Basic concept of farm firms, plant, industry and their interrelationships in agricultural commodities

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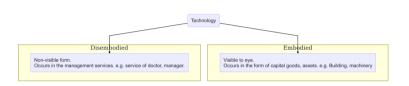
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Farm

- A piece of land where various enterprise are produced, generally agricultural commodities.
- Function of land, labor, and capital for producing particular output.
- Types of farm:
 - Family farm: Household labor dependent and diversified production
 - Commercial farm: Commercial approach of production, market-oriented and has generally around Rs. 250000 sales annually.

Firm

- A firm has a component of management and someone makes a decision.
- There is some hierarchy and an organizational head.
- Business enterprise are called firm.
- The function of making fundamental policy decision in a firm is generally called 'entrepreneurship'.
- Technical unit of production is a firm.



Objective of firm

- To increase the output/to minimize the cost
- Product levels is limited by the standard of technology used and input
- Inputs support production process
- Resources provide platform of production

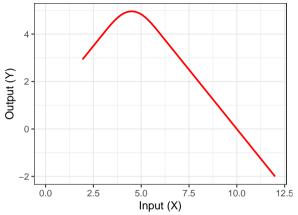


Figure 1: Relationship between input and output in production shown in terms of marginal productivity (MP).

 Allocation of total resources/income in different factor of production. Factor of production paid according to marginal productivity.

Plant

- It is another name of a firm, interchangeable aspect of it.
- Objective of plant
 - Technical efficiency: Physical
 - Economic efficiency: Monetary
 - e.g. crop variety change, cropping system change, fertilizer application either in direct broadcast or coated granule formulation, technology.
- Thus, plant is also a set of machinery/technology used in production process. For example, milk processing plant, jam/jelly processing plant.
- Plants are the input of firm and by using this input the firm produce certain ouput and this summation gives industry output.

Industry

- It comprises several similar firms or plants (Group of similar firms/plants).
- For e.g.: agricultural industry, livestock industry, poultry industry, agri-feed industry, eco-tourism industry, mining industry and coaling industry etc.
- Agricultural industry has millions of farms, 2.6 to 2.7 millions of farm in Nepalese agri-industry.
- Objective of industry:
 - To achieve/increase physical optima or
 - To achieve/increase economic optima

- Physical optima: Level of input used that gives maximum output. This is important in cases where physical inputs are insufficient. For e.g., country where there is widespread "malnutrition", physical optima is hard to reach.
- Economic optima: Those countries which achieve self-sufficiency, no malnutrition problem working on economic optima, i.e., level of input used that maximize the "profit";

Marginal revenue
$$(MR) = Marginal \cos t (MC)$$

if MR > MC firm applies more inputs to maximize profit while MR < MC firm/producer should apply less inputs.

Inter-relationship between firm, plant and industry with respect to agricultural production

Common features of farm and enterprise

- 1. Coordination/networking
- 2. Resource/fund flow
- 3. Management and decision-making
- 4. Value adding practices and upgrading

