Quadrant II – NOTES

Paper code: ECO0115

Module name: Rent- Scarcity rent, differential rent and quasi rent

Module No: 57

Scarcity rent

- In the Ricardian Model it is assumed that land has only one use that is growing corn on it. Therefore, no price is required to be paid to prevent land from transferring to other uses, that is to uses other than growing corn.
- Further land has been considered for the economy as a whole. therefore, the supply of land is given and fixed quantity.
- Given this assumption supply curve of land is perfectly inelastic.
- Scarcity rent will arise only when the available quantity of land is scarce in relation to demand for it, which is derived from the demand for the corn.

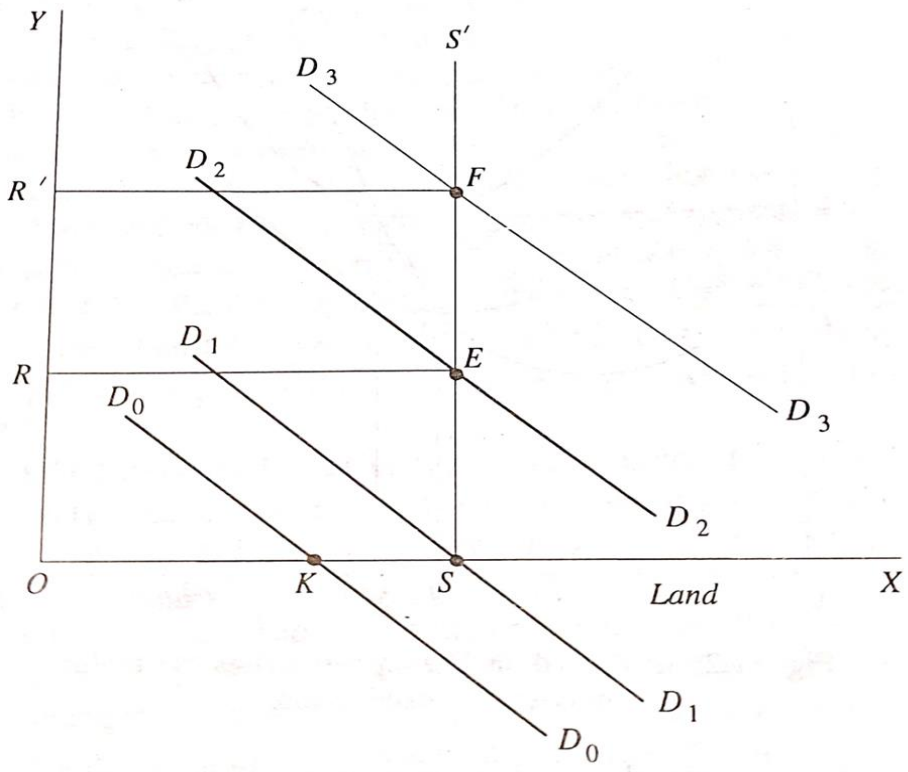

Fig. 51.1. Ricardian Model : Determination of Land Rent through Demand and Supply Curves.

- SS' is supply curve of the land with OS available quantity of land.

- It is assumed that all land is homogeneous and therefore no difference in fertility or location exist.
- There are various demand curves such as D0 D0, D1D1, D2D2, D3D3, D4D4 depend upon the various levels of demand for the product (corn). Thus as the demand for the other factors, demand for land is also determined by it's marginal revenue product.
- Demand for land is given by curve D0D0 then no rent on land will be charged on hiring it. This is because with D0D0 as the demand curve, the available land OS is abundant in relation to the demand for it.
- With this demand curve various farmers will use OK amount of land and as a result KS amount of land will remain uncultivated.
- If the demand for land increases to D1D1, even then the rent of land will be nil, but now the whole amount of available land OS will be cultivated
- If the demand for land increases to D2D2 the demand for and supply of land will be in equilibrium at point E and the rent OR will be determined.
- With the further increase in demand for land to D3D3, rent rises to OR' whereas the supply of land remains fixed at OS.
- Demand for land can increase as a result of population growth which raises the consumption of corn or agricultural produce.
- This increased demand for corn or agricultural produce causes the demand curve for land to shift upward and thereby brings about a rise in the rent of land.
- This is called as scarcity rent. It is called scarcity rent because it arises due to the scarcity of homogeneous land.
- Since all land is homogeneous and there exists perfect competition among the land owners on the one hand and among the tenants on the other, all farmers will pay equal amount of rent.
- Because land has zero elasticity of supply i.e. it's quantity is fixed, the rise in rent will not bring more land into existence.
- Therefore the essential feature of pure scarcity rent is that whereas a rise in the prices of other factors of production will bring about an increase in their supply, at any rate in the long run, a rise in rent cannot cause an increase in the supply of land.
- Scarcity rent is essential the result of the fact that land is inflexible in supply
- **Differential rent**
- Fertility of tracts of land varies Primarily because of the difference in the nature of the soil, temperature, rainfall and other climatic conditions.

- With a given applications of labour and capital, some pieces of land will yield more output per acre than others. Thus differences in fertility will bring about differences in the cost of production of various farmers operating on the different grades of land.
- The farmers working on superior or more fertile grades of land will have their average cost curve at a lower level than those working on the inferior or less fertile grades of land.
- Differences in location will cause differences in costs of various farmers because of the differences in transportation cost.
- Grade B land will be taken for production only when it's price rises in order to cover cost of production.
- Price must be high to cover lower cost of production.
- Otherwise it is not worthwhile. For ex. If price is lower than lower cost of production it will not back anything to cultivater.
- And therefore it will not be taken for cultivation.
- (b) it is evident here that price must rise to OP' if grade B land has to be brought under cultivation.
- Thus margin of cultivation has been extended to grade B land.
- Now grade B land is now on the margin Of extensive cultivation.
- Here every farmer will operate on lowest average cost curve AC.
- Since the price of corn OP' is equal to average labour and capital cost on grade B land there is no surplus over cost of production and this land does not earn any rent.

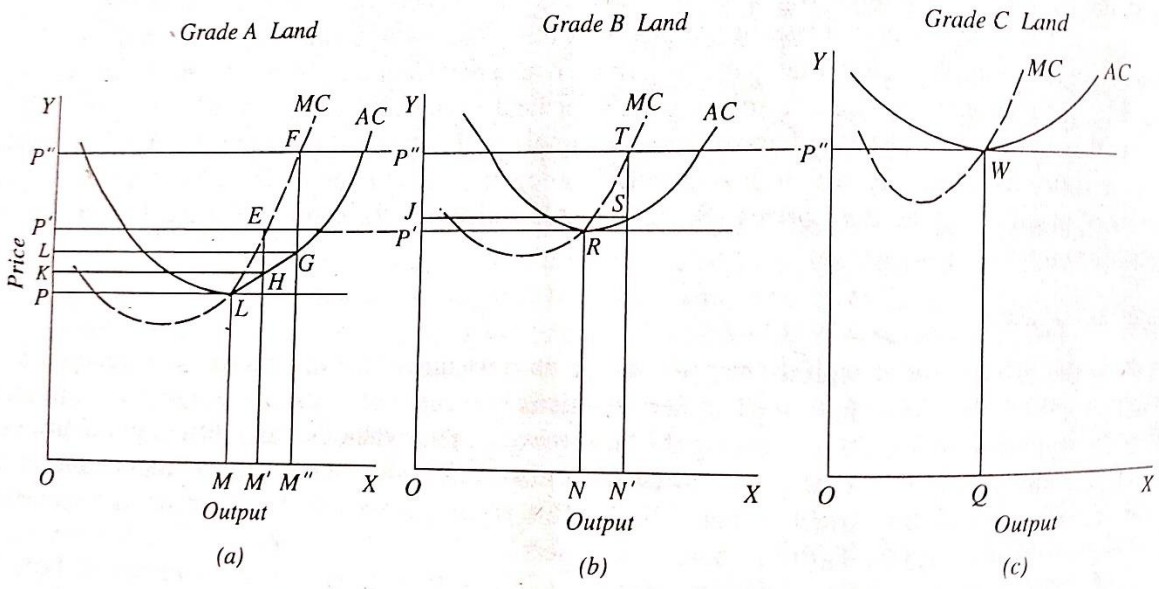

Fig. 51.3. **Differential Rent Graphically Illustrated.**

- But because price OP' stands higher than the lowest average cost on grade A land a surplus over cost of production appears on grade A land. Thus surplus is rent which will be paid to the landlord.
- There will be more intensive cultivation on land A by applying more doses of labour and capital.
- Margin of cultivation will also be pushed forward.
- It will mean that farmers operating on grade A will not produce at the lowest average cost, they will also expand output to meet the increased demand.
- With expansion of output, the marginal cost on farms of grade A land will rise.
- The price must rise to cover the extra cost.
- In figure (a) when the farmers of grade A land extended the margin of their intensive cultivation in response to increased demand, their new equilibrium position will be where the marginal cost is equal to new higher price OP' that is at point E on MC curve at output OM'.
- Though new price OP' equals marginal cost (M'E) but it stands higher than average of labour and capital which is equal to M'H.
- Thus surplus of price(MC) over average cost is land rent per unit of output which will have to be paid to be landlords.
- Total rent paid by farmer will be equal to KHEP'.
- Now suppose that population increases which also increases demand for the produce of land so that price OP" .
- As a result Grade C land will also be brought under cultivation and lands of grade A and B will be more intensively cultivated.
- Price OP" equals to the minimum average cost of grade C land. There is no surplus earned over cost of production on grade C
- **Quasi rent**
- The concept of quasi rent by Marshall.
- The distinguishing feature of the land is that its supply is perfectly inelastic to changes in its price and therefor its earnings drpends mainly on its demand.
- But in short run the fixed capital equipment such as machinery likewise is perfectly inelastic in supply.
- During the short run, the earning of specialized capital equipments depends mainly upon its demand conditions and are thus similar to land rent and have therefore been called as rent by Marshall.
- Since the capital equipment in perfectly fixed in supply like land and its it can be changed in the long run period.

- The quasi rent is only a temporary surplus which is enjoyed by owners of the capital equipment in the short run due increase in demand for it and which will disappear in the long run due to increase in the supply of capital equipment.
- In the short run period specialized machinery has no alternative use.
- Therefor its supply will remain fixed in the short run even if its earnings fall to zero.
- Thus, transfer earning of machinery in short run is zero.
- Therefore, the whole of earnings of the machinery in the short run are surplus over transfer earnings and therefore represent rent.