-extension linkages for promotion of crop diversification for livelihood improvement, formulate policy for upliftment of farm women through entrepreneurship development, promote and implement model for Integrated farming system.
- Designing training programme for capacity building of farmers and farm women according to need assessment, developing good infrastructure to encourage livestock farmers for their overall development, promotion of Self Help Group (SHG) activities among tribal farm women and transactional extension in participatory approach will empower smallholder farmers.

- Technological competency to be developed to tackle future climate change scenario. Farmers in hill regions need to be made aware about climate resilient technologies and contingency plans have to be developed.
- Innovations in technology dissemination approaches such as using village post masters to disseminate agricultural information and improved seed at identified farmers needs replication in other areas of country.
- ICT enabled Cyber extension facilitates dissemination of various agricultural technology and information. Electronic solutions against agricultural pests (eSAP) is a powerful ICT solution has automated, pest-specific surveillance that includes image capture along with other relevant details. It has to be popularized among field extension services.
- Training of farmers with extension literature in local language was found much helpful in quick understanding by farmers.
- Farmers participatory approach requires focus on preparing database on availability and applicability of technology for getting higher production of crops.
- Radio programmes based on farmers interest related to agriculture may be fruitful and accepted by farming community as mass media.
- Mobile based extension services can be effective medium for dissemination of agricultural information and can overcome hindrances of limited access to farm information in difficult areas including the North Eastern Hill region.
- Location and variety specific Front Lind Demonstration (FLD) appeared to be necessary to minimize the technological gap for yield level in different situations.
- Extension approaches for adoption of Good Agricultural Practices (GAP) have to be developed.
- The major constraints in vegetable supply chain management are influence of intermediaries, high level of wastage in transportation and logistics,

quality degradation during transport as well as during storage, lack of infrastructure facility and poor market intelligence.

- Among public and private developed educational films on live stock management practices, public films were highly effective among the live stock farmers.
- Low-cost rain water harvesting structure "Jalkhund" suitable for the Jhum areas was designed and introduced in Longleng district of Nagaland. It needs to be further widely spread.

### Road Map for Sustainable Agricultural Development with Reference to North-East Hill Regions

- Technology percolation in North-Eastern hilly region has been an issue of concern. Hence, appropriate tailor made extension methodologies have to be formulated to address the production, processing and marketing issues.
- Due to topographical diversification and climate variation wide varieties of flora and fauna are available in North Eastern Hill (NEH) region. Suitable initiatives have to be taken for bio diversity conservation.
- NEH region is predominant with acid soils. Hence, reclamation of acid soils and identifying suitable crops and varieties of the selected crops for acid soils should be priority.
- Focus should be given on secondary agriculture for the various produces available in this region.
- 'Slash and burn' agriculture is still predominant in the tribal areas of NEH. Farming systems alternative to such type of practices can be popularized in such locations.
- Location specific technologies considering the existing resources, constraints, socio-economic conditions, cultural values of the tribal communities have to be evolved.
- Agriculture based entrepreneurship initiatives have to be encouraged for value based products which are specific to this particular region.

Dr. Jitendra Chauhan Gen.

Secretary, SEE, Agra