

MANAGE Agricultural Extension "Evening4Learning (E4L)" Webinar Series

Topic: "Beyond Technology Transfer: Advancing Value Chain Extension through Eco Agripreneurs Pvt. Ltd."

Schedule:
25-11-2022, 19:00–19:45 PM

MANAGE - Center for Agricultural Extension Innovations, Reforms and Agripreneurship (MANAGE- CAEIRA)
National Institute of Agricultural Extension Management (MANAGE)
Rajendranagar, Hyderabad- 500 030, INDIA



About the Program

The MANAGE Agricultural Extension "Evening4Learning" Webinar Series is aimed at enhancing knowledge and professional engagement in the field of agricultural extension. The twelve-day series is structured with each day focusing on a distinct topic under a common theme, allowing participants to gain comprehensive insights into key areas of extension. The program is intended for a diverse audience, including postgraduate and doctoral students, agricultural faculty, and industry professionals. It covers broad themes ranging from entrepreneurship and sustainability to emerging technologies in agriculture.





Speaker

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Naganagouda Malkaji

About the Speaker

Mr. Naganagouda Malkaji, Co-Founder of Eco Agripreneurs, Karnataka, is a highly experienced professional with over 20 years of experience in promoting sustainable agriculture. He has served as a Master Trainer on key areas including sustainable agriculture, Integrated Pest Management (IPM), and Farmer Field Schools (FFS). Through his extensive field experience, he has contributed to strengthening farmer capacities, promoting eco-friendly agricultural practices, and facilitating participatory learning approaches for improved farm-level decision-making.

Background of Eco Agripreneurs Pvt. Ltd.

Eco Agripreneurs Pvt. Ltd. was established in 2017 by a group of agricultural professionals, with experience in research, development, agricultural marketing, and extension. The organization was conceptualized as a social enterprise with a dual focus on profitability and societal well-being. Its vision is to create a better life for every farming family, while its mission is to transform agriculture and optimize value for both farmers and consumers.

The enterprise operates across nine districts of Karnataka and is engaged in sustainable agriculture promotion, agricultural input services, contract farming, hybrid seed production, technical consultancy, and farmer market linkages. The organization has also collaborated with national and international agencies, including a German government-supported project (GIZ), to promote sustainable potato value chains in Karnataka and Maharashtra. The enterprise received recognition under the Rashtriya Krishi Vikas Yojana (RKVY) for its work in eco-rice production and marketing.

From Technology Transfer to Value Chain Extension

The traditional agricultural extension largely focuses on transferring technologies from research institutions, universities, private companies, or innovators to farmers. However, modern agricultural challenges require a broader and more integrated approach.

Value chain extension is a system that supports farmers across the entire agricultural value chain, including capacity building, quality input access, crop management, market linkage development, enterprise promotion, and income enhancement. Unlike conventional extension, where interactions may occur only during demonstrations or training events, value chain extension involves continuous engagement with farmers throughout the cropping season.

Agricultural extension should move beyond technology dissemination and focus on improving farmers' productivity, profitability, sustainability, and market competitiveness.

Farmer Capacity Building and Continuous Advisory Services

A major component of the enterprise's work involves regular farmer education and technical guidance. The organization currently employs a team of professionals who provide continuous field-based advisory services.

- Seed production farmers receive weekly field visits.
- Commercial crop farmers receive advisory support at intervals ranging from 15 days to one month, depending on crop requirements.
- Farmers are trained directly in their fields, allowing them to learn through practical observation and experience.

The enterprise regularly organizes:

- On-farm and off-farm training programmes
- Field demonstrations
- Farmer field days
- Knowledge-sharing events
- Exposure visits
- Farmer interaction meetings

These activities are conducted in collaboration with universities, Krishi Vigyan Kendras (KVKs), and government departments to strengthen farmers' technical competencies and decision-making abilities.

Leveraging Digital Platforms for Farmer Outreach

There is a growing role of digital communication in agricultural extension. Social media platforms, particularly WhatsApp, are extensively used to disseminate timely advisories, pest and disease alerts, and crop management recommendations.

With a network of approximately 6,000 farmers, the enterprise reaches thousands of stakeholders through digital communication channels. Timely updates on crop health issues, such as disease outbreaks, enable farmers to take preventive measures before significant crop losses occur.

The startup also contributes technical articles to newspapers and media outlets, to promote awareness on sustainable and residue-free agriculture. Over the years, the enterprise has conducted several training programmes and directly reached thousands of farmers.

Promoting Need-Based and Quality Agricultural Inputs

There is increasing concern regarding indiscriminate pesticide use and inappropriate input recommendations in agriculture. Many farmers who purchase pesticides without assessing actual pest incidence, often leading to unnecessary expenditure and ecological damage.

The enterprise follows a scientific approach to input recommendations by:

- Diagnosing field situations before suggesting interventions.
- Promoting integrated nutrient management rather than excessive pesticide use.
- Avoiding highly hazardous pesticides.
- Recommending safer alternatives wherever possible.
- Encouraging preventive crop health management.

The startup operates agricultural input centres that focus on supplying quality inputs while prioritizing environmental sustainability and farmer safety.

Pesticide Residue-Free Paddy Initiative

The startup promoted pesticide residue-free paddy cultivation. Beginning with only two acres in 2017, the initiative has expanded to nearly 4,000 acres.

The approach focuses on:

- Scientific crop monitoring
- Balanced nutrient management
- Reduced pesticide dependence
- Farmer awareness on ecological farming practices

The need for many pesticide applications can be avoided without affecting crop productivity. By promoting evidence-based decision-making, farmers have reduced production costs while maintaining or improving yields.

The initiative has demonstrated that sustainable crop management can simultaneously benefit farmers, consumers, and the environment.

Product Evaluation and Evidence-Based Recommendations

The organization conducts independent field evaluations of new agricultural products before recommending them to farmers.

Product testing enables the enterprise to:

- Assess field performance under local conditions.
- Compare products from different manufacturers.
- Identify cost-effective alternatives.
- Build farmer confidence through evidence-based recommendations.

The extension professionals need to be focused on active ingredients and field performance rather than relying solely on brand reputation, thereby helping farmers reduce unnecessary expenditure.

Farmer Market Linkages and Eco-Rice Marketing

The agricultural extension should not stop at production enhancement but must also support marketing and value realization.

To strengthen farmer incomes, the enterprise facilitates:

- Direct market linkages
- Export market connections
- Institutional marketing channels
- Consumer-producer networks

The organization markets pesticide residue-free rice under the brand "Eco Rice" and supports farmers in accessing premium markets. Farmers are also linked with organized retail chains and agribusiness companies, enabling them to obtain better prices for their produce.

This market-oriented approach has helped farmers realize higher returns while promoting consumer access to safe and healthy food products.

Hybrid Seed Production and Transparent Farmer Partnerships

Another major area of work by the startup is hybrid seed production. The enterprise currently works with a large network of farmers engaged in seed production, including cotton and other seed crops such as vegetables.

There are also several challenges in conventional seed production systems, including:

- Dependence on intermediaries
- Excessive use of agricultural chemicals
- Lack of technical support
- Non-transparent transactions

To address these issues, the startup follows a farmer-centric model characterized by:

- Continuous technical guidance
- Transparent digital transactions
- Need-based input supply
- Scientific crop management
- Environmentally responsible production practices

As a result, participating farmers have experienced reduced production costs, improved seed quality, and enhanced profitability.

Key Highlights

- **Shift from Technology Transfer to Value-Chain Extension:** The webinar highlighted the need to move beyond conventional technology dissemination towards a comprehensive value-chain approach covering production, input management, capacity building, market linkages, value addition, branding, and consumer connectivity.
- **Startup-Led Sustainable Agricultural Extension:** Eco Agripreneurs Pvt. Ltd. demonstrated how startups can support sustainable agriculture through continuous field-based advisory services, quality input supply, residue-free farming, hybrid seed production, and farmer-oriented consultancy.
- **Continuous Farmer Capacity Building:** Regular field visits, on-farm and off-farm training, demonstrations, field days, and digital platforms such as WhatsApp were emphasized as important mechanisms for providing timely and continuous technical support to farmers.
- **Evidence-Based and Environmentally Responsible Input Management:** The enterprise promotes need-based input use, integrated nutrient management, safer alternatives to hazardous pesticides, and independent field evaluation of agricultural products to reduce unnecessary expenditure and environmental risks.
- **Strengthening Institutional Partnerships:** Collaboration among startups, Departments of Agriculture, KVKs, agricultural universities, and development agencies was highlighted as essential for combining the scale and outreach of public extension systems with the innovation and field engagement of startups.
- **Market Linkages and Farmer Value Realization:** The experience of pesticide residue-free paddy demonstrated the importance of procurement, premium pricing, processing, branding, certification, and market linkages. Stronger institutional and financial support was identified as important for scaling sustainable value-chain initiatives and improving farmer returns.

Interactive discussion

1. How does Eco Agripreneurs startup collaborates with different developmental agencies such as the Department of Agriculture, Department of Horticulture, KVKs, Universities, NGOs, and other stakeholders, and what role do startups play in the agricultural extension system?

Eco Agripreneurs startup actively collaborate with the Department of Agriculture, KVKs, agricultural universities, and development projects through strongest engagement is with the Department of Agriculture, where we serve as resource persons in training programmes, organize field days, and support initiatives such as pesticide residue-free rice cultivation. We have also conducted several farmer training and demonstration programmes in collaboration with KVKs.

With agricultural universities, we work on technical demonstrations and field-based initiatives. For example, we provided technical support for residue-free paddy cultivation on the 72-acre Kathalagere Research Farm of the University of Agricultural Sciences, Shivamogga. We also provide consultancy support to development projects, including international initiatives on sustainable agricultural value chains.

Startups should be viewed as complementary partners to public extension agencies. While Departments of Agriculture, KVKs, and universities have extensive networks that reach millions of farmers, startups contribute innovation, flexibility, intensive field engagement, and market-oriented solutions. The most effective extension system is one where public institutions provide scale and outreach, while startups pilot innovative approaches that can be refined and scaled for wider farmer benefit. Stronger collaboration among these stakeholders can enhance technology adoption, value chain development, and farmer incomes.

2. How do you see the future of agricultural extension, particularly the shift from technology transfer to value-chain extension, and what role can startups play in this transformation?

The future of agricultural extension should move beyond technology transfer towards value-chain extension, covering production, input management, capacity building, market linkages, value addition, branding, and consumer connections. The existing public extension system will continue to play an important role, but field staff are often occupied with schemes, subsidies, input distribution, and administrative targets, leaving limited time for continuous farmer follow-up and outcome-oriented extension.

Startups can complement Departments of Agriculture, KVKs, and universities by providing intensive field-level advisory services, innovation, and regular farmer follow-up. To scale these efforts, government institutions can support startups through joint training programmes, field demonstrations, technical resources, infrastructure, and collaborative projects. The combination of the scale and outreach of public institutions with the innovation and field engagement of startups can strengthen the future agricultural extension system.

3. How is pesticide residue-free paddy being marketed, and what support is required to scale this value-chain approach?

The startup procures pesticide residue-free paddy directly from participating farmers and provides them with a premium price. Since the organization is unable to procure the entire quantity produced, some farmers sell their produce in the open market, while others process and market the rice directly to consumers.

The startup has explored larger markets and has established co-branding and distribution linkages. However, scaling up residue-free rice marketing requires substantial investment in procurement, storage, processing, certification, branding, and marketing. The resource person noted that limited access to investment remains a challenge for startups and emphasized that stronger partnerships among government agencies, private companies, farmer organizations, and market institutions could help develop dedicated value chains and create better market opportunities for farmers adopting sustainable production practices.

YouTube Link:

https://www.youtube.com/watch?v=YWQuRt-c9Hs&list=PLcfEugbo2RL0&t=2s

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