

AGRICULTURAL EXTENSION

(Subject Code-89)

Unit 1: Fundamentals of Extension and Communication

Concepts and scope of extension and communication particularly for primary and secondary agriculture. What is and what is not Extension. Historical and emerging perspectives of agricultural, veterinary and animal husbandry extension education in India and other countries. Community Development and Integrated Rural Development- concept, principles and objectives. Role of agricultural extension in different sectors of agriculture and rural development. Agricultural Extension in the context of enhancing productivity, Quality, Nutrition, post harvest technology, product processing, Profitability, Income and Employment. FLD and OFT in relation to TOT programmes. Farming System Research and Extension (FSR&E) and participatory development approaches. Farming situation based extension Concept and modules of communication, credibility, fidelity, empathy and feedback in communication. Similarities and dissimilarities among extension education, adult education and continuing/distance education. Andragogy and theories of adult learning. Educational approach of Extension. Human behavioural dimensions and gender sensitivity in extension education programmes. Meaning and characteristics of attitude, factors affecting attitude change; Understanding of basic rural institutions, social structure, culture and norms. Social and technological change processes, group dynamics, concepts and theories of rural leadership. Group and mass communication, Interpersonal and Intrapersonal Communication Skills, Organizational communication. Rapport building with clientele. Problems and barriers in communication; distortion and noise in communication. Impact analysis of extension programmes. Pluralism in extension.

Unit 2: Extension Methods & Farm Journalism

Concepts of teaching and learning processes–principles of learning as applied to agricultural extension. Individual, group and mass approaches in extension, audiovisual aids- classification, selection, use and production. Traditional media for communication in development programmes. Modularized communication- concept, approach, need, process of designing instruction for transfer of communication. Basics of agricultural journalism, types of publications – bulletins, folders, leaflets, booklets, newsletters, popular and scientific articles. Selection, planning and use of different extension teaching methods like demonstration, exhibition, farmers fairs, field days, tours, extension literature, etc. Public speaking. Preparation of radio/video script. Principles of photography and its use in extension.

Unit 3: Information Communication Technologies (ICT)

Concept of ICT and its role in agriculture and rural development. ICT tools- e-mail, Internet, use of multimedia, use of mobile phony, computer-assisted instructions, touch screens, micro-computers, web technologies and information kiosks. E-learning, information resources, sharing and networking. Problems and prospects of ICTs, Utilization of Internet for promoting; communication with rural, semi-urban farmers. e-Readiness, m-Learning, knowledge management, Open Education Resources, Massive Open Online Courses (MOOC), Community Radio, Blog, Bring your own Device (BYOD), CeRA. Social media as a tool of extension research, education and service Web based extension efforts of ICAR, State Agril. Universities, State Deptt. Of Agriculture, NGOs, Private/Corporate Organization. Expert system, Artificial Intelligence in Agriculture Extension Service. Difference between website and web Portel.

Unit 4: Training & Human Resource Development

Human resources and their importance in agricultural development. Concept of human resource management. Identifying training needs and assessment of training impact. Training – principles, importance, methods and factors. Phases of training - pre training and post training. Developing training modules, training requirements, training methods. Lecture cum demonstration method, case method, brain storming, syndicate method, business games, simulation exercises, in basket exercise, programmed instruction, experiential learning techniques such as sensitivity training, T-

group, transactional analysis and fish bowl exercise. Evaluation of training - types and techniques of training evaluation. Motivation, stress management and organizational behaviour as facilitators of human resource development. Capacity development of stakeholders.

Unit 5: Research Methodology in Extension Education

Social research- concept, principles and approach. Selection and identification of research problems, methods of data collection- interview method and mailed questionnaires, variables - meaning and types, independent, dependent and intervening variables. Hypothesis-concept, characteristics, types and testing. Research design-concept and types, field studies, case studies and survey method. Measurement-meaning and levels. Methods of sampling and statistical tests. Reliability and validity of tests, normal distribution, tests of significance, ANOVA, correlation and regression, scaling techniques. Processing of data, coding- tabulation. Analysis and interpretation. Writing scientific reports, citing references.

Unit 6: Programme Planning, Evaluation & Diffusion and Adoption of Innovations

Concept, steps, principles and theories of programme planning. Steps in programme planning organizing campaigns and variety of extension activities, evaluation of extension programmes, compilation and report writing. Monitoring and evaluation – concept, significance, types, methods and tools. Theoretical models of programme planning. Felt needs; need-based programmes. critical analysis of five year plans with special reference to programmes for women, children and youth. SWOT/TOWS analysis of development programmes. Concept and elements of diffusion and adoption for social change. Diffusion process, adoption process, models of diffusion and adoption, adopter categories and their characteristics. Factors influencing adoption and attributes of innovations. Concept and stages of Innovation-decision process, consequences of innovations.

Unit 7: Extension Management

Concept and principles of administration and management, classical and modern theories, schools of management thought. Functions of management – planning, organizing, staffing, directing and leading, controlling, coordinating, reporting and budgeting. Types and methods of administrative communication. Decision-making in organization. Organizational effectiveness, organizational climate, organizational behaviour, organizational development, job satisfaction and morale. Time management. Performance appraisal. Coordination at different levels of extension management, methods of coordination. Management by Objective (MBO) and Total Quality Management (TQM). Project Evaluation and Review Technique (PERT). Logical Frame Working (LFW) and Project Management Techniques. Personal management. Monitoring, evaluation and impact analysis of extension programmes. Critical analysis of organizational set up of extension administration at various levels. Agricultural Technology Information Centers (ATIC). Technology Parks. Management Information System. Traditional media for communication in development programmes. Problem Solving Techniques/Negotiation , Motivational Theories & Techniques, Work motivation Organizational climate; Resource management: concept and methods; Team building: process and strategies at organizational and village levels. Mobilization and empowerment skills: concept and strategies in mobilization.

Unit 8: Entrepreneurial Development

Concept, significance and scope. Institutional support for entrepreneurship development qualities of an entrepreneur, Forms & types of entrepreneurs, venture capital fund, Public Private partnership. Corporate Social responsibility, Social entrepreneurship. Contract farming, Theories of entrepreneurship, Module of entrepreneurship.

Unit 9: Developmental Strategies and Issues in Extension

Extension policies. National Agricultural Extension System and Networking of State development Departments, NARS, NGOs, producers companies, agricultural co-operatives, rural banks, insurance and private sectors. Rural development programmes. Developmental strategies such as Watershed Development Programmes; Technology Mission, Horticulture Mission. Front Line Extension Programmes of ICAR/TAR-IVLP, NATP, NAIP, IRDP, ATMA, ITD, SREP, Kisan Call Centre (KCC) Research-Extension-Farmer-Interface. Identification, characterization,

documentation and validation of ITKs. Privatization of extension, market led extension, production to consumption and end to end innovative approaches. Issues related to globalization and IPR. Rural, Agricultural, Animal Husbandry, Dairy and Women Developmental Programmes implemented by Govt. of India. Krishi Vigyan Kendras (KVKs). Participatory approaches, PRA, RRA, PLA and PTD. Linkage in extension. Farmer field schools.

Unit10: Gender Sensitization and Empowerment

Gender and empowerment: meaning, gender related definitions and importance for empowering women; need and focus on gender sensitization, gender in community diversity and its implication for empowerment. Gender perspectives in development of women, social characteristics, roles, responsibilities, resources, constraints, legal issues and opportunities; economical, educational and other parameters. Gender tools and methodologies: Dimensions and methodologies for empowerment; gender budgeting; gender analysis framework- context, activities, resources and programme action profile; technologies and empowerment - gender specific technologies, household technology interface, socio-cultural interface and women as consumer of technologies. Gender issues and development: health and nutrition, violence, governance, education and media.