ADAM SMITH'S THEORY OF ECONOMIC GROWTH

"Little else is requisite to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes, and a tolerable administration of justice: all the rest being brought about by the natural course of things."

Adam Smith

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NATURAL LAW

- Every individual is motivated by his/her own self interest
- This self interest leads to the ultimate common good for all

Invisible Hand

↓

Guided market mechanism

- Smith opposed government intervention in industry & commerce
- Advocated free trade & policy of laissez-faire in economic affairs

DIVISION OF LABOUR

- **Results in improvement in labor productivity by**
  - Increasing dexterity
  - Saving time/time management
  - Invention of large number of labor-saving machines
- **Technological improvement results in division of labor & market expansion**
- **Size of market determines the division of labor**

PROCESS OF CAPITAL ACCUMULATION

- Smith held that capital accumulation must precede the introduction of division of labor
- A necessary condition of economic development
- To Smith, the problem of economic development was related to the ability of people to save & invest more
- Rate of saving → Rate of investment

But Capital investments or Rent from land → Rate of saving

Iron Law of Wages (*Capitalists & landlords save, Laborers do not*) Real wages always tend, in the long run, toward the minimum wage necessary to sustain the life of the worker.

PROCESS OF CAPITAL ACCUMULATION

Classical economists like Smith believed in the existence of **WAGE FUND**.

Under stationary conditions

Wage rates fall to subsistence level

In periods of rapid capital accumulation

Wage rates rise above the subsistence level

Why do capitalists make investments?

To earn profits

Future profits depends on

- Present climate for investment
- Actual profits

WHY DO CAPITALISTS MAKE INVESTMENTS?

According to Smith → Profits fall with economic progress

Increase in Capital Accumulation

Increases Capitalist's Competition

Increases Wage

Lowers profits

AGENTS OF GROWTH

Farmers

Producers

Businessmen

Agents of economic progress

Economic development

Market expansion

Competition

Enterprise

Free trade

PROCESS OF GROWTH

STATIONARY STATE

- Scarcity of natural resources stops growth
- Wages fall to subsistence level
- Competition among businessmen lowers profits as low as possible
- Profits continue falling, investments decline and capitalism reaches the stationary state

- As a result: 1. Capital accumulation stops
  2. Population becomes stationary
  3. Profits are minimum
  4. Wages are at the subsistence level
  5. No change in per capita income and production
  6. Thus economy reaches the stage of stagnation

LIMITATIONS

- Rigid division of society
- One-sided saving base
- Unrealistic assumption of perfect competition
- Neglect of entrepreneur
- Unrealistic assumption of stationary state
- Static model

APPLICABILITY TO UNDERDEVELOPED COUNTRIES

- Limited validity for underdeveloped countries

  Reasons are:

- Size of market is small → Low capacity to save and invest

Low income

→ Low capacity to save & invest

→ Low productivity

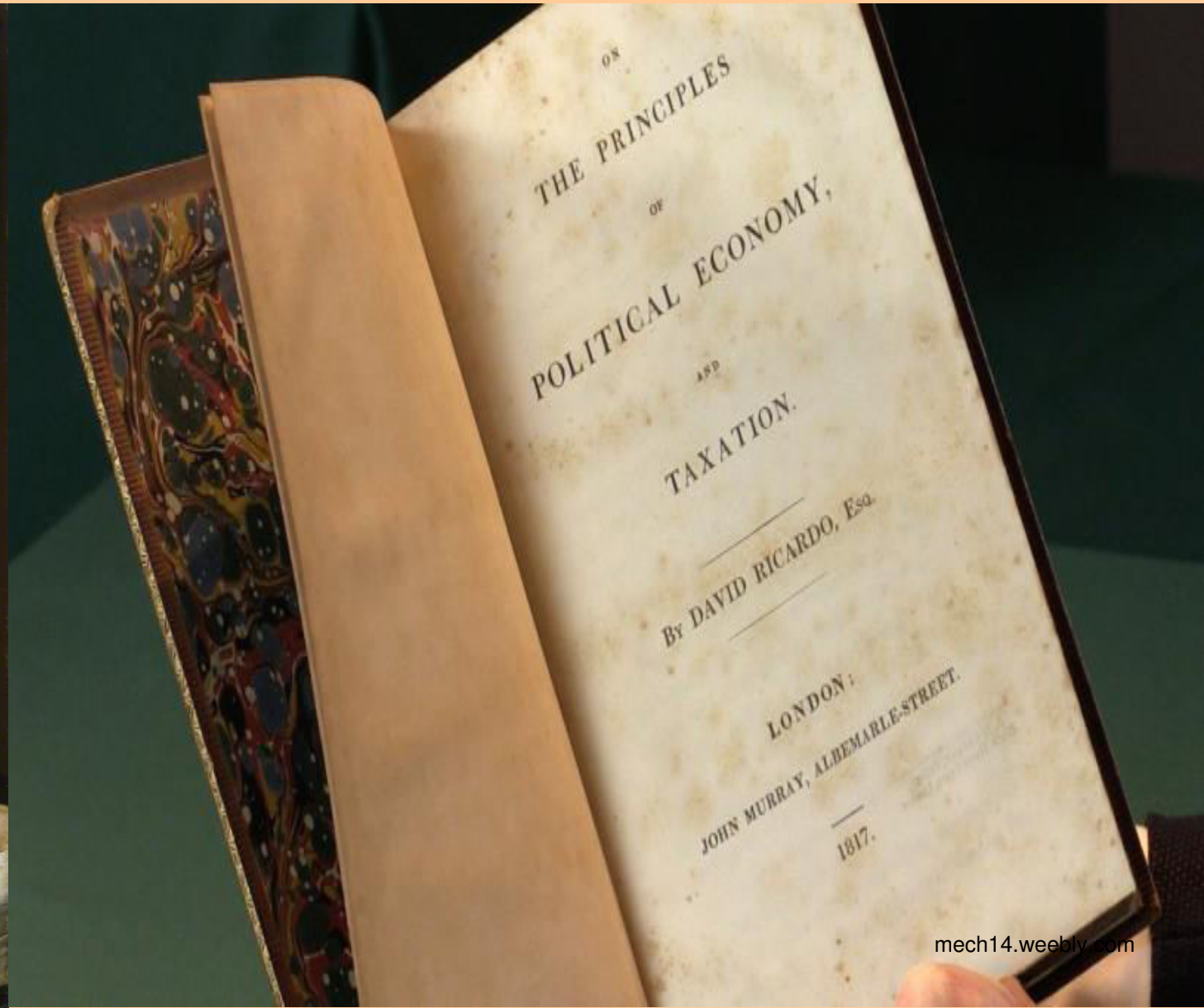
→ Small market size

APPLICABILITY TO UNDERDEVELOPED COUNTRIES

- Despite this, in underdeveloped countries, development is possible through government intervention and not solely through the *laissez-faire policy*
- However, with the help of government/state, the farmers, traders and producers can help raise productivity and develop the economy as mentioned by Smith

This interdependence between the state and the 3 growth agents points towards the importance of balanced growth for such economies

THE RICARDIAN THEORY



ASSUMPTIONS OF RICARDO'S THEORY

- All land is used for corn production & working forces in agriculture help in determining distribution in industry
- Law of diminishing returns operates on land
- Supply of land is fixed
- Demand for corn is perfectly elastic
- Labor and capital are variable inputs
- Capital consists of circulating capital
- There is capital homogeneity

ASSUMPTIONS OF RICARDO'S THEORY

- Technical knowledge is given
- All workers are paid a subsistence wage
- Supply price of labor is given and constant
- Accumulation of capital determines demand for labor & both demand and supply price are independent of the marginal productivity of labor
- There is perfect competition
- Capital accumulation results from profits

While Adam Smith laid emphasis on *"Wealth of Nations"*

David Ricardo laid emphasis on *"Income Distribution & Foreign Trade"*

Ricardo's ideas on development pertain to:

- *Capital accumulation*
- *Behavior of rent, wages and profits*
- *Stationary state*
- *International trade*

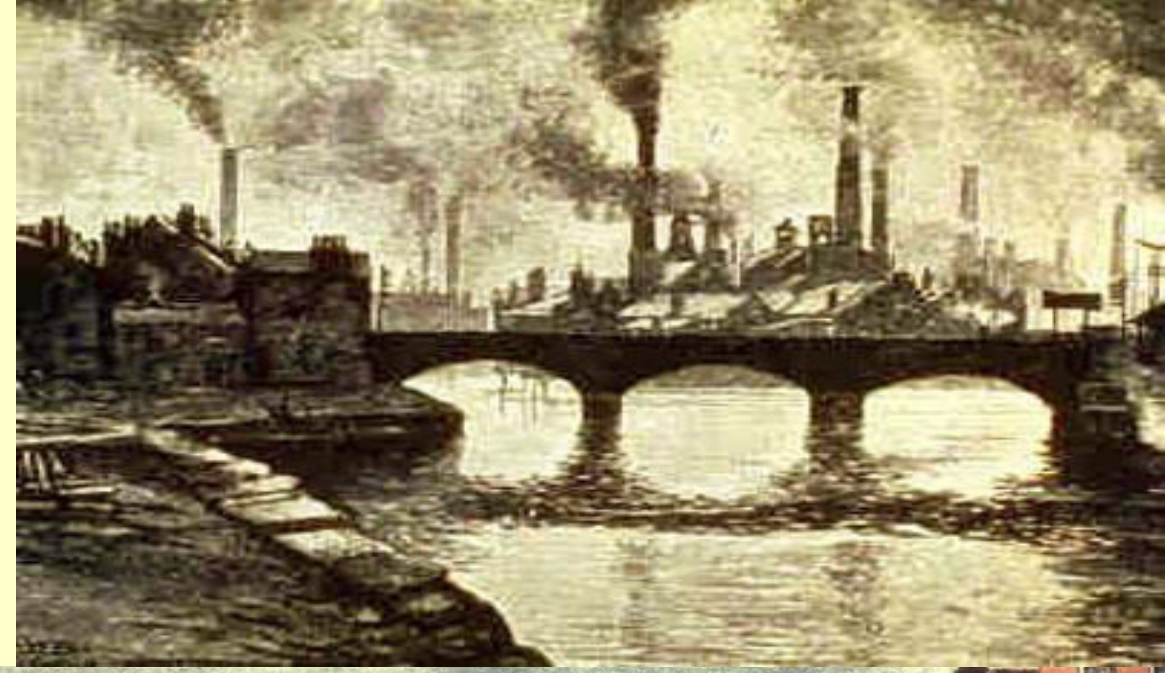
1. Capital accumulation

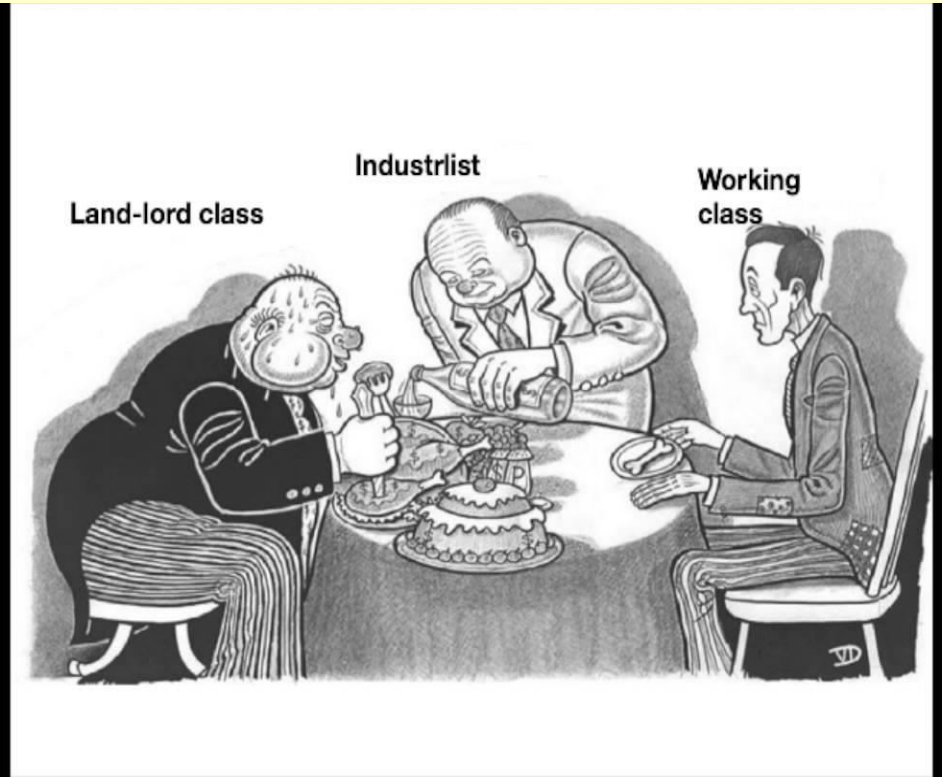
Ricardo identified 3 agents of production:

i. Capitalists

ii. Laborers

iii. Landlords





i. Capitalists

- Saves the most
- Saves out of profit
- Raise capital formation

For Ricardo, primary source of accumulation is PROFIT. Secondary includes WAGES & RENT

PROFIT = MARKET VALUE OF FINISHED PRODUCT – COST(SUBSISTENCE WAGE)

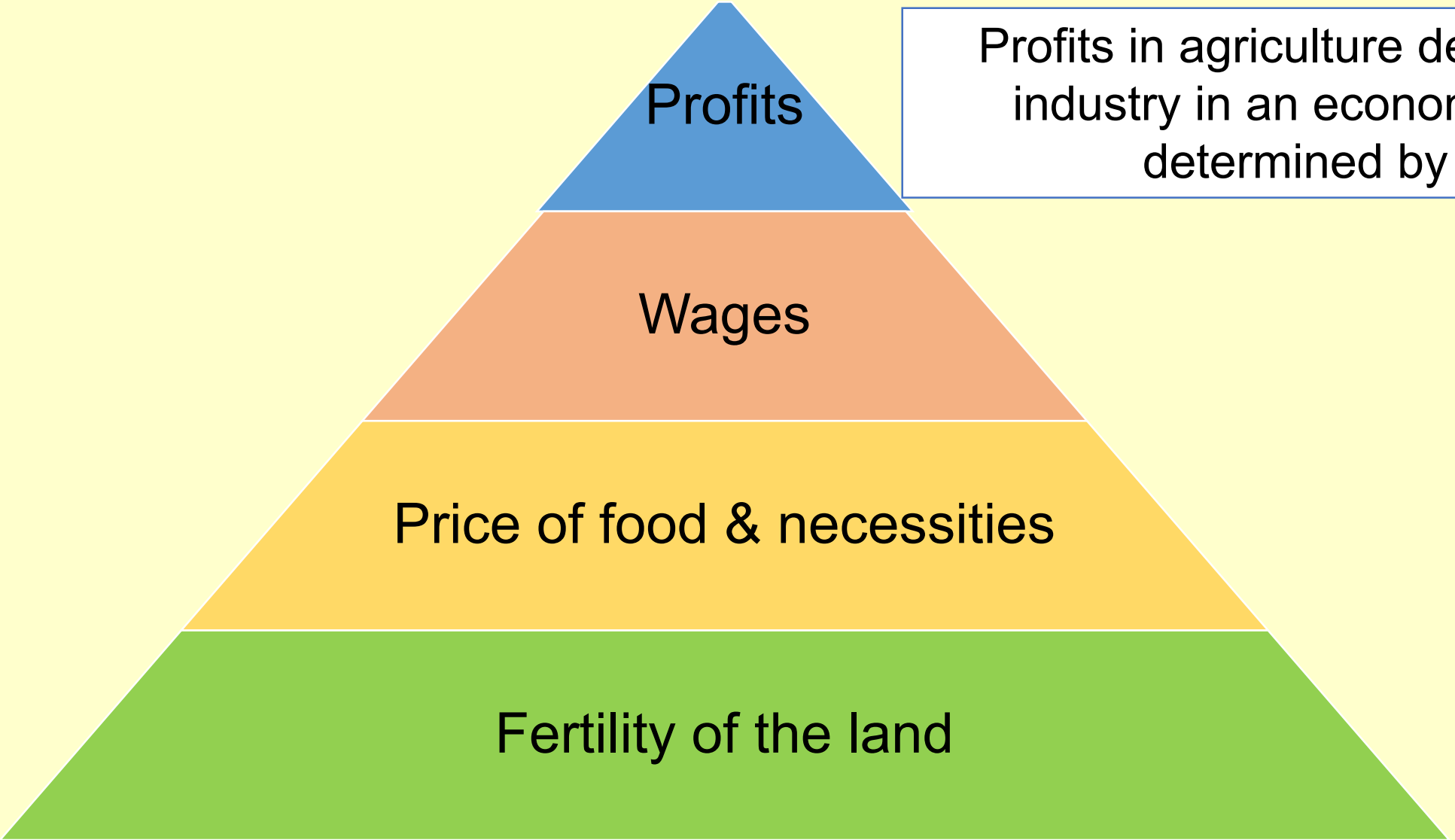
Profits ➡ Expand existing plants/start new ventures ➡ Rapid economic activities ➡ Creation of new ventures ➡ External economies ➡ Promotion & acceleration of capital accumulation

Capitalists take risks in exploiting profitable investing opportunities, which equalizes the returns from various economic activities. This helps in maximizing the national output.

ii. The working class/laborers

- Largest group among the agents of production
- Depends on capitalists for employment
- Their wages are determined by *Wage-fund*
- Their *wage-rate* depends upon *Wage-fund* & no. of workers
- **Positive correlation** between wage rate & size of population (low wage rate will create difficulties to meet the necessities of life for the working class)

- To explain the effects of wages on profits & capital accumulation, Ricardo used agricultural profits as the basis
- Agricultural profits determine industrial profits



Profits in agriculture determines profits in industry in an economy. This in turn is determined by wage rate.

- **What about corns???**

- Wages depends upon the prices of corns
- Price of corns thus determines subsistence wage
- Price of corn will increase when due to the operation of the law of diminishing returns the output on the marginal land decreases

2. Behavior of rent, wages and profits

- After deducting share of land (rent) from national income, that which remains is divided between wages & profits
- With development, a change occurs in the relative shares of wages & profits
- Profits depend on wages alone
- In the short run, wages may rise or fall but in the long run wages are at the subsistence level

2. Behavior of rent, wages and profits

Why wages remain at subsistence level in the long run??

- Population growth
- Rise in demand for agricultural land
- Inferior land brought under cultivation
- Law of Diminishing Returns operates
- Increase in agricultural output do not meet the increased demand of population which results in rise in prices of agricultural products
- Wage rates in monetary terms rise **but real wages remain at the subsistence level**
- Increase in money wage rate reduces rate of profit
- Thus ultimately rate of profit tends to fall as population grows

2. Behavior of rent, wages and profits

- Ricardo thus visualized that population growth and limited supply of land could adversely affect the saving, profit & fresh investment
- Did not however suggest ways to solve this problem

Innovation and improved methods of production can overcome this problem

3. Stationary state

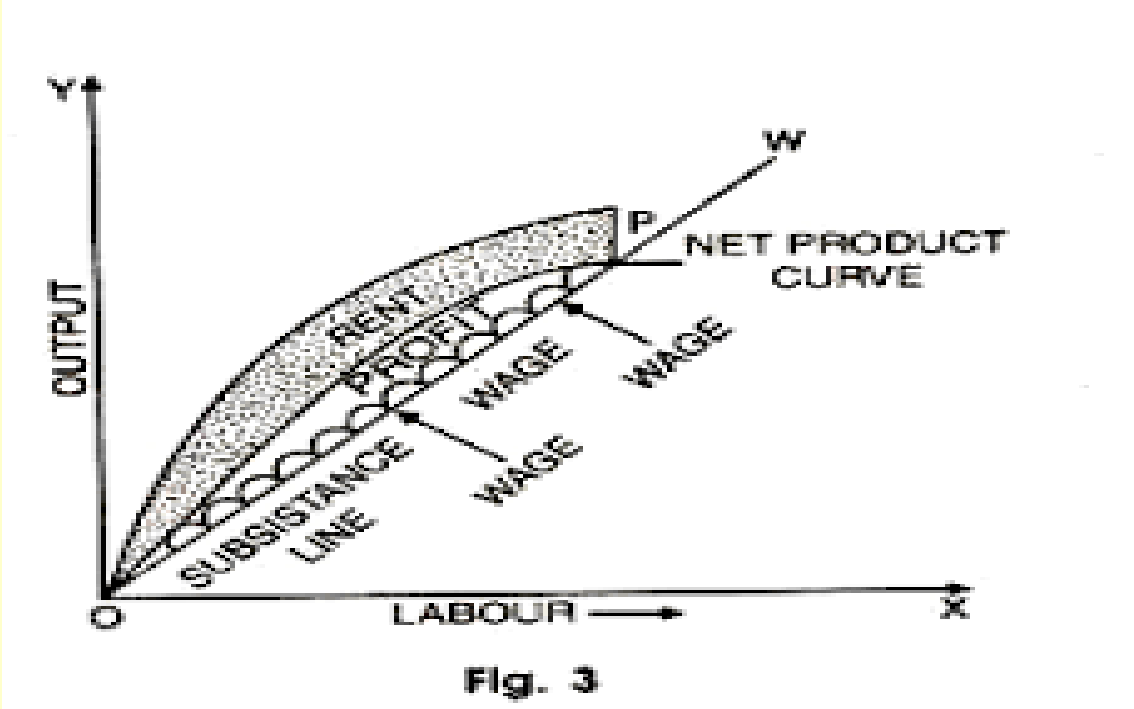


Fig. 3

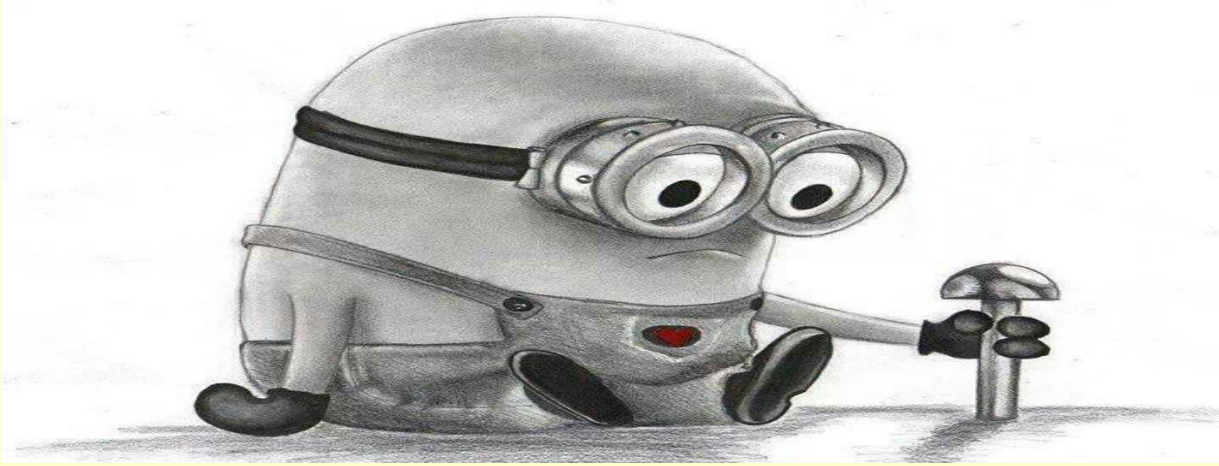
- It is a state where entrepreneurs have no tendency to increase or decrease output.
- Ricardo identified this state in terms of falling rate of profit
- Decline in rate of profit halts the process of capital accumulation and hence development
- With that the population growth also decreases
- The economy thus enters a stationary state

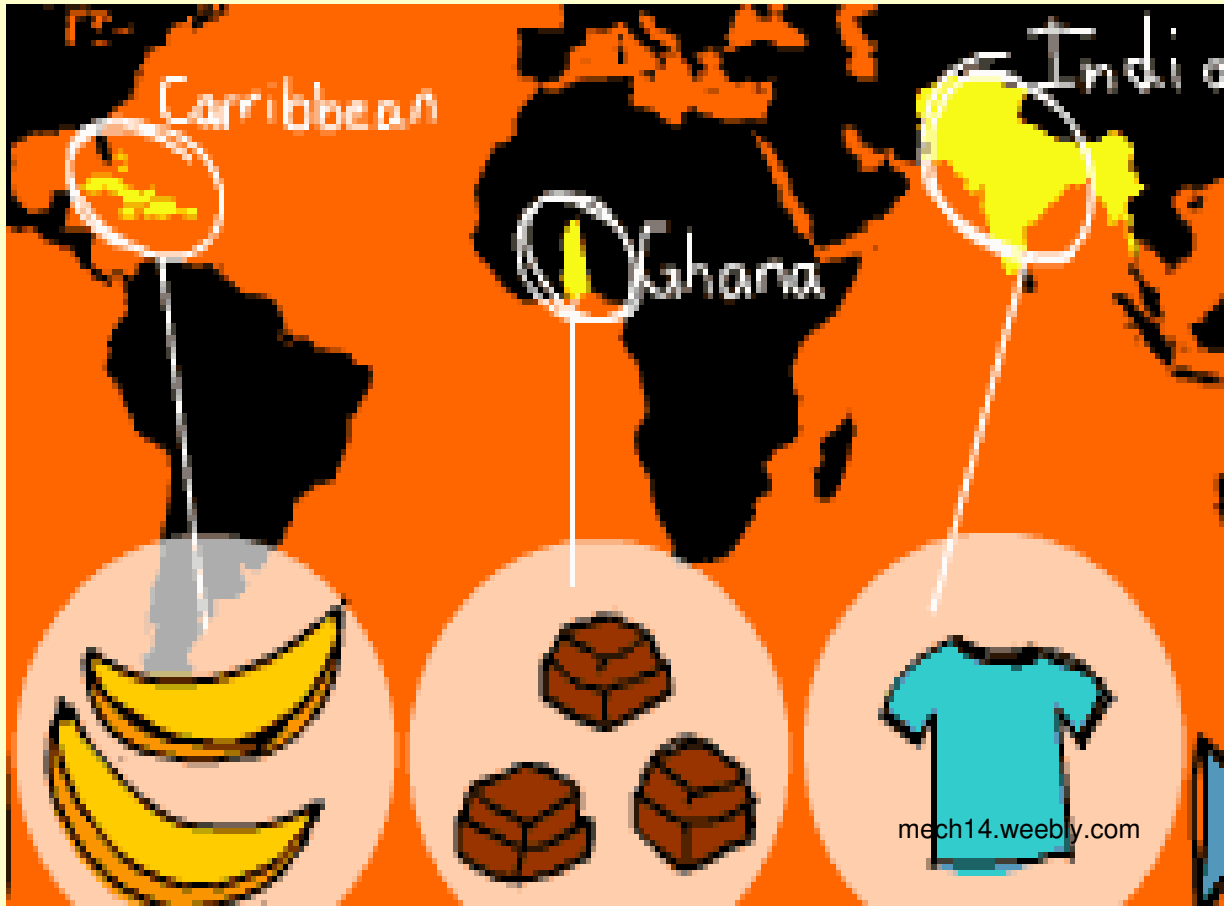
3. International Trade

- ❑ Painted a **gloomy picture of society** in the stationary state

HOWEVER

- ❑ He **advocated the role of international trade** that can provide opportunities for fresh investment
- ❑ He advocated free international trade
  - ➢ Government intervention restricts mobility of labor and capital
  - ➢ Obstacles to division of labor





3. International Trade

- Formulated the comparative cost theory of international trade
  - Specialization of production is the basis of this theory
  - Specialization leads to utilization of resources
  - Helps produce output at minimum cost
  - Investment in export-oriented industries would benefit capitalists and help earn profits
  - This profit would be reinvested to encourage development activities
  - Chain of development activities will result in recovery and prosperity of the economy

Thus free trade would mitigate the stationary state

Limitations:

I. Operation of the law of diminishing returns is criticized

II. Malthusian theory of population is open to objection

III. Unrealistic assumptions

Merits: Analyzes some vital questions related to development like

I. Explains the determination of relative factor shares

II. Until it reaches the stationary state, this theory considers the economy as dynamic one

III. Highlights the importance of development variables like capital accumulation, population, profits, wages and rents

THE MALTHUSIAN THEORY

Thomas Malthus

- Born: February 14, 1766, Surrey, United Kingdom.
- Died: December 29, 1834, Bath, United Kingdom.
- Wrote 'An essay in the First Principle of population' first published in 1798
- Debatable whether the principles of Malthus two hundred years ago (that were very revolutionary and controversial) have any relevance to the modern world.
- The world population in 1798 was at nine million people. We have now passed the seven billion mark.

❑ Malthus's Concept of development

- Economic development is not an automatic process
- Required consistent efforts of people
- Development process is not smooth
- Prior to reaching the optimum development level, economy reaches the slump several times
- Economic development could be achieved by increasing country's wealth
- Country's wealth depended partly on quantity of output produced by its labor force & partly on the valuation of this produce

❑ Population Growth and Economic Development

- Malthus stated that population growth alone is not sufficient to foster economic development

- Rather population growth is the result of the development process

HOW?? Increase in rate of capital accumulation ➡ Increase in labor demand ➡ Encourages population growth

- Mere population growth does not increase wealth

- Population growth increases wealth only if it increases **effective demand,** which ultimately leads to increase in wealth

❑ Population Theory

Table 1

Malthusian Theory of Population

Population increases in geometrical progression 1,2, 4, 8, 16, 32, 64, 128, 256 (in 200 years)

Food Supply increases in arithmetical progression 1,2, 3, 4, 5, 6, 7, 8, 9 (in 200 years).

Imbalance leads to over population

Corrected by

Preventive checks—late marriage, chastity, moral restraint, etc.

Positive checks—vice, misery, war, famine, floods, etc.

❑ Effective Demand

- Effective demand is that level of aggregate demand at which it is equal to aggregate supply.
- Effective demand is expressed by aggregate expenditure of an economy

❑ Role of Production and Distribution

- To Malthus, production and distribution are *“two grand elements of wealth”*
- Both can increase a nation’s wealth in the short time if combined in the right proportion
- According to Malthus, maximum production and optimum allocation of resources can increase a country’s wealth in the short run

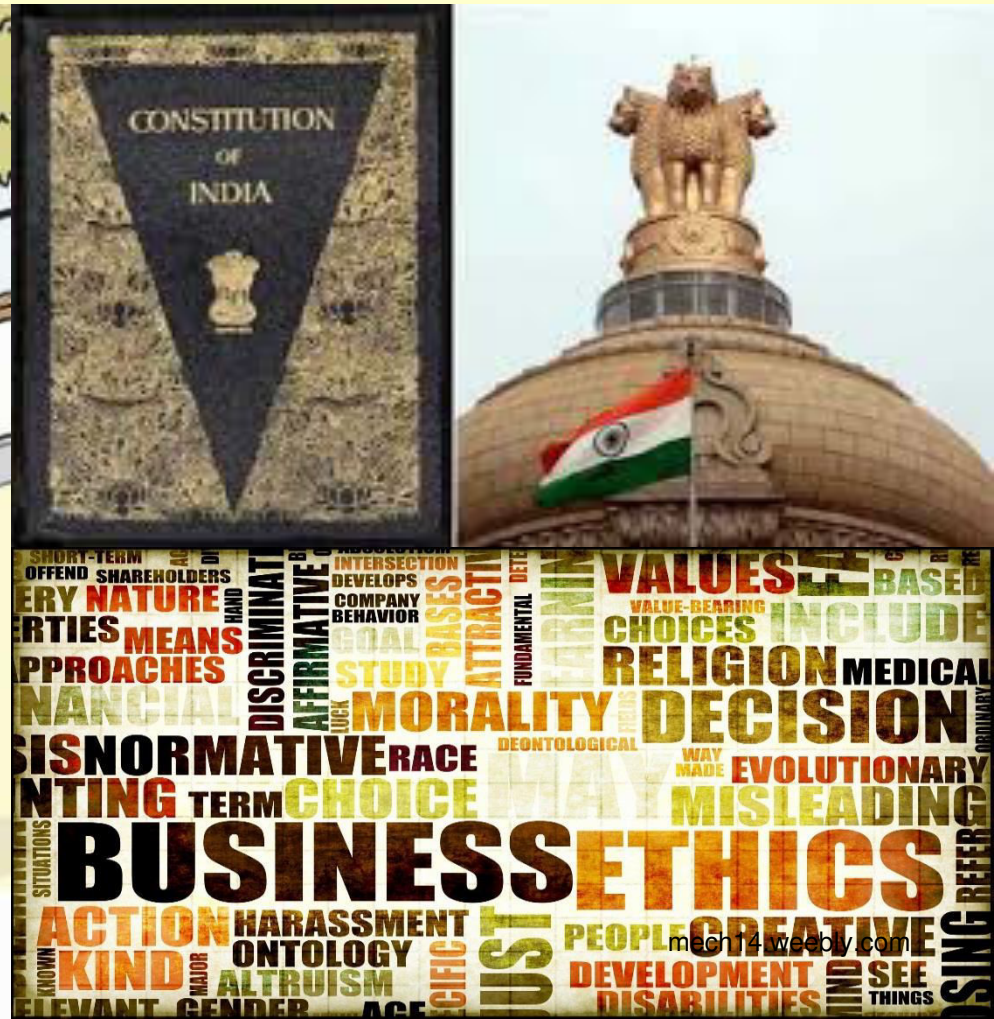
❑ Factors in Economic Development

- Explaining difference between Potential GNP and Actual GNP
- Achieving high level of Potential GNP
- Size of Potential GNP determined by *land, labor, capital & organization*
- Employment of *land, labor, capital & organization* in right proportions maximize production in **economy's 2 major sectors, i.e. agriculture and industry**

- Capital accumulation, soil fertility & technological progress increase productivity in the above 2 major sectors

❑ Factors in Economic Development

➢ Non-economic factors like ***security of property, good constitution, properly administered laws, prevailing habits, work ethics and attitude*** **etc**. also contribute to economic development



❑ Process of Capital Accumulation

- Most important determinant of economic development
- Its source is higher profits
- Profits come from savings of capitalists as workers are too poor to save
- But excess saving and less expenditure by capitalists on consumer goods to have larger profits will retard economic growth
- Optimum propensity to save

❑ Deficiency of Effective Demand

- Malthus did not agree with Say's Law of Markets
- Commodities are exchanged directly for labor than for commodities
- Excess supply of commodities in market in relation to demand
- This demand-supply gap cannot be filled by capitalists as well
- General over-production and glut of commodities in the market due to deficiency of effective demand/under consumption
- Leads to fall in prices, profits, saving, investment & capital accumulation

❑ Economic Stagnation

➢ Gluts and under consumption lead to economic stagnation

HOW??

Labor supply inelastic in short run, but capital supply can increase faster than population growth

Capitalists invest on productive labor to increase capital supply

↓

Increase in wages due to competition

Effective demand do not increase as workers prefer leisure to increased consumption

↓

Results in a general glut of commodities

Prices fall, profits decline, investment falls & both the power of accumulation and the motive to accumulation strongly decline

❑ Measures to Promote Economic Development

1. **Balanced Growth** of both the agricultural & industrial sectors
2. **Raising Effective Demand** by

i. More equal distribution of wealth and landed property,

ii. Expansion of internal and external trade,

iii. Maintenance of “unproductive consumption” and

iv. Public works schemes to remove unemployment

❑ Limitations of Malthus's Theory

1. Secular stagnation not inherent in capital accumulation
2. Negative view of capital accumulation
3. Commodities not exchanged for commodities directly
4. Unproductive consumers retard progress
5. One-sided saving base

❑ Applicability of Malthus's Theory to Underdeveloped Countries

1. He wrote about poverty, economic backwardness and underdevelopment of not only European countries, but whole of Asia, Africa and Latin America which justify its relevance even today
2. His analysis of a dualistic economy is highly realistic
3. His analysis of the causes of poverty of the peasantry makes sense
4. Relation between population growth and economic development is fully applicable
5. His views on the various factors that promote development
6. Policy measures suggested by Malthus on structural changes, land reforms, balanced growth, internal & external trade, equitable distribution of wealth & land and public works programs

❑ Non-Applicability of Malthus's Theory to Underdeveloped Countries

1. His *theory of under consumption* have no relevance
2. His remedy to maintain effective demand through "unproductive consumption" by capitalists and unproductive workers are not applicable to the prevalent conditions in underdeveloped countries

Adam Smith and Malthus and Ricardo ! There is something about these three figures to evoke more than ordinary sentiments from us their children in the spirit.

John Maynard Keynes

Adam Smith's theory

Adam Smith is regarded as the foremost classical economists. His monumental work," An enquiry into the nature and causes of the wealth of nations" published in 1776 was primarily concerned with the problem of economic development. Though he did not expound any systematic growth theory, yet a coherent theory has been constructed by later day economists, which are explained below:

Natural law:

Adam Smith believed in the doctrine of 'natural law' in economic affairs. He regarded every person as the best judge of his self interest who should be left to pursue it to his own advantage. In furthering his own self-interest, he would also further the common good. In pursuance of this, each individual was led by 'invisible hand' which guided market mechanism. "it is not to the benevolence of the baker but to his self-interest that we owe our bread", said Smith. Since every individual if left free, will seek to maximize aggregate wealth. Smith was naturally opposed to any government intervention in industry and commerce. He was a staunch free trader and advocated the policy of laissez-faire in economic affairs. The 'invisible hand'- the automatic equilibrium mechanism of the perfectly competitive market tended to maximize national wealth.

Division of labour:

Division of labour is the starting point of smith's theory of economic growth. It is division of labour that results in the greatest improvement in the productive powers of labour. He attributes this increase in productivity: 1. to the increase in the dexterity of every worker, 2. to the saving in time to produce goods and 3. To the invention of a large number of labour-saving machines. The last cause of increase in productivity stems not from labour but from capital. It is improved technology that leads to division of labour and the expansion of the market. Division of labour, however, depends on the size of the market. One of his famous sayings that," the division of labour is limited by the extent of the market," implies that, division of labour increases with the extension of the market. For this purpose, expansion of commerce and international trade is especially beneficial. With the increase in population and transport facilities, there is bound to be greater division of labour and increase in capital.

Process of capital accumulation:

Smith, however, emphasized that capital accumulation must precede the introduction of division of labour. Like the modern economists, Smith regarded capital accumulation as a necessary condition for economic development. So the problem of economic development was largely dependent on the ability of the people to save more and invest more in a country. The rate of investment was determined by the rate of investment was determined by the rate of saving and savings were invested in full. But almost all savings were invested in full. But almost all savings resulted from capital investments and landlords were capable of saving. The workers were considered incapable of saving. This belief was based on the "Iron law of wages". The idea is that wages tend to equal the amount necessary for the subsistence of the

labourers. If the total wages at any time becomes higher than the subsistence level, the labour force will increase, competition for employment will become keener and wages will comedown to the subsistence level. In such a situation, some of the workers will find it difficult to pull on below an accustomed normal living standard. They will, therefore, be unable to marry or bring up children. The working force will be reduced and competition among the capitalists for employing workers would tend to raise wages. Thus, Smith believed that," under stationary conditions, wage rates fall to the subsistence level, whereas in periods of rapid accumulation, they rise above this level. The extent to which they rise depends both upon the rate of accumulation and upon the rate of population growth". He believed that savings found their way into investment more or less automatically. Thus the wage fund could be increased by increasing the rate of net investment.

According to Smith, investments were made because the capitalists expected to earn profits on them and the future expectations with regard to profits depended on the present climate for investment as well as actual profits. Smith believed that profits tended to fall with economic progress. When the rate of capital accumulation increases, increasing competition among capitalists raises wages and tends to lower profits. In fact, it is the increasing difficulty of finding new profitable investment outlets that leads to falling profits.

Regarding the role of interest rate in economic development, Smith wrote that with the increase in prosperity, progress and population, the rate of interest falls, and as a result the supply of capital is augmented. The reason being that with the fall in interest rate the money-lenders will lend more to earn more interest for the purpose of maintaining their standard of living. Under the circumstances they will themselves start investing and become entrepreneurs. Thus, even with the fall in the rate of interest there is increase in capital accumulation and economic progress.

So far as rent is concerned, Smith believed that economic progress involves rise in money as well as real rentals, and a rise in rental share of national income. This is because the interests of the land owners are closely connected with the general interest of society.

Agents of growth:

According to Smith, farmers, producers and businessmen are the agents of economic progress. It was free trade, enterprise and competition led farmers, producers, and businessmen to expand the market which in turn made economic development possible. The functions of these three are interrelated. To Smith, development of agriculture leads to increase in construction works and commerce. When agricultural surplus arises as a result of economic development, the demand for commercial services and manufactured articles rises. This leads to commercial progress and the establishment of manufacturing industries. On the other hand, their development leads to increase in agricultural production when farmers use advanced production techniques. Thus capital accumulation and economic development take place due to the emergence of the farmer, the producer and the businessmen.

Process of Growth:

Taking institutional political and natural factors for granted, Smith starts from the assumption that a social group- we may call it a 'nation' – will experience a certain rate of economic growth that is accounted for by increase in numbers and by saving. This induces a" widening of market which in turn increases division of labour and thus increases division of labour and thus increases productivity. In this theory the economy grows like a tree. According to Smith, this process of growth is cumulative when there is prosperity as a result o progress in agriculture, manufacturing industries and commerce, it leads to capital accumulation, technical progress, increase in population expansion of markets, division of labour and rise in profits continuously. All this happens in Smith's progressive state which," is in reality the cheerful and the hearty state to all the different orders of the society".

Stationary state:

But this progressive state is not endless. It ultimately leads to a stationary state. It is the scarcity of natural resources that finally stops growth. In such a state, the competition for employment would reduce wages to the subsistence level and competition among businessmen would bring profits fall. They continue to fall, investment also starts declining and in this way the end result of capitalism is the stationary state. When this happens, capital accumulation stops, population becomes stationary, profits are the minimum, wages are at the subsistence level, there is no change in per capita income and production and the economy reaches the state of stagnation. According to Smith, the stationary state is dull, the declining melancholy. Life is hard in the stationary state for the different sections of the society and miserable in the declining state.

A Critical appraisal:

Smith's theory has the great merit of pointing out "how economic growth came about and what factors and policies impede it". In particular, he pointed out the importance of saving and capital accumulation of improved technology, division of labour and expansion of market in production and of the process of balanced growth in the interdependence of farmers, traders and producers. Despite these merits it has certain weaknesses.

1. Rigid division of society:

Smith's theory is based on the socio-economic environment prevailing in Great Britain and certain parts of Europe. It assumes the existence of a rigid division of society between capitalists and labourers. But the middle class occupies an important place in modern society. Thus, this theory neglects the role of the middle class which provides the necessary impetus to economic development.

2. One-sided saving base:

According to Smith, capitalists, landlords and money lenders save. This is, however, a one-sided base of savings, because, it did not occur to him that the major source of savings in an advanced society was the income-receives and not the capitalists and landlords.

3. Unrealistic assumption of perfect competition:

Smith's whole theory is based upon the unrealistic assumption of perfect competition. This laissez-faire policy of perfect competition is not to be found in any economy. Rather, a number of restrictions are imposed on the private sector, and on internal and international trade in every country of the world.

4. Neglect of entrepreneur:

Smith neglects the role of the entrepreneurs in development. This is a serious defect in his theory. The entrepreneur is the focal point of development, as pointed out by Schumpeter. It is the entrepreneur who organizer and brings about innovations thereby leading to capital formation.

5. Unrealistic assumption of stationary state:

Smith is of the view that the end result of a capitalist economy is the stationary state. It implies that there is change in such am economy but around a point of equilibrium. There is progress but it is steady, uniform and regular. But this explanation of the process of development is not satisfactory because development takes place by 'fits and starts' and is not uniform and steady. Thus the assumption of the stationary state is unrealistic.

6. Static model:

According to Hicks, Smith's model, though it looks like a growth model, is not a growth model in the modern sense. It does not exhibit a sequence. Thus it is a static model.

Its relevance for underdeveloped country:

Despite all this, Smith's growth economics is of some use for the less developed countries. His emphasis on raising the productivity of labour through division of labour, further, promoted by capital accumulation and extension of market is important in these countries, where product per worker is very low. His concern for raising savings to increase capital formation is also of great significance for these countries, where domestic saving and therefore capital formation are very low. It is also good for these countries to note the advantage of more international trade, in particular of expansion of exports to extend the market and demand for their products.

To conclude, Smith's theory has much to enlighten us in respect of the factors of development. It has also greatly influenced the development theories. But quite a significant part of Smith's economics is dated as a model of growth, it has only been a static one that cannot handle time and change. However, to an extent is still useful for underdevelopment countries. All in all, Adam Smith still lives on.
