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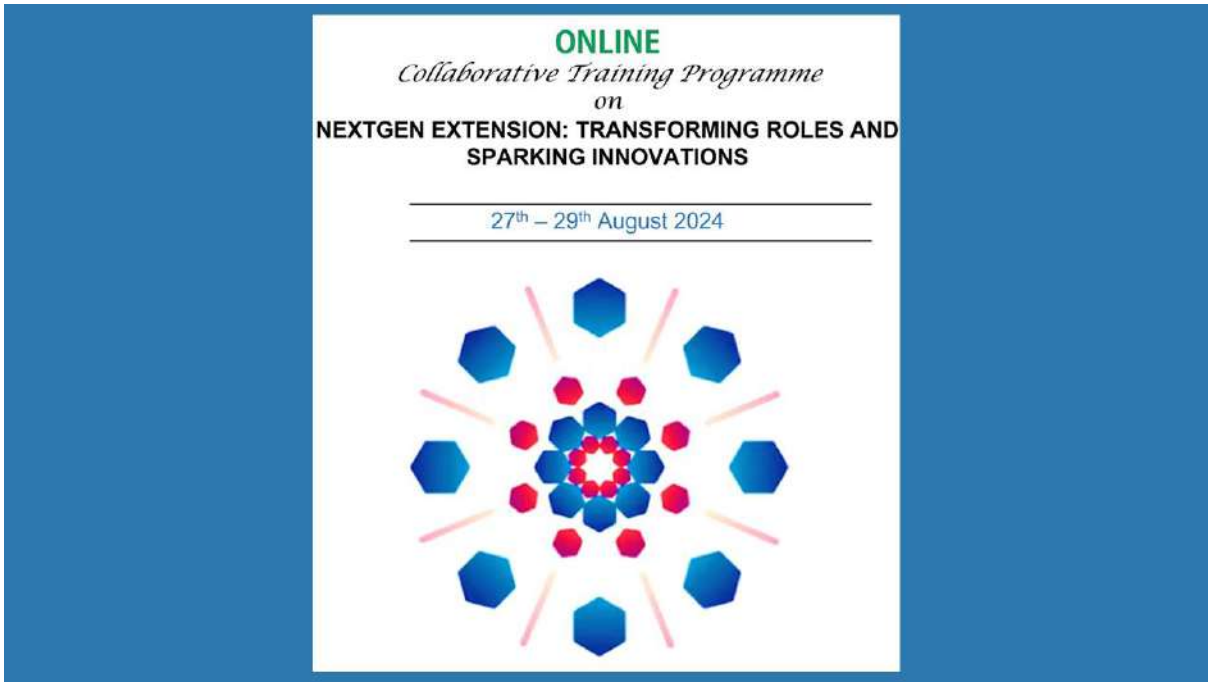
MY MEETING NOTES

Online Collaborative Training Programme on
NEXTGEN EXTENSION: TRANSFORMING ROLES AND SPARKING INNOVATIONS
Conducted by Uttar Banga Krishi Viswavidyalaya (UBKV) West Bengal in collaboration with the National Institute of Agricultural Extension Management (MANAGE), Hyderabad
August 27-29, 2024

In this meeting note, Basu Anand and Chigilipalli Mounika share their experiences from the Online Collaborative Training Programme on Nextgen Extension: Transforming Roles and Sparking.

CONTEXT

The next-generation extension approach provides practical solutions through a dynamic interplay of knowledge, policy readiness, and technology, enabling modern farmers to be both productive and sustainable. These supportive interventions leverage data analytics, online platforms, and mobile technology, facilitating real-time communication between experts and farmers. Unlike traditional methods, next-generation extension emphasizes listening, building trust, and fostering participatory approaches to ensure community ownership. Collaborative engagements with local organizations further enhance outreach efforts, making extension systems more efficient, effective, and resilient by integrating technological advancements with community-based strategies.



PROGRAM SUMMARY AND KEY LEARNINGS

DAY-1: Nextgen Extension: Transforming Agricultural Innovation Through Digital Tools and Co-Creation

Focus:

The first day's lectures showcased the transformation of agricultural extension into the Next-Gen

Extension, emphasizing the use of technology and data-driven decision-making to address modern agricultural challenges. This new approach fosters a robust agricultural innovation system that encourages collaboration and knowledge-sharing among farmers, researchers, and extension workers. Digital tools and technologies were developed to modernize services, enabling real-time information access that enhances decision-making processes. The focus is on co-creating knowledge through participatory processes, where farmers and extension agents collaborate to accelerate innovation.

In contrast, second-generation extensionists use analytics to improve services, connecting smallholder farmers with experts via online platforms. They utilize mobile technology for real-time communications and data gathering, ensuring that communities are engaged through listening and participatory decision-making. These extensionists also bridge the digital divide by promoting digital literacy, advocating for affordable devices, and training farmers on using online platforms. The focus on climate-smart agriculture and resource conservation ensures sustainable management of water and soil resources in a rapidly evolving agricultural landscape.

Key Learnings:

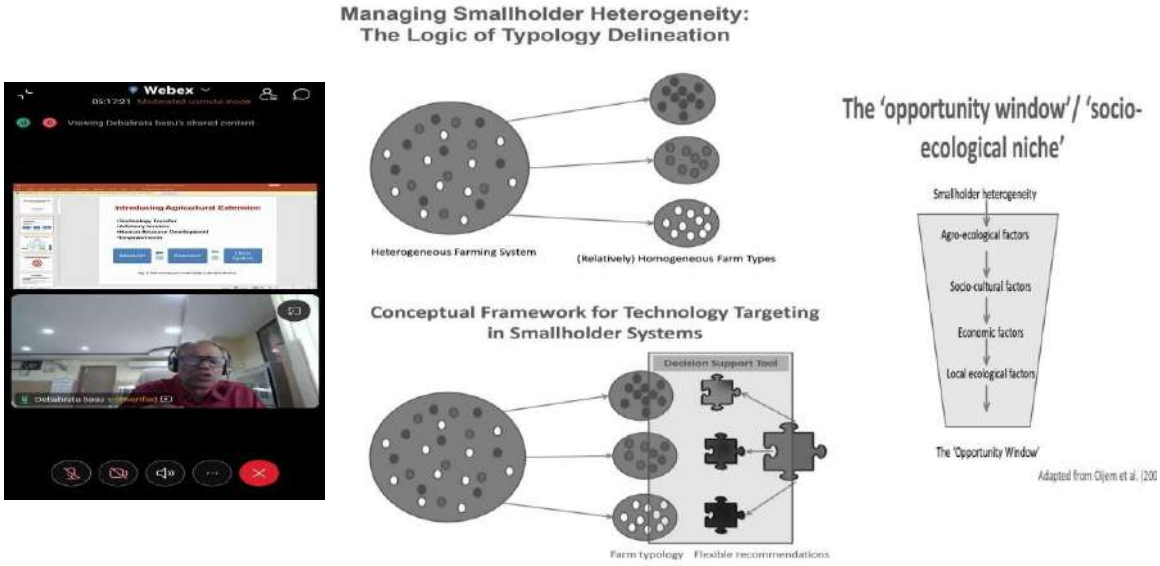
- Transitioning from traditional to digital methods in agricultural extension boosts productivity and innovation, helping farmers adapt to technological advances.
- Digital literacy programs, access to devices, and targeted training are essential to bridging the digital divide and improving decision-making.
- Stakeholder engagement, involving farmers, researchers, and extension professionals, is critical in strengthening the agricultural innovation system.
- Information and communication technologies (ICT) significantly enhance agricultural extension work, enabling precision agriculture, market analysis, and risk assessments.
- Co-creation and collaborative learning models are key to solving complex agricultural issues, making practices more relevant and actionable.

Dr. Kausik Pradhan speaking on NextGen Extension: Changing Landscape and Case Studies

Reflections:

A holistic, farmer-centric approach that integrates digital tools and continuous learning is essential for driving sustained agricultural development. This approach addresses challenges in digital literacy and

connectivity, supported by policy, capacity building, infrastructure development, and enhanced partnerships to foster greater farmer involvement.



Prof. Debabrata Basu, Vice Chancellor, UBKV presenting his thoughts on Leveraging Digital Tools of NextGen Extension

DAY 2: Building Effective Communication and Climate-Smart Strategies for Nextgen Extension Functionaries

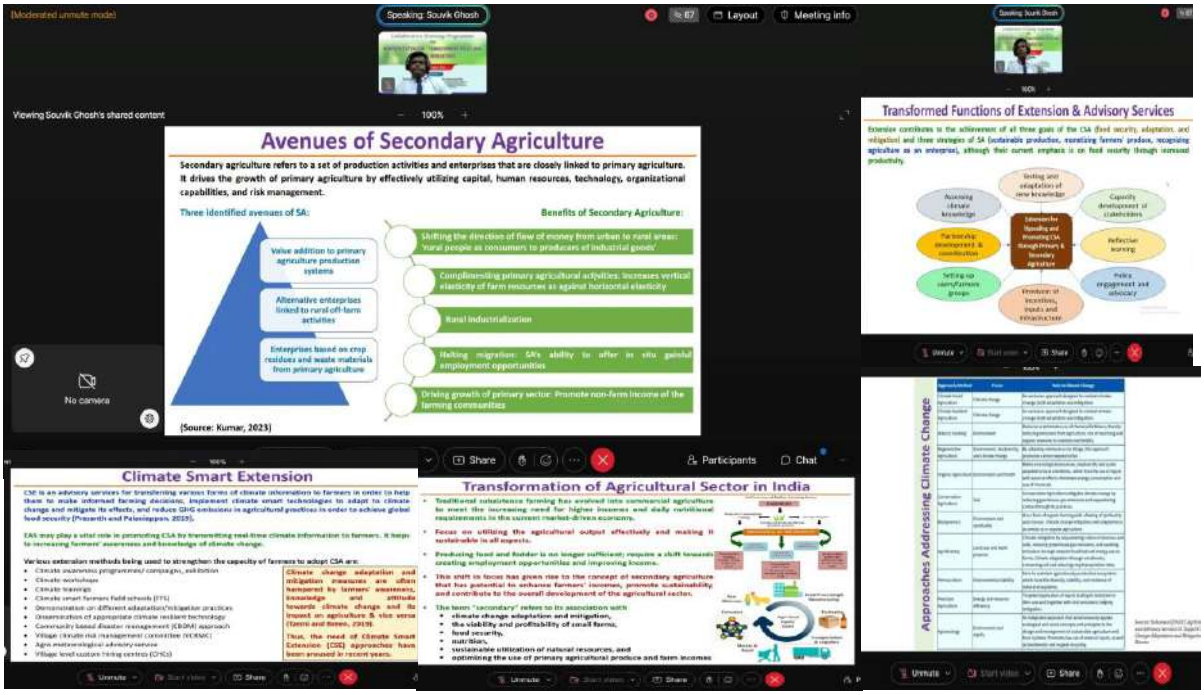
Focus:
Agricultural extension has evolved significantly over the years, adapting to broader changes in rural development, technology, and social needs. While the original focus was on improving rural livelihoods through scientific knowledge, today's extension efforts incorporate mobile and AI technologies to address limited access to information and personalized advisory services. Modern extension prioritizes developing accessible, relevant, and culturally appropriate communication strategies using multiple channels.

The lectures emphasized the importance of targeted approaches, referencing the Target Board principle (Rolling 1988) for addressing small farmers' issues, which often receive less attention from research stations. The "holding ground" approach was discussed, focusing on planning, strategy, and time required to achieve results.

Key Learnings:

- Farming typologies can be useful in addressing heterogeneity among farming systems, through demographic, psychographic, and other variables.
- Smallholder systems' heterogeneity often results in poor adoption of generalized recommendations, underscoring the need for informed targeting based on farm types.
- Researchers and policymakers should adopt the FSRE (Farming Systems Research and Extension) paradigm and agroecological zoning at a macro level for better program implementation.
- Identifying socio-ecological niches and offering flexible recommendations tailored to diverse farming situations is essential for improving adoption rates.

Reflections:
Adopting diverse communication strategies and fostering collaboration among farmers, extension agents, and policymakers can enhance knowledge transfer. This promotes climate-smart agriculture through resource conservation, precision farming, and the integration of AI and mobile technologies, leading to a more resilient agricultural sector.



Prof. Souvik Ghosh's presenting on Building Climate-Smart Farm Communities

DAY 3: Nextgen Extension: Advocacy, Capacity Building, and Innovation with Fuzzy Cognitive Mapping

Focus:
Day 3 focused on advocacy strategies for creating awareness, influencing policy, and mobilizing resources for innovative extension practices. A strong agricultural innovation system relies on knowledge transfer, collaboration, and the adoption of new technologies by farmers and extension workers. The session highlighted adaptation and mitigation measures, demonstrations of new technologies, and the development of training materials for extensionists.

Fuzzy Cognitive Mapping (FCM) was introduced as a decision-making tool that addresses both tangible and intangible factors such as soil fertility, water quality, and food security. FCM allows for analyzing the impacts of ongoing or completed projects by forming pathways between actions and results, thereby improving the effectiveness of technological interventions. This system approach helps project managers uncover hidden causal chains, enabling more informed decision-making.

Key Learnings:

- Capacity building and a multistakeholder approach are crucial for the successful implementation of NextGen agricultural practices.
- Extension services play a key role in connecting farmers with market actors, research institutions, and policymakers, ensuring knowledge and resources are properly utilized.
- FCM is a valuable tool for integrating knowledge and improving decision-making in agriculture, especially when dealing with complex issues.

- The transition from traditional extension models to participatory, farmer-centric approaches requires the adoption of new digital technologies and fostering interdisciplinary collaborations.

Reflections:
NextGen agriculture requires the development of skills through a collaborative, multi-stakeholder approach, linking extension services with research and policy. Complexity tools like Fuzzy Cognitive Mapping enhance the decision-making process by integrating cognitive and knowledge-building processes, helping to assess project impacts and drive innovation.

KEY TAKEAWAYS

- **Adopt Digital Transformation:** Shifting to technology-enabled extension services with ICT tools enhances communication, knowledge sharing, and targeted advice for farmers.
- **Foster Multi-Stakeholder Interaction:** Collaboration among farmers, researchers, extension professionals, and para-professionals strengthens the agricultural innovation system and fosters effective partnerships.
- **Empowerment and Inclusion:** Training and leadership initiatives that promote gender equality and youth engagement increase participation and innovation in agriculture.
- **Climate Resilience:** Climate-smart agricultural practices improve productivity while building resilience against adverse weather conditions brought on by climate change.

SCOPE FOR IMPROVEMENT

- Opportunities for students and research scholars to present and share their knowledge would enrich the discourse, allowing fresh voices to contribute.
- Practical training on Fuzzy Cognitive Mapping would provide research scholars with deeper insights, helping them apply it to their work for more meaningful research outcomes.
- A lecture on market-led extension would benefit students and budding entrepreneurs by providing access to information on distribution, sales, and product management through a single portal.

ACKNOWLEDGEMENT
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