RENT

MEANING OF RENT :

Rent can be termed as the reward for land which is one of the four factors of production. For economists, the term ‘land’ indicates natural resources like groundwater, forests, rivers, oil fields, mineral deposits, etc., apart from the physical soil.

Since land is a natural product and cannot be reproduced, the supply of land is permanently fixed and in general perfectly inelastic. Usually the term rent refers to thepayment made to the owner of the factor to use the same for a specificperiod of time. Here, the term land includes any material asset which hasa fixed supply. For instance, payment made to use a house, vehicle, ormachine is termed as rent. However, economists term it as ‘contractrent’ as it includes return on capital invested in material assets. ‘Economic rent’ is the term used by economists to refer to the paymentmade for usage of land. In fact there are variant views aired byeconomists with regard to the concept of rent. Some of them are rent as adifferential surplus, scarcity rent, and quasi-rent.

i. **Rent as a Differential Surplus**
DavidRicardo (Ricardo), a British economist, defined rent as, “theprice paid for the use of original and indestructible powers ofthe soil.” Ricardo explained rent as differential surplus whichindicates that rent is the surplus of revenue over costs whicharises due to differences in the level of fertility or usabilityof land. Higher rent can be earned by the landowners, if thequality of land is better.

ii. **Scarcity Rent**
Accordingto modern theory of factor pricing, the scarcity of land acted asthe basis for the concept of rent. According to the theory, rentwould arise even if all lands are of equal quality. The moderntheory further suggested that rent does not determine price but isdetermined by price i.e., when the prices are high, high rent ischarged and not vice-versa.

iii. **Quasi-rent**
Accordingto Alfred Marshall (Marshall), an English economist, rent is theincome obtained due to ownership of land and other naturalresources. Marshall opined that land is a natural resource and itssupply is perfectly inelastic considering the society as a whole.However, for an individual person, firm, or industry, the supplyof land depends on the prevailing rent thus it is elastic innature. Marshall further stated that rent of land is differentfrom remuneration for other factors of production. In his view, asthe supply of land is fixed, rent can be earned even in thelong-run. Apart from land, other factors which have limited supplycan also earn rent but only for a short-period of time. He termedthis rent earned by other factors which include man-made machinesand other appliances as ‘quasi-rent’.

Ricardian Theory of Rent

DavidRicardo, (Ricardo) a British economist, proposed the 'Ricardiantheory of rent'. The definition of rent as given by Ricardo is, "Rent is that portion of the produce of the earth which is paidto the landlord for the use of the original and indestructiblepowers of the soil." It can be deduced from this definition thatrent arises due to the following two reasons:

1.Differencesin the productivity of various pieces of land.

2.Situational differences.

Assumptions of Ricardian theory in relation to land, and its demand and supply, are:

- The supply of land is fixed and the existing quantity of land gifted by nature cannot be increased or decreased.
- Another assumption is that original powers such as fertility of land are gifted by God and are not due to human efforts of any type.
- Ricardo's theory of rent was based on assumption that land is a non-perishable factor of production. The powers/qualities of land cannot be destroyed and the fertility of land never diminishes.
- Another basic assumption is that utilization of land for cultivation is done based on the order of fertility of land. Most fertile land is cultivated first before using the next grade land.
- Ricardo assumed that the law of diminishing returns or increasing costs operates in agriculture.
- It is also assumed that different lands have different fertility levels.
- Land is assumed to be free gift of nature. Therefore, it does not have cost of production.
- Assumption of perfect competition is also made.
- Ricardo assumed the existence of margin land which is a 'no rent land'. It could be understood as the grade of land after which no land is used.
- Ricardo's theory also supposes that lands are located at different locations i.e., some of them are near to the market than others.

Explanation:

Rent arises in both the two types of farming techniques—extensive cultivation and intensive cultivation.

Extensive cultivation: In the farming technique of 'extensive cultivation', production of farm is increased by bringing more and more land under cultivation. Ricardo used the assumptions listed earlier to explain the origin of rent in the extensive cultivation technique.

Ricardo considered the case of an island where no person is living. People go there to settle in the island. As land is a free gift of nature, nothing is to be paid for its utilization. It is to be supposed that the land on island is of four grades—A, B, C, and D, where A has the highest productivity and D is the least productive. When people start cultivating the land for food, type A land which is more productive that produces 30 tons per acre is used first. Later, the demand for food might increase due to increasing population. Then the people of island starts cultivating the type B land which could produce only 25 tons per acre. Land A has a surplus over land B which gives rise to rent. Here, rent is the difference in fertility of lands (30-25 = 5 tons). Hence, land A is the intra-marginal land and rent is the difference in quantity produced by marginal land B and the intra-marginal land A.

Further when the demand rises, type C land is also brought under cultivation. Land C is supposed to produce around 20 tons per acre as it is less fertile than land A and land B. Then land C is considered to be the marginal land. The lands A and B are the intra-marginal lands and hence earn a rent which is equal to the difference in the produce of lands from the produce of land C.

Derivation of Rent (Extensive Cultivation)

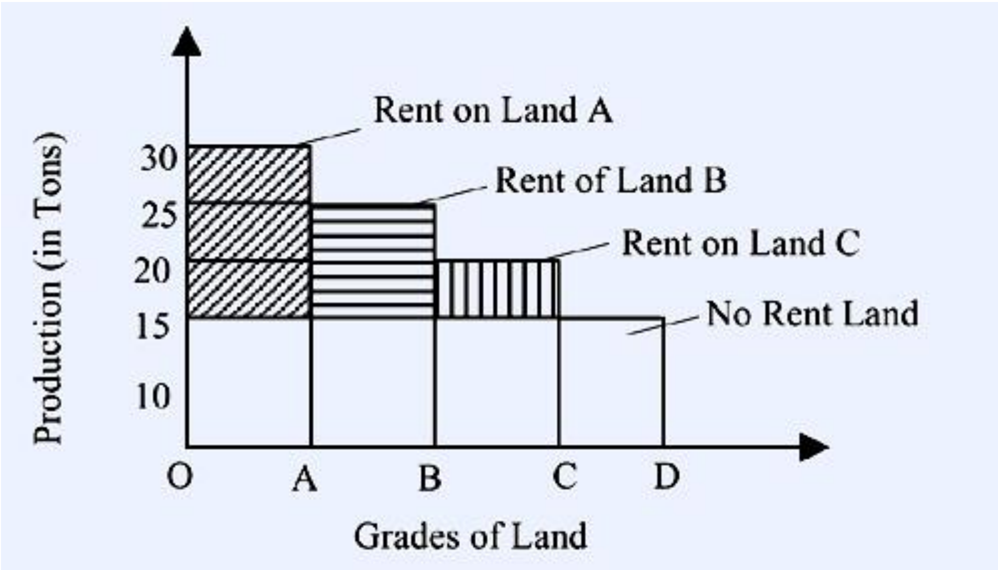

Figure A

If the demand for food further increases, land D which is the least productive land is also used for farming. The produce of land D is 15 tons per acre. Hence, land D which is the least productive becomes the marginal land and the lands A, B, and C are the intra-marginal lands. A, B, and C types of land earn rents equal to the difference between their produce and that of land D.

Table I shows the rent formation discussed under extensive cultivation when A, B, C, and D grades of land are cultivated. The rents earned by the types of land A, B, and C are 15, 10, and 5 tons of output respectively.

Figure A represents the process of rent formation under extensive cultivation. D is the no rent land and it is derived that rent earned by intra-marginal lands (A, B, and C) is the differential surplus over the output of the marginal land (D).

Table I: Derivation of Rent under Extensive Cultivation

Grade of Land	Marginal Production(in tons)	Surplus i.e., Rent(in tons)
A	30	(30-15) = 15
B	25	(25-15)=10
C	20	(20-15)=5
D	15	(15-15)=0

Intensive cultivation: Under intensive cultivation technique of farming, the production of the land is increased by employing increased number of labor and capital units. Ricardo explained the origin of rent under intensive cultivation by making some assumptions. Ricardo assumed the function of the law of 'diminishing returns' in agriculture. It implies that when more and more units of labor and capital are employed after a certain stage, there is going to be diminishing rate of increase in the production of the farm. This indicates that rent arises even when all the plots of land are equally fertile and all the plots of land are comparable even with regard to nearness to the market.

Ricardo believed that as the law of diminishing returns is applicable to agriculture, the marginal product of labor and capital will be diminishing. Marginal product refers to the increase in the total production when one more unit of labor and capital are employed while other factor units are kept constant.

If we presume that four such units - 1st, 2nd, 3rd and 4th are employed, then the additions made to the total production is 30, 25, 20, and 15 tons respectively. When the 1st unit of labor and capital are employed, there is an addition of 30 tons to the total production, for 2nd unit there is an addition of 25 tons to the total production, and so on.

Derivation of Rent (Intensive Cultivation)

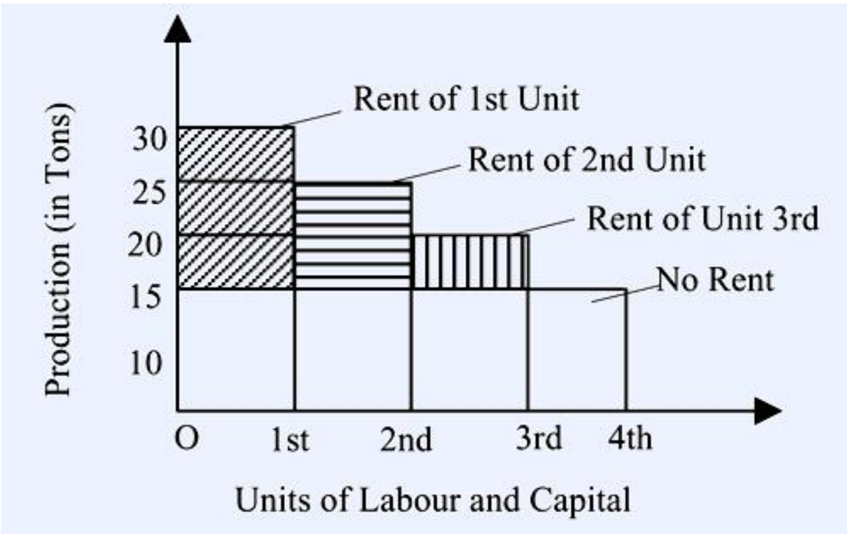

Figure:B

The 4th unit of labor and capital is called the marginal unit of labor and capital as it is the last unit to be put to use beyond which there is no increase in inputs – labor and capital - employed. The other three units, 1st, 2nd, and 3rd which make greater addition to production are termed as intra-marginal units. The rent earned by the intra-marginal units is equal to the difference of the production of marginal unit, 4th unit, and their production. This process is represented in Table II. It is inferred that the decrease in rents earned by 1st, 2nd, and 3rd units of labor and capital is due to the diminishing returns from the same plot of land. However, this is not due to the differences in fertility of land.

Figure B illustrates the process of rent formation under intensive cultivation.

Table II: Derivation of Rent under Intensive Cultivation

Grade of Land	**Marginal Production (in tons)**	**Surplus production (or) Rent**
A	30	(30-15)= 15
B	25	(25-15)= 10
C	20	(20-15)= 5
D	15	(15-15)= 0

The rent earned by 1st, 2nd, and 3rd units employed is 15, 10, and 5 tons of produce respectively. Hence, rent is the differential surplus earned by the intra-marginal lands over marginal lands or units of labor and capital over the production of marginal units of labor and capital. And Ricardo believed that rent arises on both the intensive and the extensive margin.

Criticism of Ricardian theory

Ricardo's theory of rent faced criticism for the assumptions it made and the conclusions arrived at. The significant points of criticism are as follows:

- Economists said that the assumption made by Ricardo that the quality of land is non-perishable and cannot be increased by human effort has no relevance in modern times when the productivity of land can be enhanced with proper manure and improved technical measures. Further, the fertility of land decreases after repeated usage and needs to be maintained through artificial measures involving human effort.
- Carey and Roscher criticized Ricardo's theory of rent as there is no historical proof to support the assumption that the most fertile land is cultivated first.
- Ricardo ignored the type of rent which arises due to scarcity of land.
- The impractical assumption of perfect competition made by Ricardo is also criticized. In the real life situation, there is imperfect competition for land and landowners charge rent, which is higher than economic rent. This is called 'monopoly rent'.
- Ricardo's assumption that the land is used only for farming was criticized on the grounds that it has no relevance to the real world situation.

- According to Ricardo, marginal land is a ‘no rent land’ which implies that the marginal land does not possess indestructible powers and has no fertility. Practically, this cannot be assumed as every land has some fertility.
- Modern economists criticized the narrow concept of rent given by Ricardo. They improved Ricardo’s theory of rent and applied it to the other factors of production as well which have inelastic supply in the short run.
- Modern economists opined that Ricardo’s theory of rent explained only the origin of rent and failed to explain the method in which rent can be determined. They further believed that demand and supply of land are the proper forces to determine rent. Therefore, there is no need to have a separate theory of rent.

Reference:
Dwivedi D N, Managerial Economics, Vikas Publishing House Pvt. Ltd, 2006
Samuelson, Paul A;Nordhaus, William D.(2014).Economics. Boston, Mass: Irwin McGraw-Hill
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