

### **BOS- Agricultural Economics**

An online meeting of Board of Studies of C.S.J.M. University, Kanpur was held on 12th May 2021 from 2:00 P.M. to 3:00 P.M. to discuss the syllabus of Agricultural Economics as per NEP-2020 for the course of B.Sc. (Hons.) Agriculture. Professor Nand Lal, Department of Live Science, C.S.J.M. University, Kanpur was present in the meeting as a University representative apart from following, the external honourable members are,

1. Dr. Anil Sachan, Department of Agricultural Economics & Statistics, C.S.A. University of Agriculture and Technology, Kanpur (UP).
2. Dr. R.R. Kushwaha, Department of Agricultural Economics, A.N.D. University of Agriculture and Technology, Kumarganj, Ayodhya (UP).
3. Dr. Hraday Kumar, Department of Agricultural Economics & Statistics, B.R.D. P.G. College Deoria (UP).
4. Dr. Devendra Prasad, Department of Agricultural Economics, Kulbhaskar Aasram P.G. College, Prayagraj, (UP)

The following suggestions/recommendations were offered by honourable members in the online conducting meeting:

1. There is some part of practical exercise in Agricultural marketing trade and prices (AG- 504), relates to Fundamental of agricultural economics (AG- 204). Therefore, some part of the practical exercise of (AG-504) was included in (AG- 204) and credit hours 2(2+0) of (AG-204) changed into 2(1+1).

Therefore, I am sending this file for your kind approval after including the valuable suggestions offered by all the members of BOS. Please approve it.

Regards,



Dr. Sugriv Kumar Maurya (Convener)

Assistant Professor

Department of Agricultural Economics

Janta Mahavidyalaya Ajitmal (Auraiya)

## DEPARTMENT OF AGRICULTURAL ECONOMICS

Course Code	Course Title	Credit Hours
AG-204	Fundamental of Agricultural Economics	2(1+1)
AG-305	Agricultural Finance and Co-Operation	3(2+1)
AG-504	Agricultural Marketing, Trade and Prices	3(2+1)
AG-604	Farm Management, Production and Resource Economics	2(1+1)
<b>AGE- 51</b>	<b>Agri-business Management</b>	<b>3(2+1)</b>

### AGRICULTURAL ECONOMICS

#### **1. Fundamentals of Agricultural Economics                      2 (1+1)                      AG-204**

##### **Theory**

Economics Meaning, scope and subject matter, definitions, activities, approaches to economic analysis; micro and macro Economics, positive and normative analysis. Nature of economic theory: rationality assumption, concept of equilibrium, economic laws as generalization of human behavior. Basic concepts: Goods and services, desire, want, demand, utility, cost and price, wealth, capital, income and welfare. Agricultural economics: meaning, definition, characteristics of agriculture, importance and its role in economic development, agricultural planning and development in the country. Demand meaning, law of demand, demand schedule and demand curve, determinants, utility theory: law of diminishing marginal utility, law of equip-marginal utility. Consumer's equilibrium and derivation of demand curve, concept of consumer surplus. Elasticity of demand: concept and measurement of price elasticity, income elasticity and cross elasticity. Production: process, creation of utility, factors of production. Input output relationship. Supply: Stock vs. supply, law of supply, supply schedule, supply curve, determinants of supply, elasticity of supply. Concepts of rent, wage, interest and profit, National income' Meaning and importance, circular flow, concepts of national income accounting and approaches to measurement, difficulties in measurement. Population: Importance. Malthusian and Optimum population theories: natural and socio- economic determinants, current policies and programs on population control. Money: Barter system of exchange and its problems, evolution. meaning and functions of money, classification of money, money

supply, general price index, inflation and deflation, public revenue and public expenditure. Tax: meaning, direct and indirect taxes, agricultural taxation, VAT. Economic systems: Concepts of economy and its functions, important features of capitalistic, socialistic and mixed economies, elements of economic planning.

### **Practical**

Preparation of schedule and questionnaire for socio-economic survey and collection of data. Study of supply schedule and supply curve of agricultural commodities from given data. Study of demand schedule and demand curve of agricultural commodities from given data. Practical exercise on elasticity of supply and elasticity of demand from given data.

### **Suggested Reading**

1. Das, Harsaran, Prarambhik Krishi Arhtshastra (Hindi), Rama Publishing House, Meerut.
2. Dewett, K.K. and Chand, A., Modern Economic Theory, S. Chand and company, New Delhi.
3. Ahuja, H.L., Advanced Economic Theory, Micro Economic Analysis, S. Chand and Company Limited, New Delhi.
4. Gupta, R.D. and Lekhi, R.K., Elementary Economic Theory, Kalyani Publication.
5. Seth, M.L., Marco Economics, 2<sup>nd</sup> ed. Laxmi Narain Agarwal, Agra.
6. Jhingan, M. L., Microeconomic Theory, Brinda Publishers, New Delhi.

## **2 Agricultural Finance and Co-Operation                      3(2+1)                      AG-305**

### **Theory**

Agricultural Finance: meaning, scope and significance, credit needs and its role in Indian agriculture. Agricultural credit: meaning, definition, need, classification. Credit analysis: 3R's and 4C's of credits. Sources of agricultural finance: institutional and non-institutional sources, commercial banks, social control and nationalization of commercial banks. Micro financing including KCC, Lead bank scheme, RRBs, Scale of finance and unit cost. An introduction to higher financing institutions: RBI, NABARD, ADB, IMF, and World Bank, Insurance and Credit Guarantee Corporation of India. Cost of credit, recent development in agricultural credit. Preparation and analysis of financial statements: Balance Sheet and Income Statement. Basic guidelines for preparation of project reports: Bank norms - SWOT analysis. Agricultural Cooperation - Meaning, brief history of cooperative development in India, objectives, principles of cooperation, significance of cooperatives in Indian agriculture. Agricultural Cooperation in India- credit, marketing, consumer and

multi-purpose cooperatives, farmers service cooperative societies, processing cooperatives, Farming cooperatives, cooperative warehousing; role of ICA, NCUI, NCDC, NAFED

### **Practical**

Determination of most profitable level of capital use. Optimum allocation of limited amount of capital among different enterprise. Analysis of progress and performance of cooperatives using published data. Analysis of progress and performance of commercial banks and RRBs using published data. Visit to a commercial bank, cooperative bank and cooperatives society to acquire firsthand knowledge of their management. schemes and procedures. Estimation of credit requirement of farm business: A case study. Preparation and analysis of balance sheet: A case study. Preparation and analysis of income statement: A case study. Appraisal of a loan proposal: A case study. Techno-economic parameters for preparation of projects. Preparation of bankable projects for various agricultural products and its value added products. Seminar on selected topics.

### **Suggested Reading**

1. Prasad, Devendra, Krishi Vitt avam Sahkarita (Hindi), Rama Publishing House, Meerut
2. Muniraj, R., Farm Finance for Development. Oxford & IBH. New Delhi.
3. Subba Reddy, S and P. Raghu Ram., Agricultural Finance and Management. Oxford & IBH. New Delhi.
4. Lee, W.F., Boehlje, M.D. Nelson, A.G. and Murray, W.G., Agricultural Finance, Kalyani Publishers, New Delhi.
5. Patnaik, V.E. and Roy, A.K., Cooperation and Cooperative Management, Kalyani Publishers, Ludhiana.
6. Chandra, P., Project: Preparation, Appraisal and Implementation, McGraw-Hill Inc.
7. Panday, U.K., A Introduction to Agricultural finance, Kalyani Publication.

## **3. Agricultural Marketing, Trade and Prices                      3(2+1)                      AG-504**

### **Theory**

Agricultural Marketing: Concepts and definitions of market, marketing, agricultural marketing, market structure, marketing mix and market segmentation Classification and characteristics of agricultural markets; demand, supply and producer's surplus of agri-commodities: nature and determinants of demand and supply of farm products. Producer's surplus - meaning and its types, marketable and marketed surplus, factors affecting marketable surplus of agri-commodities; cost based and competition based pricing; market

promotion - advertising, personal selling, sales promotion and publicity - their meaning and merits & demerits; marketing process and functions: Marketing process-concentration, dispersion and equalization; exchange functions - buying and selling; physical functions – storage, transport and processing; facilitating functions - packaging, branding, grading, quality control and labeling (AGMARK). Market functionaries and marketing channels: Types and importance of agencies involved in agricultural marketing, meaning and definition of marketing channel number of channel levels; marketing channels for different farm products; Integration, efficiency, costs and price spread: Meaning, definition and types of market integration; marketing efficiency; marketing costs, margins and price spread; factors affecting cost of marketing: reasons for higher marketing costs of farm commodities; ways of reducing marketing costs: Role of Govt. in agricultural marketing: Public sector institutions- CWC, SWC, FCI, CACP & DMI - their objectives and functions; cooperative marketing in India; Risk in marketing: Types of risk in marketing; speculation & hedging; an overview of futures trading; Agricultural prices and policy: Meaning and functions of price; administered prices; need for agricultural price policy; Trade: Concept of International Trade and its need, theories of absolute and comparative advantage. Present status and prospects of international trade in agricultural commodities: GATT, WTO and Agreement on agriculture (AoA) its implications on Indian agriculture, IPR and GST.

### **Practical**

Study of relationship between market arrivals and prices of some selected commodities: Computation of marketable and marketed surplus of important commodities; Study of price behaviour overtime for some selected commodities; Construction of index numbers; Visit to a local market to study various marketing functions performed by different agencies, identification of marketing channels for selected commodity. Collection of data regarding marketing costs, margins and price spread and presentation of report in the class; Visit to market institutions - NAFED, SYNC, - CWC, cooperative marketing society, etc. to study their organization and functioning, application of principle of comparative advantages of international trade.

### **Suggested Reading**

1. Prasad, Devendra and Ram, Sevak, Krishi Vipanan Vyapar Avam Mulya (Hindi), Rama Publishing House, Meerut
2. Arora, V.P.S., Agricultural Marketing and Price Analysis (Hindi), G.B. Pant University, Pantnagar.
3. Acharya, S. S. and Agarwal, N. L., Agricultural Prices Analysis and Policy. Oxford and IBH Publishing Company Pvt. Ltd., New Delhi.
4. Subba Reddy, S., Raghu ram, P. , Neelakanta Sastry T.V., Bhavani Devi I., Agricultural Economics, Oxford & IBH Publishing Co. Private Limited, New Delhi

## **4. Farm Management, Production and Resource Economics    2(1+1)    AG-604**

### **Theory**

Meaning and concept of farm management: objectives and relationship with other sciences. Meaning and definition of farms, its types and characteristics, factor determining types and size of farms Principles of farm management: concept of production function and its type, use of production function in decision-making on a farm, factor-product, factor-factor and product- product relationship, law of equi-marginal/or principles of opportunity cost and law of comparative advantage. Meaning and concept of cost: types of costs and their interrelationship, importance of cost in managing farm business and estimation of gross farm income, net farm income, family labor income and farm business income. Farm business analysis: meaning and concept of farm income and profitability, technical and economic efficiency measures in crop and livestock enterprises. Importance of farm records and accounts in managing a farm: various types of farm records needed to maintain on farm, farm inventory, balance sheet, profit and loss accounts. Meaning and importance of farm planning and budgeting, partial and complete budgeting, steps in farm planning and budgeting-linear programming, appraisal of farm resources, selection of crops and livestock's enterprises. Concept of risk and uncertainty occurs in agriculture production, nature and sources of risks and its management strategies. Crop/livestock/machinery insurance: weather based crop insurance, features, determinants of compensation. Concepts of resource economics: differences between NRE and agricultural economics, unique properties of natural resources, Positive and negative externalities in agriculture, inefficiency and welfare loss solutions. Important issues in economics and management of common property resources of land, water, pasture and

forest resources etc.

### **Practical**

Preparation of farm layout. Determination of cost of fencing of a farm. Computation of depreciation cost of farm assets. Application of equi-marginal returns/opportunity cost principle in allocation of farm resources. Determination of most profitable level of inputs use in a farm production process. Determination of least cost combination of inputs. Selection of most profitable enterprise combination. Application of cost principles including CACP concepts in the estimation of cost of crop and livestock enterprises. Preparation of farm plan and budget, farm records and accounts and profit & loss accounts. Collection and analysis of data on various resources in India.

### **Suggested Reading**

1. Singh, R.P. and Singh, Buddha, Prakshetra Prabandh Avam Utpadan Arthshastra (Hindi), Bharti Bhandar, Meerut.
2. Johl, S.S. Kapur, T.R., Fundamentals of Farm Business Management, Kalyani Publishers, New Delhi
3. Subba Reddy, S., Raghu ram, P., Neelakanta Sastry T.V., Bhavani Devi I., Agricultural Economics, Oxford & IBH Publishing Co. Private Limited, New Delhi
4. Heady Earl O and Herald R. Jenson, Farm Management Economics, Prentice Hall, New Delhi,
5. Singh, I. J., Elements of Farm Management Economics: Affiliated East- West press, Private Limited, New Delhi
6. Sankhayan, P.L., Introduction to Farm Management: Tata McGraw Hill Publishing Company Limited, New Delhi.
7. Dhondyal, S.P., Farm Management, Aman Publishing House, Meerut (India).
8. Raju, V.T. and Rao, D.V.S., Economics of Farm Production and Management, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi-110 001.
9. Kahlon, A.S. and Karam Singh, Economics of Farm Management, Allied Publishers, New Delhi.

## **ELECTIVE COURSE**

### **1. Agri-business Management      3(2+1)      AGE-51**

#### **Theory**

Transformation of agriculture into agri-business, various stakeholders and components of agribusiness systems. Importance of agribusiness in the Indian economy and New Agricultural Policy. Distinctive features of Agribusiness Management: Importance and needs of agro-based industries, Classification of industries and types of agro based industries. Institutional arrangement, procedures to set up agro based industries. Constraints in establishing agro-based industries. Agri-value chain: Understanding primary and support activities and their linkages. Business environment: PEST & SWOT analysis. Management functions: Roles & activities, Organization culture. Planning, meaning, definition, types of plans. Purpose or mission, goals or objectives, Strategies, policies procedures, rules, programs and budget. Components of a business plan. Steps in planning and implementation, Organization staffing, directing and motivation, ordering, leading, supervision, communications, control. Capital Management and Financial management of Agribusiness. Financial statements and their importance. Marketing Management: Segmentation, targeting & positioning. Marketing mix and marketing strategies. Consumer behavior analysis, Product Life Cycle (PLC). Sales & Distribution Management. Pricing policy, various pricing methods. Project Management definition, project cycle, identification, formulation, appraisal, implementation, monitoring and evaluation. Project Appraisal and evaluation techniques.

#### **Practical**

Study of agri-input markets: Seed, fertilizers, pesticides. Study of output markets: grains, fruits, vegetables, flowers. Study of product markets, retail trade commodity trading, and value added products. Study of financing institutions- Cooperative, Commercial banks, RRBs, Agribusiness Finance Limited, NABARD. Preparations of projects and Feasibility reports for agribusiness entrepreneur. Appraisal/evaluation techniques of identifying viable project- Non-discounting techniques. Case study of agro-based industries. Trend and growth rate of prices of agricultural commodities. Net present worth technique for selection of viable project. Internal rate of return.



### **Suggested Reading**

1. Das, Harsaran, and Pathak, M., Krishi Sahkarita Vitt avam Vyavsay Prabandh Rama Publishing House, Meerut.
2. Meena, G.L., Burark, S.S., Pant, D.C. and Sharma, R., Fundamental of Agri-business Management, Agrotech Publishing Academy, Udaipur.
3. Tripathi, P.C. and Reddy, P.N., Principles of Management, Tata Mac Graw Hill Publishing Company Limited, New Delhi.
4. Shoji Lal Bairwa, Lokesh Kumar, Meena Chandra Sen, Meera Kumari, Agribusiness Management; Theory and Practices, Write and Print Publisher, WAP, New Delhi.
5. Gaur, S.C., Agri-business : Management Information System, Agrobios Publications Jodhpur.
6. Mubeen Taj, Agricultural Business Managemnt, Kalyani Publishers, New Delhi
7. Kadam, M.M., Patil Ranjit S., A Textbook of Agribusiness Management, Kalyani Publishers, New Delhi
8. <https://www.technoserve.org/wp-content/uploads/source//files/e-book-agribusiness-management/mobile/index.html#p=1> Agri- business –management Handbook (free)