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National Young Professionals Development Program on New Competencies, Career Opportunities, and Research Priorities in Agricultural Extension Chaudhary Charan Singh Haryana Agricultural University and MANAGE December 02-06, 2024

#### CONTEXT

Agricultural extension has evolved significantly, with new research in innovation diffusion, innovation systems, digital tools, and communication studies driving its transformation. These advancements demand updated teaching and training materials to keep the discipline relevant to the needs of Agricultural Innovation Systems (AIS) stakeholders. To address these needs, the National Institute of Agricultural Extension Management (MANAGE) launched the MANAGE-University Alliance for Advancing Agricultural Extension and Advisory Services in 2018.



The training participants with the program organizers and delegates.

Under this alliance, the National Young Professionals Development Program on New Competencies, Career Opportunities, and Research Priorities in Agricultural Extension was organized by the Institute of Agricultural Extension Management and Chaudhary Charan Singh Haryana Agricultural University, Hisar, from December 2-6, 2024. It aimed to orient M.Sc. students, Ph.D. scholars, and young faculty members on emerging areas in extension research, practice, and policy, and to discuss new competencies, career opportunities, and research priorities in the discipline. Forty-eight participants from six states and ten universities attended the five-day program.

## **PROGRAM OVERVIEW**

The program was structured and conducted by Dr. Saravanan Raj (Director, Agricultural Extension, MANAGE Hyderabad), Dr. Sandipamu Rahalya (MANAGE Fellow), Dr. Anupam Anand (Assistant Professor, CCS HAU), and Dr. Rati Mukteshwar (Assistant Professor, CCS HAU).



## **PROGRAM SUMMARY AND KEY LEARNINGS**

#### Day 1

The sessions began by assessing participants' understanding of agricultural extension, exploring their competencies, and discussing time management strategies and digital media engagement in professional and personal contexts. Activities included individual and group tasks that encouraged collaboration and innovation.

Participants also reflected on their perceptions of agricultural extension, examining both personal views and societal perspectives. A major highlight was the discussion on "Challenges and Opportunities in Agricultural Extension Professional Specialization," which sparked thought-provoking ideas about the evolving landscape of agricultural extension.

## **Key Learnings:**

- Understanding one's competencies and areas of improvement is critical for professional growth.
- Time management and effective use of digital tools play a significant role in balancing personal and professional commitments.
- Collaborative activities foster innovation and collective problem-solving in addressing challenges in agricultural extension.
- Exploring perceptions about agricultural extension helps identify gaps and redefine its role in the current context.



Individual and group tasks performed by the participants.

## Day 2

The day started with an inspiring session by Dr. Saravanan Raj on "Evolving Competencies for Agricultural Extension Professionals." He emphasized aligning skills with emerging job opportunities in the agricultural sector and adapting to its dynamic demands. His session provided a clear roadmap for professionals to remain relevant and thrive.

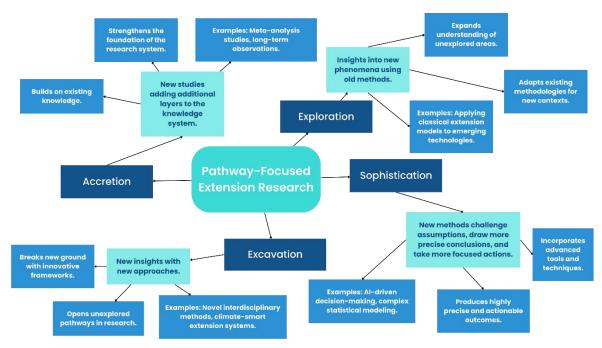
Following this, Dr. P. Sethuraman Sivakumar, Principal Scientist at CTCRI, Trivandrum, delivered an engaging session on "Emerging Research Traditions, Approaches, and Tools in Extension." He discussed:

- Agro-socio-cultural-economic-psychological interactions in farmers' research.
- Emerging challenges and expectations from extension research, such as replicable extension models, high-impact research, intellectual property ownership, commercialization, and revenue generation.
- New research pathways, including climate-smart agriculture, nutrition-sensitive and sustainable agriculture, and grassroots entrepreneurship.
- Human decision modeling, detailing the types of farmer decisions, steps in the decision-making process, and the complexity of related research.

Dr. P. S. Sivakumar further explained key research dimensions through the concepts of accretion, exploration, sophistication, and excavation.

Later, Dr. Krithika Sundaram, Manager of Social Science Research and Documentation at the Shroff Foundation, presented an engaging session on "Social Science Research and Knowledge Management: Sharing Experiences of NGOs." She provided clarity on the framework of grounded theory, knowledge management, and the application of AI tools to simplify and enhance research processes. She emphasized the importance of qualitative research and how formulating robust research questions is equally critical as quantitative analysis and data. Additionally, Dr. Krithika Sundaram highlighted the competencies and skills required to work in NGOs and shared valuable

insights into career opportunities in the NGO sector through her personal experiences with various projects.



Mind map illustrating the concept of "Pathway-Focused Extension Research" (created by Arulmanikandan).

The day concluded with Dr. Anupam Anand's session on "The Startup Mindset: Nurturing Entrepreneurs for Tomorrow." He provided a comprehensive overview of startups, discussing the attributes of successful ventures, steps to build entrepreneurial skills, and funding opportunities for budding agri-entrepreneurs. His session inspired participants to explore innovation and entrepreneurship in agriculture.



Dr. Saravanan Raj, Dr. P. S. Sivakumar, Dr. Krithika Sundaram, and Dr. Anupam Anand interacting with participants on different topics in their respective sessions.

# **Key Learnings:**

- Adapting to new competencies ensures professional relevance and career progression in the evolving agricultural sector.
- Extension research must integrate social, cultural, economic, and psychological dimensions to be impactful and replicable.
- Tools like human decision modelling and Al-driven research methodologies can significantly enhance research depth and relevance.
- NGOs provide a unique platform for professionals with diverse skills, offering career opportunities and contributing meaningfully to social development projects.
- Entrepreneurship in agriculture requires a structured approach, including a startup mindset, understanding of funding mechanisms, and innovation-driven solutions.

### Day 3

The focus area for the day was on "Extension for Organic Farming, Entrepreneurship, Gender Equality, and Monitoring & Evaluation." It explored the role of agricultural extension in promoting organic farming, fostering agri-preneurship, and advancing gender equality. It also emphasized the significance of monitoring and evaluation (M&E) in assessing agricultural extension programs.

# **Key Learnings:**

- 1. Extension for Entrepreneurship and Gender Equality: Dr. Mahesh Chander highlighted strategies for integrating gender-sensitive approaches in agricultural extension to ensure inclusivity. Insights were shared on leveraging extension services to support agripreneurship, emphasizing sustainable business models in agriculture.
- 2. Extension for Organic Farming: The session delved into best practices for organic farming, focusing on eco-friendly methods and the role of extension in disseminating knowledge about organic techniques.
- 3. Monitoring and Evaluation (M&E): Dr. P.V.K. Sasidhar provided a comprehensive understanding of M&E frameworks for evaluating extension programs. Best practices in designing and implementing effective evaluation techniques were discussed to ensure impactful agricultural interventions.
- 4. Focus Group Discussions (FGDs): The demonstration led by Dr. Sasidhar emphasized methods to conduct effective FGDs, fostering participatory approaches for gathering qualitative insights.



Participants' active participation in the Focus Group Discussion (FGD) demonstration led by Dr. P.V.K. Sasidhar (Professor, IGNOU).

#### **Reflections:**

The sessions were engaging and practical. Dr. Mahesh Chander emphasized the power of inclusive extension services in promoting entrepreneurship and gender equality. Dr. P.V.K. Sasidhar's insights on monitoring, evaluation, and focus group discussions provided clear, actionable methods for assessing and improving agricultural programs.

#### Day 4

The sessions for the day focused on "Career Opportunities in Extension Education." This day highlighted career opportunities in extension education, emphasizing advanced graduate studies in the United States, transdisciplinary research, and the practical application of monitoring and evaluation frameworks in extension programs.

#### **Key Learnings:**

- 1. Graduate Study and Career Opportunities: Insights were provided on pursuing advanced studies in extension education and evaluation in the U.S., with a focus on interdisciplinary approaches to tackle global agricultural challenges.
- 2. Transdisciplinary Research: Participants explored the concept, motivations, advantages, and challenges of integrating multiple disciplines to address complex agricultural issues.
- 3. Practical Skill Development: A group exercise on monitoring and evaluation frameworks fostered critical thinking and collaborative problem-solving.

## **Reflections:**

The session by Dr. Vikram Koundinya and Dr. Parmveer Singh provided a deep understanding of academic and professional pathways in extension education. Their guidance on transdisciplinary research emphasized innovation and adaptability.

Along with this, he described some elementary points pertaining to submitting the project with its necessary requirements. Herewith, he presented some key points that are as follows:

- What should be in a cover letter?
- Who are you?
- Why are you a potential candidate?
- Why should you be selected for our organization?

## **Field Visit**

The visit to the Dr. Mangal Sein Agricultural Science Museum, CCSHAU, Hisar offered participants an opportunity to explore agricultural heritage and technological advancements. The experience highlighted the evolution of agricultural practices and the role of innovation in addressing modern challenges.



Visit to the Dr. Mangal Sein Agricultural Science Museum, CCSHAU, Hisar.

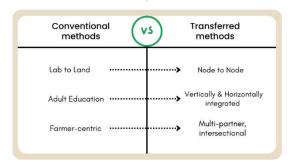
**Reflections:** The field visit to the CCSHAU Museum served as a bridge between history and future aspirations, inspiring participants to learn from the past while innovating for the future.

#### Day 5

The day began with a session by Mr. Srajesh Gupta on "Agricultural Extension in the Times of Climate Change: Community, Markets, and Policy." In his lecture, he mainly focused on farmer welfare in terms of food production, climate change, community interface, and policymakers. Along with this, he mentioned a few push factors like increasing pressure on natural resources (soil, water, air, and forest).

# Extension = Problem Identification + Communication + Management

# **Redefining Extension**



Similarly, a discussion was made on the pull factors, which are globalization, increasing digitalization, the Internet of Things (IoT), Artificial Intelligence (AI), and private capital. He also provided insights into the node interface in extension education with conventional and transferred extension methods.

This was followed by an engaging session by Dr. Rasheed Sulaiman on "New Competencies for Agricultural Extension," emphasizing the skill sets

needed to navigate the changing agricultural landscape. He explained how individuals can build experience through internships, volunteering, joining the workforce, and honing new extension advisory methods as essential core competencies. Another key focus of his session was on why extension professionals should engage in policy-making and how they can do so effectively, with practical guidance on drafting impactful policy briefs and writings.

# **Key Learnings:**

- Integrating community, market, and policy perspectives to address climate challenges.
- Exploring innovative approaches to engaging stakeholders in sustainable practices.
- Emphasizing new extension advisory methods as essential tools for success.
- Building experience through internships, volunteering, and jobs to gain practical skills.
- Recognizing the importance of policy-making for extension professionals and how to get involved.
- Learning to draft impactful policy briefs and writings to influence agricultural innovation.

Overall, the program has been a transformative experience. We have learned that agricultural extension is not just about knowledge dissemination but also about creating meaningful collaborations, fostering innovation, and addressing systemic challenges with a future-ready mindset.

# **Scope for Improvement**

To enhance the effectiveness of the training program:

- A better balance between theoretical discussions and practical applications can be achieved to keep sessions engaging and actionable.
- Incorporating more hands-on workshops and simulations, such as policy brief writing, extension program evaluation, or advisory model building, would provide valuable experiential learning opportunities.

- Additionally, facilitating virtual or in-person discussions with industry leaders, successful agripreneurs, and policymakers would offer broader perspectives and real-world insights.
- Leveraging technology to make sessions more interactive using tools like live polls, breakout rooms, and real-time feedback platforms would further boost engagement.
- Employing both pre- and post-training assessments would effectively measure learning outcomes, ensuring the program's objectives are met and identifying areas for continuous improvement.

# Acknowledgements

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