



**National Institute for Agricultural Extension Management (PGDAEM)  
Rajendranagar, Hyderabad – 500 030, Telangana.**

**Guidelines for AEM 205 - Project Work:  
Selection of Topic, Report Writing & Evaluation**

The course AEM 205: Project work (2 Credits) is compulsory for completing the Post Graduate Diploma in Agricultural Extension Management (PGDAEM). The candidates have to select any one topic from A or B or C category, in consultation with SAMETI, based on their interest, area of work and its relevance to farming communities in your locale with due consideration to their existing socio-economic conditions.

SAMETIs will maintain an oversight of the candidate's project work. All candidates are required to submit a project report before the second semester examinations. Report on the project work carries 100 marks. A minimum of 50 marks is required for successfully qualifying the course.

**Purpose of the project work:**

**AEM 205:** Project Work is intended to provide an opportunity to the candidates to field test the learnings, related to extension management skill that he/she has acquired from PGDAEM programme. The overall objective of the program is to equip the extension functionaries with the latest tools and technologies for participatory decision making, provide an insight into various extension models and developments in agricultural extension and enhance their techno-managerial competencies.

As part of the course requirement, the candidates are suggested to choose **either** of the topic from:

- (A) Technologies related to respective departments or
- (B) Extension management approaches/ skills or
- (C) Government Schemes in Agriculture and allied Sectors.

The topic chosen from A/ B/ C category for the project work has to be planned as a field activity which the candidate has to implement in his/her own jurisdiction and

report on the work done at the field level with the farmers/ stake holders and its utility to the farming community.

## **How to select the topic for the project work:**

### **Criteria:**

1. Selected topic must have importance in the candidate's area of posting and the agro-ecological situation.
2. Any topic related to the theme from A or B or C category has to be chosen. The provided list for all the categories is only indicative.
3. The project work should not be based on the book reviews/reports alone. It has to be a field activity where farmers/ livestock-rearers / fishermen/ others are involved as primary stakeholders.
4. The project work should be simple and easy to execute.
5. The project work should be within the control of the candidate, in terms of time and jurisdiction (area of his/her operation).
6. Should not involve any financial commitments.
7. The candidates should communicate to the SAMETI of his/her State, the topic chosen for the project work within 15 days after completing the 1<sup>st</sup> semester contact classes at SAMETI. Change/ modification in the topic of the project work is permitted only once during the entire course period.
8. The field activity has to be completed before the second semester examination, so that the report can be submitted on time.
9. Photos of the field activities should be included in the project report.

### **Endorsement of the project work**

10. The project work carried out by the candidates at the field level should be endorsed by the immediate reporting officer of his/ her department. In case of private candidates who do not belong to any department, the project work should be endorsed directly by competent authority at the concerned SAMETI.
11. The project report should be a minimum of 20 page and should not exceed 50 page. The candidates should refer various field study reports, annual reports, program evaluation reports, observations of experts and other sources relevant to the topic of the project.

## Structure of the project report

### 1. Introduction

Introduction should include the following aspects:

- a. **Topic or subject matter:** This should justify why the topic is important or significant.
- b. **Objectives of the project:** What is the specific objective (s) of your field project (on the selected topic) and how is it going to be helpful to the farmers/ primary stakeholders.
- c. **Scope:** What are the possibilities of up-scaling or expanding or replicating the project in your area of operation and other areas where it is applicable. What are the probable outcomes and benefits from the project to the target group i.e. farmers or primary stakeholders.

### 2. Methodology for undertaking the project work

The methodology adopted for undertaking the project work should be fully explained. The report should contain the details such as location of the project work, sample size (target group- farmers/stakeholders), technologies involved/ schedules/ experiments, details of analysis (if any) for interpretation of the data, time frame of project activities and other details based on the nature of the project.

### 3. Results and conclusion

A detail presentation of the findings of the project work with supporting data in the form of tables, charts, photographs etc. needs to be given. The results of the project work may be in the nature of e.g. increase in yield, efficient water management, empowerment of the groups, increase in income, reduction in diseases, introduction and adoption of new technology, replication of innovations; accessibility, acceptability, coverage and impact of government scheme on the farmers; effectiveness of participatory approaches, farm schools, farmer producer companies, public private partnership, etc.

Based on the results and observations, the conclusions derived may be expressed in the form of lessons learnt, suggestions for improvement, specific recommendations for future and limitations experienced.

### **Guidelines for evaluation of project work:**

- Project report should be type written on A4 sheet.
- The project report carries 100 marks.
- The projects report accompanied with the endorsement of the immediate reporting officer, in case of regular departmental candidates, should only be evaluated. In case of self-funded candidates who do not belong to any department, project reports accompanied with the endorsement of PGDAEM Coordinator / competent authority in SAMETI only should beevaluated.
- Evaluation should be done only by the identified panel of resource ~~pers~~ under A & B category of the topics.

### **Parameters for evaluation and awarding marks for the project report:**

<b>Parameters</b>	<b>Marks</b>
Introduction (which includes topic,objectives and scope)	15
Methodology (which includes selection of area for project work, sample size (farmers / other stakeholders), details of the field activity, interview schedules, analysis and interpretation of data etc.)	30
Results and conclusion	35
Photographs, diagrams, graphs etc.	10
Format for writing the project report and the clarity in expression (as per guidelines)	10
Total:	100

## **General tips for writing the project report:**

The report will have the following headings:

1. Cover sheet
2. Title page
3. Table of contents
4. Abstract
5. Introduction
  - i. Topic or Title
  - ii. Objective/s of the project
  - iii. Scope
6. Methodology for undertaking the project work
7. Results and Conclusion
8. References / Bibliography
9. Glossary (if needed)
10. Appendices

### **1. Title page**

- Title of the project
- Name of the candidate
- Enrollment No.
- Name of the department
- Year of submission

### **2. Table of contents**

- Should be accurate with clear layout
- Should have section numbering along with page numbers
- List of illustrations, if applicable

### **3. Abstract**

- The abstract of a report include the following:
- Providing the essence of the report in a few words
- Informative or descriptive form
- Impersonal tone
- Connected writing
- Length 150-250 words (for longer reports, 1/2-1 page single-spaced)
- Complete summary of key information

#### **4. Body format**

- Main headings indicating equal level of importance
- All sub-headings relating to section heading
- Choice of levels indicating hierarchy of importance
- Hierarchy of importance shown by careful and consistent use of features such as capitals, different fonts, underlining, bold, italics
- Indenting
- Numbering/letter system
- Space between sections to enhance readability and layout
- When using charts, statistics and illustrations check for suitability, captions, reference in text and positioning
- Acknowledgement of all sources, including material referred to indirectly, direct quotations, copied diagrams, tables, statistics
- Ensure a systematic link between references in the text and the reference list and bibliography

#### **5. Content**

- Logical development of ideas from one section to another, and within each section
- Citing evidence
- Relevant to the topic selected within the purview of the PGDAEM
- Should be objective and specific

#### **6. Conclusion(s)**

- It should be arising out of the facts and convincing
- There should be a substantial basis for the recommendations

#### **7. Recommendations (if applicable)**

- Based on the conclusions
- It should be practical and specific
- Well organized, with the most important one first

#### **8. References**

The reference list is placed at the end of the report. It is arranged in alphabetical order of authors' surnames and chronologically arranged for each author. The reference list includes only references cited in the text. The author's surname is placed first, immediately followed by the year of publication. The date is often placed in brackets. The title of the publication appears after the date, followed by place of publication, then publisher. Use of commas, colons, full stops may be used as indicated below. Note that the titles of books,

journals and other major works appear in italics (or are underlined when handwritten), while the titles of articles and smaller works which are found in larger works are placed in (usually single) quotation marks. The format of reference is given below.

- Beasley, V. (1964), *Eureka! Or how to be a successful student*, Flinders University, Bedford Park, South Australia.
- Betts, K. and Seitz, A. (1986), *Writing essays in the social sciences*, Melbourne, Thomas Nelson.
- Clanchy, J. and Ballard, B. (1981), *Essay writing for students*, Melbourne, Longman Cheshire.
- Marshall, B.R. (1985), 'Common Writing Problems in Tertiary Education' *Australian Educators Journal*, Vol 7, No.3, pp. 56-64.
- White, R.V. (1979a), *Functional English*, Sunbury-on-Thames, Nelson.
- White, R.V. (1979b), *English for Academic Purposes*, Sunbury-on-Thames, Nelson.

#### **9. Glossary (if included)**

- Should be arranged alphabetically

#### **10. Appendix (appendices)**

- Should be placed at the end of a report (if included)
- Should be arranged in the order referred to in the report



## **SUGGESTED SUBJECTS / TOPICS FOR PROJECT WORK UNDER PGDAEM**

### **A - List of Technologies**

#### **Agriculture:**

- Soil Health management - soil testing and soil test based recommendations to farmers
- Use of micronutrients for improving soil health
- Management technologies for problematic soil
- Alternative source of inorganic fertilizers to sustain the soil and crop productivity (Green Manuring and Bio fertilizers)
- Integrated Nutrient Management (INM) for improving soil health and its productivity –NPM SH&F - Sub-Mission on Plant Protection included in NMAET
- Use of Bio-fertilizers
- Vermi - compost for soil fertility improvement
- Recycling of farm wastes and various composting techniques
- In situ- trash composting
- Nutrient deficiency symptoms of major crops of your Jurisdiction and remedial measures
- Organic farming cultivation technologies
- Bio priming seed treatment for plant health management
- Varietal innovation for sustainable crop production
- Pulse production technologies
- Growth substances in enhancing crop productivity
- AESA based plant health management
- Ecological engineering for pest management
- Use of Bio pesticides
- Disease Management-Sub-Mission on Plant Protection included in NMAET
- Integrated Pest Management–Sub-Mission on Plant Protection included in NMAET
- Integrated Weed Management-Sub-Mission on Plant Protection included in NMAET
- Mechanical weed control
- Pest, disease and Weed management in organic farming
- Integrated Farming System: Advantages, Components and Models

- Water management in Dry land areas
- Water conservation technologies and importance in Agriculture
- Rain water harvesting technologies
- Drought management including in - situ moisture conservation technologies
- Importance of Watershed development in soil and water conservation
- Major extreme events of your area and proposed disaster management techniques such as Flood management and mitigation technologies
- System of Rice Intensification (SRI) Cultivation
- Important post-harvest technologies to minimize the wastage of farm produce
- Important dry land technologies suitable for your areas
- Adaptation and Mitigation Technologies for Climate Change
- Value addition
- Irrigation management through Solar energy
- Role of Women in agricultural and allied activities
- Gender mainstreaming in Agriculture and allied activities
- Drudgery related and health related problems of the agricultural labour in the field
- Mechanization

## **Agricultural Engineering Technologies**

### **Soil & water conservation technologies**

- a. Micro irrigation
- b. Drainage technology
- c. Watershed development & water harvesting
- d. On farm irrigation structures such as pre-fabricated irrigation channels, diversion block, V notch etc.
- e. Green house & protected cultivation
- f. Water use efficiency by different methods
- g. Impact of command areas on productivity of crops

## **Farm machinery**

- a. Tillage implements
- b. Sowing implements
- c. Weeding and intercultural implements
- d. Plant protection equipment
- e. Harvesting equipment
- f. Miscellaneous equipment

## **Horticulture**

- ❖ Green house cultivation
- ❖ Orchard management
- ❖ Canopy management in mango
- ❖ Shade net cultivation of vegetables with fertigation
- ❖ Soil Test Based Integrated Plant Nutrient Supply System (IPNSS)
- ❖ Crop diversification with oil palm
- ❖ Relay cropping in vegetable cultivation
- ❖ Rejuvenation of old and unproductive mango orchards
- ❖ Mango production and post-harvest management

## **Livestock and dairy**

- Commercialized Goat milk based soap technologies
- Technologies for producing Cured and Smoked meat products
- Technologies for producing Shelf stable meat products
- Value added meat Product Technologies
- Emulsion based chicken products Emulsion based mutton products
- Male Kid Production System
- Optimum Floor Space and Ventilation for Goats ...
- Area Specific Mineral Mixture
- Tree leaves and spent grain based Feed blocks
- Silage making with agro-industrial by-products
- Vanaraja: A dual-purpose variety developed exclusively for free range poultry farming in rural and tribal areas.

- Gramapriya: A layer type variety developed for free range farming in rural and tribal areas.
- Feed supplements
- Enriched paddy straw blocks
- Artificial Insemination
- Milking machine
- Chaff cutting machine

### **Fisheries**

- Technology of Extensive Shrimp Farming Systems.
- Technology of Semi-intensive Shrimp Farming Systems.
- Technology of Intensive Systems.
- Pen Culture Technology.
- Cage Culture Technology.
- Integrated Fish Farming.

### **Fish cum-Poultry Integration.**

- Fish-cum- Duck Integration.
- Rice cum-fish Culture.
- Horticulture –Fish Integration.
- Seri –Fish Integration.
- Freshwater Pearl Culture
- Feed formula, production process and feeding methods suitable for feeding in poly culture system of carps and prawn.
- Feed supplement to enhance growth and survival of Indian major carps.
- Comprehensive catfish hatchery.

## **B. Extension Approaches & Methods:**

1. Diffusion and adoption of farm innovation.
2. Audience response pattern through Farm Field Schools approach in terms of change in Knowledge, Skills and Attitudes (KSA).
3. A Study on the role and impact Agricultural Producer companies in augmenting farmers' incomes.
4. Research - Extension - Farmer (REF) linkage - its weaknesses and need for strengthening the linkages.
5. Role of Information Communication Technology (ICT) in Agricultural Innovations.
6. Develop a communication strategy using traditional, conventional and modern media for diffusion of innovations?
7. Women are forced to take to Agriculture and Allied sectors for livelihoods which is termed as feminization in agriculture. But apprehension is, their access to farm innovations is poor. Analyze and suggest a communication strategy to women in Agriculture?
8. Interpersonal and group communication behaviour of farmers under irrigated or command areas.
9. Performance assessment and implications of Extension system (s) operating in your state.
10. Capacity building of different stakeholders - farmers, extension functionaries, agroprocessors, marketers and other players.
11. A study on the time utilization and decision making patterns of farm women in farm and home activities.
12. Organizational role, stress and job performance of Extension functionaries.
13. Study on the Entrepreneurial Behaviour of Rural Women.
14. Develop a Micro plan of a selected village applying PRA techniques you have studied.
15. How do you conduct participatory planning and monitoring of a project implemented in your workplace?
16. Identify the technological needs of a given village using PRA techniques to develop a people oriented programme?
17. Market led extension through group approaches would the farmers -

Analyze its implications on empowerment of Farmers.

18. Time related PRA Methods - its application and implication in the process agricultural development.
19. Capacity building - its role in empowering the given clientele i.e. farmers and extension functionaries.
20. Develop a knowledge test (instrument to measure knowledge) taking hypothetical example of your field and activity with procedure?
21. Public - Private Partnerships in Agriculture and Allied Enterprises.
22. Develop an instrument to measure farm literacy levels
23. Identify a research problem of a village of your choice - develop the objectives, and variables for the study.
24. Agricultural Market Intelligence System in India – Problems and Prospects.
25. Supply Chain Management of Agricultural Produce – Opportunities and Possibilities.
26. Future Trading and Commodity Marketing – New Vista in Agricultural Marketing in India.
27. Business to Entrepreneurship – most desired change in agri-business management to help farm producers and consumers.
28. Rural Marketing – A new horizon in agribusiness venture.
29. Why and how to manage Project? Extension Professionals' Guide to Project Management in Agricultural Extension.
30. Human Aspects – the most important factor in Project Management in Agricultural Extension – An Unique Analysis
31. Commercial and Financial Feasibility of an Agricultural Project – the most important determinant of its success.
32. Information and communication Technology (ICT) – A New Vista in Agricultural Extension Services.
33. Changing Scenario of Indian agriculture through introduction of ICT in its technology dissemination process.
34. E-extension – Paradigm shift in agricultural extension services reaching millions of farmers with ease and efficiency.

## **C. Schemes of the Government of India and the concerned state**