## **National Institute of Agricultural Extension Management**

## Rajendranage, Hyderabad- 500030, Telangana

# Post Graduate Diploma in Agricultural Extension Management (PGDAEM)

## **AEM-205 Project Work**

#### 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 Mannuring and Bio fertilizers)
- Integrated Nutrient Management (INM) for improving soil health and its productivity –NPMSH&F Sub-Mission on Plant Protection included in NMAET
- Use of Bio-fertilizers
- Vermicompost 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

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

## Farm machinery

- Tillage implements
- Sowing implements
- Weeding and intercultural implements
- Plant protection equipment
- Harvesting equipment
- Miscellaneous equipment

#### Horticulture

- Green house cultivation
- Orchard management
- Canopy management in mango
- Shade net cultivation of vegetables with fustigation
- 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 of 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 the 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 people oriented programme?
- 17. Market led extension through group approaches would the farmers -Analyse its implications on the 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 the 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 the introduction of ICT in its technology dissemination process.
- 34. E-extension A 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