INTRODUCTION TO AGRICULTURAL ECONOMICS (NAAE 32101)

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Economics is…

- Defined differently by different people….
- study of allocation of scarce & limited resources among competing alternatives.
- study of how scarce & limited resources (land, labor, capital, and management) are allocated among different and competing choices to best satisfy human wants.

Resources/Capitals

- Resources are the inputs that individuals/families or nations use to produce outputs/products (goods & services).
- Resources are classified into:
  - Natural resources (land & mineral deposits),
  - Human resources (labour services provided by labourers & managers for production of goods & services & Entrepreneurial /Management skills),
  - Financial resources
  - Physical resources
  - Social resources
- Resources are considered scarce because of tendencies for society or individuals to demand more resources than what are available.
  - Resources or goods that are not scarce are called free resources or free goods (e.g. Sunlight/ air).
  - Scarcity of resources is the foundation of the study of economics.

Scarcity:

- Scarcity refers to the fixed quantity of resources that are available to meet societal needs.
- Scarcity-A situation where there are not enough resources available to satisfy people’s needs or wants.
- Scarcity of resources limits options & demands making of choicesbecause people/individuals can not have everything at a time, they must make choices as to what they will have and what they will not have (sacrifice).
- Scarcity is a relative concept-All nations/individuals face the problem of scarcity. The difference lies in the degree to which resource scarcity exists and the forms that it takes.

Needs & Wants

- Needs: things that are crucial to sustain a living.
  - E.g. food, clothing and shelter.
- Wants are things we can live without/ are not crucial to daily living.
  - E.g. A basic tractor is a need to a farmer, but a tractor with air conditioner and radio may be a want.
  - Context matters when differentiating needs and wants.
- Society and Human wants are insatiable (unlimited, unsatisfied):- Human wants cannot be satisfied no matter how much or how many goods we have.

Choices

- Scarcity of resources forces consumers & producers to make choices.
- Choices have a time dimension-choices consumers/businesses make today have an effect on how they will live in the future.
- Choices one makes also have an associated cost, called Opportunity Cost.
- Opportunity cost refers to the foregone benefits linked with the next best alternative/choice in a set of choices available to decision makers.
- Example:
- The opportunity cost of going to college now is the income you are currently foregoing/sacrificing by not getting a job now.
- The opportunity cost of a consumer withdrawing MK10,000 out of his or her avings account to buy a bag is the interest income this money would have earned if left in the savings account.
- The bottom line is that economic benefits must exceed the costs, includingforegone income (opportunity cost). Intro

Microeconomics & Macroeconomics

- Microeconomics is a branch of economics that focuses on the actions or behavior of individual agents or groups of agents.
- The prefix micro means “small,” indicating that microeconomics studies the economy on a small scale.
- Microeconomics is concerned with behaviour & decisions of individual economic units/entities/markets that make up the economy.
  - E.g. behaviour & decisions of individual farmers (producers/suppliers), households (consumers), government entities, agricultural buyers, and entrepreneurs.

Macroeconomics & Microeconomics…

Macroeconomics:

- The prefix macro means “large,” indicating that macroeconomics is the study of the economy on a large scale or nationally.
- Macroeconomics looks at the aggregate (total) performances of all the markets in the national economy and is concerned with the choices made by large sub-sectors of the economy.
- Macroeconomics focuses on broad aggregates, e.g.:
  - Growth of the nation’s gross domestic product (GDP),
  - Trade-offs between unemployment and inflation.
  - Trade balance (exports minus imports).
  - Exchange rate (currency devaluation, depreciation/appreciation)

Positive Versus Normative Economics

- Positive Economics:
  - Focuses on facts & cause-and-effect relationships
  - Explains economic behaviour using scientific explanations. Concerned with "What is?"
  - Is a basis for development of public policy.
  - E.g.: the rate of inflation in the past one year has been increasing as compared to the financial year 2022/23
- Normative Economics:
  - Involves value judgements about what the economy should be-focuses on what economic policies and goals should be implemented.
  - Expresses subjective feelings of how things should be like
  - E.g.: The Government of Malawi should put in place measures to reduce cost of gas to curb depletion of trees.

Agriculture Economics

- Is an applied field of economics, which applies principles of choice in the use of scarce resources such as land, labour, capital and management in farming and allied activities.
- Helps farmers, consumers and development practitioners to efficiently utilize resources (e.g. land, labour and finances).
- …To be a productive agricultural economist, one must first understand basic economic principles.
- Agricultural economics uses theoretical concepts of economics to provide answers to challenges of agriculture and agribusinesses

Questions of Agricultural Economics

- What to produce?: The first major decision relates to the quantity and the range of goods to be produced. Since resources are limited we must choose between different alternative collections of goods and services that may be produced.
- How to produce?: Having decided quantity and type of goods to produce, we must next determine the techniques of production to be used e.g. labour intensive or capital intensive.
- For whom to produce?: This means how the national product is to be distributed, i.e. who should get what & how much?
- Are the resources efficiently used?: There is to be no wastage or misuse of resources since they are limited & scarce.
- Is there full employment of resources?: An economy must endeavor to achieve full employment not only of labour but of all resources.
- Is the sector/economy growing?: An economy should keep on expanding or developing to maintain conditions of stability. The economy’s productive capacity must continue to expand to provide people’s needs of people

Role of Agricultural Economics

- Provides guidance to farmers (e.g. what to produce, how to produce, what to sell and how to sell) to maximize benefits to the farmers.
- Deals with optimal selection of land, labour and equipment for a farm; optimal choice of crops to be grown & of livestock to be kept.
- Provides guidance to government institutions for proper participation in the agriculture sector (e.g. aids in designing taxation policy, agricultural export policy, agricultural subsidy policies etc).
- Concerned with distribution and/or consumption of resources, goods and services within a society.

Role of Agricultural Economists:

- Microeconomic Level:
- Concerned with mobilization & use of resources in the production, processing, distribution and consumption of products in the agricultural system:
    - Production economists examine demand of resources by businesses & their supply response.
    - Market economists focus on the flow of agri. products through market channels to their final destination and the determination of prices at each stage.
    - Financial economists are concerned with financing needs of businesses and the supply of capital (finances) to these firms.
    - Resource economists focus on the use and preservation of natural resources.
    - Public/Policy economists are interested on various government policies/programs to farmers.

Role of Agricultural Economists:

- Macroeconomic Level:
- Interested in how agriculture & agribusinesses can participate in national & global markets.
- Analyses how events taking place in other economic sectors affect agribusiness firms and agriculture in general-to formulate effective policies and interventions.
  - For example, agricultural economists employed by the Reserve Bank of Malawi and Ministry of Finance analyse how changes in monetary policy affect the price of various food commodities.
  - Macroeconomists employed by multinational food companies examine foreign trade arrangements for marketing of food and fiber products
  - For example, one could ask: How could Malawian Agribusinesses take advantage of the African Continental Free Trade Area (AfCFTA)?

Scientific Method in Studying Economics

- Economics adopts scientific method to explain how the world works:
  - Observes real world behaviour and outcomes.
  - Based on observations, formulates hypothesis-possible explanations of cause & effects
  - Collects & analyses data to test the formulated hypotheses (in step 2).
  - Based on results in step # 3, accepts, rejects or modifies the hypothesis
  - Continues to test the hypothesis against facts. If more evidence supports the hypothesis, the hypothesis becomes an economic theory/principle.
- **Economic Principles are:**
  - Generalizations-expressed as behaviour of typical/average economic actors (consumers or producers)
  - Usage of “other-things-equal assumption” (ceteris paribus)-holding all other factors constant.

Marginal Analysis

- Economists are frequently concerned with understanding additional output/benefits as a result of using a unit of input.
  - For instance, a micro-economist may be interested with changes in output of agricultural production with usage of one additional bag (50Kg) of fertilizer (input) by a farmer.
  - A macroeconomist, on the other hand, may focus on how a change in the tax rate on personal income may change the nation's output, interest rates, inflation, and the government budget deficit.
- The key word in these examples is change.
- Thus, economists are interested in understanding how changes, for example in price of inputs, changes in quantity of outputs supplied, affect other prices and quantities in the economy, and how these situations affect economic well-being of consumers, businesses, and the economy as a whole.

Economic Systems

- Economic System: Defined as institutional means (arrangements put in place) by which resources are employed (used) to satisfy human/societal needs and desires.
- (Institutions refer to laws, policies, practices, habits, ethics and customs of the nation’s citizens)
- Prominent economic systems include:
    - Capitalism
    - Socialism/Communism
    - Mixed.
    - Traditional
- The major distinctive feature of these systems is the degree of control of economic resources-
    - Economic resources can be controlled by Private Economic units/entities or Government entities or by both.

Capitalism

- Private individuals have free control over their time and other economic resources, and determine exactly how to use those assets, with few legal controls by government.
- It is a self-regulating system which excludes government from economic decisions (there is little or no government participation in economic activities).
- Capitalism depends on the will and desires of those involved in the system.
- Market forces of demand & supply determine prices, allocate resources, and distribute income.
- Market prices indicate the value of resources and economic goods.
- Owners of businesses are called **Capitalists**

Socialism/Communism

- The basis of socialism as an economic system is public ownership of all productive resources.
- Government or “state” directs all decisions regarding utilization of resources (both human and nonhuman) by various sectors of the economy.
- Decisions are centralized by government planners.
- Prices of most essential goods and services are largely set by the government and administered to consumers and farmers.
- Example: The MCP-led government under Dr. H. Kamuzu Banda largely pursued Socialist economic policies.

Mixed Economic System

- This system combines aspects of Capitalism and Socialism (Development State Policy).
- That is, market forces (of Demand and Supply) are not entirely free to determine price in some markets but are free in other markets.
- The government's intervention in the agricultural sector, for example, is well known (FISP, Setting of minimum/Maximum prices for agricultural produce).

Traditional System

- In a traditional system, things are done without any proper formal system and without any prescribed or known pattern.
- Economic decisions are based on customs, religious beliefs and culture that has been passed from generation to generation.
- Examples:
  - Nomadic life of Massai People
  - Bushmen of Kalahari desert

Some Economic Terminologies and Concepts…

- 1. Scarcity, 2. Resources,3. Needs/Wants 4. Opportunity Cost 5. Interest rate 6. Gross National/Domestic Product
- 7. Demand/Supply 8. Elasticity 9. Marginal Analysis 10. Employment 11. Inflation 12. Depreciation
- 13. Devaluation 14. Economic/Accounting profit
- 15. Investment 16. Rate of return
- 17. Exchange rate
- 18. Balance of Payment
- 19. Trade Balance
- 20. Exports/Imports.