Karnataka State Open University
Manasagangothri, Mysore- 570 006

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮುಕ್ತ ವಿಶ್ವವಿದ್ಯಾನಿಲಯ
ಮಾನಸಗಂಗೋತ್ರಿ, ಮೈಸೂರು ೫೭೦ ೦೦೬

COURSE : 2

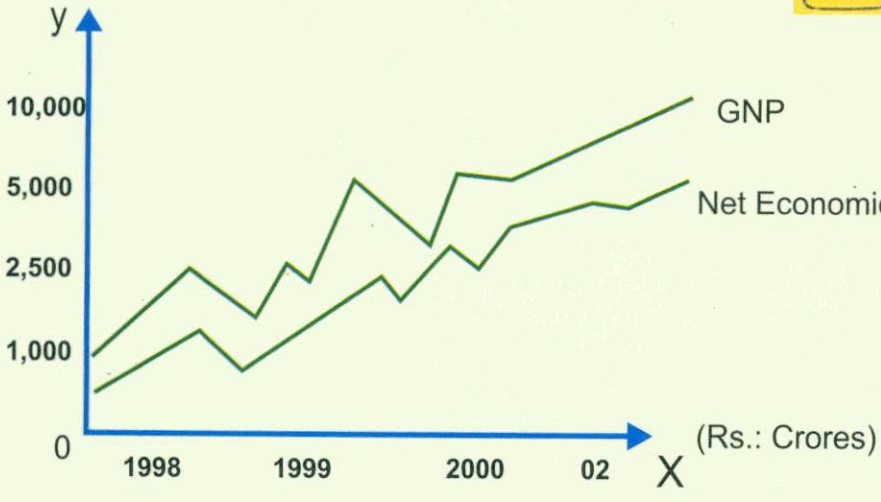
M.A. (PREVIOUS)
DEVELOPMENT ECONOMICS

Modern Agriculture

Industrial Development

Agriculture

IT Industry



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Economics of Development & growth

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Development and Under development - An overview

Block Introduction

Economic development is as old as economics. But the real emphasis can be traced since the Second world war. After the war almost all the countries of the world aimed at achieving economic development. But the objectives differed based on the stage of economic development Unit – 1 deals with the concepts of development and growth. Unit – 2 explains the indicators of economic development and Unit – 3 explains the international gap, its causes and remedies.

MA (Previous) – Economics

Course: 2 Economics of Development and Growth.

Block: 1 DEVELOPMENT AND UNDERDEVELOPMENT : AN OVERVIEW

Unit : 1

1.0 OBJECTIVES

After studying this Unit, you should be able to

- Understand the concept of development;
- The distinction between economic growth and economic development;
- The pre-requisites for development ;
- The main features of LDCs; and
- The factors that come in the way of rapid economic development.

1.1 INTRODUCTION

Thinking on economic development is as old as Adam Smith. But the real emphasis can be traced to the Second World War and thereafter. The studies made during the past nearly six decades has resulted in the emergence of what is known as "Development Economics". The coming into being of a large number of politically independent countries, what is euphemistically called the "Third World" has resulted in,what Higgins calls " development minded" orientation. There is a joint effort of both developed and LDCs to convert the poor countries into economically prosperous regions. Three reasons may be given for the interest in development economics.

1.Renewed interest in the process of growth and theory of planning;

2.Awareness among backward countries; and

3.Growth of nationalism and cold war resulted in developed

countries showing greater political interest in poor and ideo

logically uncommitted nations.

Economic development is for both developed and LDCs. But the objective differs. The aim in developed countries is the maintenance of rate of growth and avoiding cyclical fluctuations. In the case of LDCs, the aim is to accelerate development and remove poverty.

1.2 Concept of Development

The concept of development (in the present context is usedto mean economic development) in its broadest sense, can be described as a process which improves the quality of human life. The South Commission defines it as follows:

" Development is a process which enables human beings to realize their potential, build self confidence and lead lives of dignity and fulfilment". The ends of development here indicate that it is the fulfilment of human potential. The Commission furthers states "Development is a process which frees people from the fear of want and exploitation. It is a movement away from political, economic or social oppression. Development has to be an effort, by and for the people. True development has to be people – centered".

This definition and the subsequent observations bring out the essen-

tial attributes of development.

Ø The ends of development are fulfilment of human potential and the means to achieve these ends is the responsibility of the people themselves as individuals and members of society. In this view, development is a process of social transformation. More than a century back, Marshall in his classic *"Principles of Economics"* made the observation that the "Mecca of Economist lies in economic biology rather than in economic dynamics" thus stressing that human welfare is the central objective of economic activity.

1.3 Distinction between economic growth and economic development

The terms 'growth' and 'development' are sometimes used synonymously in economic discourse. While the usage sometimes is acceptable, it may confuse. The two terms can have different meanings. To quote Herrick and Kindleberger " In particular, economic growth means more output. Economic development implies not only more output but also different kinds of output than previously produced, as well as changes in the technical and institutional arrangements by which out put is produced and distributed. Growth may involve greater inputs leading to greater output. It may also result from greater efficiency. Development goes beyond this to include changes in the composition of output and in the relative sizes of the contributions of the various inputs to the productive process". Let us take an example: Supposing you measure general changes in the height and weight of the population of a country, it becomes growth. You go a step further: Measure functional capacities like learning capacity, physical coordination or the ability to adapt to changing circumstances; it becomes development.

Growth does not necessarily imply development. Robert Clower made an interesting study of the economy of Liberiaentitled *"Growth Without Development – An Economic Sur vey of Liberia"*(1966). It goes on to describe the rapid rise in Liberian exports of primary commodities from property owned by foreign companies, and goes on to note the absence of structural changes to induce complementary growth in other economic sectors and institutional changes as would ensureequitable distribution of gains of real income.

Economists generally use the term *economic growth* to refer to increase over time in country's real output of goods and services or more appropriately real output per capita. Output is conveniently measured by GNP or national income though other measures could also be used. Eco-

nomic development is a comprehensive term. Some economists have defined it as growth accompanied by change – changes in economic, social and political structure. Though there will be changes when there is economic growth, it is the qualitative aspect that becomes important here. Economic development implies a decline in agriculture share of GNP and a corre sponding increase in the share of such sectors as manufacturing, utilities, financial institutions, construction and government administration. This results in a change in the occupational structure of labour force and increase in the degree of education and training required of those who seek jobs. Not only do the types of job change but so does their gegraphicdistribution, with most new jobs found in urban area.

According to Meier and Baldwin " Economic development is a process whereby an economy's real national in come increases over a long time". When the rate of development is greater than the rate of population growth, then per capita real income will increase. 'Process' implies the operation of certain forces, which vary under diverse conditions in space and time.

When we focus only on growth in national product, we are taking a comprehensive view of the end result of the development forces. If however we examine the forces in greater detail we observe that many other changes accompany a rise in output. The most important of these changes may be classified as changes in fundamental factor supplies and changes in the structure of demand for products.

Changes in factor supplies: These include:

1.Discovery of additional resources

2.Capital accumulation

3.Population growth

4.Introduction of new and better techniques of production

5.Improvements in skills and

6.Other institutional and organizational modifications

Changes in the structure of demand for products: These are associated with:

1.Size and age composition of population

2.Level and distribution of income

3.Tastes and

4.Other institutional and organizational arrangements

Let us look at the two terms 'Economic Growth' and 'Economic Development' this way also. Economic growth may be defined as increasing total output, which can occur with no increased efficiency or rising levels of living. Growth can result from increased population, increased investment, longer hours of work, or a large proportion of the population working. If the total man hours worked in a society double, but total output goes up only by 50%, there is growth even though efficiency has declined. Growth may even be associated with falling levels of living, if population grows faster than output or if capital investments grow faster than increases in output.

Economic development may be defined as " rising out put per man-hour of labour with no reduction in employment". It implies improvement or increasing efficiency. It is generally but not necessarily associated with economic growth and rising levels of living. With the increasing productivity people might prefer increased leisure instead of increased income. Thus, if productivity doubled while workers chose to cut their labour hours by half, there would be economic development but no growth and no rising real income unless we consider leisure part of income.

Environmental considerations:

A discussion of the relationship between economicgrowth and economic development would be incomplete if we do not touch upon a reality of our times – environmental degradation and its impact on development. Development to be true must be environmentally sustainable. Economic development and sound environmental management are complementary aspects of the same agenda. Without adequate environmental protection, development will be undermined; without development, environment protection will fail. There are two ways in which environmental problems can and do affect development. First environment quality (safe water & healthy air for example) is itself part of the improvements in welfare that development attempts to bring. If the benefits from rising incomes are offset by the costs imposed on health and the quality of life by pollution, this cannot be called development. Secondly, environmental damage can affect productivity. Soils that are degraded, acquifers that are depleted, and eco systems that are destroyed in the name of raising incomes today can jeopardize the prospects for earning

income tomorrow. Therefore it is not enough to have only development, but it should be both 'Sustainable' and 'Equitable'. 'Sustainable Development' – which was first brought into common use by the World Commission on Environment and Development(the Bruntland Commission) in 1987 in its Report *OurCommon Future* defines it as " Meeting the needs of the present generation without compromising the needs of future generations".

Check Your Progress

i) Thinking on economic development can be traced to Adam Smith but its significance has grown after 1945.

ii) Economic development is for both developed countries and LDCs but the objective differ.

iii) Development can be defined as a process of improving the quality of human life.

iv) The ends of development are the fulfilment of human potential and it is the responsibility of the people themselves to achieve this.

v) Economic growth means more output. Economic development implies not only more output but also different kinds of output and changes in the technical and institutional arrangements.

vi) A complete analysis of the concept of economic development would be incomplete if environmental considerations are not taken into account.

vii) Development to be true should be sustained.

1.4 Pre - requisites for Development

You have been introduced to the concept of development. The question is how to achieve this? In other words, what are the requirements for development? To merely say "remove the obstacles to development" may not carry us far. Development is too complex an issue and there are no mechanical and simplified answers. We need to seek aid of all disciplines, especially history, psychology, sociology and political science. Some of the major requirements for development are indicated below.

A) Indigenous Forces: The desire for rapid economic development must come within and cannot be implanted from outside. Forces outside the economy can only complement sustained development, they cannot serve as a substitute for it.

The importance of indigenous base will be appreciated if one recognizes the vast difference that exists between initiating development and maintaining development. Some projects might be initiated with foreign aid, but this will not ensure the maintenance of development. Development will falter if incomes are increased through external aid, without sufficient internal motivation. If the development is to be cumulative and long lasting, the development forces must be fundamentally based within the developing country.

B) Perfecting the Market

Another requirement is that market imperfections are removed. Market imperfections restrict the transference of factors from less productive to more productive forms of employment, handicap the expansion and development of markets, and limit the impact of one sector of expansion in another sector. The opportunities for greater productivity with existing state of knowledge and with the same resources must be exploited. There will also be need to reduce monopolistic tendencies in domestic production and marketing. The capital market must be widened and credit facilities must be made easily available. In short, the economy must move towards a more efficient use of its existent resources.

Removal of market imperfections helps in widening the economy and pushes the production frontier outward. This outward movement will help the economy to achieve the maximum potential from the given resources. Removal of market imperfections would also help in the spread of development to all the sectors.

C) Capital Accumulation

Most agree that a major requirement for development is the accumulation of real capital. This involves three independent activities:

i) An increase in the volume of real savings

ii) Finance and credit mechanism

iii) The act of investment itself.

The requirement of capital accumulation cannot be met simply by creating financial institutions and monetary expansion. A strong financial structure is needed to cannelise savings into productive investment. When we talk of 'savings' wemean 'real savings' not savings that result due toperfectly

elastic supply of money.

How to estimate the capital requirements for LDCs like India? The following steps may be useful: First, an estimate is made of the rate of population growth. Next, some target is established for the desired rate of increase in per capita real in come. Then, finally the incremental capital output ratio (ICOR) is estimated. It is estimated that the required real savings or capital formation necessary to maintain per capita income for a 1% population growth vary between 2% and 5% of the national income. Assuming a required savings ratio of 4% of the national income, and a population increase of 2% a year, then savings ratio of 8% a year would be required merely to maintain per capita income constant. Even if population were to remain constant, but per capita in come were to increase by 2% a year, then a savings rate of 8% a year would again be required. If population were to increase by 2% and per capita were to rise by 2%, then savings rate of 16% would be required.[This method of measuring capital requirements is an alternative to that ofHarrod-Domar].

It is not enough to have the mere objective of capital accumulation. It is equally important that a country must have capital absorption. Further, there must be technological and organizational progress so that capital may be used most productively. Such a situation would reduce capital output ratio so that capital becomes more productive.

D) Investment Criteria

Once the required capital has been accumulated, it is necessary to establish some investment criteria. This is important in determining whether a given volume of investment contributes as much to development as is possible. As a general rule, we may say that the general criterion is one of productivity. The investment must be of a productive character if it is to be conducive to further development. That is, those investments in which the marginal social productivity is the highest should be taken up. In order to say whether the given investment has maximized marginal social productivity or not, two factors are considered.

* A given volume of investment should be allotted in a manner that maximizes the ratio of current output to investment; those investment projects should be selected that will maximize the ratio of labour to investment; and

* To reduce pressures on the balance of payments, investments should be allocated in a manner that will maximize the ratio of export goods to investment. It should be remembered that the concept of social marginal

productivity is vague and value judgements regarding various social objectives become important [For a fuller discussion of this please refer to Meier & Baldwin's book pages 340-348]

E) Capital absorption and Capacity

Although capital accumulation is an important requirement, it does not mean that LDCs can absorb capital without limit and at any rate. Each country has a limited capital absorption capacity. This capacity is in general determined, on one side, by the availability of complementary factors of production with which capital is to cooperate, and on other side, by requirements of avoiding inflation and maintaining balance of payments equilibrium.

Usually, the most important limitations are the lack of technology, the shortage of skilled personnel and the low geographic mobility of labour. If capital accumulation is to proceed rapidly, then it will be necessary to try to increase the supply of other factors that cooperate with capital. Until these bottlenecks are overcome, it is all the more essential to select investments carefully in accordance with rational investment criteria.

Once development is accelerated, then the absorptive capacity will increase. Since bottlenecks are common in LDCs and result in unused capacities elsewhere in the economy, the removal of these will increase total productivity considerably. There is also need to avoid inflation and balance of payments disequilibrium.

F) Values and Institutions

You will agree that economic matters are inter woven in practice with the rest of the social system. Economic change will require other changes in society. In fact, the psychological and sociological requirements for development are as important as the economic requirements.

Successful development efforts require some institutional changes, which are not merely economic. The present cultural framework has not helped in economic development of sufficient rapidity. Where religious obstacles come in the way of economic progress, then religion will have to be taken less seriously or its character altered.

To avoid human discontent, changes should be introduced that will disrupt the existing culture as little as possible. An increase in national income will not bring about an increase in social welfare, if the increase is accompanied by deep cultural adjustments. Development goals therefore must include judgements about these more general aspects of welfare. More rapid

progress will have to come by utilizing as much as possible existing attitudes and institutions.

In general, the economic problems of development are relatively simple compared with the broader and deeper sociological problems of respecting the general cultural and institutions of LDCs. Not only economic institutions, but also social organizations – as represented by caste, joint family, the rural village, the temple, mosque and church and the school must also be modified so that they may be more fovourable for development. Development requires therefore both economic change and cultural change.

1.5 A) Features of Less Developed Countries (LDCIs)

In examining the problems of LDCs, it is useful at the outset to know what constitutes a country of this type. Please remember LDC or less developed country is only one such expression. Other expressions like low-income country, under developed country and developing country are all used as synonyms. The Human Development Report 2003 lists 137 countries or areas as the developing countries. Further, there is now a further subdivision among developing countries, referred to as the least developed countries by the United Nations and there are 49 countries or areas in this.

There are some fundamental characteristics common to many LDCs. Meier and Baldwin list six such basic economic characteristics:

a) It is primary producing;

b) It faces population pressure;

c) It has underdeveloped natural resources;

d) It has an economically backward population;

e) It is capital deficient and ;

f) It is foreign trade oriented

To the above one may add the following, listed by Benjamin Higgins:

g) Nature of occupational structure;

h) Technological dualism;

I) Regional dualism;

j) Level of education;

k) Employment and Unemployment and

l) Other social indicators.

Here is a brief description of each of these.

a) Primary Production: This indicates that the nature of production is agricultural oriented. Raw materials and foodstuffs dominate the structure of production. The high percentage of labour force in agriculture and large percentage contribution of agriculture to national income indicate the concentration in primary production.

Some poor countries are also highly dependent on non-agricultural primary production, that is, minerals. These countries account for a very high proportion of world's production of tin, aluminum, copper, manganese, diamonds etc. In most mineral industries, although the smaller mines are domestically owned, many of the larger mining companies are organized and controlled by industrial countries. But there is a change in this scenario in recent years.[Would you collect recent data in regard to contribution of agricultural sector / primary sector to national income of some developing countries and verify this conclusion?]

Another related point is the low agricultural productivity. The level of output both with regard to land and persons is lower than in advanced countries. Several reasons can be given to this: Low ratio of land to worker, small amount of capital in use, insufficient techniques of production, inadequate knowledge of better methods of production and insufficient methods of organizing agricultural production.

B) Population pressures:

The emphasis on primary production leads to the next characteristic, population pressure. Due to this pressure, three consequences follow:

— Many poor countries have rural underemployment

— High birth rates create large number of dependent children per head

— Falling death rates with high birth rates bring about a rapid increase in population. It is better to concentrate on these specific features of the population structure, rather than attempting to think of an 'Optimum Population'. Look at some demographic data:

i) The total world population in 2001 is estimated at 6,148.1 Mn (614.81 crore). This is likely to reach 7,197.2 Mn (719.72 crore) in 2015.

ii) The share of population of developing countries in2001 is placed at 4,863.8 mn (486.38 crore) or 77.5 % of global population. This share is likely to go

upto 5,868.2 mn (586.82 crore) in 2015 (80.7%)

iii) Between 2000-2015 nearly 94.1% of increased population will be in developing countries. (Source: Human Development Report 2003)

C) Underdeveloped Natural Resources

The economy of a poor country can also be said to be underdeveloped in the sense that there are natural resources that are underdeveloped. Labour and capital can make only limited contribution to national income if natural resources are not properly used. One may therefore think that, besides capital deficiency, there is also deficiency of natural resources. It cannot however be said that there is an absolute deficiency of natural resources. One cannot forget that the concept of an economic resource is always relative to the given state of technology. Although a country may be poor in resources, it is entirely possible that in the future it may become rich in resources as a result of the discovery of presently unknown resources or because new uses may be found for the known resources. It appears to be more appropriate to say that they are poor because they have not succeeded in overcoming the scarcity of natural resources by appropriate changes in technology and economic and social organization.

D) Economically Backward Population:

The quality of people, as productive agents, may be said to be low. This is particularly manifest in such indications as low labour efficiency, limited specialization in occupations and in trade, lack of entrepreneurship, economic ignorance and a value structure and social structure that minimise the incentives for economic change.

E) Capital Deficiency

Capital deficiency is another general characteristic of poor countries. One indication of this is the low amount of capital per head and the fact that even this small amount is not diversified. Not only is the capital stock low, but the current rate of capital accumulation is also low. However, One can see this gradually rising.

For example in the year 2002, the global capital formation average is put at 23% of GDP (see World Development Report 2003).

F) Foreign Trade Oriented:

The economies of the poor countries may also be characterized as being foreign trade oriented. One of the indicators is the great reliance on the production of a few primary products, which usually are almost completely exported. The ratio of this export production to total output is normally high. In some cases, the export of only one or two staple commodities may account for large part of foreign exchange receipts. This would expose to the danger of transmission of international trade cycle. A depression abroad reduces the demand for the poor country's export, resulting in large price and value declines. The opposite is equally true.

G) Occupational Structure

Colin Clark demonstrated as long ago as 1935 that economic progress tends to be accompanied by a decline in the proportion of the labour force in agriculture and an increase in the proportion in manufacturing and services. Transforming people from low productivity agriculture to high productivity jobs in the second ary and tertiary sectors has been a major source of economic growth. The correlation between level of per capita income and share of labour force employed out side agriculture is quite high.

Morever, the countries that have most of labour forcein agriculture are also relatively inefficient in the agricultural sector. This statement is true in terms of yields per hectare as well.

H) Technological Dualism:

One of the striking features of developing countries is what has been called 'Technological Dualism'. The division of the economy into two distinct and radically different sectors, one technologically advanced and other technologically retarded. In general, in the advanced modern sector is found the petroleum, large scale manufacturing, mechanized plantation agriculture, and the transport, finance, insurance, teaching and other services associated with these activities. In the 'traditional' sector is found peasant agriculture, handicrafts or cottage industry and very small scale industry and once again the services related to these undertakings. In the modern sector, the operation is capital intensive, whereas in traditional sector, the techniques are labour intensive. Productivity is correspondingly low.

I) Regional Dualism:

Regional dualism is also a common characteristic of under de-

veloped regions. Gunnar Myrdal looking at European experience, was perhaps the first to suggest that underdeveloped countries are characterised by large increasing gaps in productivity and income among major regions. Even small developing countries have rich and poor, leading and lagging regions. In bigger countries such as India and Brazil, the contrasts are sharper.

Healthy growth requires that the poor or the lagging regions be converted into leading ones before too much time is gone. If this does not happen, the pull of the leading regions may become so strong that lagging regions may become chronically poor. It may also be noted that lagging sectors and regions are associated with less highly developed social groups as well. In such cases, moving people from low productive occupations to high productivity ones is not only a matter of moving them from one part of the country to another; it is also a matter of moving them from one socio– cultural framework to another. Once such dualism appears, the best educated, the best trained, most progressives and most ambitious men and women leave the lagging region for the progressive one. Thus the lagging region will have very low quality population.

J) Education:

Generally, high levels of education are indication that incomes are reasonably high and equitably distributed. There could be some exceptions to this. Education and development have correlation. Improved education brings higher productivity resulting in higher incomes and standard of living.

K) Employment and Unemployment:

It is clear that unemployment is a problem in developing countries in a way that is different from developed countries. Serious unemployment in industrialized countries has been associated with recessions and depressions during the 20th century, which have been traced to deficiency of effective demand. This kind of unemployment occurs in developing countries but is not the major employment problem. Add to this the issue of underemployment or disguised unemployment.Those working less than a 'normal' workweek but not seeking additional work are sometimes referred to as'disguised unemployed'. Other characteristics of the employment problem in developing countries are a very large volume of seasonal unemployment, and unemployment generated from the supply side through drought or other causes of crop failure.

L) Other Social Indicators:

A number of social indicators can be used to identify the level of underdevelopment. These include health and nutrition as reflected in such indicators as life expectancy at birth, calorie consumption, infant mortality etc.

The above is a brief summary of the characteristics that make a developing country. You will agree this is not comprehensive. In the light of the present day situation and needs, which other characteristics do you think should go into the above list ?

Check your progress:

· What factors go to make development possible is not easy to say. Development is a complex process.

· Some major requirements include: indigenous forces, to remove market imperfections, promote capital accumulation, evolve a suitable investment criteria, promote capital absorptive capacity and build suitable values and institutions.

· To identify a developing country is not easy, since no country has all characteristics that go to make a country undeveloped.

· Using the analysis of Meier and Baldwin and Higgins, twelve major features can be identified. These include: Primary producing, population pressure, underdeveloped natural resources, economically backward population, capital deficiency, foreign trade oriented, technological dualism, regional dualism, low level of education, unemployment and underemployment and backward social indicators.

· The above are not comprehensive.

1.6 Impediments of Development:

The general characteristics described above indicate the more important obstacles to development. There are certain common aspects applicable to all developing countries that have come in the way of rapid development. Meier and Baldwin group these into three categories.

i) Market imperfections

ii) Vicious circles and

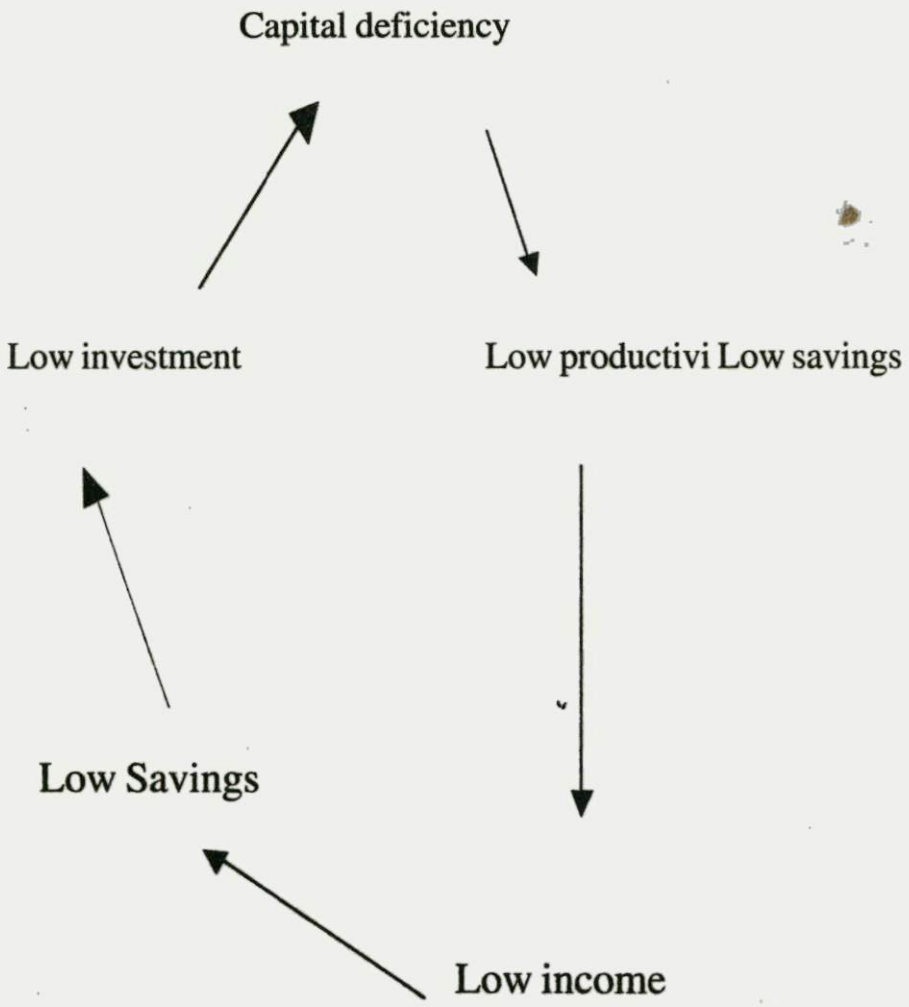
iii) International forces.

We will briefly examine how the inter-relations within and among these categories have impeded development.

i) Market imperfections: Market imperfections such as factor immobility, price rigidity, ignorance of market conditions, rigid social structure and lack of specialization have acted as frictions and impediments. This has prevented the achievement of an optimum allocation of resources. Efficiency of production has been low, resources have been underemployed and employment has been misdirected. One may observe that poor country always remains within the production possibility boundary. Market rigidities and imperfections obstruct the movement of factors and forces, the best combination of factors is not used, and the resources are not allotted most efficiently. Not only is the economy within its production frontier, but all the elements of backwardness also combine to make the poor country's economy highly inflexible.

ii) Vicious Circles: There are domestic obstacles that can be brought under the heading 'Vicious Circles'. Many obstacles to development are both a cause and consequence of poverty. As such there are circular relationships that perpetuate the low level of development. If we include capital deficiency along with market imperfection the basic vicious circle appears as follows:

Market imperfections: Underdevelopment backwardness



This circle emphasizes that total output is low, and that, after consumption needs are fulfilled, little remains as surplus for capital accumulation. Because of the low level of real income in the poor countries, the flow of savings is small. The low level of real income is in turn, primarily due to the lack of an adequate capital stock and secondarily to market imperfections. And the low level of capital stock is in turn, a result of the low level of real income. Thus, deficiency of real resources and low productivity constitute the basis for saying " a poor country is poor because it is poor". Other vicious circles overlap this basic circle. The low level of real income is both a cause and consequence of the low level of demand; low real income leads to a low level of demand, which, in turn leads to low investment and hence back to capital deficiency. The low level of real income thus accounts for the shortage of savings and lack of investment incentives.

[For a fuller discussion please refer to the original text of Meier and Baldwin]

iii) <u>International Forces:</u>

This refers to the role of poor countries in the world economy. The classical theory of comparative costs argued that, on the whole, the largest share of the gains from international trade would accrue to the economically small countries.

Many economists however question whether the classical theory of trade is realistic for poor countries and whether it is relevant under dynamic conditions. The classical theory of comparative costs assumes that factors are mobile internally, but are immobile internationally, the production functions are known, private marginal product equals social marginal product, full employment and optimum allocation of resources exist internally before trade, and balance of payments is in equilibrium. It is argued that these "ideal conditions " are unrealistic for poor nations.

The second major line of argument is that the efforts of international factor movements have not been entirely beneficial. Foreign investment has merely developed the natural resources for export, not the domestic sector or the people.

The third major element involves the contention that there has been a secular deterioration in the terms trade for developing countries. Singer and Prebisch, for instance, argue that benefits of technological progress have gone disproportionately to the advanced industrialized countries, and Lewis suggests that an unlimited supply of labour at subsistence wages has kept prices low for tropical commercial produce. It should not be forgotten that all the above lines of arguments have their critics.[For a different perspective

in regard to impediments to development, refer Clarence Zuvekas: Economic development (Macmillan, 1979)

1.6.1 Summary:

* Thinking on economic development can be traced to the writings of Adam Smith, but its significance has grown after 1945
* Development can be defined as process of improving the quality of human life.

* The ends of development are the fulfilment of human potential.
* Economic growth means more output but economic development is more fundamental.

* Development to be true should be sustained.

* Requirements that go to make development possible in clude promotion of indigenous forces, remove market imperfections, promote capital accumulations, have suitable investment criteria, promote capital absorptive capacity and build suitable values and institution.

* Using the analysis of Meier and Baldwin, and Higgins one can identify 3 major impediments to development. These include market imperfections, existence of vicious circles and international forces not conducive to domestic development.

* Each of these impediments is looked by different economists in different perspectives.

1.7 Key Words

Development: It is a process which enables human beings to realize their potential, build self confidence and lead lives of dignity and fulfilment.
Economic Growth: Increases over time in a country'sreal output of good and services – or more appropriately real output per capita.
Economic development: Growth accompanied by change – changes in the economic, social and political structure.
Sustainable development: Meeting the needs of the present generation without compromising the needs of the future generations.
Indigenous forces: The desire for rapid economic development coming from with.

Technological dualism: The division of the economy into two distinct and radically different sectors, one technologically advanced and the other tech-

nologically retarded.

Regional dualism: Large and increasing gaps in productivity and income among major regions.

1.9 For Further Reading

1) Benjamin Higgins: Economic Development: Problems, Principles and Policies
2) Clarence Zuvekas : Economic Development : An Introduction
3) Meier and Baldwin : Economic Development: Theory History, Policy
4) Narasimham M: Economic Reforms, Development and Finance
5) World Bank : World Development Reports, 1991,1992

Block: 1 Indicators of Development

Unit-2

2.0 Objectives:

After studying this unit, you should be able to

- Know the various economic indicators of development;
- Know the non-economic indicators of development;
- And analyse where India stands with regard to these measures or indicators.

2.1 Introduction:

You have been introduced to the nature of development problems of LDCs. We learnt what we meant by economic development, the characteristics that go to make a country underdeveloped and the obstacles that come in the way of rapid development. How are we to say whether a country is moving on the path of development? What characteristics can be used

to evaluate the degree of 'Development ' a country has undergone or how 'developed' or 'underdeveloped' a country is at any point in time? In short, how do we measure development?

It is not easy to measure. We all have intuitive notions of development when we speak of a developed country. We get picture of well clothed, well fed people having access to a variety of commodities; and having sufficient leisure and entertainment. In other words, there is a *minimal* requirement for a developed nation is that the physical quality of life be higher, spread across all sections of society. But the notion of a good society goes further, that includes political rights and freedoms, intellectual development, low crime rate etc. However, material well being is still the basis on which development is measured. What then are the measures that one employs to measure material well being of a country? What non-economic indicators go to make this picture complete? To these issues, the rest of the lesson is devoted.

2.2 Economic Indicators:

At the basic level of measuring development we have to identify two major measures, namely Gross National Income (GNI) and per capita income. Both are important, the first one highlighting the monetary value of the output of goods and services in a country, while the other tells a bit about how each one has been benefited from this.

2.2.1 Gross National Income (GNI) as a Measure:

I know all of you are familiar with the term Gross National Product (GNP) and wonder what Gross National Income is. GNP is now known as GNI in line with the recommendations of the 1993 System of National Accounts (SNA). Most countries however continue to compile their national accounts according to the 1968 SNA, but we use the expression GNI here. It is the broadest measure of national income and measures total value added from domestic and foreign sources claimed by residents. GNI comprises gross domestic product(GDP) plus net receipts of primary income from foreign sources. Data are converted from national currency to current US Dollars using the World Bank atlas method. The World Bank uses the Atlas conversion factor. (For methodological details, please refer to World Bank's World Development Report 2003, (pages 249 & 250).

Here are GNI for a few countries for the year 2001 (amount in billion of dollars)

Argentina:	261.0
Australia:	383.3
Brazil:	528.5
Canada:	661.9
China:	1,131.0 (excludes Hong Kong - China)
France:	1,377.4
Germany:	1,948.0
India:	474.3
Japan:	4574.3
United Kingdom:	1,451.4
United States:	9,900.7

The average for low income countries is 1069.1 billion dollars and for high income countries 25,506,4 billion dollars (Source: World Development Report 2003, Table 1)

What inference would you draw from this? Obviously U.S.A is at the top and Argentina is at the bottom. India is nearer to Argentina than USA! Now let us look at the data for these countries with GNI expressed in terms of purchasing power parity (PPP) dollars

Argentina:	438
Australia:	500
Brazil:	1,286
Canada:	864
China:	5,415
France:	1,495
Germany:	2,098
India:	2,530
Japan:	3,487
United Kingdom:	1,466
United States:	9,902

(Source: W.D.R 2003, Table 1)

Can you draw conclusions after comparing the above two sets of data?

GNI as an indicator of development has the following deficiencies:

1) The GNI figures tells nothing about the types of goods and services produced or the amount of welfare derived from the use of these goods and services.

2) It tells us nothing about the costs to society of increased environmental pollution, urbanization or population growth. Some economists suggest that

these be treated as costs and subtract from GNI.

3) Many goods and services not passing through the market are excluded from GNI estimates. In all countrie's for example, unpaid house work and repairs carried by oneself are not considered as production. Failure to include non-market transactions in LDCs distorts GNI data more than in developed countries, since these transactions are relatively more important. Further, even when estimates are made of the value of certain non-market transactions, they are often biased on the downward side.

4) GNI tells nothing about distribution of income. Out put per capita may be growing by 2% per annum, but only 20% of the population may be experiencing rising living standards. To call this 'Development' is questionable.

5) GNI tells little about standard of living of people. Rising national income might be accompanied by growing population as well. This means that the standard of living is deteriorating.

6) There are also a number of conceptual problems like double counting, the method of treating illegal incomes etc.

2.2.2 Per Capita income as an Indicator:

Figures of per capita income are frequently used as an index of development and for making a distinction between developed and developing countries.. Look at the way the World Bank classifies countries. According to the World Development Report 2003 countries in terms of per capita incomes are classified as follows:

Low income countries - $ 745 or less [2001GNI per capita]
Lower middle countries - $ 746 - $ 2975
Upper middle countries - $ 2976 - $ 9205
High income countries - $9206 or more

As you would have observed, each country's income (inlocal currency) is converted into a common currency (typically US Dollars) and divided by that country's population to arrive at a measure of per capita income. This conversion scheme is called the exchange rate method, because it uses the rates of exchange between the local and the common currencies to express income in a common unit.

Look at per capita income figures for a few selected countries for the year 2001.

	Per Capita Income	PPP $
Argentina:	$ 6,960	$ 11,690
Australia :	$19,770	$ 25,780
Brazil :	$ 3,060	$ 7,450
Canada :	$ 21,340	$ 27,870
China :	$ 890	$ 4,260
France :	$ 22,690	$ 25,280
Germany :	$ 23,700	$ 25,530
India :	$ 460	$ 2,450
Japan:	$35,990	$27,430
Switzerland	$ 36,970	$ 31,320
United Kingdom:	$ 24,230	$ 24,460
United States :	$ 34,870	$ 34,870

The data above speaks for itself. The disparities are, as you can see, enormous and no amount of fine-tuning in measurement methods can get rid of the stark inequalities that we live with.

How good per capita income as a measure of development? Look at these merits:

i) It represents the fact that a country as whole is getting better if the per head incomes are rising. Though this is an average measure, it indicates that per head, there is an increase in the availability of goods and services.

ii) It suggests the possibilities of raising living standards of the poor masses, provided an equitable economic policy is formulated and implemented.

iii) It is helpful in comparing living standards among countries.

The limitations may be summarised as follows:

I) There are difficulties in making inter country comparisons. This arises due to differences in economic structure, purchasing power etc. However, with regard to the latter, namely purchasing parity, we have the PPP comparisons. Can you use the data given earlier and come to meaningful conclusions? This PPP is the result of an ambitious United Nations International Comparison Programme (ICP) which carries out declared price comparisons for a set of benchmark countries every 5th year beginning from 1970. The ICP is joint project of the World Bank and the regional economic commissions of the United Nations. Even after making such a comparison; problems remain.

II) Dividing countries as developed and developing on the basis of per capita income appears to be arbitrary.

III) It neglects the distribution of income within a country, which has an important bearing on the welfare of people.

IV) It neglects the potential for development. Often the example of Kuwait is given .It has one of the highest per capita incomes in the world ($18,030 and PPP $ 18,690 in 2001) but by no stretch of imagination can we classify it as a developed country.Despite the deficiencies noted above, it appears to be the most appropriate measure. If LDC's are defined on the basis of per capita income which means including most of the countries of Asia, Africa and Latin America striking similarities are found (Ex: Predominance of Agriculture, low productivity, high birth rate etc.)

There may be countries with high per capita incomes, but posses all the characteristics of a less developed country. This situation is few. However, a simple mechanical argument like per capita income ignores the stage of development. Therefore, it is necessary to examine the stage of development that a country is in. In this connection, countries may be classified into four main categories:

i) Countries with low per capita incomes, which are progressing rapidly and with potential, based on indigenous resources.

ii) Countries with high per capita incomes with less hope of rapid self-sustaining growth because of resources limitations.

iii) Countries which are rich in resources but which have stagnant per capita incomes; and

iv) Countries with stagnant per capita incomes and with little prospects of raising living standards due to resource constraints.

A low-income country may fall into any of the above broad categories and to ascribe per capita income at any point of time as the cause of underdevelopment would be misleading.

Check Your Progress:

- The question of measuring 'development' is not easy.
- One can generally classify measurement of development into two broad categories, namely, economic indicators and non-economic indicators.
- The main economic indicators include Gross National Income (earlier known as gross national product) and per capita income.
- GNI measures the national income, which is the total value, added from domestic and foreign services claimed by residents.
- The average GNI for high-income countries is $1069.1 Bil-

lion. India's GNI forth the year 2001 is 474.3 billion.

- GNI has limitations like that it does not say anything about the types of goods and services produced or the amount of welfare derived from these goods and services. Costs of development are not indicated so also barter transactions.
- Per capita income is a more reliable indicator and countries are classified according to per capita income levels.
- Per capita income also has limitations like that it does not indicate the level of development of a country etc.

2.3 NON- ECONOMIC INDICATORS:

The income measures explained above are criticized on the ground that the income index focuses on Quantity of goods and services and totally ignores the quality of life that development would promote Quality of life is related to such things as income, expectancy of life, gender equality, level of education leading to skill formation etc. In order to take note of these parameters, a number of measures have been developed.

These include the following:

2.3.1 Physical Quality of Life Index (PQLI)
2.3.2 Basic Needs Approach
2.3.3 Human Development Index (HDI)
2.3.4 Gender Related Development Index (GDI)
2.3.5 Gender Empowerment Measure (GEM) and
2.3.6 Human Poverty Index (HPI)

2.3.1 Physical Quality of Life Index (PQLI)

This is a composite index of three elements, namely, life expectancy, infant mortality, and literacy. Morris D Morris has made important studies in this direction. Figures in respect of each of these components are rated on a scale of 1 to 100, where 1 represents the worst case and 100 the best case. For life expectancy Morris assigned the upper limit of 1 to 20 years. Similarly, scales are set for infant mortality and literacy rates. A composite index is then prepared by averaging the three indices giving equal weight to each of them. This index will be highest at 100 for a country with the most favourable life expectancy, lowest infant mortality and highest literacy in the world. Between these two extremes all other countries are according to their rankings.

The study revealed that generally countries with low per capita income had low PQLI and countries with high per capita had a high PQLI. There were exceptions to this as in the case of China and Sri Lanka.

2.3.2 Basic Needs Approach:

This suggests that development has to be assessed in terms of the extent to which basic needs of the population, in particular of the poor, are satisfied. The approach involves satisfying the minimum levels of physical needs. These include consumption of food, provision of shelter and access to essential services like pure drinking water, sanitation, health, and education. Depending upon the level of development, the physical condition and culture of the society, these needs may differ. This approach focuses most sharply on the poor of the LDCs. This approach is concerned with the removal of absolute poverty through the direct provision of goods and services to the poor.

2.3.3 Human Development Index (HDI):

This index is in use since 1990. It is prepared by the United Nations Development Programme (UNDP). It is based on three aspects of human living-income for a decent living, educational attainment and life expectancy. Elements of the Index: Of the three components, per capita income is the economic indicator (PPP US $), the educational attainment is measured by a combination of adult literacy and average years of schooling. Life expectancy reflects the progress made in fields like health (as infant and child mortality) and nutrition. Thus one economic and two social components are brought together in this index. As per the Human Development Report2003, India rank is 127 out of total 175 countries. It value is 0.590. It was 0.511 in 1990. The highest value (0.944) is that of Norway and lowest (0.275) is that of Sierra Leone.

2.3.4 Gender Related Development Index (GDI):

This is similar to HDI in the sense that this also includes the three components of HDI, but adjusts these for gender inequality. GDI was first computed in 1995 and here there are 144 countries. The index adjusts the average achievement of each country in life expectancy, educational attainment and income in accordance with the disparity in achievement between men and women. The position of India is 103 out of 144 countries. The first rank goes to Norway and the last to Niger.

2.3.5 Gender Empowerment Measure (GEM):

The HDR of 1995 first introduced GEM. It concentrates on female participation key areas of economic and political spheres in decision making.

It thus differs from GDI. In order to reflect economic participation and decision making power of women, the percentage share of women and men in administrative and manegerial positions;as also the percentage shares of professional and technical jobs are considered.The third world variable is the women's and men's percentage share of parliamentary seats to reflect political participation and decision making power. An income variable is also used to reflect power over economic resources.

The HDR 2003 has given GEM ranks to 70 countries and India is not within the index. Iceland stands first while Yemen is ranked last.

2.3.6 Human Poverty Index (HPI)

This was first developed in the HDR of 1997. There are two indexes – One for developing countries known as HPI-1 and another for developed countries HPI-2.This index is composed of three elements:

a) A long and healthy life;
b) Knowledge;
c) A decent standard of living

With regard to (a), in HPI-1, the percentage of population that does before it reaches the age of 40 years is taken into account.
With regard to (b) adult illiteracy rate is considered. For measuring a decent standard of living, percentage of population not using improved water sources and percentage of children under 7 live who are under weight are considered. India rank is 53 out of a total 94 developing countries, as per the HDR of 2003. Barbados tops the list, while Niger is at the bottom.
The HPI-2 is for developed countries. These also include the above three parameters but standards are higher. It adds long term unemployment rate as another indicator. HPI-2 has 17 selected OECD countries with Sweden at the top and United States at the bottom.

A general observation that becomes obvious after examining the above aspects is the shift in emphasis to poverty reduction in 1970s along with reduced income inequality. During 1970s, it is associated with human development.

2.4 Let us sum up:

The above analysis might have given you an idea as to how difficult it is to define development. The following main ideas emerge out of the above:

- Development or economic development can be measured using both economic and non-economic indicators.
- The main economic indicators are the Gross National Income and the

per capita income.

· The GNI is the broadest measure of national income, that measures total value added from domestic and foreign sources claimed by residents. GNI comprises GDP plus net receipts of primary income from foreign sources. A country with high GNI is regarded as a developed country and vice-versa.

· GNI has certain serious limitations. It does not say anything about the types of goods and services produced, or the amount of welfare derived from these goods and services. It does not say anything about the "costs" of development nor does it include non-monetary transactions.

· Per capita income is regarded as a more reliable indicator and countries are classified according to per capita income levels.

·Per capita income also has limitations like that it does not indicate the level of development of a country, the purchasing power of the currency etc.

· Some important measures incorporating these non-economic parameters are the PQLI, Basic needs approach, HDI, GDI, GEM, and the HPI.

· Each of these stresses some social or political dimension of our social set up apart from economic factors like the per capita income.

· One important point that emerges after analysing these indicators of development, is the reduced importance that income commands in the development process.

2.5 Glossary:

GNI per capita: GNI divided by mid-year population.

GNI: Formerly gross national product. The broadest measure of national income. It measures the total value added from domestic and foreign sources claimed by residents.

GNI comprises GDP plus net receipts of primary income from foreign sources.

PPP Gross National Income: It is GNI converted into international dollars using purchasing power parity conversion factors.

PPP GNI per capita: It is PPP GNI divded by midyear population.

Human Development Index: A composite index measuring average achievement in three basic dimensions of human development - A long and healthy life, Knowledge, and a decent standard of living.

HPI-1: A composite index measuring deprivations in the three basic dimen-

sions captured in the human development index - A long and healthy life, Knowledge, a decent standard of living.

HPI- 2: It includes all elements of HPI –1 plus considers social exclusion as expressed in terms of long term unemployment.

GEM: A composite index measuring gender inequality in three basic dimensions of empowerment – economic participation and decision making, political participation and decision making, and power over economic resources.

GDI: A composite index measuring average achievement in the three basic dimensions captured in the HDI, adjusted to account for inequalities between men and women.

2.6 : For FurtherReading

UNDP: Human Development Report : Various issues especially 2002.
World Bank : World Development Report: Various issues especially 2003.

Unit -3 INTERNATIONAL GAP

Unit : 3

3.0 Objectives

After studying this Unit, you should be able to understand the:

- Ø Dimension of the problem of international economic gap;
- Ø The reason put forth for such an inequality;
- Ø The relationship between inequality and poverty if any; and
- Ø The possible remedies

3.1 Introduction:

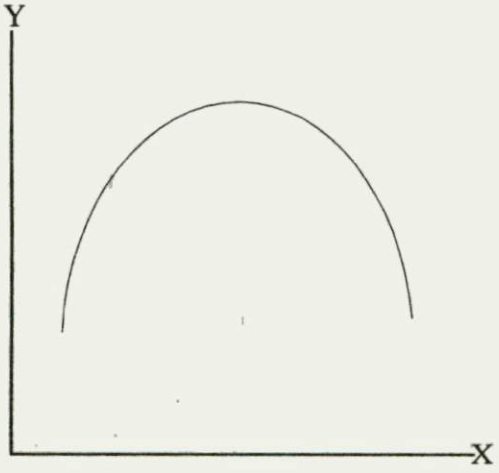
One of the major challenges of economic development is to promote growth with equity. The modern economic system, which first started in UK, was later transmitted to France, Germany, USA, Japan, etc. But the major portion of the world economy remained unaffected by this change. It should be noted that all the present day developed countries did not grow at the same time or at the same rate. Though there are differences among developed countries themselves, they are not as significant as that which exists between developed and developing countries.

Existence of inequality affects the way in which an economy works and prevents (or perhaps promotes!) some other goal we are interested in. We know that the resources at the disposal of majority of nations are limited, even if we go by average income. Imagine what are the consequences that would result in when this low income is distributed unequally – for poverty,

under nutrition and waste of human life. Low levels of income affect savings rate as also the capacity to work. Access to credit and finance is constrained. There is therefore the need to examine the dimension of this problem and to suggest a few remedies.

3.2 Income distribution and economic growth:

The earliest attempt to correlate economic inequality is the study of Simon Kuznets. It has come to be known as inverted 'U' hypothesis. [Kuznets, S (1995) – Economic Growth, and Income Inequality, *American Economic Review*]. Because of data limitations, Kuznets used the ratio of the income share of the richest 20% of the population to that of the poorest 60% of the population as a measure of inequality. The comparison was carried out be tween a small set of developing countries – India, Sri Lanka and Puerto Rico – and a small set of developed countries – United States of America and the United Kingdom. Later in 1963, 18 countries were stud ied. Kuznets hypothesized an asymmetrical relationship between income distribution and economic growth. A simple diagram may be used to show this hypothesis.



This diagram indicates that in the initial phase, inequality widens. Later, as everybody catches up, inequality falls. This reasoning drove Oshima (1962) and Kuznets (1955,1963) to suggest a broad hypothesis of development: that economic progress, as measured by per capita income, is initially accompanied by rising inequality, but that these disparities ultimately go away as the benefits of development spread more widely. Thus if you plot per capita income an one axis and degree of inequality on the other, the hypoth-

esis suggests a plot that looks like an upside down 'U'. Hence the name 'inverted U hypothesis'. The hypothesis also suggests that economic development is fundamentally a sequential and uneven process. Instead of everybody benefiting at the same time, the process seems to pull up certain groups first and leave the other groups to catch up later. In the initial phase, inequality widens. Later, as every body catches up, inequality falls.

Kuznets study revealed the following two important findings:

1. The shares of the upper income groups in income distribution are distinctly larger in LDCs than developed countries.
2. The incomes of the poorest 40% of the population normally grow more slowly than the average until per capita income reaches a range of $700 to $900. Beyond this range, the incomes of poorer grow or tend to grow faster than the average. Thus, the income distribution is typically less unequal in developed countries than in developing countries. A number of studies have been made to empirically test the inverted 'U' hypothesis. The study of M.Ahluwalia (1976) is worth mentioning. According to his findings income share tends to fall initially with a rise in per capita income for all quintiles except the highest, and then rises beyond a certain point.

3.3 Dimension of the problem:

A number of estimates have been made to estimate the degree of inequality that exists in global economy. A few such estimates are given here to indicate the historical trend.

1) **Jagdish Bhagwati:** This study relates to mid-1950s. According to him, approximately 2/3rd of world's population had a per capita income be low the world mean of $200. The majority of nations living below this world average were in Asia, Africa and Latin America. Among these, Asia is the most depressed area. (Is this true today also?) The highest income is 60 times greater than the lowest.

2) **Simon Kuznets:** This study pertains to the late 1930s. Here are the ma jor findings of this study:

High Income Countries: 20% of the population got 60% world's in come

Middle Income Group: 10 % of the population got 15% world's income

Low Income Group: 70 % of the population got 25% world's income

3)**United Nations:** This refers to the year 1949. Here are its main findings

a) Countries with an average per capita income of $ 915, which accounted for 18% of world's population got 67% of world's income.

b) Countries with an average per capita income of $ 310, which accounted for 15% of world's population got 18% of world's income.

c) Countries with an average per capita income of $ 54, which accounted for 67 % of world's population got 15% of world's income.

4)**Beckerman and Bacon:** The study is concerned with consumption levels. The study found that in 1962-63,

a) Poorest 10% accounted for less than 2% of world's consumption

b) Top 10% accounted for 35% of world's consumption

c)The bottom 30% of world's population consumed only 10% of world's consumption.

5) **Human Development Report 1997 estimates:**

The HDR 1997 primarily deals with globalisation and its impact on the world economies. This is what it says about inequalities. 'Inequality has been rising in many countries since the early 1980s. In China disparities are widening between the export-oriented regions of the coast and the interior. The human poverty index is just under 20% in coastal provinces, but more than 50% in land Guizhou. The countries of Eastern Europe and CIS have registered some of the largest increases ever in the Gini coefficient, a measure of income inequality.....

Inequality between countries has also increased. The income gap between the fifth of the world's people living in the richest countries and the fifth in the poorest was 74 to 1 in 1997, up from 60 to 1 in 1990 and 30 to 1 in 1960.

By the late 1990s, the fifth of the world's people living in the highest income countries had:

- 86% of world GDP – the bottom fifth just 1%
- 82% of world's export markets – The bottom fifth just 1%
- 68% of foreign direct investment – the bottom fifth just 1%
- 74% of world telephone lines, today's basic means of communication- the bottom fifth just 1.5 %

OECD countries, with 19% of the global population have 71% of global trade in goods and services, 58% of foreign direct investment and 91 % of all Internet users.

6) **Per Capita Income Comparison:**

Per capita income comparison:Another way of booking at international inequality is to examine the per capita income distribution among countries. According to Human Development Report 2003, the following are the average per capita incomes of different income regions of the world for the year 2001:

High Income Countries: $26,710 (PPP $27,680)

Middle Income Group: $1,850 (PPP $5710)
Low Income Group: $430 (PPP $ 2040)
Can you search the web and find out how many countries are there in each of the income regions?
An analysis of the above data suggests the following:
i) Both relative and absolute per capita income are growing steadily.
ii) The present inequalitiness have no historical parallels.
iii) Distribution of income and real consumption per capital between countries at present is more unequal.
iv) There is enormus income gap among Third World countries among themselves. Latin America is both richer and developed faster than both Africa and South Asia.
v) Inequalities between countries are responsible for inequalities within the countries.
vi) Even if LDCs record much higher growth rate than at present, the gap between them and the developed countries continue to widen.

Check Your Progress:

- A major challenge of economic development is to promote economic growth with equity.
- Fruits of agricultural and industrial revolutions have not uniformly spread among all regions of the world, resulting in the present inequality.
- The relationship between income growth and degree of inequality may be explained by the Inverted 'U' hypothesis, presented by Simon Kuznets in 1955 and 1963.
- The major idea of this hypothesis is that in the initial stages, growth in per capita income result in greater degree of inequality, which, after a stage is reached, comes down.
- A number of studies have been made to estimate the degree of inequality among countries. These include the studies of Jagdish Bhagwati, Simon Kuznets, United Nations, Beckerman and Bacon. The sum and substance of all these studies in that income inequalities have been widening between

LDCs and developed countries.

- Historically these inequalities have been unprecedented.

3.4 Causes for the Gap:

A number of explanations have been given for this substantial gap. A few such explanations are examined below:

a) **Climatic factors:** It is sometimes pointed out that many LDCs are in tropical and semi-tropical regions. Extreme heat can reduce industriousness; monsoons may erode soil and make life hazardous. There is no empirically verifiable basis for this conclusion. It cannot be said that only climatic factors can influence the course of economic development. Nations do adopt occupations suited to their climate.

b) **Racial Factors:** Sometimes doubts are expressed whether differences in racial qualities are responsible for different rates of economic development. There are no evidences to prove this assumption. All races possess the necessary intellectual and other qualities needed for economic progress.

c) **Distribution of Natural Resources:** We know that global natural resources are not equally distributed in all countries. Simon Kuznets points out that non-availability of natural resources in adequate quantity and quality has resulted in underdevelopment. Observe some of the following:

* Per capita land availability in Asia is quite low when compared to North America.

* The mineral resources, especially these of coal, petroleum, and iron ore, suggest that a country like USA, is in a very favourable position.

* The availability of natural resources acted as a catalyst for technological progress. Though natural resources do play an important role, there are instances where their non-availability has not come in the way of rapid economic progress. Japan is the best example for this.

d) **Population and the size of nations:** It may be asked whether smallness of population and the size of nations (not size of market) are responsible for underdevelopment. But if we take the two examples of India and China, it becomes clear that these are not responsible for underdevelopment. Size of markets may be a factor but vastness of only population is no guarantee for economic progress. Infact, it has turned out to be the other way about.

e) **Historical Factors:** Industrial revolution brought the benefit only to a few countries. This resulted in countries to grow at different rates and at different times. Today's LDCs were either colonies or were countries under foreign subjugation. The ruling countries did not evince due interest.

3.5 Poverty and Inequality:

Do poverty and inequality go hand in hand? That is, greater the pov-

erty, greater also is the inequality. The World Development Report 2003 has provided data for a number of LDCs. The following table summarises the position for a few LDCs.

Economy year	Survey	Population below poverty line	Percentage share of income	Consumption
			Lowest 10%	Highest 10%
Brazil	1990	17.4%	0.7%	48
China	1998	4.6%	2.4%	30.4
India	1994	35%	3.5*	33.5*
Indonesia	1999	27%	4.0	26.7
Nigeria	1992-93	34.1 %	1.6**	40.8**
Pakistan	1991	34.0%	4.1**	27.6**

* Data is for the year 1997

** Data is for the year 1996-97

The general inference that can be drawn is that there is a positive correlation between poverty levels and income distribution within the country.

3.6 Remedies:

It is clear that political freedom brought with it new expectations. There is what may be called, a revolution of rising expectations. One of the indicators of realisation of this goal is to ensure equality in sharing the fruits of economic progress both internationally and within the country. In order to achieve, a few suggestions that have been made may be indicated here:

1) **International Aid:** The 1950's and 1960's and to some extent the 1970's saw the realisation among the countries that aiding politically free but economically backward countries was a normal responsibility. The establishment of the UNO and its economic aims clearly indicate this. The objectives of UN include among other things. The utilisation of education and other resources for general upliftment, provide employment to all employable, and provide for international development. The World Bank and a number of regional economic commissions have been effectively involved in this.

An important development in this direction is the declaration of the Development Decades. The 1960-70 was designated the First Devel-

opment Decade and 1970-80 the Second Development Decade. The aim of this declaration is to enthuse developed countries to transfer at least 1% of GNI as foreign aid to developing countries.

Just as internal public revenue and expenditure provide a policy vehicle for redistribution with growth, similarly at an international level redistribution with growth can be achieved through an effective foreign aid strategy.

What has been the experience in this direction? It is decreasing to pay the least. The Human Development Report 2002 has estimated that the net official development assistance (ODA) which was 0.33% of GNP (Now GNI) in 1990 has fallen to 0.22% of GNP. According to the World Development Report 2003, the per capita ODA in 2000 was mere $ 9 for low income countries and $ 8 for middle income countries. The share of South Asia for the same year was a mere $ 3, whereas the low and middle-income countries of Europe and central Asia got the highest of $ 23. The conclusion is that foreign aid is not flowing to LDCs the way these countries need.

2) **International Trade:**

The volume and term on which international trade is conducted between countries also influences how the international income disparity question is being tackled. The importance of terms of trade in distributing income can be made clear with a simple example like that like that of international oil prices, income are flowing out of both developed and developing countries to oil producing countries, thus improving their economic conditions.

The nature of exports is also indicative of flow of income as also the terms of trade. The HDR 2002 has given the following data for the year 2000.

	Primary exports as % of goods	Manufacture exports as % of goods
High income	15	82
Middle income-	35	63
low income-	35	53

A predominance of primary products indicates that the terms of trade are against these countries and therefore suffer a welfare loss. There is therefore the need to protect LDCs against price fluctuations.

3) Technology and investment:

Developed countries dominate in the generation and control of technology. In LDCs expenditure on research and development is not significant. Some 98% of R&D expenditure takes place in developed countries, of this

the share of USA alone is 70%. The R&D of the developed countries cannot be applied in full. Technological advances have brought productivity increases in developed countries. There is need for developing an 'appropriate' technology in the context of developing countries in general as would lead to increased productivity.

Net foreign direct inflows into developing countries have been increasing. As per HDR 2002, while all the developing countries received 0.9% of GDP in 1990, it has risen to 2.5% in 2000. However, the share of South Asia is mere 0.5%, while Latin America and Caribbean receive 3.9%. Here again, there is need for greater inflow of FDI and that there is greater regional equality in its distribution

3.7 Let us sum up:

- Promoting economic growth equity is major challenge of the present day world.
- All regions of the world have not been equally benefited by agricultural and industrial revolutions.
- This has resulted in international economic inequalities.
- Inverted 'U' hypothesis presented by S.Kuznets studies the relationship between income growthand degree of inequality.
- The major idea of this hypothesis is that in the initial stages, growth in per capita income result in greater degree of inequality which after a stage is reached, comes down.
- Some important studies estimating severity of income inequalities among nations include that of J Bhagwati, S.Kuznets, the UNO, Beckerman and Bacon, the HDR and WDR. The main conclusion is that income inequalities have been widening between LDCIs and developed countries.
- A number of reasons can be given for this inequality. These include climatic factors, racial factors, distribution of natural resources, the size of population and geographical area and also historical factors.
- There is a positive correlation between poverty and income distribution. That is higher the poverty, higher the inequality in income distribution.
- Some solutions suggested include providing higher foreign aid, giving preferential preferences in trade, development of appropriate technology and increasing FDI.

3.8 Glossary:

Inverted 'U' hypothesis sugested by S.Kuznets. It states that inequality rises at low levels of per capita income and then falls.

Terms of Trade: The ratio of prices (unit Values) of a country's exports to the prices (Unit Values) of its imports.

3.9 For Further Reading:

* Bhagwati J : Economics of Underdeveloped countries.
* Debraj Ray : Development Economics
*UNDP: Human Development Report, Various issuees.

L. Sridara Murthy

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ಆದೇಶ ಸಂಖ್ಯೆ : ಕರಾಮುವಿ/ಸಪಾವಿ/4/517/2006–07 ದಿನಾಂಕ : 01/09/2006
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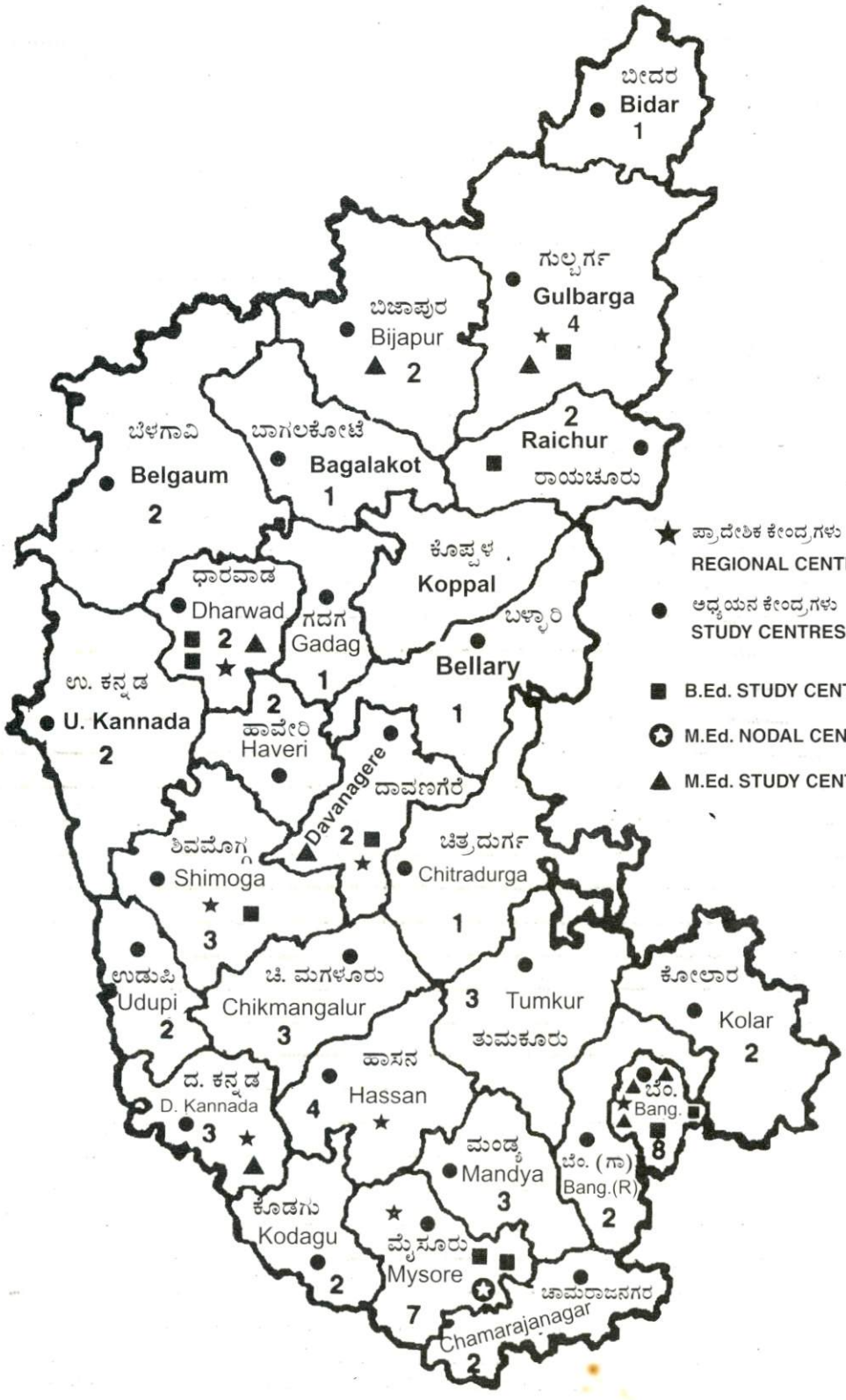

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