



## **MANAGE Agricultural Extension “Evening4Learning (E4L)” Webinar Series**



**Theme: “Agricultural Extension: An Exciting Profession for Future”**



**Topic: : “New Trends and Professional Opportunities in Monitoring and Evaluation”**



**Schedule:**

**19-11- 2022, 19:45-20:30**



## 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.



**MANAGE**  
**Agricultural Extension**  
**Webinar Series**  
(Online)

19-30 November 2022  
19.00-20.30 pm (IST)

**Agricultural Extension**  
To meet the new challenges in the agri-food systems





## Speaker

**Dr. P.V.K. Sasidhar**

Professor

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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.

## Importance of Monitoring and Evaluation in Agricultural Extension

Monitoring and Evaluation (M&E) is an essential competency for agricultural extension professionals, as it enables them to systematically assess programme implementation, effectiveness, outcomes, and impacts. Extension professionals are involved in planning and implementing multiple programmes and projects and are responsible for managing financial, human, and time resources efficiently. M&E provides evidence to assess whether planned activities are being implemented as intended and whether they are producing the desired results.

The importance of M&E for extension professionals can be understood through the following key aspects:

**Ensures Effective Programme Implementation:** M&E helps extension professionals track progress against planned activities, identify implementation gaps, and take timely corrective measures.

**Promotes Evidence-Based Decision-Making:** It generates empirical evidence on programme performance, outcomes, and impacts, enabling professionals to make informed decisions regarding the continuation, modification, or improvement of programmes.

**Strengthens Accountability and Resource Management:** M&E supports the efficient utilisation of financial, human, and time resources and strengthens accountability to funding agencies, institutions, farmers, and other stakeholders.

**Measures Outcomes and Impacts:** It helps determine who benefited, what changes occurred, and what impacts were achieved, thereby assessing the effectiveness and relevance of extension interventions.

**Supports Programme Improvement and Learning:** M&E identifies what worked, what did not work, and why, enabling extension professionals to improve ongoing programmes and design more effective future interventions.

**Demonstrates Programme Effectiveness to Stakeholders:** Evidence generated through M&E helps justify continued investment and demonstrates the value and contribution of agricultural extension programmes to funding agencies, agricultural universities, and development organisations.

**Strengthens Professional Competency:** Competence in M&E enables extension professionals to move beyond programme implementation towards evidence-based programme management, learning, accountability, and strategic planning.

## Appraisal, Monitoring, Evaluation and Impact Assessment

The four related concepts include appraisal, monitoring, evaluation, and impact assessment.

**Appraisal** is undertaken before initiating a programme or project. It examines aspects such as economic viability, technical feasibility, social desirability, political considerations, and environmental sustainability before approval.

**Monitoring** begins with programme implementation and continues throughout the programme. It provides information for immediate management and mid-course correction and generally covers technical, financial, and human-resource aspects.

**Evaluation** is generally undertaken at a particular point in time, such as midway through or at the completion of a programme. It provides learning for future planning and replication. While monitoring is generally undertaken internally, evaluation may involve external agencies to enhance reliability and validity.

**Impact assessment** focuses on long-term and wider changes beyond the immediate results of a programme. Evaluation and impact assessment should not be used interchangeably, as they differ in their time scale and focus.

## Appraisal - Monitoring - Evaluation - Impact Assessment



**Appraisal** - Critical examination of **Extension** programme proposal, normally before implementation & funding w.r.t. **economic viability, technical feasibility / social desirability etc.**

| Monitoring                                                  | Evaluation                                                                                    |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Continuous:</b> Starts and ends with a programme.        | <b>One shot operation:</b> At a point of time (usually at completion or mid way of programme) |
| Required for <b>immediate use and mid-course correction</b> | Used for <b>future planning/ replication/ expansion of DEAFF programmes</b>                   |
| Done by <b>DEAFF personnel</b>                              | Usually by <b>outside agency</b>                                                              |
| <b>Quick but covers all units</b>                           | <b>In-depth; covers a sample</b>                                                              |
| <b>Correcting / Managing</b>                                | <b>Learning process</b>                                                                       |
| <b>Symptomatic, early warning system</b>                    | <b>Diagnostic</b>                                                                             |

**AME** focus on the processes & direct results of programmes.

Building on these, 'Impact Assessment' focuses on long-term & wide-ranging changes, beyond the immediate results of the programme.

## Evaluation Designs

The two major approaches to evaluation design include:

**Pre-project and post-project evaluation:** This approach assesses changes by comparing the situation before and after programme implementation. Baseline or benchmark studies should be given due importance to reduce recall bias and establish reliable evidence of change.

**With-project and without-project evaluation:** This approach compares beneficiaries with non-beneficiaries, or treatment groups with control groups, to identify programme-related changes.

The combination of pre-project/post-project and with-project/without-project approaches can provide a more comprehensive evaluation design.

# Evaluation Types across Different Stages of an Extension Programme

Evaluation is an integral component of programme management that helps extension professionals assess the relevance, effectiveness, efficiency, and outcomes of extension interventions. It is undertaken at different stages of the programme cycle, beginning with planning and baseline assessment, continuing through implementation and formative evaluation, and concluding with summative and follow-up evaluation.

This systematic process provides evidence for identifying needs, tracking progress, assessing outcomes, improving programme implementation, and supporting future planning and decision-making.

| Evaluation Types<br>By Extension Programme Stage |                      |                                                                                                                                                                                                |                                                                                   |
|--------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Programme Stage                                  | Evaluation Type      | Evaluation Questions                                                                                                                                                                           | Evaluation tools and techniques                                                   |
| Planning                                         | Needs assessment     | • What are the felt and unfelt CD needs of Farmers / EAS professionals?                                                                                                                        | Survey ; FGD ; Observation<br>Content analysis;<br>Economic analysis<br>B:C ratio |
|                                                  | Feasibility study    | • Can the programme address these needs?                                                                                                                                                       |                                                                                   |
|                                                  | Base line study      | • Is capacity development programme feasible (socio-economic & environmental)?                                                                                                                 |                                                                                   |
| Implementation                                   | Formative evaluation | • Is programme meeting its intended outcomes?<br>• Are Farmers / EAS professionals satisfied with the CD programme?                                                                            | Annual monitoring reports<br>KASA changes<br>Satisfaction surveys                 |
| Conclusion                                       | Summative evaluation | • Are the needs addressed?<br>• Are the desired outcomes achieved?<br>• What is the cost effectiveness of the programme?<br>• Under what conditions? With what training?<br>At what cost? etc. | Pre & post programme data<br>Economic analysis                                    |

## Major Frameworks for Programme Evaluation

### 1. Logic Framework Approach

The Logic Framework Approach (LFA) is a systematic tool for planning, monitoring, and evaluating agricultural extension programmes. It establishes a clear logical relationship between the resources invested, activities undertaken, outputs generated, and outcomes achieved. The framework helps extension professionals define what a programme intends to achieve and identify measurable indicators for tracking progress and results.

The basic logic can be represented as:

**Inputs → Activities → Outputs → Outcomes → Impact**

**Inputs:** Financial, human, technical, material, and time resources required for programme implementation.

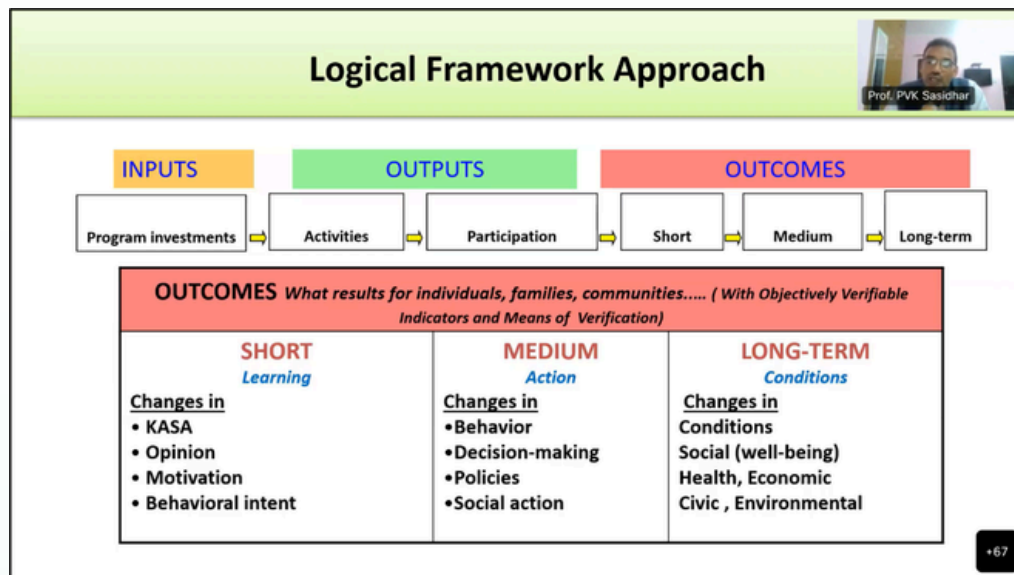
**Activities:** Extension interventions undertaken using the available resources, such as training, demonstrations, advisory services, capacity building, and stakeholder facilitation.

**Outputs:** Immediate and measurable products or services generated through programme activities, such as farmers trained, demonstrations conducted, advisories delivered, or groups formed.

**Outcomes:** Changes resulting from the outputs, which may occur in the short, medium, or long term, including improvements in knowledge, skills, attitudes, practices, adoption, opinions, motivation, and behaviour.

**Impact:** Longer-term changes such as improved productivity, income, livelihoods, resilience, sustainability, and overall development outcomes.

The Logic Framework Approach therefore provides a structured basis for programme planning, monitoring, evaluation, accountability, and learning. It enables extension professionals to connect programme investments and activities with measurable results and assess whether the intended outcomes and impacts are being achieved.



## 2. Bennett's Hierarchy

Bennett's Hierarchy is a seven-level framework used to assess the results and impacts of extension programmes systematically. It traces the progression from programme inputs and activities to participation, reactions, changes in knowledge, attitudes, skills and aspirations, behavioural change, and ultimately programme impact. The framework enables extension professionals to assess results at different levels according to the objectives of the programme, availability of resources, and time.

The seven levels of Bennett's Hierarchy are:

**Inputs:** Resources invested in the programme, including financial, human, and material resources.

**Activities:** Actions and interventions undertaken to achieve programme objectives.

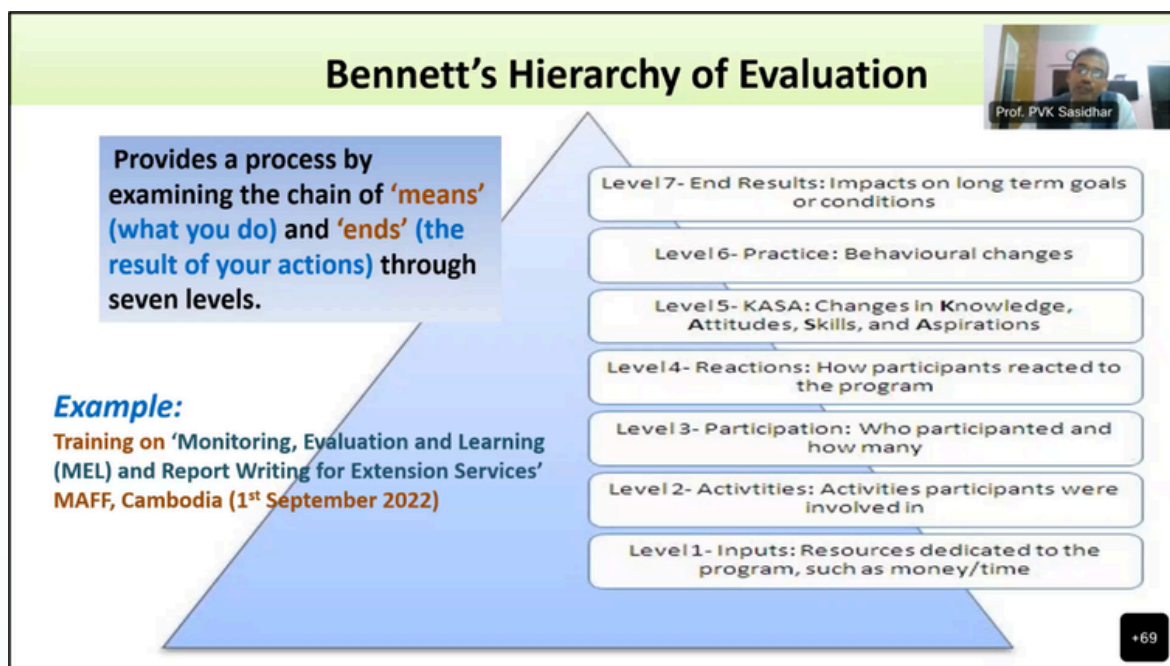
**Participation:** Involvement of farmers, extension personnel, and other stakeholders in programme activities.

**Reactions:** Participants' responses, perceptions, and satisfaction with the programme.

**Change in Knowledge, Attitudes, Skills and Aspirations (KASA):** Changes in participants' knowledge, attitudes, skills, and aspirations resulting from the programme.

**Change in Practice:** Application or adoption of the knowledge and skills gained through the programme.

**End Results:** Wider and longer-term changes attributable to the programme.



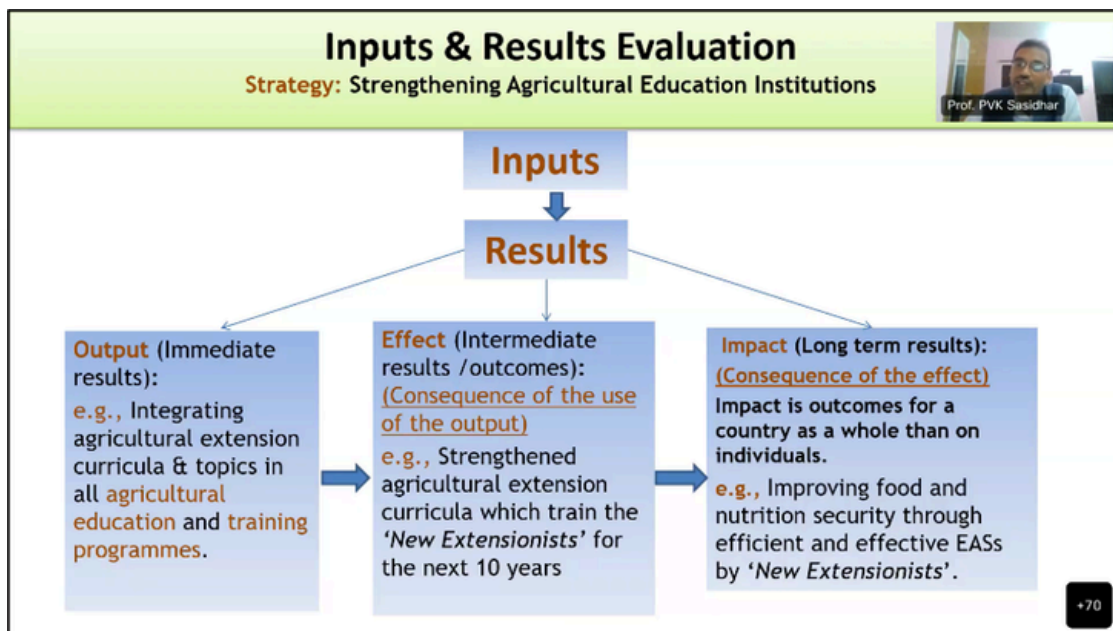
Greater emphasis was given to Change in Knowledge, Attitudes, Skills and Aspirations (KASA), Change in Practice, and End Results.

For example, in evaluating a webinar or training programme, assessment may begin with the resources and activities involved, followed by participant participation and satisfaction. It can then examine changes in knowledge, skills, and attitudes, subsequent application or behavioural change, and finally the broader contribution or impact on extension practice. Thus, Bennett's Hierarchy provides a structured basis for measuring programme results, learning from implementation, and strengthening evidence-based extension planning and management.

### 3. Inputs and Results Evaluation

Inputs and Results Evaluation is an important component of programme planning, monitoring, and evaluation in agricultural extension. It helps assess whether the resources invested in a programme have generated the desired changes among beneficiaries and institutions. The approach provides a systematic framework for understanding the relationship between programme investments, activities, outputs, outcomes, and long-term impacts. In extension systems, it supports evidence-based decision-making, accountability, learning, and programme improvement.

The Inputs and Results Framework distinguishes between resources invested in a programme and the results generated from those investments. This approach demonstrates how immediate outputs can contribute to intermediate effects and longer-term impacts at institutional and broader levels.



## Indicators and Measurement of Outcomes

Identifying objectively verifiable indicators and means of verification is important for assessing programme results. Outcomes may occur at different levels:

**Short-term:** Knowledge, aspirations, attitudes, skills, opinions, motivation, and behavioural intentions.

**Medium-term:** Behavioural change, decision-making, and social or institutional action.

**Long-term:** Food security, social change, community well-being, economic conditions, health, civic development, and environmental change.

These categories may overlap and should therefore be interpreted according to the nature and timeframe of the programme.

## MEL as an Emerging Professional Competency

The growing importance of Monitoring, Evaluation and Learning (MEL) as a core competency for new-generation extension professionals. MEL skills are relevant not only for conventional extension positions in agricultural universities, ICAR institutions, and KVKs, but also for national and international development organisations.

- Potential professional areas include:
- Monitoring and Evaluation Specialist
- Programme Evaluation
- Impact Assessment
- Development Projects
- International Development Organisations
- Corporate Social Responsibility (CSR) Projects
- Extension Advisory Service Performance Assessment

These areas offer opportunities in organisations and development agencies such as UNDP, FAO, the World Bank, WHO, CGIAR institutions, and other national and international organisations.

## Key Highlights

- **Monitoring, Evaluation and Learning (MEL) is a critical competency for extension professionals**, enabling effective programme implementation, evidence-based decision-making, accountability, resource management, learning, and assessment of programme outcomes and impacts.
- **Appraisal, Monitoring, Evaluation, and Impact Assessment are distinct but complementary processes**: appraisal is conducted before programme initiation, monitoring tracks implementation progress, evaluation assesses performance at specific stages, and impact assessment examines long-term changes beyond immediate programme results.
- **The Logic Framework Approach (LFA) provides a structured pathway from Inputs → Activities → Outputs → Outcomes → Impact**, helping extension professionals plan, monitor, evaluate, and demonstrate how programme investments contribute to measurable development results.
- **Bennett's Hierarchy offers a seven-level evaluation framework** that tracks programme progress from inputs and activities through participation, reactions, changes in Knowledge, Attitudes, Skills and Aspirations (KASA), changes in practice, and ultimately end results.
- **The Inputs and Results Evaluation framework links programme investments with outcomes and impacts**, distinguishing between inputs, activities, outputs, outcomes, and long-term impacts such as increased productivity, income, resilience, food security, and sustainable livelihoods.
- **MEL is emerging as an important professional competency in agricultural extension and development sectors**, creating opportunities in monitoring and evaluation, programme evaluation, impact assessment, development projects, CSR initiatives, and national and international development organisations.

**YouTube Link:**  
<https://youtu.be/YfIGisOEI2o?t=1305>

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