

MANAGE Agricultural Extension "Evening4Learning (E4L)" Webinar Series

Topic: "Core Competencies of Extension Professionals: Implications for Extension Curricula"

Schedule:
21-11-2022, 20:00-20:30 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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About the Speaker

Dr. P.V.K. Sasidhar is a Professor at the School of Extension and Development Studies, IGNOU, New Delhi, with a Ph.D. in Veterinary Extension from the Agricultural University, Hyderabad. He has over two decades of experience in research, teaching, extension, training, and policy, including service with ICAR and prestigious fellowships from USDA, USAID, and Michigan State University. His research focuses on agricultural and veterinary extension, veterinary service delivery, livestock development, and professional competency enhancement. He has published around 100 research articles and more than 100 other publications and has undertaken collaborative research across India, the USA, Sri Lanka, Nepal, Cambodia, and several African countries. He has also contributed to national policy initiatives and international projects with institutions including Michigan State University, the University of Edinburgh, and the World Organisation for Animal Health (OIE). At IGNOU, he coordinates several academic programmes in Development Studies, Corporate Social Responsibility, Urban Planning and Development, and Animal Welfare.

Background

Agricultural and allied extension systems are increasingly expected to provide integrated, demand-driven, and field-oriented services to farmers. Extension professionals working in agriculture, veterinary, and fisheries sectors require not only technical subject-matter expertise but also process competencies and soft skills to effectively respond to farmers' needs and changing field situations.

There is a need to link undergraduate extension curricula with the competencies required at the field level. It was emphasized that professional education in agriculture and allied sectors should prepare graduates to deliver integrated technical, advisory, and support services. The discussion particularly illustrated this through the example of livestock extension professionals and field veterinarians, while also drawing implications for agricultural, fisheries, and community extension professionals.

Need for Undergraduate Curriculum Reform

A major point of discussion was the need to strengthen undergraduate extension curricula in agriculture and allied sciences. While curriculum reforms have been undertaken at the postgraduate and doctoral levels, similar attention is required at the undergraduate level to prepare the next generation of extension professionals.

The revised curriculum should reflect emerging requirements such as digital extension, communication, programme management, monitoring and evaluation, gender responsiveness, value-chain development, nutrition, leadership, problem-solving, and other field-level competencies.

Such curriculum interventions can help bridge the gap between what graduates learn during their education and what is expected of them in professional field situations.

Integrated Service Delivery

Extension professionals are expected to provide a combination of technical and advisory services according to their respective sectors. In the case of livestock extension professionals, integrated service delivery broadly encompasses three major areas:

Technical services: Clinical, paraclinical, and livestock healthcare services.

Input and production support services: Facilitating access to artificial insemination, pregnancy diagnosis, vaccines, medicines, equipment, feed, and other livestock-related inputs.

Livestock extension advisory services: Enhancing farmers' knowledge and skills, facilitating the adoption of improved technologies and practices, and helping farmers derive greater benefits from available innovations.

Similar integrated service delivery models can be developed for agriculture, fisheries, and other allied sectors by combining domain-specific technical competencies with extension and advisory competencies.

Concept of Core Competencies

Core competency was explained as the integration of knowledge, skills, and attitudes (KSA) and their application, enabling professionals to perform effectively and respond appropriately to contingencies, changes, and unexpected situations.

The competencies required by extension professionals were broadly categorized into:

- Technical competencies
- Process competencies/soft skills

Technical competencies are acquired primarily through subject-matter education, while process competencies enable professionals to effectively apply their technical knowledge in real-world field situations.

Technical Competencies and Their Application

Technical competencies vary according to the professional discipline. For example, veterinary graduates require competencies related to basic veterinary sciences, animal production, paraclinical subjects, and clinical sciences. Similarly, agricultural professionals require expertise in areas such as agronomy, plant pathology, plant physiology, and other agricultural disciplines. Merely possessing technical knowledge is insufficient. Professionals should also be able to demonstrate and apply their technical competencies effectively at the field level.

Refresher and continuing training programmes were identified as important mechanisms for updating technical competencies in response to emerging technologies, changing production systems, and evolving farmer needs.

Process Competencies and Soft Skills

Based on studies conducted among extension professionals and extension personnel across India, South Asia, and Sub-Saharan Africa, several core process competency areas were identified.

Core Competency Areas to be Focused on

The major competency areas requiring attention include:

- Programme planning
- Programme implementation
- Communication skills
- Information and Communication Technologies (ICTs)
- Programme monitoring and evaluation
- Personal and professional development
- Diversity and gender responsiveness
- Marketing, brokering, and value-chain development
- General soft skills for extension functionaries
- Nutrition-related competencies
- Technical subject-matter expertise

In addition, several **soft skills** were identified as important for effective extension practice, including critical thinking, problem-solving, time management, stress management, conflict management, leadership, teamwork, flexibility, negotiation, networking, facilitation, collaboration, and other interpersonal and professional skills.

It was emphasized that technical competencies may help professionals enter and perform within a particular job, whereas mastery of process competencies and soft skills can strengthen their capacity to assume leadership and facilitation roles within extension systems.

Competency Development Across the Professional Lifecycle

Four major opportunities for developing and strengthening core competencies were identified:

1. Pre-service training

Undergraduate curricula should be periodically revised to incorporate the competencies required by contemporary extension systems. Curriculum reforms should ensure that graduates are equipped with both technical knowledge and practical extension skills.

2. Induction training

Following recruitment, organizations and government departments should provide induction programmes to familiarize new professionals with institutional mandates, field responsibilities, programmes, procedures, and sector-specific requirements.

3. In-service training

Continuing education and refresher training are essential for updating technical knowledge and strengthening process competencies. In-service training can help professionals respond to technological, institutional, and societal changes.

4. Continuing professional learning

Seminars, workshops, webinars, open and distance learning programmes, and online courses provide additional opportunities for professionals to continuously upgrade their knowledge and skills.

Technical and Soft Skills: Complementary Competencies

Effective extension requires a combination of domain-specific technical expertise and process competencies. A professional possessing only general development or communication skills may not be able to provide specialized agricultural, veterinary, or fisheries advisory services without the necessary technical foundation.

Therefore, effective extension practice requires:

Technical knowledge + Process skills + Appropriate application = Effective Extension Service Delivery

Key Highlights

- **Need for undergraduate curriculum reform:** Extension curricula in agriculture and allied sciences should be regularly updated to integrate emerging field-level competencies alongside technical knowledge.
- **Integrated service delivery:** Agricultural, veterinary, fisheries, and other extension professionals need to combine technical expertise, advisory services, input support, and farmer-oriented facilitation to address diverse field-level needs.
- **Importance of core competencies:** Effective extension requires a combination of knowledge, skills, and attitudes (KSA), with technical competencies complemented by process competencies and soft skills.
- **Strengthening process and soft skills:** Programme planning, communication, ICT use, monitoring and evaluation, leadership, problem-solving, teamwork, negotiation, networking, gender responsiveness, and value-chain development are essential competencies for contemporary extension professionals.
- **Competency development across the professional lifecycle:** Competencies should be continuously strengthened through pre-service, induction, in-service, and continuing professional learning, ensuring professionals remain responsive to changing technologies and farmer needs.

Interactive discussion

1. What is the difference between technical competencies and soft skills/process competencies?

There are broadly two types of competencies: **technical competencies and process competencies or soft skills.**

Technical competencies are specific to a professional's core area of work. For example, an engineering graduate possesses technical competencies related to engineering, a medical graduate possesses competencies related to medical treatment, and an agriculture graduate possesses competencies related to agricultural sciences and their areas of specialization.

In contrast, process competencies and soft skills are common across professions. These include communication skills, the ability to work in diverse settings and environments, teamwork, leadership, problem-solving, and the ability to address issues related to gender, caste, religion, and other forms of diversity.

Soft skills enable professionals to effectively apply their technical knowledge in real-world situations and improve their overall job performance. Therefore, technical expertise and process competencies are complementary and both are essential for effective professional practice.

2. Why is there a need to strengthen and reform undergraduate extension curricula, particularly with regard to soft skills and emerging professional competencies?

Extension curricula already include communication and other soft skills, but these need to be strengthened, modernized, and taught through more practical and application-oriented approaches. Teachers may also require reorientation and capacity building to effectively develop competencies such as critical thinking, problem-solving, facilitation, negotiation, leadership, and teamwork among students. Extension education has evolved beyond one-way technology transfer towards participatory communication, facilitation, networking, stakeholder engagement, innovation, and co-creation, but these emerging competencies are not always adequately reflected in undergraduate curricula. Since many agricultural graduates enter professional employment after their undergraduate education, it is important to equip them with both technical knowledge and process competencies through experiential learning, field exercises, case studies, and problem-solving activities. Strengthening extension representation in curriculum decision-making, reviewing course content, and providing adequate space and credit for extension education are also necessary to ensure that undergraduate curricula remain relevant to changing professional and field-level requirements.

YouTube Link: https://youtu.be/gQwDALu9Fag?t=3952

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