Magadh Mahila College

Patna University, Patna

M A Economics

Semester II

Paper: Growth and Development (CC 06)

Topic: David Ricardo

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~~R~~ David Ricardo

The principles of Political Economy and Taxation (1817).

(i) Three classes – Capitalist, landlords, labourers
A/c to Ricardo, capital is the most important means of production and development.

capitalist →
(ii) (a) investment of capital
(b) ~~allocation~~ Accumulation of ~~capital~~

How profit of capitalist maximise –

1. Minimum wage
2. Decrease in tax / Removal of tax
3. Free trade

2. Profit is the incentive to investment.

3. Tendency of declining profit

4. long term stationary state

→ ~~Assumpt~~ Assumptions –

1. Supply of land is fixed.
2. Land is used for production of corn and the working force in agriculture helps in determining the distribution in industry.
3. Law of diminishing returns operates on land.
4. Demand for corn is perfectly inelastic.
5. Labour and capital are variable inputs.
6. Capital ~~consists~~ consists of circulating capital.
7. There is capital homogenity.
8. All workers are paid subsistence wage.
9. The state of technological knowledge is given
10. There is perfect competition.
11. Demand for labour depends upon accumulation of capital.
12. Demand and supply price are independent of the marginal productivity of labour.

13. The supply price of labour is given and constant.

14. Capital accumulation results from profits.

Ricardo propounded the theory of development on the bases of distribution. This theory is based on the marginal and surplus principles. The marginal principle explains the share of rent in national output and surplus principle explains the division of the remaining share between wages and ~~profit~~. Ricardian System Consider agriculture as the most important sector of the economy. The ~~total~~ national output is distributed among the three groups – rent, profits, and wages respectively.

* Production function – Ricardo's production function assumes the existence of three factors – land, labour and capital. The marginal productivity of ~~labo~~ land, labour, capital declines with the increase in Cultivation. Ricardian production function is given as – $\boxed{Y = f(K, N, L)}$, where L = labour, K = capital, N = Land

This production function is subjective to following constraints imposed by diminishing marginal productivity.

$$\frac{\partial^2 f}{\partial K^2} < 0, \quad \frac{\partial^2 f}{\partial N^2} < 0, \quad \frac{\partial^2 f}{\partial L^2} < 0$$

Since the ~~pae~~ base of economies technological progress regulates to a large extent the ~~rate~~ of onset of diminishing returns, we may write

$$\frac{\partial^2 f}{\partial K^2} = g\left(\frac{\partial s}{\partial t} \text{------}\right)$$

$$\frac{\partial^2 f}{\partial N^2} = h\left(\frac{\partial s}{\partial t} \text{------}\right)$$

$$\frac{\partial^2 f}{\partial L^2} = j\left(\frac{\partial s}{\partial t} \text{------}\right)$$

where, S = technological progress

Since $\frac{\partial S}{\partial t}$ is one of the determinant of extent of diminishing return, it must also appear as a determinant of marginal productivity of the factors of production themselves. Thus, we may produce S in the production function, i.e)

$$\boxed{Y = f(K, N, L, S)}$$

The rate of progress of the economy is obtained by differentiating the above equation

$$\frac{\partial y}{\partial t} = \frac{\partial f}{\partial k} \cdot \frac{dk}{dt} + \frac{\partial f}{\partial N} \cdot \frac{dN}{dt} + \frac{\partial f}{\partial L} \cdot \frac{dL}{dt}$$

$$+ \frac{\partial f}{\partial S} \cdot \frac{dS}{dt}$$

where $\frac{dK}{dt}$ = capital accumulation

$\frac{dL}{dt}$ = labour growth

$\frac{dN}{dt}$ = Land increase

$\frac{dS}{dt}$ = technological progress

* Capital Accumulation — Ricardo emphasized the rate of capital accumulation as capital acts as an engine of growth. Capital is the part of the wealth of a country. Capital accumulation depends upon two factors —

(i) capacity to save

(ii) will to save

* <u>The profit rate</u> - As long as the rate of profit is positive, the process of capital accumulation will thus continue and the economy will progress. The profit depends upon wages, wages on price of the corn and price of the corn on the fertility of marginal land. Hence, profits and wages are inversely proportional to each other.

* <u>Increase in wages</u> — If the wage rate is sufficient to enjoy the comforts of the life by labourers, the population is expected to increase. and if the wage rate is lowest, the working class cannot meet the necessities of life, hence population will increase. Thus, there is positive correlation b/w wage rate & size of populatⁿ.

* <u>Declining profits in other industries</u> —

Ricardo uses agricultural profit as a basis and it is the agricultural profit which determines the industrial profit. When a profit declines in the agricultural sector, it also declines in industrial sector.

The industry would have to raise the wage of labourers with the increase in price of Corn and which, in turn, reduces the profit. Thus, the price of Corn determines the rate of profit in an industry.

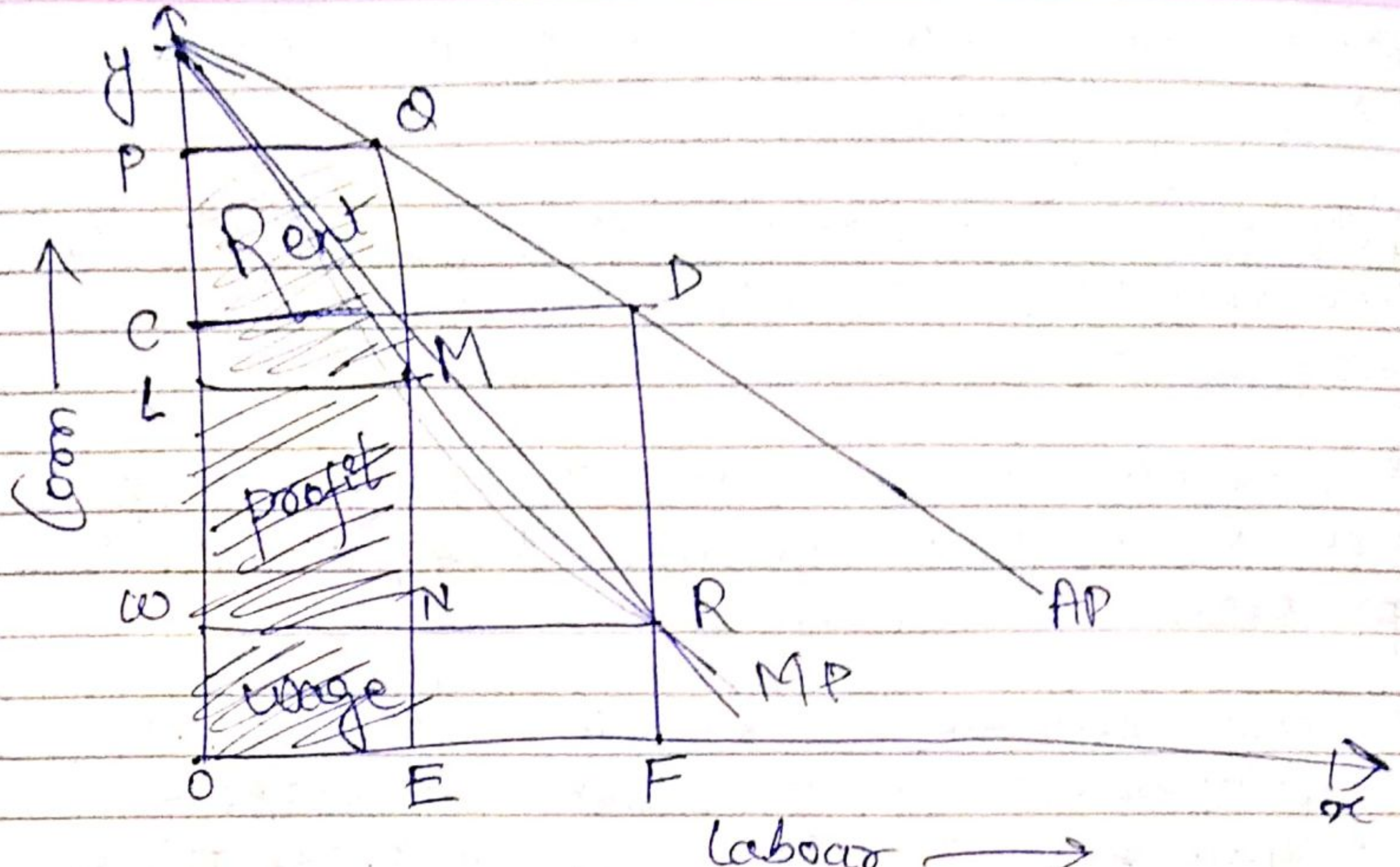
— ~~07.02.20~~

other sources of capital formation —

Ricardo is of the view that economic growth depends upon production & consumption.

Taxes are the source of capital accumulation in the hands of the government. Taxes adversely effect the investment. Therefore, Ricardo is not in favour of imposition of taxes. As taxes reduce income, profit and capital accumulation.

Prof. Ricardo is in favour of free trade as it is an important factor of development of the country. Free trade provide vast majority of investment to capitalist.



With the OE amount of labour, total corn produced is OPQE. Rent is shown by rectangle PQML, as the difference b/w AP and MP. At subsistence wage rate OW, the supply curve of labour WN is infinitely elastic and total wage is OWNE. Total profits WLMN are the residue after deducting rent and wages from the total output.

Stationary Stage – When the capital accumulation rises with increase in ~~output~~

profit, total output increases which raises the wage fund.

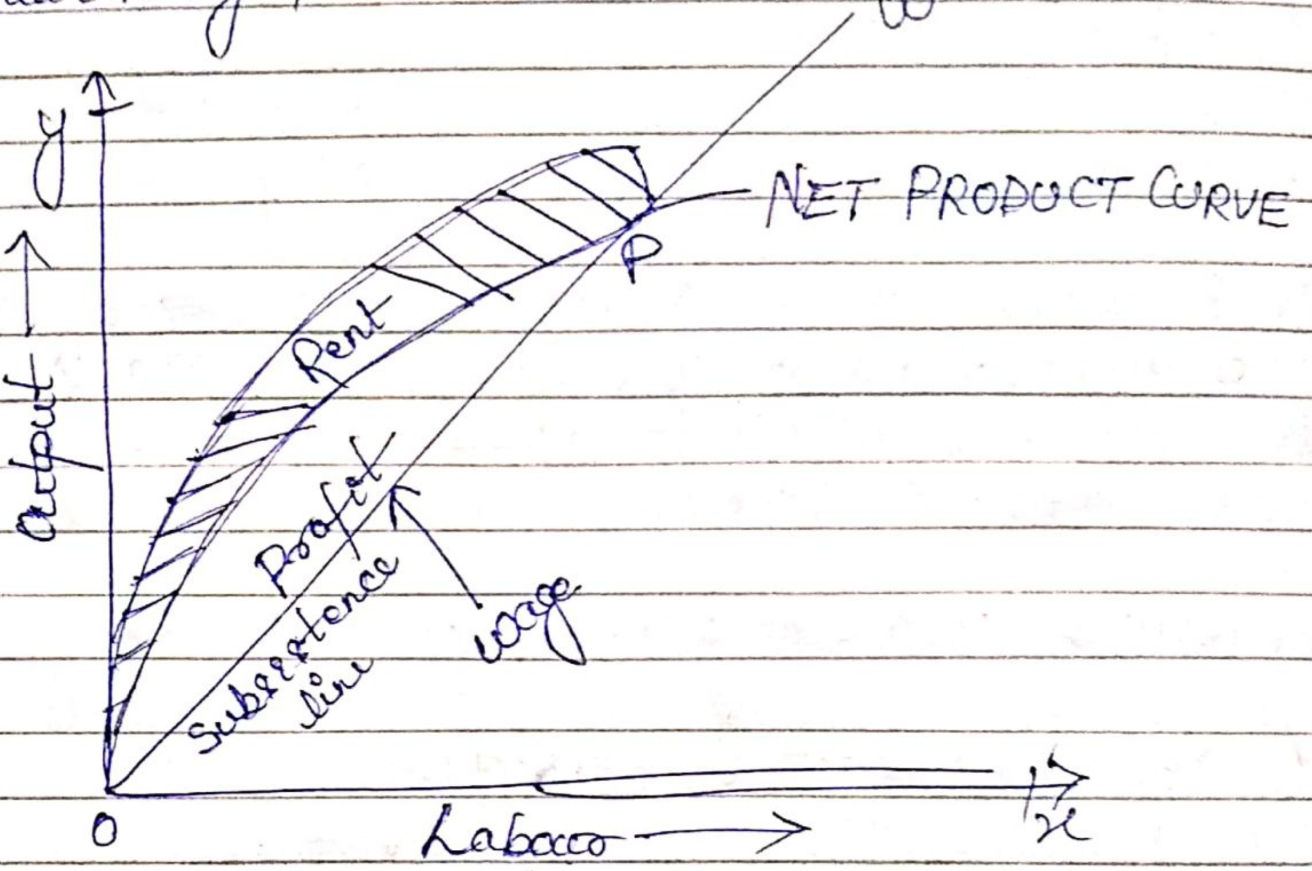
With the increase in the wage fund, population increases which raises the ~~the~~ demand for corn and its price.

As population increases, inferior grade lands are cultivated to meet increasing demand of ~~for~~ corn.

Ricardo assumes that saving is done by the capitalist but as the society progresses, the share of profit begins to decline. As a result, the process of capital accumulation and the development becomes static, economy enters in a stationary state.

In this state, capital accumulation stops, population does not grow, the wage rate is at subsistence level and technological progress ceases.

The cause behind this stationary state is the fact of diminishing returns in agriculture. It can be postponed temporarily by technical progress. But technical progress cannot prevent the ultimate disappearance of profit and the onset of stationery state.



With the increase in capital accumulation, profits and wages tend to increase and the rise in wages bring about a decline in profit. The decline in profits will continue till a stage comes when the net product ~~cue~~ curve intersects the wage line OW at P. At this point, wages are equal to Net product and the profit is nill.

Any disturbance to the right of point P will make the Net product less than wage level which is impossible. So, pls the point at which economy is in a stationary state.

→ Criticism →

1. Impractical laissez faire policy

2. Baseless notion regarding population – Ricardo development model is based on Malthusian theory of population and this theory is less valid in present time.

3. Law of diminishing returns criticized

4. Neglects impact of technology

5. Wrong ~~A~~ notion of stationary state

6. Neglects institutional factors

7. Neglects interest rate

8. Capital and Labour not fixed. – The Ricardian assumption that capital and labour are fixed coefficients of production but it is not correct as labour and capital are independent variables.

9. ~~Fr~~ Distribution rather than growth theory

10. Land also produces goods other than bank.

11. Static model

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