# **Agricultural Economics**

### 1. Principles of Economics

- 1.1 Definition, subject matter and nature of economics
- 1.2 Theories of consumption, production and cost
- 1.3 Law and elasticity of demand and supply
- 1.4 Market structure and price analysis
- 1.5 Characteristics and theories of factors of production
- 1.6 National income, welfare economics and Pareto optimality

### 2. Farm Management and Production Economics

- 2.1 Definition, nature, scope, problems and importance of farm management
- 2.2 Farm resource management- land, labor, machinery and civil works
- 2.3 Production relationship-factor-product, factor-factor and product-product
- 2.4 Principles of farm management decisions
- 2.5 Farm planning and financing and budgeting
- 2.6 Farm records and efficiency measures
- 2.7 Risk and uncertainty management

### 3. Agriculture Marketing, Price Policies and Cooperatives

- 3.1 Consumer behavior, market surplus and producers' surplus
- 3.2 Agricultural marketing system, price policies and related institutions in Nepal
- 3.3 Marketing strategy and Ansoff matrix
- 3.4 Marketing functions, efficiency, conduct and research
- 3.5 Spatial and temporal price variation
- 3.6 International trade and WTO
- 3.7 Cooperative history, laws, bylaws, forms and role in Nepal
- 3.8 Current trends in agricultural marketing and cooperatives

# 4. Agriculture Project Planning

- 4.1 Concept of plan, program and project
- 4.2 Project cycle and aspects of project analysis
- 4.3 Structure of Project concept note and proposal
- 4.4 Assessing cost and benefits of project
- 4.5 Financial and economic analysis
- 4.6 Joint cost allocation, sensitivity and risk analysis
- 4.7 Monitoring and evaluation of agricultural projects

### 5. Agribusiness Management

- 5.1 Concept, importance and problems of agribusiness in Nepal
- 5.2 Agribusiness environment and management systems
- 5.3 Human behavior in organization
- 5.4 Leadership and motivation
- 5.5 Economic principles involved in capital acquisition
- 5.6 Agribusiness control program, evaluation and production planning
- 5.7 Value chain analysis-development, alliance and financing
- 5.8 Agricultural policies of Nepal and their impact on agribusiness enterprises.

#### 6. Microeconomics

- 6.1 Economic models and microeconomic analysis
- 6.2 Various product concepts of a resource and resource substitutability
- 6.3 Constrained output maximization and cost minimization
- 6.4 Important models of market structure including price discrimination
- 6.5 Factors and product market and their equilibrium
- 6.6 Dynamic equilibrium and lagged adjustment
- 6.7 Public goods, collective action and Coase theorem
- 6.8 Economies and diseconomies of scale

#### 7. Macroeconomics

- 7.1 Money, income and interest
- 7.2 Keynesian and classical macroeconomic models
- 7.3 Concept and application of multipliers
- 7.4 General equilibrium and IS-LM model
- 7.5 Money and banking
- 7.6 Consumption, saving and investment
- 7.7 Inflation, deflation, public debt and deficit financing
- 7.8 Unemployment: concept, types and factors affecting
- 7.9 Growth theories, trade cycle and balance of payment

#### 8. Statistics and Mathematics for Economics

- 8.1 Application of set theory, matrix, determinants and calculus in economics
- 8.2 Correlation and regression analysis
- 8.3 Time series analysis, index numbers and scaling techniques
- 8.4 Linear programming, input-output model and game theory
- 8.5 Application of ANOVA and multivariate analysis in economics
- 8.9 Sampling design, hypotheses and their testing

## 9. Financial Management

- 9.1 Decision making and planning process
- 9.2 Financial intermediation and its role in growth and commercialization
- 9.3 Tools of financial management and financial statements
- 9.4 Financial and business risk
- 9.5 Cost of capital and time value of money
- 9.6 Scope, models and limitation of agricultural insurance in Nepal

#### 10. Resource and Environmental Economics

- 10.1 Type of natural resources and issues on resource management in Nepal
- 10.2 Common property resources and inter-temporal efficiency of resource use
- 10.3 Market failure and sources of inefficiency
- 10.4 Externalities, pollution charge and carbon trading
- 10.5 Valuation of biodiversity and agro-biodiversity resources
- 10.6 Resource management policies in Nepal