10.SUPPLY-LAW OF DIMINISHING MARGINAL RETURN – ITS APPLICATION TO AGRICULTURE - COST CONCEPTS – SHORT RUN & LONG RUN COST CURVES - OPTIMUM LEVEL OF PRODUCTION.

Supply refers to the quantity or a commodity actually offered for sale at a particular price at a particular time. Supply schedule is the various quantities of a commodity that would be offered for sale at different prices.

Table 5.1 Supply schedule of Rice

Price of Rice (Rs/Kg)	Quantity of Rice Supplied (Tonnes)
6.50	100
7.00	125
7.50	150
8.00	175
8.50	200
9.00	250

The supply schedule for the whole market is called market supply. It is arrived at by adding the quantities supplied by all the sellers at varying prices.

A. LAW OF SUPPLY

Law of supply is stated as follows: Other thing remaining the same, as the price of a commodity raises its supply is extended, and as the price falls its supply is contracted. The quantity offered for sale varies directly with price i.e., higher the price the larger is the supply, and vice versa. Thus, there is a positive or direct relationship between price and quantity of a commodity supplied. The supply curve, as shown in the figure 5.1, slopes upward from left to right.

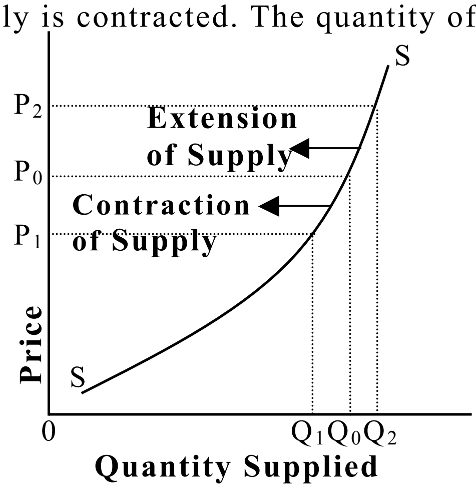

Fig.5.1 Extension and Contraction of Supply

i) Extension and Contraction of Supply: Other factors remaining constant, as the price increases, the quantity supplied increases. This is known as extension of supply, i.e., when prices increases from P_0 to P_2, the quantity supplied also increases from Q_0 and Q_2. As the price decreases, the quantity supplied also decreases. This is known as contraction of supply. In the figure, the quantity supplied declines from Q_0 and Q_1, if price decreases from P_0 to P_1. The extension and contraction of supply take place in the same supply curve.

ii) Increase and Decrease in Supply

When there is a change in supply due to changes in any of the factors other than price, the supply curve is shifted upward or downward. (E.g.) when the technology improves, for the same price an increased quantity will be supplied. This is called increase-in-supply. If supply increases from Q_0 to Q_2, as shown in figure 5.2, then, it is increase in supply. Then, the supply curve, S_0S_0, shifts downward or away from origin, i.e., S_2S_2. Similarly, due to flood, fire etc. for the same price, the quantity supplied will be less resulting in decrease-in-supply. The quantity supplied decreases from Q_0 to Q_1 and the supply curve S_1S_1moves upward.

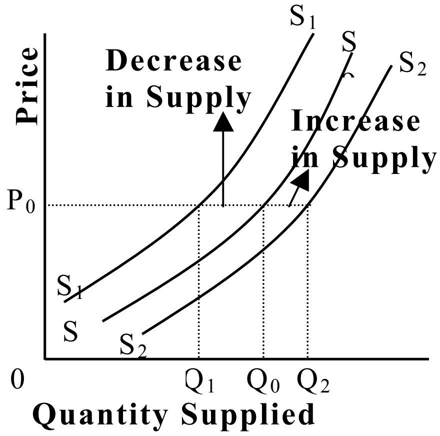

Fig. 5.2 Increase and Decrease in Supply

iii) Determinants of Supply

a) The cost of factors of production: When the costs of inputs increase, the cost of production will raise and the producers may have to fix higher price to cover the increased costs.

A fall in input price will reduce the costs and permit supply at a lower price.

b) State of Technology: Improvement in technology reduces the cost of production and increases the supply.

c) Factors outside the economic sphere like flood, drought etc. will decrease the supply.

d) Taxation and subsidy: Higher taxation will increase the price and as a result supply will come down. E.g. If additional tax is imposed on television, its supply will come down. Granting subsidies will increase supply. For instance, if more subsides are given for bio gas plants, fertilizer etc. more will be their supplies.

e) Price of the commodity: When the price of one commodity increases, its supply also increases.

f) Price of related goods: If the market price for soybean increases, all other conditions remaining the same, then the farmer would allot more land meant for other crops to soybean, and therefore, the supply of soybean would be increased.