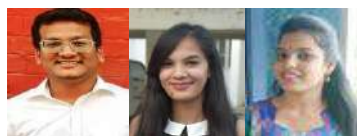




MY MEETING NOTES

National seminar
'Transforming Indian Agriculture through Pluralistic & Innovative Extension Approaches for Self-reliant India'
Indian Society of Extension Education,
Banaras Hindu University (BHU), Varanasi, Uttar Pradesh (UP), India
4-6 October 2021



Pranoy Ray, Priyanka Ginwal and Simantini Shasani share their experience of participating in the Indian Society of Extension Education's National Seminar on 'Transforming Indian Agriculture through Pluralistic & Innovative Extension Approaches for Self-reliant India'.

CONTEXT

Agricultural Extension over the past several years has been an essential tool in bringing a positive change in the farm and life of Indian farmers. The core principle of extension is making the farmers think, discover, and work in order to fulfil their needs. This can be done by using appropriate technology with the help of extension support to make farmers successful and self-reliant. Given the Prime Minister's clarion call of an 'Atmanirbhar Bharat', the time has again come to reorient extension strategies and applications for an empowered India. The recently organized National Seminar (Indian Society of Extension Education), held from 4-6 October 2021, focused on presenting relevant principles, practices, technology, methods, experiences, and prescribing strategies and scientific support to accelerate the *Atmanirbhar Bharat* programme in India. The seminar brought together more than 420 scientists and delegates along with 50 farmers. The three-day national seminar had deliberations – organised into 15 sessions – pertaining to seven seminar themes where 15 lead papers were presented by delegates from 25 states, 63 universities, and 17 ICAR research institutes.



THE KEY TAKEAWAYS

Innovative Extension Approaches and the Convergence Mechanism

Having knowledge of the historical journey of agricultural extension education, consequences of primary agriculture, one has to think about the secondary agricultural practices along with the introduction of technology in the system. The COVID-19 pandemic had made it difficult for producers and sellers to market their produce. But the innovative extension approaches, such as Agri-war room started by the University of Agricultural Sciences in Bengaluru, helped farmers by providing them with a toll-free helpline (080-22212818 and 080-22210237) for providing farm advisory services to farming communities. The helpline helped them to address their marketing queries and also facilitated them to sell their produce to consumers directly. Along with this, regular personal contact methods, print materials, video conferencing and ICT-based extension methods help in greater knowledge dissemination among farmers. Advanced technologies, the use of social media, and artificial intelligence via mobile phones – all play a key role in extension advisory systems. But still, there is a high need for convergence between the state departments of agriculture, ICAR, and other extension professionals to derive more innovative extension approaches for effective outreach of information to farmers. Extension priority setting, research-extension linkages, feedback management and convergence mechanisms need to be suitably strengthened at various levels. Convergence modalities can be spelled out in block/cluster level extension plans, delineating resources and responsibilities.

Strengthening Institutional Mechanisms

The role of human resource capital in strengthening institutional mechanisms is immense. The skills, knowledge and other attributes embedded in human resources can lead to the ultimate development of institutional innovation. Public private partnerships (PPP) that bring together government, civil society and businesses can go far in driving agricultural growth and productivity. It plays a pivotal role in the food processing industries in India bringing together all the required and available facilities and opportunities. PPPs could be a useful tool to accelerate development in various areas of agribusiness and effective delivery of infrastructure facilities. It plays a major role in various areas of agricultural sectors viz., crop diversification, contract farming, providing extension services, etc. The measures necessary to be taken up to enhance the outreach of extensions services include sectoral convergence, proactively reaching disadvantaged areas and groups, promoting entrepreneurial secondary agricultural opportunities for rural youth, and improving access of rural women to credit-market services, etc., through FPOs.

Atmanirbhar Bharat (Self-Reliant India)

a. Digitization perspective

In order to move forward in times of crisis by not just combating but to prevail, it is essential to have a self-reliant India with digitization and innovation proving to be the differentiator in creating a technology-driven Atmanirbhar Bharat. Digitisation in agricultural extension is very crucial for a self-reliant India. ICT-based farm advisory services enhance access to farmers through management of information systems, GPS or satellite image of the survey area, as well as the reach of E-SAP (Electronic Solutions against Agricultural Pests) advisory. These digital extension services lead to incremental income. Crop-specific, context-specific customised advisory services can be provided through farmer-centric e-modules, such as *Dalhan Sandesh* (Pulses message) implemented by the ICAR-Indian Institute of Pulses Research. With farmers showing a positive attitude towards ICT, the government should provide training, demonstration and need-based information through ICT. WhatsApp is found to be much more easy to understand among the various mobile apps. For the transfer of agricultural technologies, QR codes have been prepared for QR code-based digital agricultural information boards.

Informative and interactive participative digital videos can play a crucial role in the teaching-learning process as it can contextualize a scenario based on practical learning. Localization and personalization of content is very important for advisories. Digitisation enables real-time multimedia-based agriculture content to individual field workers; and returns the flow of data to policymakers (e.g., E-SAP, Dalhan Sandesh). YouTube channels of state agricultural universities are being effectively utilized as tools for extension and advisory services, reaching a large number of unreached farmers through informative videos and content.

ICT-based social networking has resulted in the construction of a knowledge base and promotion of social as well as technological interventions. As such, the institutionalization of social media platforms, content creation for social media and its evaluation needs to be included in extension organizations and operations.

b. Market-led extension perspective

It is recommended that extension agencies focus on developing extension strategies in the promotion of location-specific technology to cater to the needs of tribal farming communities. Initiative must be taken to improve Extension & Advisory Services so as to reduce information gaps among livestock farming communities and establish mutually beneficial collaborative programmes with the private sector. The government should help in the formation of Cooperative Societies or FPOs at all levels for getting remunerative prices for farmers' produce. Consumers or users of 'ATMA Kisan Bazaar' (Farmer Markets) were highly satisfied because they received certified products, of good quality, as well as locally produced. Structural support systems, incentives and policies, technological backstopping, financial flexibilities, market support system and information networking, etc., need convergence for maximizing farm profits by linking the Atmanirbhar Bharat and One District One Product programme.



c. Agripreneurship and start-ups perspective

There is a dire need to shift the focus of extension from specific field crops to entire agriculture domains. Human capacity, content, process and technologies can be strengthened by improving linkages among public-public, private-public, and private-private actors. This would enhance the effectiveness of extension service providers. Nearly 30% of Indian youth is fascinated with taking up start-ups in the field

of agri-enterprises and 17% youth is inclined towards the field of food industry. This necessitates the need to provide adequate policy infrastructure and financial support for turning the dreams of youth into reality. If the potential of 41% of rural youth in India is to be utilized, investment of resources should not only focus on improving technical skills (as often focussed on) but also on empowering youth in the areas of communication, leadership, perseverance and business planning skills. To harness the potential of 54% unemployed Indian agri-graduates, the government can start specialized courses in the universities to promote agri-tech start-ups by supporting them through raising funds, improving digital infrastructure, and via liberal policy support to improve the input-use efficiency in agriculture. The Student READY Programme reorients graduates of Agriculture and allied subjects towards start-up promotion. The programme ensures and assures employability and develops entrepreneurs by conveying knowledge, skill, ability and experiences. Addressing the socio-cultural norms pertaining to the establishment of agri-enterprises can improve the entrepreneurial climate in order to promote more entrepreneurs and start-ups.

d. Farmers Producers Company perspective

Farmer Producer Companies combine the principles of collective action with the structural benefits of a company. Initially these companies were promoted because they were believed to enable small producers to pool their capital and establish successful businesses which would eventually improve their income and reduce risks. Successful FPCs have the potential to create jobs and entrepreneurial opportunities for the younger generation. In order to link FPCs to a number of small producers, major commodities produced in the area and the geographic area of each district should be taken into account. The promotion of FPCs should be prioritised in the 100 most backward districts in India by NABARD, SFAC and other agencies in the public, private and NGO sector. FPCs need to be systematically promoted with appropriate handholding support. They may be linked with marketing and export systems so as to make farmers self-reliant.



CONFERENCE RECOMMENDATIONS

- 'One District One Export' product strategy should be promoted on a cluster basis. Agricultural and Processed Food Products Export Development Authority (APEDA), National Centre for Management of Agricultural Extension (MANAGE), National Bank for Agriculture and Rural Development (NABARD) and Indian Society of Extension Education (ISEE) may immediately work out suitable export-centric extension strategies.
- The extension services need to emphasize participatory technology validation, inference and institutionalization of delivery for greater socio-economic impact. As such the social scientist must be involved from planning of an intervention to impact assessment and its up-scaling.
- International experiences on good extension practices should be collected, documented, prioritized and integrated with ongoing extension models suitably.
- For promoting entrepreneurship and start-ups the psychological and motivational dimensions need to be stressed upon, and adequate focus should be laid on HRD activities.
- In-Tensions of Ex-Tension should be internalized by both Extension Service Providers and Extension Educators.
- Documenting farmers' knowledge and innovations in different subject matter areas needs to be stressed upon for strengthening farmer to farmer extension and its replication.
- Extension research needs to be strengthened in terms of research methodologies, with a focus on technologies, system interplay, convergence of extension efforts and socio-economic dimensions.

OUR IMPRESSIONS

The seminar was organised at a national level with core focus on the pluralistic and innovative extension approaches for a self-reliant India. It was interesting to have a confluence of various stakeholders responsible for pluralistic and innovative extension approaches. It allowed us to build networks, deliberate on key ideas and bring to light insights on the challenges faced by extension personnel and researchers from private and public sectors. A pluralistic extension system wherein all the stakeholders from public, private, international and voluntary organizations came together, planned and collaborated for providing demand-driven and holistic services to farmers, emerged as the best and sustainable extension mechanism.

ACKNOWLEDGEMENT

We thank Dr Basabaprabhu Jirli , Head , Extension Education , IAS, BHU , Varanasi and Organising secretary of the national seminar; Dr Kalyan Ghadei, Professor, Extension Education, IAS, BHU, Varanasi, Dr Arjun Verma, Assistant Professor, Agricultural Extension, BUAT, Banda, UP; and Himadri Roy, PhD Scholar, Extension Education, IAS, BHU, Varanasi, for the inputs provided by them. Finally, we acknowledge with heartfelt gratitude Dr Mahesh Chander, Head, Division of Extension Education, ICAR-Indian Veterinary Research Institute, for his constant encouragement and for the motivation to write this Meeting Note.

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