

**Mekelle University**  
**Faculty of Business and Economics**  
**Department of Economics**

**DEVELOPMENT ECONOMICS II**  
*Distance Learning Material*

**Module I**

**Prepared By: TSEHAYE WOLDEGIORGIS**

**Edited By: FREDU NEGA**

# Table of Content

<b>Chapter One</b> .....	1
1. Historic Growth and Contemporary Development: Lessons, Controversies, and Relevance .....	1
1.1 The Growth Game .....	2
1.2 The Economics of Growth: Capital, Labor, and Technology .....	2
1.2.1 What is Capital Accumulation? .....	2
1.2.2 Population and Labor Force Growth.....	3
1.2.3 Technological progress .....	5
1.3 The Historical Record: Kuznets’s Six Characteristics of Modern Economic Growth .....	7
1.3.1 High Rates of Per Capita Output and Population Growth .....	8
1.3.2 High Rates of Total Factor Productivity Increase .....	8
1.3.3 High Rates of Economic Structural Transformation .....	9
1.3.4 High Rates of Social, Political, and Ideological Transformation .....	9
1.3.5 International Economic outreach.....	10
1.3.6 Limited International Spread of Economic Growth .....	10
1.4 The Limited Value of the Historical Growth Experience: Differing Initial Conditions .....	11
1.4.1 Physical and Human Resource Endowments .....	12
1.4.2 Relative Levels of per Capita Income and GNP.....	13
1.4.3 Climatic Differences .....	14
1.4.4 Population Size, Distribution, and Growth .....	14
1.4.5 The Historical Role of International Migration.....	14
1.4.6 The Growth Stimulus of International Trade .....	16
1.4.7 Stability and Flexibility of Political and Social Institutions .....	18
1.5 Why is not Africa (sub – Sahara Africa) Growing? .....	19
1.5.1 Is SSA’s Economic Growth Constrained by Too Little Human Capital? ..	20
1.5.2 Globalization and SSA.....	23
1.5.3 Is There Too Much Inequality in Sub-Saharan Africa? .....	25
1.5.4 Reviewing Economic Growth in Sub-Saharan Africa .....	26
1.6 Many paths to development (Alternative Growth Strategies).....	28
1.6.1 Classification of strategies.....	29
<b>Questions for Review and Discussion</b> .....	<b>333</b>
<b>Chapter Two</b> .....	<b>34</b>
2. Unemployment and Rural-Urban Migration: Issues, Dimensions, and Analyses ...	34
2.1 The Employment problem: Some Basic Issues.....	35
2.2 Employment and Unemployment: Trends, Projections and Dimensions .....	37
2.3 Four Dimensions of the Employment Problem.....	39
2.3.1 The Educated Unemployed .....	39
2.3.2 Self-employment.....	39
2.3.3 Women and Employment.....	39
2.3.4 Youth Unemployment and Child Labor.....	40
2.4 Linkages among Unemployment, Poverty, and Income Distribution .....	41
2.5 The Phenomenon of Jobless Growth and the Output-Employment Lag .....	42
2.6 The Migration and Urbanization Dilemma.....	43
2.6.1 Urbanization: Trends and Projections.....	44

2.7 The Urban Informal Sector .....	46
2.8 Toward an Economic Theory of Rural-Urban Migration .....	49
2.8.1 A Verbal Description of the Todaro Model .....	50
2.8.2 A Diagrammatic Presentation.....	52
2.9 Policy Implications.....	55
2.10 Economic Models of Employment Determination.....	57
2.10.1 The Traditional Competitive Free-Market Model .....	59
2.10.2 Output and Employment Growth: Conflict or Congruence?.....	59
2.10.3 Appropriate Technology and Employment Generation: The Price- Incentive Model.....	61
2.11 Toward the Shape of a Comprehensive Migration and Employment Strategy	64
<b>Questions for Review and Discussion .....</b>	<b>66</b>
<b>Chapter Three .....</b>	<b>68</b>
Education and Development.....	68
3.1 Education and Human Resources.....	69
3.2 Education in Developing Regions .....	70
3.2.1 Public Educational Expenditure .....	70
3.2.2 Enrollments.....	71
3.2.3 Literacy.....	72
3.2.4 The Gender Gap: Women and Education .....	72
3.3 Educational Supply and Demand: The Relationship between Employment Opportunities and Educational Demands.....	73
3.4 Social versus Private Benefits and Costs .....	76
3.5 Education, Society, and Development: Some Issues.....	79
3.5.1 Education and Economic Growth.....	79
3.5.2 Education, Inequality, and Poverty.....	80
3.5.3 Education, Internal Migration, and the Brain Drain .....	81
3.5.4 Education of Women, Fertility, and Child Health.....	82
3.5.5 Education and Rural Development.....	83
3.6 Summary and Conclusions: Major Educational Policy Options.....	86
3.6.1 Policies Largely External to Educational Systems .....	87
3.6.2 Policies Internal to Educational Systems .....	88
<b>Questions for Discussion.....</b>	<b>90</b>

# Chapter One

## Historic Growth and Contemporary Development: Lessons, Controversies, and Relevance

Dear distance learners in this chapter we will briefly look into some basic concepts of the theory of economic growth using simple production function. This will complement our previous understanding on how to link production with economic growth. We will use this preliminary knowledge to look into the historic growth process and records of contemporary developed countries to analyze important economic, structural and institutional components that characterize rich countries and deduce on the relevance of this historical growth experiences and the development policies to the plans and strategies of developing nations of today. To build our theoretical knowledge, we will discuss why economic growth in sub-Sahara Africa is slow and then we will review alternative growth strategies that developing countries could adopt to impart positive change to the socio-economic environment in which their citizens live.

### **Objectives**

After studying this chapter

- You will be acquainted with the basic components of economic growth (capital accumulation, growth in labour force, and technology) and analyze how important they are for any society.
- You will understand the economic, institutional and structural characteristics that facilitated the historic growth experience of contemporary developed nation.
- Analyze the relevance of the historic growth process to the current prospects of developing countries
- Understand why economic growth is slow? or why economic decline in Africa?
- You will be able to compare the relevance of alternative development strategies to the realities of developing countries.

## 1.1 The Growth Game

For the past four decades, a primary focus of world economic attention has been on ways to accelerate the growth rate of national income. Economists and politicians from all nations, rich and poor, capitalist, socialist, and mixed, have worshipped at the shrine of economic growth. Third world development programs are often assessed by the degree to which their national outputs and incomes are growing and in one way or another they were forced to follow the footsteps of the growth strategies of contemporary rich countries. In fact, for many years the conventional wisdom equated development almost exclusively with the rapidity of national output growth.

*Critical thinking!!! Dear distance learners, think of how capital accumulation, population and labour force growth, and technological progress contribute to development process of a nation.*

## 1.2 The Economics of Growth: Capital, Labor, and Technology

Dear distance learners, three factors or components of economic growth are of prime importance in any society:

1. capital accumulation, including all new investments in land, physical equipment, and human resources
2. growth in population and hence eventual growth in the labor force
3. Technological progress

Now let us look briefly at each.

### 1.2.1 What is Capital Accumulation?

Capital accumulation results when some proportion of present income is saved and invested in order to augment future output and income. New factories, machinery, equipment, and materials increase the physical **capital stock** of a nation (the total net real value of all physically productive capital goods) and make it possible for expanded output levels to be achieved. These directly productive investments are supplemented by investments in what is known as social and economic **infrastructure** - roads, electricity, water and sanitation, communications, and the like- which facilitates and integrates economic activities. For example, may increase

the total output of the vegetables he can produce, but without adequate transport facilities to get this extra product to local commercial markets, his investment may not add anything to national food production.

For example, investment by a farmer in a new tractor, the supply of irrigation facilities, use of chemical fertilizers and the control of insects with pesticides improve the quality of existing land resources.

Similarly, investment in human resources can improve its quality and thereby have the same or even a more powerful effect on production as an increase in human numbers. Formal schooling, vocational and on-the-job training programs, and adult and other types of informal education may all be made more effective in augmenting human skills and resources as a result of direct investments in buildings, equipment, and materials.

All of these phenomena and many others are forms of investment that lead to capital accumulation. Capital accumulation may add new resources (e.g., the clearing of unused land) or upgrade the quality of existing resources (e.g., irrigation, fertilizer, pesticides).

Now, I hope you have acquired important concept on how investment in physical assets and human resource can lead to economic growth. If you don not please ask your instructor.

### 1.2.2 Population and Labor Force Growth

***Critical thinking!!! Dear distance learners, now think about how growth in population influences the overall economic development of a country.***

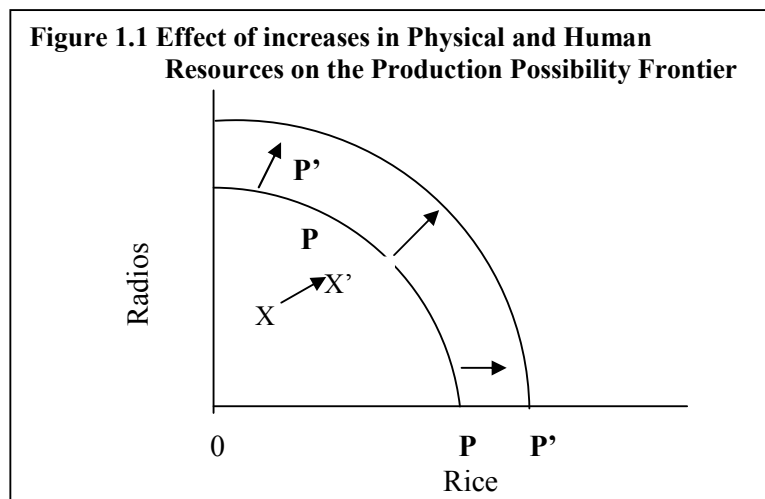
In traditional economics, population growth, and the associated eventual increase in the labor force has been considered a positive factor in stimulating economic growth. A larger labor force means more productive workers, and a large overall population increases the potential size of domestic markets. However, the role of growing supplies of workers in surplus-labor developing countries will depend on the ability of

the economic system to absorb and productively employ these added workers – an ability largely associated with the rate and kind of capital accumulation and the availability of related factors, such as managerial and administrative skills.

Now distance learners, disregarding for a moment the third (technology), and given an initial understanding on the first two (capital accumulation and labour force growth), let us see how they interact via the production possibility curve to expand society’s potential total output of all goods.

For a given technology and a given amount of physical and human resources, the production possibility curve portrays the maximum attainable output combinations of any two commodities, say, rice and radios, when all resources are fully and efficiently employed. Figure 1.1 shows two production possibility curves for rice and radios.

Suppose now that with unchanged technology, the quantity of physical and human resources were to double as a result of either investments that improved the quality of the existing resources or investment in new resources – land, capital, and, in the case of larger families, labor. Figure 1.1 shows that this doubling of total resources will cause the entire production possibility curve to shift uniformly outward from  $pp$  to  $p'p'$ . Because these are assumed to be the only two goods produced by this economy, it follows that the gross national product (the total value of all goods and



services produced) will be higher than before. In other words, the process of economic growth is under way.

Note that even if the country in question is operating with underutilized physical and human resources as at point X in Figure 1.1, a growth of productive resources can result in a higher total output combination as at point X', even though there may still be widespread unemployment and underutilized or idle capital and land.

*Think Critically whether there is any deterministic relationship (law) between resource growth and output growth. What is the short-run and long-run effect of existing potential resource?*

Here is the answer for the above question. This is not an economic law, as attested by the poor growth record of many contemporary developing countries. Nor is resource growth even a necessary condition for short-run economic growth because the better utilization of idle existing resources can raise output levels substantially, as portrayed in the movement from X to X' in Figure 1.1. Nevertheless, in the long run, the improvement and upgrading of the quality of existing resources and new investments designed to expand the quantity of these resources are principal means of accelerating the growth of national output.

### 1.2.3 Technological progress

Dear distance learners, I hope you are familiar with the term 'technology'. Please try to develop your own definition of technology, and attempt to explain its relationship with the other two resources we discussed so far (physical capital and labour) and how it contributes for economic growth.

Technological progress, for many economists is the most important source of economic growth. In its simplest form, technological progress results from new and improved ways of accomplishing traditional tasks such as growing crops, making clothing, or building a house. There are three basic classifications of technological progress: *neutral, laborsaving, and capital-saving*.

**Natural technological progress** occurs when higher output levels are achieved with the same quantity and combinations of factor inputs. Simple innovations like those that arise from the division of labor can result in higher total output levels and greater consumption for all individuals. In terms of production possibility analysis, a neutral

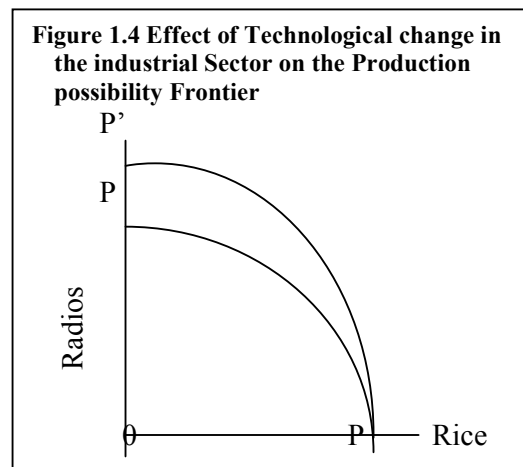
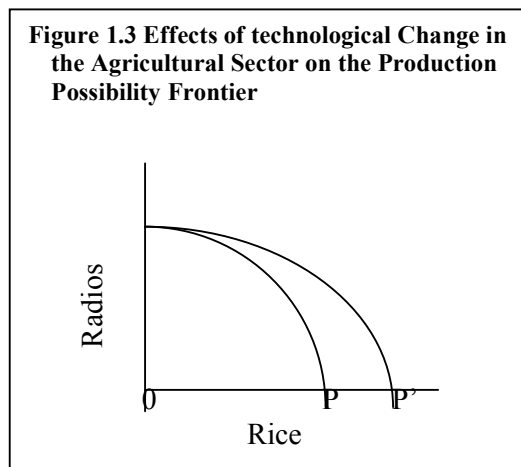


technological change that, say, doubles total output is conceptually equivalent to a doubling of all productive inputs. The outward-shifting production possibility curve of Figure 1.1 could therefore also be a diagrammatic representation of neutral technological progress.

By contrast, progress may either be **laborsaving or capital-saving technological progress** (i.e., higher levels of output can be achieved with the same quantity of labor or capital inputs). Modern machinery and equipment can be classified as products of laborsaving technological progress. Capital-saving technological progress is a much rarer phenomenon. But this is primarily because almost all of the world's scientific and technological research is conducted in developed countries, where the mandate is to save labor, not capital.

***Critical thinking!!! Please explain the negative and positive effects of labour-saving technology for developing countries like Ethiopia. Ask your instructor for more explanation.***

In the labor-abundant (capital-scarce) countries of the Third world, however, capital-saving technological progress is what is needed most. Such progress results in more efficient (lower-cost) labor-intensive methods of production such as foot-operated bellows pumps, and back mounted mechanical sprayers for small-scale agriculture. Indigenous LDC development of low-cost, efficient, labor-intensive (capital – saving) techniques of production is one of the essential ingredients in any long-run employment-oriented development strategy.



Distance learners, having provided this introduction to the simple economics of growth, we can now look more carefully at the historical experience of contemporary developed nations in order to analyze the nature of the economic and non economic factors that were basic to their long-term growth. We will then see what relevance all this has for the growth prospects of developing countries.

### **1.3 The Historical Record: Kuznets's Six Characteristics of Modern Economic Growth**

Now, let us discuss the most important factors that have facilitated the growth process of contemporary developed countries (rich countries) since the 1770s.

Professor Simon Kuznets has developed pioneering work in the measurement and analysis of the historical growth of national incomes in developed nations. He defined a country's economic growth as "a long-term rise in capacity to supply increasingly diverse economic goods to its population. According to him, this growing capacity depends on advancing technology and the institutional and ideological adjustments that it demands.

Now let us critically look all three principal components of his definition

1. The sustained rise in national output is a manifestation of economic growth, and the ability to provide a wide range of goods is a sign of economic maturity.
2. Advancing technology provides the basis or preconditions for continuous economic growth – a necessary but not sufficient condition.
3. To realize the potential for growth inherent in new technology, institutional, attitudinal, and ideological adjustments must be made. Technological innovation without associated social innovation will be meaningless.

In his exhaustive analysis, Kuznets has isolated six characteristic features manifested in the growth process of almost every developed nation: *high rates of growth of per capita output and population; high rates of increase in total factor productivity; high rates of structural transformation of the economy; high rates of social and ideological transformation; the propensity of economically developed countries to reach out to*

*the rest of the world for markets and raw materials; the limited spread of this economic growth to only a third of the world's population.*

***Dear distance learners, now please attempt to categorize the six conditions into economic variables, structural transformation variables, and international spread of growth.***

Let us briefly examine each of these five characteristics.

### 1.3.1 High Rates of Per Capita Output and Population Growth

In the case of both per capita output and population growth, all contemporary developed countries have experienced large multiples of their previous historical rates during the epoch of modern economic growth, roughly from around 1770 to the present. For the now industrialized countries, annual growth rates over the past 200 years averaged almost 2% for per capita output and 1% for population, or 3% for total output (real GNP). These rates, which imply a doubling time of roughly 36 years for per capita output, 72 years for population, and 24 years for real GNP, were far greater than those experienced during the entire era before the industrial revolution began in the late eighteenth century.

### 1.3.2 High Rates of Total Factor Productivity Increase

***Distance learners before you go to in-depth discussion, please ask your instructor to explain what factor productivity is and how it is calculated.***

The second aggregate economic characteristic of modern growth is the relatively high rate of rise in total factor productivity (TFP), the output per unit of all inputs. Many findings have confirmed that total factor productivity growth is what determines the rate of growth in developing countries. Because TFP shows the efficiency with which all inputs are used in a production function, economists often measure its growth separately from the growth of factor inputs. An increase in TFP would cause the production possibility frontier to shift outward without any increase in labor or capital. Kuznets found substantial rises in TFP during the modern growth era.

### 1.3.3 High Rates of Economic Structural Transformation

***Critical thinking!!! From your previous background in development economics, what is structural transformation? What are the conditions to achieve it?***

The historical growth record of contemporary developed nations reveals a third important characteristic: a high rate of structural and sectoral change inherent in the growth process. Some of the major components of this structural change include the gradual shift away from agricultural to nonagricultural activities and, more recently, away from industry to services; a significant change in the scale or average size of productive units (away from small family and personal enterprises to the impersonal organization of huge national and multinational corporations); and finally, a corresponding shift in the spatial location and occupational status of the labor force away from rural, agricultural, and related nonagricultural activities toward urban-oriented manufacturing and service pursuits. For example, in the United State, the proportion of the total labor force engaged in agricultural activities was 53.5% in 1870. By 1960, this figure had declined to less than 7%.

### 1.3.4 High Rates of Social, Political, and Ideological Transformation

For significant economic structural change to take place in any society, concomitant transformations in attitudes, institutions, and ideologies are often necessary. Obvious examples of these social transformations are the general urbanization process and the adoption of the ideals, attitudes, and institutions of what has come to be known as “modernization.”

Gunnar Myrdal has provided a list of these modernization ideals in his seminal treatise on underdevelopment in Asia. They include the following:

**1. Rationality-** the substitution of modern methods of thinking, acting, producing, distributing, and consuming for age-old, traditional practices. Accordingly, what underdeveloped nations need is a scientific and technological society. It employs new techniques which follows modern thinking. In addition the quest for rationality implies that opinions about economic strategies and policies should be logically valid inferences rooted as deeply as possible in knowledge of relevant facts.

**2. Economic planning-** the search for a rationally coordinated system of policy measures that can bring about and accelerate economic growth and development

**3. Social and economic equalization-** the promotion of more equality in status, opportunities, wealth, incomes, and levels of living.

**4. Improved institutions and attitudes-** necessary to increase labor efficiency and diligence; promote effective competition, social and economic mobility, and individual enterprise; permit greater equality of opportunities; make possible higher productivity; raise levels of living; and promote development.

*Distance students now think off the attitudinal and institutional barriers that enslave society and hinder economic growth in Ethiopia.*

Among the social institutions needing change are outmoded land tenure systems, social and economic monopolies, educational and religious structures, and systems of administration and planning. In the area of attitudes, the concept of “modern workers” embodies such ideals as efficiency, diligence, orderliness, punctuality, frugality, honesty, rationality, change orientation, integrity and self-reliance, cooperation, and willingness to take the long view.

#### 1.3.5 International Economic outreach

These relates to the historical and ongoing propensity of rich countries to reach out to the rest of the world for primary products and raw materials, cheap labor, and lucrative markets for their manufactured products. Such outreach activities are made feasible by the increased power of modern technology, particularly in transport and communication. The propensity of rich countries to look outwards also opened the possibilities for political and economic dominance of poor nations by their more powerful neighbors.

#### 1.3.6 Limited International Spread of Economic Growth

In spite of the enormous increases in world output over the past two centuries, the spread of modern economic growth is still largely limited to less than one-fourth of the world’s population. The minority of the world’s population enjoys almost 80% of the world’s income. Moreover, unequal international power relationships between

developed and underdeveloped countries have a tendency to exacerbate the gap between rich and poor. The further economic growth of the former is sometimes achieved at the expense of the growth of the latter.

***Dear distance learners now let us conclude by analyzing how the six characteristics conditions have reinforced each other to speed-up or facilitate economic growth in the contemporary rich counties.***

The six characteristics of modern growth reviewed here are interrelated and mutually reinforcing. High rates of per capita output result from rapidly rising levels of factor productivity. High per capita incomes in turn generate high levels of per capita consumption, thus providing the incentives for changes in the structure of production (because as incomes rise, the demand for manufactured goods and services rises at a much faster rate than the demand for agricultural products). Advanced technology needed to achieve these output and structural changes causes the scale of production and the characteristics of economic enterprise units to change in both organization and location. This in turn necessitates rapid changes in the location and structure of the labor force and in status relationships among occupational groups. It also means changes in other aspects of society, including family size, urbanization, and the material determinants of self-esteem and dignity. Finally, the inherent dynamism of modern economic growth, coupled with the revolution in the technology of transportation and communication, necessitates an international outreach on the part of the countries that developed first. But the poor countries affected by this international outreach may for institutional, ideological, or political reasons either not be in a position to benefit from the process or simply be weak victims of the policies of rich countries designed to take advantage of them economically.

#### **1.4 The Limited Value of the Historical Growth Experience: Differing Initial Conditions**

Dear distance learners, expecting that you have gained enough insight on how economic growth was facilitated in the contemporary developed nations, now let us look into the relevance of the growth history and western development experience to the current realities and situations of developing countries. While studying this part, please try to relate the theoretical discussion to the circumstances of your country.

One of the principal failures of development economics of the 1950s and 1960s was its inability to recognize and take into account the limited value of the historical experience of economic growth in the west for charting the development path of contemporary developing nations. *Stages-of-growth economic theories* and related models of rapid industrialization, which you have discussed in the previous courses (modules), gave too little emphasis to the very different and less favorable initial economic, social, and political conditions of developing countries. The fact is that the growth position of these countries today is in many important ways significantly different from that of the currently developed countries when they embarked on their era of modern economic growth prospects and requirements of modern economic development. *The differences are in terms of physical and human resource endowments; per capita incomes and levels of GNP in relation to the rest of the world; climate; population size, distribution, and growth; historical role of international migration; international trade benefits; basic scientific and technological research and development capabilities; and stability and flexibility of political and social institutions.*

Dear learners, now we will discuss each of these conditions with a view to formulating a more realistic set of requirements and priorities for generating and sustaining economic growth in the twenty-first century.

#### 1.4.1 Physical and Human Resource Endowments

Contemporary developing countries are often less well endowed with natural resources than the currently developed nations were at the time when the latter nations began their modern growth. A few developing nations are blessed with abundant supplies of petroleum, other minerals, and raw materials for which world demand is growing; most less developed countries, however- especially in Asia, where almost one-third of the world's population resides- are poorly endowed with natural resources. Moreover, in parts of Latin America and Africa, where natural resources are more plentiful, heavy investments of capital are needed to exploit them. Such financing is not easy to come by without sacrificing substantial autonomy and control to the powerful developed-country multinational corporations that alone are currently capable of large-scale, efficient resource exploitation.

The difference in skilled human resource endowments is even more pronounced. The ability of a country to exploit its natural resources and to initiate and sustain long-term economic growth is dependent on, among other things, the ingenuity and the managerial and technical skills of its people and its access to critical market and product information at minimal cost. The populations of today's developing nations are generally less educated, less informed, less experienced, and less skilled than their counterparts were in the early days of economic growth in the West.

According to economist Paul Romer, today's developing nations "are poor because their citizens do not have access to the ideas that are used in industrial nations to generate economic value. For Romer, the technology gap between rich and poor nations has two components, a **physical object gap**, involving factories, roads, and modern machinery, and an **idea gap**, including knowledge about marketing, distribution, inventory control, transactions processing, and worker motivation. It is idea gap between rich and poor nations that lies at the core of the development divide.

#### 1.4.2 Relative Levels of per Capita Income and GNP

The four-fifths of the world's population at present living in developing countries have on the average a much lower level of real per capita income than their counterparts had in the nineteenth century. Over 70% of the population of Third World countries is attempting to subsist at bare minimum levels. Obviously, the average standard of living in, say, early nineteenth-century England was nothing to envy or boast about, but it was not as economically debilitating or precarious as it is to day for most people in the Third world, especially those in the 40 or so least developed countries.

Second, at the beginning of their modern growth era, today's developed nations were economically in advance of the rest of the world. They could therefore take advantage of their relatively strong financial position to widen the income gaps between themselves and less fortunate countries. By contrast, today's LDCs begin their growth process at the low end of the international per capita income scale. Not only is such backwardness economically difficult to overcome or even reduce, but psychologically



it creates a sense of frustration and a desire to grow at any cost. This can in fact inhibit the long-run improvement in national levels of living.

#### 1.4.3 Climatic Differences

Almost all developing countries are situated in tropical or subtropical climatic zones. It has been observed that the economically most successful countries are located in the temperate zone. This indicates some relation to the special difficulties caused directly or indirectly by differing climatic conditions. It is undeniable that the extremes of heat and humidity in most poor countries contribute to deteriorating soil quality and the rapid depreciation of many natural goods. They also contribute to the low productivity of certain crops, the weakened regenerative growth forests and the poor health animals. Finally, extremes of heat and humidity not only cause discomfort to workers but can also weaken their health, reduce their desire to engage in strenuous physical work, and generally lower their levels of productivity and efficiency.

#### 1.4.4 Population Size, Distribution, and Growth

Third World population size, density, and growth constitute another important difference between less developed and developed countries. Before and during their early growth years, Western nations experienced a very slow rise in population growth. As industrialization proceeded, population growth rates increased primarily as a result of falling death rates but also because of slowly rising birthrates. However, at no time during their modern growth epoch did European and North American countries have natural population growth rates in excess of 2% per annum.

By contrast, the populations of many developing countries have been increasing at annual rates in excess of 2.5% over the past few decades, and some are rising even faster today. Moreover, the concentration of these large and growing populations in a few areas means that most LDCs today start with considerably higher person-to-land ratios than the European countries did in their early growth years.

#### 1.4.5 The Historical Role of International Migration

Of perhaps equal historical importance to the differing rates of natural population increase is the fact that in the nineteenth and early twentieth centuries, there was a major outlet for excess rural populations in international migration, which was both

widespread and large-scale. In countries such as Italy, Germany, and Ireland, periods of severe famine or pressure on the land often combined with limited economic opportunities in urban industry to push unskilled rural workers toward the labor-scarce nations of North America and Australia.

The period since the Second World War has witnessed a resurgence of international migration within Europe itself, which is essentially over short distances and to a large degree temporary. However, the economic forces giving rise to this migration are basically the same; that is, during the 1950s and especially the 1960s, surplus rural workers from southern Italy, Greece, and Turkey flocked into areas of labor shortages, most notably West Germany and Switzerland. This migration provided a valuable dual benefit to the relatively poor areas from which these unskilled workers migrated. The home governments were relieved of the costs of providing for people who in all probability would remain unemployed, and because a large percentage of the workers' earnings were sent home, these governments received a valuable and not insignificant source of foreign exchange.

***Distance learners, pause for moments and think about the trend of pattern and form migration of people from developing countries to developed countries that is taking place today and look at its socio-economic consequences.***

Then, you might reasonably ask why the large numbers of poor and less educated peoples in Africa, Asia and Latin America do not follow the example of workers from southeastern Europe and seek temporary or permanent jobs in areas of labor shortage. There is very little scope for reducing the pressures of overpopulation in Third World countries today through massive international emigration. The reasons for this relate not so much to a lack of local knowledge about opportunities in other countries as to the combined effects of geographic (and thus economic) distance and, more important, the very restrictive nature of immigration laws in modern developed countries.

Despite these rustications, at least 46 million legal and illegal migrants from the developing world have managed to migrate to the developed world since 1960. From the point of view of recipient industrialized nations, the problem of illegal Third World migrants has become so serious that drastic action is being called for. These

migrants are perceived as taking jobs away from poor, unskilled citizen workers. Moreover, illegal migrants and their families are believed to be taking unfair advantage of free local health, educational, and social services, causing upward pressure on local taxes to support these services. As a result, major debates are now under way in both the United States and Europe regarding the treatment of illegal migrants.

***Then again ask yourself “what is so unique in the modern international migration?”***

The irony of international migration today, however, is not merely that this traditional outlet for surplus people who migrate legally from poor to richer lands are the very ones that developing countries can least afford to lose: *the highly educated and skilled*. Since the great majority of these migrants move on a permanent basis, this perverse brain drain not only represents a loss of valuable human resources but could prove to be a serious constraint on the future economic progress of Third World nations. For example, by the late 1980s, Africa had lost nearly one-third of its skilled workers, with up to 60,000 middle and high-level managers migrating to Europe and North America between 1985 and 1990. Sudan, for example, lost 17% of its doctors and dentists, 20% of its university teachers, 30% of its engineers, and 45% of its surveyors and 60% of Ghanaian doctors now practice abroad.

#### 1.4.6 The Growth Stimulus of International Trade

***Dear distance students now think of and discuss about the ‘bads’ and ‘goods’ of the present day international trade between rich and poor countries.***

International free trade has often been referred to as the “engine of growth” that propelled the development of today’s economically advanced nations during the nineteenth and early twentieth centuries. Rapidly expanding export markets provided an additional stimulus to growing local demands that led to the establishment of large-scale manufacturing industries. Together with a relatively stable political structure and flexible social institutions, these increased export earnings enabled the developing country of the nineteenth century to borrow funds in the international capital market at very low interest rates. This capital accumulation in turn stimulated further

production, made possible increased imports, and led to a more diversified industrial structure. In the nineteenth century, European and North American countries were able to participate in this dynamic growth of international exchange largely on the basis of relatively free trade, free capital movements, and the unfettered international migration of unskilled surplus labor.

To day developing countries face formidable difficulties in trying to generate rapid economic growth on the basis of world trade. Many developing countries have experienced a deteriorating trade position. Their exports have expanded, but usually not as fast as the exports of developed nations. Their terms of trade (the price they receive for their exports relative to the price they have to pay for imports) have declined steadily. Export volume has therefore had to grow faster just to earn the same amount of foreign currencies as in previous years. Moreover, the developed countries through their advanced science and technology remain more competitive, develop more new products, and obtain international financing on much better terms. Finally, where developing countries are successful at becoming lower-cost producers of competitive products with the developed countries, the latter have typically resorted to various forms of tariff and non-tariff barriers to trade, including import quotas, sanitary requirements, and special licensing arrangements.

#### 1.4.7 Stability and Flexibility of Political and Social Institutions

Dear distance learners, the final distinction between the historical experience of developed countries and the situation faced by contemporary developing nations relates to the nature of social and political institutions. One very obvious difference between the now developed and the underdeveloped nations is that well before their industrial revolutions, the former were independent consolidated nation-states able to pursue national policies on the basis of consensus toward modernization. Modern scientific thought developed in these countries (long before their industrial revolutions) and a modernized technology began early to be introduced in their agriculture and their industries, which at that time were all small scale.

In contrast, Third World countries of today have only recently gained political independence and have yet to become consolidated nation - states with an effective

ability to formulate and pursue national development strategies. Moreover, the modernization ideals embodied in the notions of rationalism, scientific thought, individualism, social and economic mobility, the work ethic, and dedication to national material and cultural values are concepts largely alien. Until stable and flexible political institutions can be consolidated with broad public support, the present social and cultural fragmentation of many developing countries is likely to inhibit their ability to accelerate national economic progress.

The critical importance of political stability for economic growth is underlined by a number of recent quantitative studies. Researchers have found that growth is more influenced by the stability of the political regime than by its type (democracy or dictatorship). They also found that in the transition from dictatorship to democracy, the tremendous pressures from competing interest groups tend to slow down economic growth, but in the longer run, stable democracies experience higher growth than dictatorships

***Then, what can be the conclusion from the aforementioned discussion concerning the development divide between poor and rich countries and the relevance of western development economics to the realities of poor nations?***

We may conclude that due to very different initial conditions, the historical experience of Western economic growth is of only limited relevance for contemporary Third World nations. Nevertheless, one of the most significant and relevant lessons to be learned from this historical experience is the critical importance complementary technological, social, and institutional changes, which must take place if long-term economic growth is to be realized. Such transformations must occur not only within individual developing countries but, perhaps more important, in the international economy as well. In other words, unless there is some major structural, attitudinal, and institutional reform in the world economy, one that accommodates the rising aspirations and rewards the outstanding performances of individual developing nations, internal economic and social transformation within the Third World may be insufficient.

***Dear distance learners, before you proceed to the next topic, please ask your instructor for concepts or issues which you are not clear.***

## 1.5 Why is not Africa (sub – Sahara Africa) Growing?

*Dear distance learners, in this part we will review an empirical work which analyzes why the pace of economic growth is slow in sub-Sahara Africa.*

In the 1950s and 1960s, sub-Saharan Africa (SSA) held great promise. Countries in the region had natural resources, extensive land, and in many cases peasant agriculture that seemed to fit well with capitalist development. Two world wars had left SSA generally unscathed; destructive civil wars had been uncommon and independence brought a wave of optimism that anything could be achieved. But the promise has gone unfulfilled. Modern economic growth has succeeded in raising the well-being of hundreds of millions of people in many developing economies throughout the world, but it has sputtered throughout most of Africa. Why has economic growth taken hold in many Asian and Latin American countries? Why not in Africa?

SSA has had periods of moderate economic growth. In 1996 GDP grew by 4.4 percent, a rate unprecedented in recent decades. But 1997 brought another downturn, with growth estimated at under 4 percent following extended periods of economic decline that could not propel countries into the modern economic world. A longer term perspective reveals that even with recent improvements in GDP, Africans have lost immense ground in the past several decades.

Other indicators also show substantial economic retrogression: massive drops in modern sector employment as a share of the labor force; real wages of urban workers falling to subsistence levels; reverse migration from cities to rural areas; loss of shares of world trade and of foreign investment; absolute poverty rates climbing above 50 percent; and declines in food production per capita.

Many economists have analyzed SSA's poor economic performance. One group of explanations focuses on factors associated with more rapid growth in other regions that SSA appears to lack. Among these factors, three stand out: (1) low levels of human capital; (2) lack of openness to trade and foreign capital; and (3) urban bias and high income inequality. Another set of explanations focuses on features which are SSA

specific: high degrees of ethnic fractionalization, frequency of land-locked states and high concentration of land in the tropics.

The stress on investments in education as a prerequisite for more rapid growth is misplaced. Many developing nations have progressed with limited investments in schooling. Others have failed to progress with substantial investments. Trade and foreign capital inflows are important to growth but are far from a sufficient condition for economic progress. Inward-looking policies have failed, but simply lowering trade barriers or properly realigning exchange rates does not guarantee prosperity. As for urban bias and inequality, the urban bias that once characterized SSA has disappeared and income inequality, though high in some SSA countries, is not so extreme as to foreclose successful growth and poverty alleviation. Similarly, the Africa-specific explanations reveal real constraints but are not the core explanation for SSA's growth tragedy.

#### 1.5.1 Is SSA's Economic Growth Constrained by Too Little Human Capital?

***Critical thinking!!! Try to relate the role of investment at different level of education (human capital) for economic growth***

SSA's low stock of human capital – reflected in relatively high rates of adult illiteracy and low school enrollment rates would seem a natural cause for SSA's lack of economic growth. A great deal of micro and macro evidence has been accumulated linking education, productivity and growth. But closer inspection of the micro evidence on the returns to education in the region and of cross-country growth regressions which include schooling as an independent variable suggests another interpretation. An expansion in human capital is neither sufficient for more rapid growth nor is SSA's lack of human capital necessarily a barrier to accelerated growth.

***What do microeconomic empirical economic assessments show?*** Estimates reviewed by Psacharopoulos (1994) indicate that rates of return to education in Africa are high relative to the social opportunity cost of capital and to rates prevailing in other regions. The highest returns are for primary school education. If the claim that educational investment is a sufficient condition for growth were true, this would have produced sizeable growth in SSA since most African countries have increased lower level school

enrollments rapidly. To the other extreme, detailed econometric analysis by Glewwe (1991) on Ghana indicate private returns to primary education of only a few percentage points, far lower than those usually cited for SSA and other regions. Glewwe also reports returns for secondary and tertiary education that are higher than at the primary level. This "convexity" of returns by education level has been found in many other studies of SSA and contrasts with patterns elsewhere.

But according to Glewwe, why has primary education yielded so low a return in Africa? One possible explanation is the low quality of schooling. Counting years of schooling is a rough approximation for the accumulation of productive human capital. If teachers know little more than their students, or if the curriculum is irrelevant to employment opportunities and market realities, then years of schooling produce little educational capital. Concern over school quality is raised throughout the world. Rapidly expanding school systems, as in Africa, suffer from quality problem.

Rosenzweig (1995) presents another possible explanation: "Schooling investments are not a universal panacea; reaping returns from such investments requires that the scope for productive learning be expanded via either technical innovation or changes in market and political regimes. In SSA this may explain the pattern of low returns that have constrained the region's accumulation of years of schooling from contributing more to the region's economic growth. The problem has been a lack of opportunities rather than a lack of schooling.

Another explanation that fits the African experience is that the return to schooling requires stable property relations and a safe economic environment, which have been lacking in most African states. Wars, corruption, revolutions, and other instabilities that disturb or distort the normal functioning of markets make the value of schooling less than it would be in a more stable world.

What do *growth regressions (macroeconomic studies)* say? Many analysts, for example Denison (1967), have identified education as an important determinant of aggregate economic growth. Many economists believe that modern growth regressions show that education is a sufficient factor for increasing per capita incomes. This conclusion is derived from a production function approach to growth accounting which implicitly assumes a technological relationship where increases in



the stock of human capital, *ceteris paribus*, yield economic growth. If this were true, SSA's low stock of human capital could readily explain at least some of the region's poor growth record. But regressions relating human capital to growth across countries do not tell a clear and convincing story. For example, Barro (1997) finds that the level of human capital for men has a positive effect on growth while that for women has a negative effect. Pritchett (1997) directly incorporates the accumulation of years of schooling by regressing growth in GDP per worker on growth of physical and human capital, and finds that physical capital dominates the growth equation while growth in the education levels of the work force is weakly and *negatively* correlated with economic growth.

In sum, the equivocal effects of education on productivity found in the micro evidence for SSA reappear in the macro studies on all countries. Changes in the level of absolute years of schooling of workers seem to have some positive link to growth, but the link varies with specification and, at best, is far from overwhelming; changes in the percentage growth of schooling are not positively related to growth; while countries with high initial levels of schooling generally grow faster than others. In all calculations investments in physical capital are more strongly and robustly related to economic growth than are investments in human capital.

#### **Empirical evidence**

There are many counter-cases to the claim that education *per se* produces economic growth. In 1965, Indonesia and Thailand had enrollment rates in primary school that were not much greater than those in Ghana and Zaire, yet the Southeast Asian nations grew and the two African states did not (Perkins and Roemer 1994). Despite effectively destroying much of its human capital during the Cultural Revolution and having a very low rate of return to schooling during the 1980s (Freeman 1999), China has managed to grow extremely rapidly.

The good news for Africa from the diverse studies is that investment in physical capital is well correlated with growth, and physical capital can be more readily accumulated than can human capital. In the right environment, domestic and foreign savings can be redirected toward productive opportunities rapidly. By comparison, it may take a decade or more to produce a significant increase in the mean education

level of the labor force. This does not mean that African countries should not invest in schooling. With a resumption of economic growth parents in Africa will find schooling a worthwhile investment and will send their children to school. Schooling has significant benefits that do not show up in national accounts. Education, especially of girls, reduces own and child mortality. It may also foster the evolution of democratic institutions. But the expansion of education should not be viewed as a sufficient condition for achieving individual or economy-wide prosperity, nor should slow expansion of education be seen as an absolute barrier to SSA's growth.

### 1.5.2 Globalization and SSA

***Dear distance learners, before trying to read the next part please define globalization, international trade, and outward-oriented economic policy***

Is greater openness to trade and foreign capital the key to economic growth in Africa? Or is the opposite true -- that African prospects have been diminished by globalization of the world economy?

The view that openness is the key to economic prosperity is part of the “Washington Consensus” about economic development. ***Here ask your instructor what Washington Consensus mean?*** This view gains some support from cross-country growth regressions. Sachs and Warner (1995, 1997) identify openness to world markets for capital, goods and technology as "crucial elements of any pro-growth package and thus recommend for many African countries to liberalize markets for foreign exchange and traded goods.

Once again the growth regression literature is not sufficiently compelling. Openness has the *potential* to increase investment, improve resource allocation and facilitate the transmission of new ideas and technology. But even in the growth regressions that lend most support for the role of greater openness, the lion's share of the variance in cross-country growth rates is not explained by openness. The implication is that domestic markets and policies matter as well.

Other studies, for example, by Feldstein and Horioka (1980) indicate that there is strong evidence linking domestic investment is correlated with domestic savings. This home country bias in investment highlights the importance of domestic market conditions and institutions in capital accumulation. Relative to other regions, moreover, SSA displays less home country bias in investment. Studies have found that despite a lower level of wealth per worker than in any other region, Africa's wealth owners have relocated 37 percent of their wealth outside the continent. This compares to a ratio of 17 percent in Latin America and only 3 percent in East Asia. Protection of property rights and an overall reduction in the riskiness of the domestic economic environment are probably more important factors in encouraging domestic savings to be invested in SSA's economies than more open economies, though the latter might help as well.

In any case, most SSA countries have moved toward greater openness. The import substitution strategies of the past, including reliance on highly over-valued exchange rates, failed. Today black market premiums on foreign exchange have almost disappeared and some of the region's recent positive growth rates may be linked to the gradual abandonment of inward-looking strategies and the policies that supported them. Still, Africa remains marginalized in the world economy.

There is also a different view about the relation between world trade and African economic progress. This is the argument that competition from other low-income economies today forecloses African countries from advancing through the global trading system. In the 1960s and 1970s a low-income SSA nation could have prospered by exporting labor-intensive goods. But today, the argument goes the entry of China, India and other large labor abundant economies, has depressed the prices of labor-intensive goods and thus cut-off the chances for SSA's labor force of about 200 million.

Openness to trade and the outside world can help Africa develop. Foreign savings can finance much needed investments. Ideas, information and technology from abroad can increase the returns to schooling, physical capital and infrastructure. But openness alone is not sufficient to guarantee growth.

### 1.5.3 Is There Too Much Inequality in Sub-Saharan Africa?

At one stage growth economists believed that inequality contributed to growth. Kaldor (1955-56) and Lewis (1954) saw income inequality as a source of added savings for investment and growth. The Harris-Todaro (1970) model, developed with SSA in mind, was driven by assumptions about the rural-urban income gap which fueled rural to urban migration, exacerbated urban unemployment and generated a misallocation of resources that inhibited economic growth. For Lipton (1977), "urban bias" drained the rural economy's surplus, regressively allocated government expenditures to the minority of the population living in cities and was the core reason.

Recent empirical analysis of the impact of inequality on growth suggests the opposite: that high level of inequality adversely affects economic growth. Beginning with Alesina and Rodrik (1994) and Person and Tabellina (1994), analysts have entered measures of inequality in standard growth regressions and found that their effect is negative. Benabou (1996) lists twenty-three studies that link inequality either to growth of GDP per capita or to investment. The regressions give a consistent message: low inequality improves growth with a fairly robust coefficient. The divergent growth performance of the Philippines with its high level of inequality and Korea, with its low inequality, or between East Asia and Latin America underlie these regression results. One possible reason for this outcome is that lower inequality can increase political and macroeconomic stability, hence investment and growth. When the interests of rich and poor are closer together, policies stand a better chance of avoiding the wide swings caused by trying to serve the needs of one group versus another.

If Africa had extremely high levels of inequality and suffered from excessive urban bias, inequality could be a substantial drag on growth. Data compiled by Deininger and Squire (1996) permit a comparison of income inequality both within SSA and between SSA and other regions. The data indicate that inequality in SSA varies a great deal. Some economies (Guinea Bissau, South Africa) have income inequality comparable to the highly regressive outcomes in Brazil and other countries in Latin America. But SSA also has its share of more equal distributions with Ghana, Niger and Tanzania falling within the inequality range associated with East Asia.

The traditional criticism of African countries as suffering from extreme urban bias also does not hold up today, if it was ever true. Jamal and Weeks (1993) provide compelling evidence contradicting the conventional wisdom on African inequality. They show that the extent of urban bias in SSA, even in the immediate post-independence period, was probably exaggerated due to failure to adjust for differences between rural and urban prices; and that the subsequent macroeconomic decline in SSA has eroded much of whatever urban bias once existed. The decline of urban bias in SSA is evident in some of the policy reversals that have accompanied structural adjustment. In the past, overvalued exchange rates and high export taxes on cash crops favored urban over rural areas; but devaluation and a move toward paying farmers border prices has narrowed the earlier gap. *The conclusion is that Africa might do better if it had lower levels of inequality, but there is nothing exceptional in its levels to serve as a barrier to economic growth.*

#### 1.5.4 Reviewing Economic Growth in Sub-Saharan Africa

***Critical thinking!!! Distance learners, then why is Africa poor or not economically growing?***

Distance learners, the preceding analysis suggest that the standard reasons given for poor growth in SSA do not constitute iron-clad barriers. The region may have a poorly educated labor force but the activity of African traders, or the success of African immigrants in advanced economies, demonstrates the labor skills that are waiting to be called upon, given capital and a modern economic environment. African capital flight and the resource rents of its mineral wealth offer large pools of latent savings for productive investments at home. Africa may not have an ideal set of “building blocks” for successful growth, but neither do most other developing economies.

#### **Why then has Africa failed to grow?**

African growth has been stifled by political turmoil, often the result of non-democratic unstable regimes, and by the accompanying absence of protection of property and capital. The determinants of growth and that first and foremost are political stability and the security of property. Without this base, investments in education, openness, and levels of income equality have little effect on growth. The reason returns to

schooling are low in Africa, that capital flight is high, and that the shift toward free trade has not created growth miracles is that schooling, investment, and trade operate successfully only in a peaceful, stable, environment for economic activity.

Consider first the most extreme form of political turmoil, war. War plagues the region. By our count, twelve SSA countries representing one quarter of the region's total population, were war-torn usually for prolonged periods, between 1975-1995. The Economist (1998) reports "nearly a third of sub-Saharan Africa's 42 countries [today] are embroiled in international or civil wars." The burden of war is reflected in another statistic. SSA accounts for 10 percent of the world's population but harbors 46 percent of the world's refugees and those internally displaced by war (Haughton 1997).

Just as war discourages the productive accumulation that SSA needs, corruption plays a similar role. According to a study of corruption in 54 countries, including 30 low and middle income economies, the four SSA nations in the sample (Nigeria, Kenya, Cameroon and Uganda) ranked 1st, 3rd, 6th and 12th, respectively. Dictatorships need not be inimical to economic growth. But African dictators have a particularly poor record in choosing policies that are growth-augmenting. They are among the world's best examples of rent-seeking political actors.

The result of war, corruption, dictatorship is that sub-Saharan Africa ranks low in the basic economic protections that are necessary for economic growth. The Heritage Foundation/Wall Street Journal has developed an Index of Economic Freedom that demonstrates this proposition. In 1998, just three African countries ranked in the top 50 countries by economic freedom – Botswana, Namibia, and Swaziland – while 50 percent of African countries fit in the lowest grouping of countries.

There is no simple nor single recipe for achieving economic growth, but there is one way to prevent growth: though instability and absence of property rights. SSA needs peace, less corruption, and secure property rights so that its people can invest in productive activities. Capitalism is a sturdy economic system, permissive of a variety of permutations. If African countries can establish a stable political environment which enables people to gain the rewards of investment in physical or human capital, the alleged barriers to growth – education, trade, inequality, geography, and climate – will, prove surmountable.

## 1.6 Many paths to development (Alternative Growth Strategies)

*Distance learners, in this part we will be discussing theoretical review of different growth strategies that developing countries could adapt to their institutional, physical and resource conditions especially since independence to achieve modest growth rate.*

The experience of economic development in Third World countries since independence is varied and rich and it is possible to learn much from it, both analytically and in terms of economic policy. Already it is clear that there are many paths to development although some no doubt are more circuitous than others.

It should be said straight away that few countries have followed a distinct strategy of development. Some have adopted internally consistent set of economic measures which at least in retrospect can be seen to have constituted an identifiable approach to the problems of their own development. Most countries are confused and inconsistent borrowing bits and pieces from a number of different strategies, and they are unsteady fast, chopping and changing with shifts of political opinion. Policy confusion, inconsistency, eclecticism and the reasons for lack of steadiness of purpose are themselves worthy topics for study by economists. We are interested in something rather different, namely, the theoretical review of adopting coherent development policies over a long period of time, say, a quarter of a century.

### 1.6.1 Classification of strategies

Six distinct strategies of development have been identified. The first is called a **Monetarist strategy**. It is distinctive in that it concentrates on increasing the efficiency of market signals as a guide to an improved allocation of resources. In practice the strategy often is introduced during a period of crisis, and consequently measures to improve relative prices usually are accompanied by measures to control the rate of increase in the general level of prices. Emphasis, then, is placed on monetary and fiscal policies and on financial reforms.

Monetarist strategies are concerned only with short-run adjustment, with reducing inflation and restoring macroeconomic balance, after which longer term policies can be resumed. At the same time, the strategies are deeply concerned with microeconomic

issues, with getting markets to work properly, with removing distortions and establishing the correct set of relative prices that will permit efficient, long-run growth.

A major feature of this strategy is it grants abundant space to the private business sector. In the economically more advanced Third World countries the strategy implies placing reliance on private industry and takes on the role of the dynamic sector, responsible for generating backward and forward linkages with the rest of the economy. The role of the state is reduced to a minimum and confined to providing a stable economic environment in which the private sector can flourish. By using stabilization policy the state attempts to reduce fluctuations of the economy as much as possible, thereby helping the private sector to make reliable forecasts and undertake accurate planning. Policies to privatize state-owned enterprises and legislation to reduce trade union power may also be part of this strategy.

The objectives of monetarist strategies are, first, to stabilize the economy and produce well-functioning markets, to improve the allocation of resource, to achieve high levels of savings, and to ensure a more efficient use of capital. The strategy is non-interventionist in spirit and relies on individual initiative and entrepreneurship to move the economy forward.

The second distinct strategy is an *outward-looking strategy* of development which shall be called the *Open Economy*. The open economy shares some of the features of a monetarist strategy, but not all of them. It too relies on market forces to allocate resources and on the private sector to play a prominent role, but it differs from monetarism in part by placing special emphasis on policies that directly affect the foreign trade sector, i.e., exchange rate policy, tariff regulations, quotas and non-tariff barriers to trade and policies which regulate foreign investment and profit remittances.

Foreign trade supplemented by foreign private direct investment is seen as the leading sector or engine of growth. Particularly for small countries, the world market is regarded as a source of demand for exports of virtually infinite elasticity. Thus the constraints imposed by a small economy and domestic market, undiversified resources endowment, inability to exploit economies of scale can be overcome by exporting. The pressure of international competition is thought to be vital because it provides a strong



incentive to producers to keep costs low, to use capital and labor efficiently, to innovate, improve quality standards and sustain high rates of investment.

An outward-oriented strategy of development should raise not only the level of income but also the level of savings and possibly the rate of saving too. This, in turn, permits a faster rate of accumulation of capital and hence faster growth. In addition, the incentives to increase efficiency associated with export-led growth are likely to result in a more efficient pattern of investment.

The open economy is also open to international movements of factors of production, capital and labor. Foreign direct investment, commercial lending, knowledge, technology and management skills is seen as increasing factor productivity in the Third World and thereby contributing to higher levels of output and a faster growth of incomes.

Outward-looking strategy of development normally implies an active role for the state. First, government policy is involved in removing obstacles restraining a country's capacity to export (e.g., inadequate infrastructure) and in promoting those activities which will increase exports. Second, the state is responsible for removing price distortions in the economy, due to previously inappropriate policies of import-substituting industrialization. In general terms, the state is expected to be concerned with "getting prices right", in particular the key prices of the exchange rate, interest rates and wage rates.

The third strategy is ***Industrialization***. The emphasis here as with the previous strategy, is on growth but the vehicle for achieving growth is rapid expansion of the manufacturing sector. The immediate concern is acceleration of the aggregate rate of growth of gross domestic product. This is achieved by a strategy of industrialization typically in one of three ways: (i) by producing manufactured consumer goods largely for the domestic market, usually behind high tariff walls; (ii) by concentrating on the development of the capital goods industries, usually under the direction of the state; or (iii) by deliberately orienting the manufacturing sector towards exporting, usually under some combination of indicative planning and either direct or indirect subsidies.

Industrialization strategies in practice tend to place much stress on raising the level of capital formation, on introducing modern technology, and on promoting the growth of a small number of large metropolitan areas. Urbanization and the industrialization strategy tend to go together. Government intervention is pervasive with the objective to increase production and distribute income from sector to sector (agriculture to industry) and from low-income to high-income households, distribution of income toward those groups with high marginal propensities to save.

***Dear distance students, you can ask your instructor why income redistribution from poor to rich can be used to facilitate short run economic growth.***

Fourth, there is the ***Green Revolution strategy***. The focus under this strategy is on agricultural growth. One purpose of the strategy is to increase the supply of food, especially grains, the most important wage good. An abundant supply of grains will force down the relative price of food and this, in turn, will help to lower unit labor costs. Low unit costs will raise the general level of profits in non-agricultural activities and this should permit higher savings and more investment by stimulating the demand for agricultural inputs, capital and intermediate goods (fertilizer, irrigation pumps, construction materials) and by creating a larger market for simple consumer goods consumed in the countryside. Many of these industries tend to be more labor intensive than the industries promoted under an industrialization strategy and hence greater employment opportunities are created in both rural and urban areas.

In the rural areas, technical change is seen to be the key to accelerating agricultural growth and it is this of course that gives the strategy its name. Emphasis is on improved crop varieties, greater use of fertilizer and other modern inputs, investment in irrigation, transport and power, more ergonomically based research and improved extension services and credit.

The strategy is intended to alleviate mass poverty in several different ways. First, the poor are thought to benefit directly from a greater abundance of food. Second, because of the increased agricultural output, there will be greater employment in agriculture. Third, because of the high income elasticity of demand for non-food items of consumption, large numbers of jobs will be created in non-agricultural rural activities and in urban industry. Fourth, because of the high labor intensity of the

strategy, real wages in both the cities and the countryside should rise and this is likely, finally, to result in a more equal distribution of income.

**Redistribute strategies** of development start where the green revolution strategy finishes, namely, with a concern to improve the distribution of income and wealth. The strategy is designed to tackle head-on the problem of poverty by giving priority to measures which benefit directly low-income groups. There are three distinct strands which have shaped thinking about redistribute strategies. First, there are those who place great emphasis on creating more productive employment for the working poor. Second, there are those who advocate redistributing to the poor a part of the increment to total income that arises from growth. Third, there are those who urge that top priority should be given to the satisfaction of basic needs. These include the need for food, clothing and shelter as well as the provision by the state of primary health care programs and universal primary and secondary education.

Interest in redistribute strategies arose as a reaction to what their proponents perceived as a failure of growth-oriented strategies to reduce significantly over a reasonable period of time the number of those living in poverty or to improve their well being. Unlike the other strategy outlined above, a redistribute strategy aims to improve the distribution of income and wealth through direct intervention by the state. This objective of policy does not necessarily imply a larger role for government (as measured, say, by the ratio of public expenditure to GDP) but it does imply a change in the composition of government expenditure and a qualitative transformation of the relationship between the governed and those who govern them.

A comprehensive redistributive strategy of development contains five central elements: (i) an initial redistribution of assets; (ii) creation of local institutions which permit people to participate in grass roots development; (iii) heavy investment in human capital; (iv) An employment intensive pattern of development, and (v) sustained rapid growth of per capita income.

Finally, there are **socialist strategies** of development. These strategies are distinctive in that private ownership of the means of production is of relatively little significance. Almost all large industrial enterprises are in the state sector, while medium and small-sized enterprises may be organized along co-operative principles; private ownership,

where tolerated, often is limited to a few services and small workshops employing only a small number of people. In agriculture, state farms, collectives, co-operatives and communes predominate, although in some countries collectively owned land is cultivated by individual peasant households.

Socialist strategies of development seem to be characterized by high rates of capital formation, low ratio of household consumption to national income, high rates of state consumption and mainly for public consumption (health, education, public transport) at the expense of private. The result is a scarcity of personal services, a fairly uniform distribution of consumption goods among households and a relatively even spread of the benefits of growth.

## Questions for Review and Discussion

1. How would you describe the economic growth process in terms of production possibility analysis? What are the principal sources of economic growth, and how can they be illustrated using *PP* frontier diagrams?
2. What does the historical record reveal about the nature of the growth process in the now developed nations? What were its principal ingredients?
3. Of what relevance is the historical record of modern economic growth for contemporary developing nations? How important are differences in "initial conditions"? Give some examples of the initial conditions in a developing country with which you are familiar that make it different from most contemporary developed nations at the beginning of their modern growth experience.
4. "Social and institutional innovations are as important for economic growth as technological and scientific inventions and innovations." What is meant by this statement? Explain your answer.
5. What do you think were the principal reasons why economic growth spread rapidly among the now developed nations during the nineteenth and early twentieth centuries but, with the exception of parts of Asia, has failed to spread to an equal extent to contemporary LDCs?

## Chapter Two

# Unemployment and Rural-Urban Migration: Issues, Dimensions, and Analyses

Dear distance learners in the first chapter we have discussed some basic concepts of the theory of economic growth and then systematically analyzed why Africa's economic performance is slow. In this chapter we will discuss why many countries of the world, especially developing countries, are witnessing a new phenomenon of jobless growth (unemployment) even when output increases. The chapter begins with a quantitative profile of current and anticipated trends in LDC unemployment. It then focuses on the nature and characteristics of the employment problem and then on linkages between unemployment, migration, and poverty. At the end we will be able to answer why did rapid industrial growth in many developing countries fail to generate substantial new employment opportunities and why do great numbers of people continue to migrate from rural areas into cities despite high and rising levels of urban unemployment?

### **Learning objectives**

After studying this chapter, you will be able to:

- Analyze why unemployment is growing and common phenomena in developing countries.
- understand the trends and dimensions of unemployment in developing countries
- interpret the casual relationship between economic growth, unemployment and poverty
- Answer why people (especially the youth) migrate from rural to urban areas despite the growth of unemployment in cities, and what strategic options they adopt in the face of unemployment.
- Develop policy options to curb the unemployment problem and rural to urban migration.

***Critical thinking!!! Dear distance learners before reading the next part please think why unemployment is rising and common phenomena in developing countries***

Unemployment in its simplest dimension results from a relatively slow growth of labor demand in both the modern industrial sectors and in traditional agriculture combined with a rapidly growing labor supply, especially as a result of accelerated population growth and high levels of rural-urban migration.

Dear distance learners now we will start discussing some basic issues of unemployment in developing countries and see some trends during 1960s to 1980s and predictions for the 21<sup>st</sup> century.

### **2.1 The Employment problem: Some Basic Issues**

Historically, the economic development of Western Europe and North America has often been described in terms of the continuous transfer of economic activity and people from rural to urban areas, both within and between countries. As urban industries expanded, new employment opportunities were created; and over the same period, labor-saving technological progress in agriculture reduced rural labor needs. The combination of urban industrialization and agricultural mechanization made it possible for Western nations to undergo a systematic rural-to-urban transfer of their human resources.

On the basis of this shared experience, many economists concluded that economic development in the Third World, too can be necessitated by promoting rapid urban industrial growth. They therefore tended to view cities as growth centers, the focal points of an expanding economy. Unfortunately, this strategy of rapid industrialization has in many instances failed to bring about the desired results predicted by historical experience.

***Critical thinking!!! Dear distance students, please ask yourself again why rapid industrialization and urbanization policy in developing countries has failed to create employment***

Today many developing countries are plagued by a historically unique combination of massive rural-to-urban population movements, stagnating agricultural productivity,

and growing urban and rural unemployment and underemployment, and this is probably one of the most striking symptoms of their inadequate development. In a wide spectrum of poor countries, open unemployment now affects 10% to 20% of the labor force. The incidence of unemployment is much higher among the young and increasingly more educated. Even larger fractions of both urban and rural labor forces suffer from underemployment. They have neither the complementary resources (if they are working full time) nor the opportunities (if they work only part time) for increasing their very low incomes. ***Because of its relationship to the problem of Third World poverty, the employment issue occupies a central place in the study of underdevelopment.***

But the dimensions of the employment problem go beyond the simple shortage of work opportunities or the underutilization and low productivity of people who work long hours. Unemployment grew rapidly, largely due to economies being "demand-constrained" by external factors such as a worsening balance of payments, rising debt problems, and IMF induced austerity programs, all of which caused a marked deceleration of industrial growth, a rapid decline in real wages, and falling urban and rural employment.

***Dear distance learners, please ask your teacher what are the IMF induced factors that contribute to employment problem in developing countries?***

The employment problem in developing countries therefore has a number of facets that make it unique thus subject to a variety of economic analyses. There are three major reasons for this:

1. Unemployment and underemployment regularly and chronically affect much larger proportions of LDC labor forces than unemployment did in the industrialized countries, even during the worst years of the Great Depression.
2. Third World employment problems have much more complex causes than employment problems in the developed countries.
3. Whatever the dimensions and causes of unemployment in developing nations, it is associated with human circumstances of poverty and low levels of living. There is an urgent need for concerted policy action by both the less developed and the more developed nations.

Dear distance learners in investigating these issues, we will see why the urbanization process in less developed countries has differed so markedly from the historical experience of the now developed countries and why growing unemployment and underemployment are not, as many economists believed, merely self-correcting, transitory phenomena present in the early stages of economic growth.

## 2.2 Employment and Unemployment: Trends, Projections and Dimensions

Dear distance learners, before we dwell into the main analysis of dimensions of employment problem first let us look at some of the quantitative and qualitative dimensions of the unemployment problem in developing nations.

During the 1970s, increased interest in the widespread and growing problem of Third World unemployment and underemployment on the part of individual development economists, national planning authorities, and international assistance agencies led to a much broader and more precise picture of the quantitative dimensions of the problem.

Table 2.1 provides a summary picture of employment and unemployment trends in the 1960s and 1970s with projections to 1990, both for developing countries as a whole and for Africa, Asia, and Latin America. Looking at Table 2.1, we see first that recorded unemployment grew from approximately 36.5 million in 1960 to over 54 million workers in 1973, an increase of 46%. This averages out to an annual rate of increase of 3%, which is higher than the annual rate of employment growth during this same period. In the developing world as a whole, unemployment was growing faster than employment.

**Table 2.1 Employment and Unemployment in Developing Countries, 1960-1990(in thousands)**

<b>Indicator</b>	<b>1960</b>	<b>1970</b>	<b>1973</b>	<b>1980</b>	<b>1990</b>
<b>All Developing Countries</b>					
Employment	507,416	617,244	658,000	773,110	991,600
Unemployment	36,466	48,798	54,130	65,620	88,693
Unemployment rate (percent)	6.7	7.4	7.6	7.8	8.2



Combined unemployment and underemployment rate (percent)	25	27	29
Africa	31	39	38
Asia	24	26	28
Latin America	18	20	25

When we also consider that the underemployed in 1973 comprised approximately an additional 250 million people, the combined unemployment and underemployment rate reaches a staggering 29% for all developing countries, with Africa experiencing a labor underutilization rate of 38%. Moreover, with rapid labor force growth, the marginal unemployment rate (the proportion of new labor force entrants unable to find regular jobs) is likely to be even higher than the average figures shown in Table 2.1.

**Table 2.2 Open Unemployment Rates in Developing Countries, 1980s and 1990s**

Country	Unemployment Rate (%)	
	Urban	Total
<b>Sub-Saharan Africa</b>		
Botswana	31	25
Kenya	23	24
Nigeria	10	28
<b>Latin America</b>		
Argentina	6	19
Colombia		9
Venezuela	13	10
<b>Asia</b>		
Malaysia	9	3
Philippines	7	10
South Korea	4	3

## 2.3 Four Dimensions of the Employment Problem

The unique nature of the employment problem in developing countries is most vividly revealed in four areas: the educated unemployed, self-employment, women's work, and youth unemployment.

### 2.3.1 The Educated Unemployed

*Critical thinking!!! Dear distance what is the relationship between and trend of level of education of individuals and employment in developing countries, for example in your country?*

The existence of an unexpected positive relationship between levels of education and rates of unemployment in developing countries-the opposite of the situation in developed countries and contrary to what one might expect is one of the pressing issues of today. For example, in India in 1989, the unemployment rate was 2% for people with no education, but it was 9% for those with a secondary education and 12% for university graduates. One reason for this puzzling phenomenon is that the least educated cannot afford to be openly unemployed and must seek any kind of work in the urban informal sector. Even though they may be grossly underemployed-working, say, only one day a week-these people are not counted as being unemployed. Secondary school and university graduates can usually afford to search for higher-paying jobs and are thus more likely to be counted among the openly unemployed. The problem is becoming particularly acute in Africa, where the educational system continues to turn out many more graduates than there are jobs to accommodate.

### **2.3.2 Self-employment**

As a second example of how the employment problems of developing nations differ from those of the more developed countries is people unable to find salaried employment in the modern (formal-sector) economy of developing countries pursue self-employment in the traditional or "informal" economy, in both urban and rural areas (some of the activities are street vendors, hawkers, small shop owners, prostitutes, rickshaw drivers, and artisans). The objective of informal sector operators is day- to-day survival, and they constitute most of the underemployed. Look figure 2.3

### **2.3.3 Women and Employment**

Although women's participation in LDC labor forces had increased dramatically by 1990, rising to 43% in East Asia, 32% in Latin America, and 13% in the Arab world, most women were employed in a very limited range of low-productivity jobs where hours worked were long and pay was low.

**Table 2.3 Self-Employment in Selected Countries**

	<b>Self- Employed in Total Labor Force</b>	
<b>Country</b>	<b>(%)</b>	<b>Year</b>
Ghana	68	1984
Pakistan	56	1984
Nigeria	56	1983
Mexico	48	1981
United States	8	1987
Canada	7	1987

Most economically active women work either in agriculture (78% in Africa and 80% in Asia) or in the urban informal sector (25% to 40% in Latin America). Their nonagricultural jobs tend to be in low-status production-line work. Women are routinely discriminated against in terms of pay scales, job advancement, and job security. They are also more likely to be unemployed than men.

#### **2.3.4 Youth Unemployment and Child Labor**

The most conspicuous dimension of the unemployment problem in developing countries is its prevalence among people between the ages of 15 and 24 years. Youth unemployment affects both educated and uneducated, women as well as men. David Turnham has estimated the youth unemployment rate to be in excess of 30% in a large number of developing countries and as depicted in Table 2.4, unemployed young people tend to be concentrated in urban areas. Many have recently migrated from the rural countryside, and their expectations of finding well-paid work are often unrealistically high.

The darker side to the question of jobs for young people is the problem of child labor. The International Labor Office has estimated that almost 60 million LDC children under the age of 14 work long hours for pitiable low wages under horrible working conditions. They earned less than half the adult wage and often worked in long hours per week..

**Table 2.4 Age-Specific Urban Unemployment Rates (percent)**

<b>Country</b>	<b>Overall Rate</b>	<b>Age 15-24</b>	<b>Age 25+</b>	<b>Year</b>
Kenya	14.1	38.1	8.2	1986
India	7.1	19.4	3.4	1988
Indonesia	7.3	23.4	2.6	1986
Sri Lanka	19.5	40.2	11.5	1983
Philippines	9.0	18.6	5.6	1983
Bolivia	11.5	15.2	N.A	1988
Colombia	9.3	14.2	5.1	1988
Venezuela	9.1	17.6	6.5	1987

## **2.4 Linkages among Unemployment, Poverty, and Income Distribution**

Dear distance learners, now let us see how unemployment in developing countries is linked to abject poverty and low level of living

A close relationship exists between high levels of unemployment and underemployment, widespread poverty, and unequal distributions of incomes. For the most part, people without regular employment or with only scattered part-time employment are also among the very poor. Those with regular paid employment in the public and private sectors are typically among the middle- and upper-income groups. But it would be wrong to assume that everyone who does not have a job is necessarily poor or that all who work full time are relatively well-off.

*Dear distance learners, please ask your teacher why unemployment is not necessarily related to poverty*

In spite of the too literal linkage between unemployment and poverty, it still remains true that one of the major mechanisms for reducing poverty and inequality in less developed nations is the provision of adequate-paying, productive employment opportunities for the very poor. But most important, the creation of more employment opportunities should not be regarded as the sole solution to the poverty problem. More far-reaching economic and social measures are needed. But the provision of more work and the wider sharing of the work that is available would certainly go a long way toward solving the problem. Employment must therefore be an essential ingredient in any poverty – focused development strategy.

## **2.5 The Phenomenon of Jobless Growth and the Output-Employment Lag**

Dear distance learners, in this part we will have brief statistical information and introduction on why modern sector or output growth (economic growth) in developing countries is not really correlated with employment creation

During the 1960s, one of the major doctrines of the development literature was that successful economic development could be realized only through the twin forces of substantial capital accumulation and rapid industrial growth. By concentrating on the development of a modern industrial sector to serve the domestic market and to facilitate the absorption of surplus rural laborers in the urban economy, less developed countries, it was argued, could proceed most rapidly toward the achievement of considerable economic self-sufficiency. But an inevitable consequence of this emphasis has been the extraordinary growth of urban centers resulting from an accelerated influx of rural, unskilled workers in search of urban jobs.

Unfortunately, optimistic predictions regarding the ability of the modern industrial sector to absorb these migrants have not always been realized. In fact, the failure of modern urban industries to generate a significant number of employment opportunities is one of the most obvious failures of the development process over the past few decades. Table 2.5 shows, for many developing countries, the growth of manufacturing output exceeded the growth of employment by a factor of 3 or 4 to 1. For the majority of LDCs, this phenomenon of jobless growth or 'output-employment lag' continued into the 1980s, when output growth slowed and real wages declined, particularly in Africa and Latin America. And it was projected to continue further to the year 2000.

**Table 2.5 Industrialization and Employment in Developing Countries, 1963-1969**

Country	Manufacturing Annual Output (percent)	Growth	Manufacturing Employment Growth (percent)
Africa			
Egypt	11.2		0.7
Ethiopia	12.8		6.4
Nigeria		14.1	5.3
<hr/>			
Asia			
Pakistan	12.3		2.6
Thailand	10.7		-12.0
<hr/>			
Latin America			
Colombia	5.9		2.8
Costa Rica	8.9		2.8
Ecuador	11.4		6.0

Too much emphasis, however, cannot be placed on the expansion of the modern industrial sector to solve the unemployment problem. The reason is that in most Third World countries, it employs only 10% to 20% of the total labor force. For example, if the manufacturing sector employs, say, 20% of the country's labor force, it would need to increase employment by 15% per year just to absorb the increase in a total workforce growing at 3% per year ( $0.2 \times 0.15 = 0.03$ ). But almost none of the developing countries have yet been able to achieve such a high rate of employment growth in its manufacturing sector. In fact, such industrial employment growth is virtually impossible to achieve in any economy.

## 2.6 The Migration and Urbanization Dilemma

Dear distance learners in this part we focus on one of the most perplexing dilemmas of the development process: the phenomenon of massive and historically unprecedented movements of people from the rural countryside to the cities of Africa, Asia, and Latin America. By 2050, world population could reach 9.4 billion people, and nowhere will population growth be more dramatic than in the major cities of the developing world.

After reviewing trends and prospects for overall urban population growth, we examine the growth of the urban informal economy and try to ascertain its potential role and functions. We then turn to a well-known theoretical model of rural-urban labor transfer in the context of rapid growth and high urban unemployment. In the final section we evaluate various policy options that LDC governments may wish to pursue in their attempts to curtail the heavy flow of rural-to-urban migration and to ameliorate the serious unemployment problems that continue to plague their crowded cities.

*Distance learners before you read the next part, think of the composition of the population in the major cities that you are familiar*

### 2.6.1 Urbanization: Trends and Projections

One of the most significant of all postwar demographic phenomena and the one that promises to loom even larger in the future is the rapid growth of cities in developing countries. In 1950, some 275 million people were living in Third World cities, 38% of world urban population. According to U.N. estimates, the world's urban population had reached 2.6 billion by 1995, with 66% (1.7 billion) living in metropolitan areas of developing countries. The United Nations projects that in 2025, over 4.1 billion, or 80%, of the urban dwellers of the world will reside in less developed regions. Table 2.6 presents data on this growth of urban populations by major world regions from 1950 to 1995 with projections to the year 2025.

**TABLE 2.6 Urban Population in Major World Regions, 1950-2025 (millions)**

<b>Region</b>	<b>1950</b>	<b>1960</b>	<b>1970</b>	<b>1980</b>	<b>1995</b>	<b>2000</b>	<b>2025</b>
World	724	1,012	1,352	1,807	2,584	3,208	5,065
More Regions developed	449	573	698	834	875	965	1,040
Less developed Regions	275	439	654	972	1,709	2,101	4,025
Africa	32	50	83	133	250	331	804
Latin America	68	107	162	241	358	431	601
Asia	218	342	407	596	1,101	1,291	2,615

***Critical thinking!!! Now distance learners, what do you think will be the consequence of such upsurge of urbanization to developing countries?***

A central question related to the unprecedented size of these urban agglomerations is how these LDC cities will cope-economically, environmentally, and politically -with such acute concentrations of people. While it is true that cities offer the cost-reducing advantages of agglomeration economies and economies of scale and proximity as well as numerous economic and social externalities (e.g., skilled workers, cheap transport, social and cultural amenities), the social costs of a progressive overloading of housing and social services increased crime, pollution, and congestion, tend gradually to outweigh these historical urban advantages. These sizes are such that any economies of location are dwarfed by costs of congestion. The rapid population growth that has produced them will have far outpaced the growth of human and physical infrastructure needed for even moderately efficient economic life and orderly political and social relationships, let alone amenity for their residents.

Along with the rapid spread of urbanization and the urban bias in development strategies, has come the prolific growth of huge slums and shantytowns. Today slum settlements represent over one-third of the urban population in all developing countries; in many cases they account for more than 60% of the urban total. Most of settlements are without clean water, sewage systems, or electricity. For example, metropolitan Cairo is attempting to cope with a population of 10 million people with a water and sanitation system built to serve 2 million.

Although population growth and accelerated rural-to-urban migration are chiefly responsible for the explosion in urban shantytowns, part of the blame rests with LDC governments. Their misguided policies regarding urban planning and outmoded building codes often mean that 80% to 90% of new urban housing is illegal.

The extent of Third World government concern and even alarm at the trends in urban population growth was vividly revealed in a 1988 United Nations report on population policies in the world. Almost all countries dissatisfied with the size and growth of their urban population believed that internal rural-urban migration was the most prominent factor contributing to city growth. Accordingly, many developing



countries responding to the U.N. survey indicated that they had initiated policies to slow down or reverse their accelerating trends in rural-urban migration.

Given the widespread dissatisfaction with rapid urban growth in developing countries, the critical issue that needs to be addressed is the extent to which national governments can formulate development policies that can have a definite impact on trends in urban growth. It is clear that the unquestioning pursuit of the orthodox development strategies of the past few decades, with their emphasis on industrial modernization, technological sophistication, and metropolitan growth, created a substantial geographic imbalance in economic opportunities and contributed significantly to the steadily accelerating influx of rural migrants into urban areas. With birthrates beginning to decline in many LDCs the serious and worsening problem of rapid urban growth and accelerated rural-urban migration will undoubtedly be one of the most important development and demographic issues of the early twenty-first century. And within urban areas, the growth and development of the informal sector as well as its role and limitations for labor absorption and economic progress will assume increasing importance.

## **2.7 The Urban Informal Sector**

*Dear distance learners, what forms of business (sectors) and the providers of goods and services that you consume everyday in your locality*

One of the major focuses of development theory has been on the dualistic nature of developing countries' national economies – the existence of a modern urban capitalist sector geared toward capital-intensive, large-scale production and traditional rural subsistence sector geared toward labor-intensive, small-scale production. In recent years, this dualistic analysis has also been applied specifically to the urban economy, which has been decomposed into a formal and an informal sector.

The existence of an unorganized, unregulated, and mostly legal but unregistered informal sector was-recognized in the early 1970s, following observations in several developing countries that massive additions to the urban labor force failed to show

up in formal modern-sector employment statistics. The bulk of new entrants to the urban labor force seemed to create their own employment or to work for small-scale family-owned enterprises. The self-employed were engaged in a remarkable array of activities, ranging from hawking, street vending, letter writing, and junk collecting, prostitution, drug peddling, and snake charming. Others found jobs as mechanics, carpenters, small artisans, barbers, and personal servants. Studies reveal that the share of the urban labor force engaged in informal-sector activities is growing and now ranges from 30% to 70%, the average being around 50%. With the unprecedented rate of growth of the urban population in developing countries expected to continue and with the increasing failure of the rural and urban formal sectors to absorb additions to the labor force, more attention is being devoted to the role of the informal sector in serving as a panacea for the growing unemployment problem.

**Table 2.7 Estimated Share of the Urban Labor Force in the Informal Sector in Selected Developing Countries**

<u>Area</u>	<u>Share (%)</u>
<b>Africa</b>	
Ghana	60-70
Kenya	44
Nigeria	50
<b>Asia</b>	
India	50
Malaysia	35
Pakistan	69
<b>Latin America</b>	
Argentina	53
Brazil	56
Colombia	62

*Distance learners discuss with your instructor the advantages and disadvantage of the urban informal sector*

The informal sector is characterized by a large number of small-scale production and service activities that are individually or family owned and uses labor intensive and simple technology. The usually self-employed workers in this sector have little formal education, are generally unskilled, and lack access to financial capital. As a result, worker productivity and income tend to be lower in the informal sector than in the formal sector.

Moreover, workers in the informal sector do not enjoy the measures of protection afforded by the formal modern sector in terms of job security, decent working conditions, and old-age pensions. Most workers entering this sector are recent migrants from rural areas unable to find employment in the formal sector. Their motivation is usually to obtain sufficient income for survival, relying on their own indigenous resources to create work. Most inhabit shacks that they themselves have built in slums and squatter settlements, which generally lack minimal public services.

In terms of its relationship with other sectors, the informal sector is linked with the rural sector in that it allows excess labor to escape from rural poverty and underemployment. The formal sector depends on the informal sector for cheap inputs and wage goods for its workers, and the informal sector in turn depends on the growth of the formal sector for a good portion of its income and clientele. The informal sector also often subsidizes the formal sector by providing raw materials and basic commodities for its workers at artificially low prices maintained through the formal sector's economic power and legitimacy granted by the government.

The important role that the informal sector plays in providing income opportunities for the poor is open to debate. There is some question as to whether the informal sector is merely a holding ground for people awaiting entry into the formal sector - transitional phase until it is itself absorbed by the formal sector or whether it is here to stay and should in fact be promoted as a major source of employment and income for the urban labor force.

There seems to be a good argument in support of the latter view. The formal sector in developing countries has a small base in terms of output and employment. In order to absorb future additions to the urban labor force, the formal sector must be able to generate employment at a very high rate of at least 10% per annum. But this much growth seems highly unlikely in view of current trends. Thus the burden on the informal sector to absorb more labor will continue to grow unless other solutions to the urban unemployment problem are provided.

Moreover, the informal sector has demonstrated its ability to generate employment and income for the urban labor force. As pointed out earlier, it is already absorbing

an average of 50% of the urban labor force. Some studies have shown the informal sector generating almost one-third of urban income. Other evidences indicate that the informal sector generates surplus even under the currently hostile policy environment. Thus the informal sector's surplus could provide an impetus to growth in the urban economy. Besides, as a result of its low capital intensity, only a fraction of the capital needed in the formal sector is required to employ a worker in the informal sector, offering considerable savings to developing countries so often plagued with capital shortages. Others argue referring to its contribution to entrepreneurship. By providing access to training and apprenticeships at substantially lower costs the informal sector can play an important role in the formation of human capital. From resource abundance perspective the informal sector is more likely to adopt appropriate technologies and make use of local resources, allowing for a more efficient allocation of resources.

Promotion of the informal sector is not, however, without its disadvantages. One of the major disadvantages in promoting the informal sector lies in the strong relationship between rural-urban migration and labor absorption in the informal sector. Promoting income and employment opportunities in the informal sector could aggravate the urban unemployment problem by attracting more labor than either the informal or the formal sector could absorb. Furthermore, there is concern over the environmental consequences of a highly concentrated informal sector in the urban areas. Many informal-sector activities cause pollution and congestion and inconvenience to pedestrians. Moreover, increased densities in slums and low-income neighborhoods, coupled with poor urban services, could cause enormous problems for urban areas. Any policy measures designed to promote the informal sector must be able to cope with these various problems.

*Dear distance learners, given the above views and dimension what do you recommend towards or against promotion of the formal sector? Please discuss this issue with your instructor.*

## **2.8 Toward an Economic Theory of Rural-Urban Migration**

Distance learners, as we saw in the beginning of this chapter, the economic development of Western Europe and the United States was closely associated with,

and in fact defined in terms of, the movement of labor from rural to urban areas. For the most part, with a rural sector dominated by agricultural activities and an urban sector focusing on industrialization, overall economic development in these countries was characterized by the gradual reallocation of labor out of agriculture and into industry through rural-urban migration, both internal and international. Urbanization and industrialization were in essence synonymous.

This historical model served as a blueprint for the development of LDCs, as evidenced, for example, by the original Lewis theory of labor transfer.

But the overwhelming evidence of the 1960s and 1970s, when developing nations witnessed a massive migration of their rural populations into urban areas despite rising levels of urban unemployment and underemployment, lessens the validity of the Lewis two-sector model of development. In a series of articles, Michael P. Todaro have attempted to develop a theory of rural-urban migration to explain the apparently paradoxical relationship of accelerated rural-urban migration in the context of rising urban unemployment. In the forthcoming section we will discuss this model.

### **2.8.1 A Verbal Description of the Todaro Model**

Starting from the assumption that migration is primarily an economic phenomenon, which for the individual migrant can be a quite rational decision despite the existence of urban unemployment, the Todaro model postulates that migration proceeds in response to urban-rural differences in *expected income* rather than actual earnings. The fundamental premise is that migrants consider the various labor market opportunities available to them in the rural and urban sectors and choose the one that maximizes their expected gains from migration. Expected gains are measured by the difference in real incomes between rural and urban work and the probability of a new migrant's obtaining an urban job.

In essence, the theory assumes that members of the labor force compare their expected incomes for a given time horizon in the urban sector (the difference between returns and costs of migration) with prevailing average rural incomes and migrate if the former exceeds the latter.

Consider the following illustration. Suppose that the average unskilled or semiskilled rural worker has a choice between being a farm laborer (or working his own land) for an annual average real income of, say, 50 units or migrating to the city, where a worker with his skill or educational background can obtain wage employment yielding an annual real income of 100 units. The more commonly used economic models of migration, which place exclusive emphasis on the income differential factor as the determinant of the decision to migrate, would indicate a clear choice in this situation. The worker should seek the higher-paying urban job.

*It is important to recognize, however, that these migration models were developed largely in the context of advanced industrial economies and hence implicitly assume the existence of full or near-full employment. In a full-employment environment, the decision to migrate can be based solely on the desire to secure the highest-paid job wherever it becomes available. Simple economic theory would then indicate that such migration should lead to a reduction in wage differentials through the interaction of the forces of supply and demand, in areas of both emigration and immigration.*

Unfortunately, such an analysis is not realistic in the context of the institutional and economic framework of most developing nations. First, these countries are beset by a chronic unemployment problem that a typical migrant cannot expect to secure a high-paying urban job immediately. In fact, it is much more likely that on entering the urban labor market, many uneducated, unskilled migrants will either become totally unemployed or will seek casual and part-time employment as vendors, hawkers, repairmen, and itinerant day laborers in the urban traditional or informal sector, where ease of entry, small scale of operation, and relatively competitive wage determination prevail. Consequently, in deciding to migrate, the individual must balance the probabilities and risks of being unemployed or underemployed for a considerable period of time against the positive urban-rural real income differential. Thus if the actual probability of his being successful in securing the higher-paying urban job is 20%, and therefore his expected urban income for the one-year period is in fact 20 units and not the 100 units that an urban worker in a full-employment environment would expect to receive. So with a one-period time horizon and a probability of success of 20%, it would be irrational for this migrant to seek an urban

job, even though the differential between urban and rural earnings capacity is 100%. However, if the probability of success were 60% and the expected urban income therefore 60 units, it would be entirely rational for our migrant with his one-period time horizon to try his luck in the urban area, even though urban unemployment may be extremely high.

*Dear distance learners, if you are not clear about the above discussion, ask your teacher for clarification.*

If we now approach the situation by assuming a considerably longer time horizon—a more realistic assumption, the decision to migrate should be represented on the basis of a longer-term, more permanent income calculation. If the migrant anticipates a relatively low probability of finding regular wage employment in the initial period but expects this probability to increase over time as he is able to broaden his urban contacts, it would still be rational for him to migrate, even though expected urban income during the initial period or periods might be lower than expected rural income.

### **2.8.2 A Diagrammatic Presentation**

Now let us look into the real situation and the process of achieving *unemployment equilibrium* between urban expected wages and average rural income in developing countries using diagrammatic portrayal of the basic Todaro model. This is done in Figure 2.1 Assume only two sectors, rural agriculture and urban manufacturing. The demand for labor (the marginal product of labor curve) in agriculture is given by the negatively sloped line AA'. Labor demand in manufacturing is given by MM' (reading from right to left). The total labor force is given by line  $O_A O_M$ . In a neoclassical, flexible-wage, full-employment market economy, the equilibrium wage would be established at  $W_A = W_M$ , with  $O_A L_A$  workers in agriculture and  $O_M L_M$  workers employed in urban manufacturing. All available workers are therefore employed.

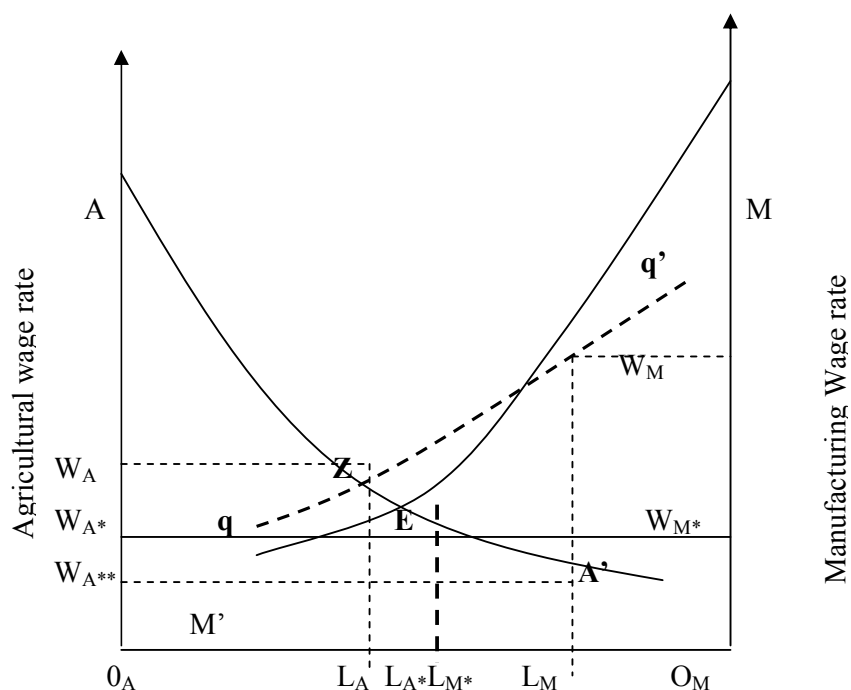
But what if urban wages are institutionally determined (inflexible downward) as assumed by Todaro at a level  $W_M$ , which is at a considerable distance above  $W_A$ ? If for the moment we continue to assume that there is no unemployment,  $O_M L_M$

workers would get urban jobs, and the rest,  $O_A L_M$ , would have to settle for rural employment at  $O_A W_A'$  wages (below the free-market level of  $O_A W_A$ ). So now we have an urban-rural real wage gap of  $W_M - W_A'$ , with  $W_M$  institutionally fixed. If rural workers were free to migrate, then despite the availability of only  $O_M L_M$  jobs, they are willing to take their chances in the urban job lottery. If their chance (probability) of securing one of these favored jobs is expressed by the ratio of employment in manufacturing,  $L_M$ , to the total urban labor pool,  $L_{US}$ , then the expression shows the probability of urban job success necessary to equate agricultural income  $W_A$  with urban expected income  $(L_M / L_{US})(W_M)$ , thus

$$- \\ W_A = - \frac{L_M}{L_{US}} (W_M)$$

causing a potential migrant to be indifferent between job locations. The locus of such points of indifference is given by the  $qq'$  curve in Figure 2.1. The new unemployment equilibrium now occurs at point  $Z$ , where the urban-rural actual wage gap is  $W_M - W_A$ ,  $O_A L_A$  workers are still in the agricultural sector, and  $O_M L_M$  of these workers have modern (formal) -sector jobs paying  $W_M$  wages. The rest,  $O_M L_A - O_M L_M$  are either unemployed or engaged in low-income informal-sector activities. This explains the existence of urban unemployment and the private economic rationality of continued rural-to-urban migration despite this high unemployment. However, although it may be privately rational from a cost-benefit perspective for an individual to migrate to the city despite high unemployment, it can, be socially very costly.





**Figure 2.1 The Todaro Migration Model**

To sum up, the Todaro migration model has four basic characteristics:

1. Migration is stimulated primarily by rational economic considerations of relative benefits and costs, mostly financial but also psychological.
2. The decision to migrate depends on expected rather than actual urban-rural real wage differentials where the expected differential is determined by the interaction of two variables, the actual urban-rural wage differential and the probability of successfully obtaining employment in the urban sector.
3. The probability of obtaining an urban job is directly related to the urban employment rate and thus inversely related to the urban unemployment rate.
4. Migration rates in excess of urban job opportunity growth rates are not only possible but also rational and even likely in the face of wide urban-rural expected income differentials. High rates of urban unemployment are therefore inevitable outcomes of the serious imbalance of economic opportunities between urban and rural areas in most underdeveloped countries.

## 2.9 Policy Implications

*Dear distance learners, now let us look into the important policy implication of the employment problems and rural-to-urban migration in developing countries we have discussed so far.*

Although the Todaro theory might at first seem to devalue the critical importance of rural-urban migration by portraying it as an adjustment mechanism by which workers allocate themselves between rural and urban labor markets, it does have important policy implications for development strategy with regard to wages and incomes, rural development, and industrialization.

First, imbalances in urban-rural employment opportunities caused by the urban bias of development strategies must be reduced. Because migrants are assumed to respond to differentials in expected incomes, it is vitally important that imbalances between economic opportunities in rural and urban sectors be minimized. Permitting urban wage rates to rise at a greater pace than average rural incomes will stimulate further rural-urban migration in spite of rising levels of urban unemployment resulting in escalating urban socioeconomic problems.

Second, urban job creation is an insufficient solution for the urban unemployment problem. The traditional economic solution to urban unemployment can result in the paradoxical situation where more urban employment leads to higher levels of urban unemployment. Once again, the imbalance in expected income-earning opportunities is the crucial concept. Because migration rates are assumed to respond positively to both higher urban wages and higher urban employment opportunities (or probabilities), it follows that for any given positive urban-rural wage differential, higher urban employment rates will widen the expected differential and induce even higher rates of rural-urban migration leading to *induced migration*.

Third, indiscriminate educational expansion will lead to further migration and unemployment. The heavy influx of rural migrants into urban areas - at rates much in excess of new employment opportunities has necessitated a rationing device in the selection of new employees. For the same wage, employers will hire people with more education in preference to those with less, even though extra education may not

contribute to better job performance. Jobs that could formerly be filled by those with a primary education now require secondary training; those formerly requiring a secondary certificate must now have a university degree. It follows that for any given urban wage, if the probability of success in securing a modern-sector job is higher for people with more education, their expected income differential will also be higher, and they will be more likely to migrate to the cities.

Fourth, wage subsidies and traditional scarcity factor pricing can be counter-productive. Standard economic policy prescription for generating urban employment opportunities is to eliminate factor-price distortions by using "correct" prices, perhaps implemented by wage subsidies (fixed government subsidies to employers for each worker employed) or direct government hiring. Because actual urban wages generally exceed the market or "correct" wage as a result of a variety of institutional factors, it is often argued that the elimination of wage distortions through price adjustments or a subsidy system will encourage more labor-intensive modes of production.

Finally, programs of integrated rural development should be encouraged. Policies that operate only on the demand side of the urban employment picture, such as wage subsidies, direct government hiring, elimination of factor-price distortions, and employer tax incentives, are probably far less effective in the long run in alleviating the unemployment problem than policies designed directly to regulate the supply of labor to urban areas. Clearly, however, some combination of both kinds of policies is most desirable.

Policies of rural and agricultural development are crucial to this aim. This call for the restoration of a proper balance between rural and urban incomes and for changes in government policies that currently give development programs a strong bias toward the urban industrial sector (e.g., policies in the provision of health, education, and social services).

As a conclusion, given the prevailing urban bias and thus the political difficulties of reducing urban-rural real-wage differentials, the need continuously to expand urban employment opportunities through judicious investments in small-and medium scale labor-intensive industries, and the inevitable growth of the urban industrial sector,

every effort must be made to broaden the economic base of the rural economy. The present unnecessary economic incentives for rural-urban migration must be minimized through creative and well-designed programs of integrated rural development. These should focus on farm and non-farm income generation, employment growth, health-care delivery, educational improvement, infrastructure development, and the provision of other rural amenities.

*Dear distance learners, given the above policy implications of our discussions, now try to review how governments in your country have been pursuing to influence urbanization and rural developing. Discuss this with your instructor.*

## **2.10 Economic Models of Employment Determination**

Distance learners, now we will review three economic models of employment determination: *the free-market classical model* (traditional theory of employment), *the output-employment macro model* (the relationship among capital accumulation, industrial output growth, and employment generation), and *the price-incentive micro model* (the impact of distorted factor prices on resource, especially labor, utilization).

Over the years, economists have formulated a number of economic models of employment determination. The majority of these models have focused on or been derived from the social, economic, and institutional circumstances of the developed nations. They have nevertheless often been uncritically and inappropriately applied to the unique circumstances of employment problems in developing countries majority resulting in more complex problems

### **2.10.1 The Traditional Competitive Free-Market Model**

#### **Flexible Wages and Full Employment**

In traditional free-market economics – characterized by perfect competition, and economic efficiency with many atomistic producers and consumers, the level of employment and the wage rate are determined by the forces of demand and supply. Producers demand more workers as long as the value of the marginal product produced by an additional worker exceeds his or her cost. As the law of diminishing marginal product is assumed to apply and as product prices are fixed by the market,

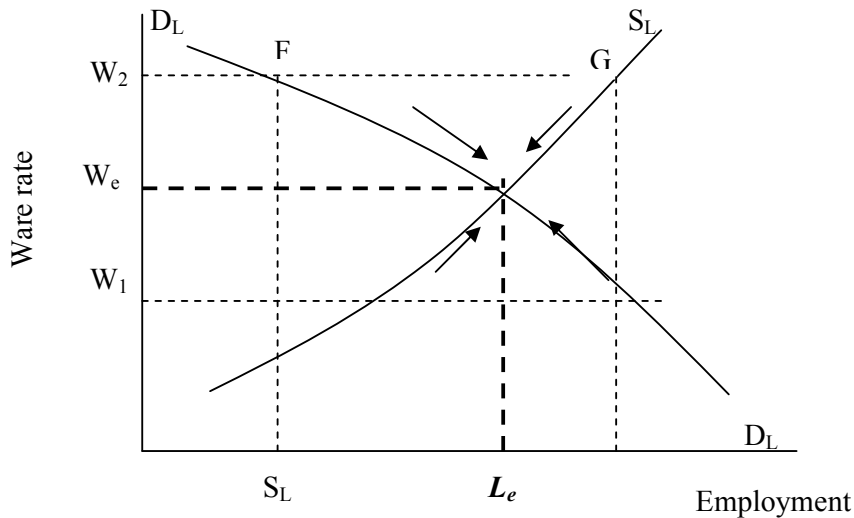
the value of labor's marginal product and thus the demand curve for labor will be negatively sloped, as shown in Figure 2.2. More workers will be hired only at successively lower wage rates.

***Note: Value of the marginal product of a worker is the worker's physical marginal product multiplied by the market price of the product he or she produces; cost is the going wage rate.***

On the supply side, individuals are assumed to operate on the principle of utility maximization. They will therefore divide their time between work and leisure in accordance with the relative marginal utility of each. A rise in wage rates is equivalent to an increase in the price (or opportunity cost) of leisure. It follows that more labor services will be supplied at successively higher wage rates, so that the aggregate supply curve of labor will be positively sloped. This supply curve is also depicted in Figure 2.2.

Now from Figure 2.2 that only at one point, the equilibrium wage rate  $W_e$ , will the amount of work that individuals are willing to supply just equal the amount that employers will demand. At any higher wage, like  $W_2$ , the supply of labor will exceed its demand, and competitive pressures among workers will force the wage rate down to  $W_e$ . At any lower price, like  $W_1$ , the labor quantity demanded will exceed the quantity supplied, and competition among producers will drive the wage rate up until it reaches its equilibrium level at  $W_e$ . At  $W_e$  total employment will be  $L_e$ , on the horizontal axis. By definition, this will be full employment - at the equilibrium wage and only at this wage will all people willing to work be able to obtain jobs so that there is no involuntary unemployment.

**Figure 2.2 wage and employment determination by demand and supply: The Traditional Free-Market Approach**



*Critical thinking!!! Dear distance learners, please discuss the limitations of the Competitive Model into the realities of wage and employment determination in Third World countries. Please ask your instructor for detailed analysis.*

### 2.10.2 Output and Employment Growth: Conflict or Congruence?

#### *Growth Models and Employment Levels: The Conflict Argument*

This model associates levels of employment with levels of GNP, and then asserts that by maximizing the rate of growth of GNP, developing countries could also maximize their rate of labor absorption. Economic growth is explained as the combined result of the rate of saving and the resultant physical capital accumulation on the one hand and the capital-output ratio on the other. For a given aggregate capital-output ratio, therefore, the rate of national output and employment growth could be maximized by maximizing the rate of saving and investment. It then emphasizes on generating domestic savings and foreign exchange to make possible heavy capital investments in the growing industrial sector. The **'big push'** for rapid industrialization thus became the code word for development and growth.

But, in spite of relatively impressive rates of industrial output growth in many less developed countries, the rate of employment growth has lagged significantly behind.

In a number of cases it has even stagnated. Why has rapid industrial output growth failed to generate correspondingly rapid rates of employment growth? Basically, the answer lies in the growth in labor productivity. By definition, the rate of growth in output (Y) minus the rate of growth in labor productivity (Y/L) approximately equals the rate of growth of employment (L); that is,

$$\frac{\Delta Y}{Y} - \frac{\Delta (Y/L)}{Y/L} = \frac{\Delta L}{L}$$

It follows that if output is growing at 8% per year while employment is expanding by only 3%, the difference is due to the rise in labor productivity. It follows from this constant labor productivity assumption that a 10% increase in national output (GNP) will always be accompanied by a 10% increase in employment. In reality, if labor productivity is rising, meaning that fewer workers are required to produce any given level of total output, a 10% output growth may only result in, say, a 3% increase in employment. In this case, maximum output and maximum employment growth are therefore seen as conflicting objectives

*Distance learners, if you are not clear about the above theory, please ask your teacher to explain it more.*

### ***Growth and Employment: The Congruence Argument***

In general, increases in labor productivity are desirable. But what is really desirable are increases in total factor productivity: *output per unit of all resources*. The productivity of labor can increase for a variety of reasons, some good and some not so good. Improved education, better training, and better management are all desirable reasons for increased productivity. But increases as a result of the substitution of capital for labor in production processes or as a result of the importation of laborsaving machinery and equipment may be less satisfactory in heavily populated nations. This can curtail the growth of new employment opportunities.

The conclusion is therefore, the neoclassical models of capital accumulation and economic growth, and the kinds of economic policies they imply, can and often do lead to rapid output growth but with lagging employment creation. If the overriding development objective is to maximize employment, different policies (e.g., focusing

on the promoting of labor-intensive industries such as small-scale agriculture and manufacturing) may be better.

Many economists have now come around to the view that an employment-oriented (and therefore, indirectly, a poverty-oriented) development strategy is likely also to be one that accelerates rather than retards overall economic progress. This is especially true with regard to the growth and development of the rural and small-scale urban sectors. More employment means more income for the poor, which in turn implies a greater demand for locally produced basic consumption goods. Since these products tend to be more labor intensive than many of those produced by large-scale industry, both domestic and foreign, it follows that more jobs and higher incomes can become self-reinforcing phenomena. They ultimately lead to higher growth rates of both national output and aggregate employment. But to achieve this dual objective, a complementary policy of removing factor-price distortions and promoting labor-intensive technologies of production may be required. This leads us to the third model of employment determination.

### **2.10.3 Appropriate Technology and Employment Generation: The Price-Incentive Model**

*Dear distance learners, in this part we will discuss how factor prices (resource prices) determine the choice production technology.*

#### ***Choice of Techniques: An Illustration***

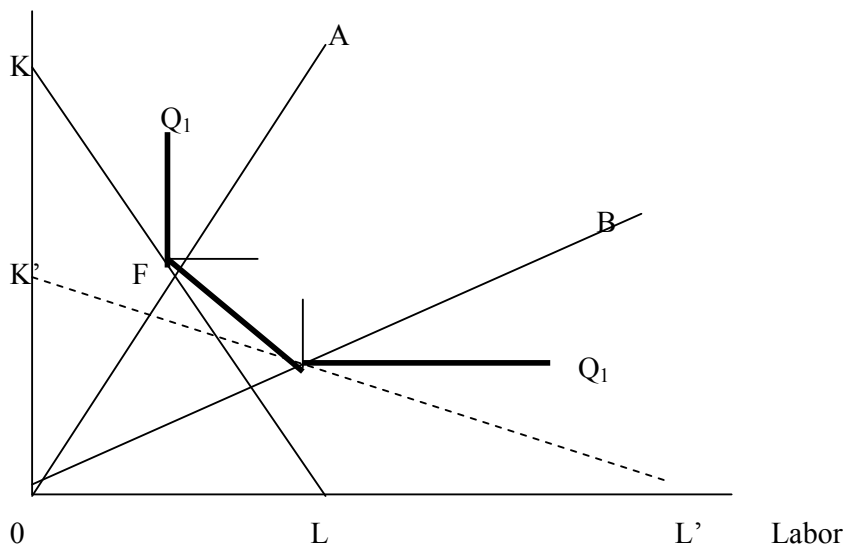
The basic proposition of the neoclassical price-incentive model is quite simple theory of the firm. Following the principle of market economy, producers are assumed to face a given set of relative factor prices (e.g., of capital and labor) and to use the combination of capital and labor that minimizes the cost of producing a desired level of output. They are further assumed to be capable of producing that output with a variety of technological production processes, ranging from highly labor-intensive to highly capital-intensive methods. Thus if the price of capital is very expensive relative to the price of labor, a relatively labor-intensive process will be chosen and vice versa.



The conventional economics of technical choice is portrayed in Figure 2.3. Assume that the firm, farm, industry, or economy in question has only two techniques of production from which to choose: technique or process  $OA$ , which requires larger inputs of (homogeneous) capital relative to (homogeneous) labor; and technique or process  $OB$ , which is relatively labor-intensive. Points  $F$  and  $G$  represent unit output levels for each process, and the line  $Q_1FGQ_1$  connecting  $F$  and  $G$  is therefore a unit-output isoquant.

According to this theory, optimum (least-cost) capital-labor combinations (efficient or appropriate technologies) are determined by relative factor prices. Assume for the moment that market prices of capital and labor reflect their scarcity or shadow values and that the desired output level is  $Q_1$  in Figure 2.3. If capital is cheap relative to labor (price line  $KL$ ), production will occur at point  $F$  using capital-intensive process  $OA$ . Alternatively, if the market prices of labor and capital are such that labor is the relatively cheap (abundant) factor (line  $K'L'$ ), optimal production will occur at point  $G$ , with the labor-intensive technique,  $OB$ , chosen. It follows that for any technique of production currently in use, a fall in the relative price of labor, all other things being equal, will lead to a substitution of labor for capital in an optimal production strategy.

**Figure 2.3 Choice of technique: The price-incentive model**



***Factor-Price Distortions and Appropriate Technology***

Given that most developing countries are endowed with abundant supplies of labor

but possess very limited financial or physical capital, we would naturally expect production methods to be relatively labor-intensive. But in fact we often find production techniques to be heavily mechanized and capital-intensive. Large tractors and combines cultivate the rural landscape of Asia, Africa, and Latin America while people stand idly by. Gleaming new factories with the most modern and sophisticated automated machinery and equipment are a common feature of urban industries while idle workers congregate outside the factory gates.

***Critical thinking!!! Dear distance learners, given the above discussion do you think that producers in developing countries are irrational? Why?***

The explanation, according to the price-incentive school, is simple. Because of a variety of structural, institutional, and political factors, the actual market price of labor is higher and that of capital is lower than their respective true scarcity, or shadow, values would dictate. In Figure 2.3, the shadow price ratio would be given by line K'L', whereas the actual (distorted) market price ratio is shown by line KL. Market wage structures are relatively high because of trade union pressure, politically motivated minimum-wage laws, an increasing range of employee fringe benefits, and the high-wage policies of multinational corporations.

The net result of these factor-price distortions is the encouragement of inappropriate capital-intensive methods of production in both agriculture and manufacturing. Note that from the private-cost-minimizing viewpoint of individual firms and farms, the choice of a capital-intensive technique is correct. It is their rational response to the existing structure of price signals in the market for factors of production. However, from the viewpoint of society as a whole, the social cost of underutilized capital and, especially, labor can be very substantial. Government policies designed to "get the prices right" - that is, to remove factor-price distortions-would contribute not only to more employment but also to a better overall utilization of scarce capital resources through the adoption of more appropriate technologies of production.

From the aforementioned discussions on employment theories we can learn that factor prices do matter for resource allocation and employment creation; government policies designed to promote industrialization often at the expense of agricultural growth have typically exacerbated the unemployment and underemployment

problems of both urban and rural areas; and policies intended to stimulate efficient, labor-intensive methods of production need not lead to lower levels of output growth. Finally, the urban bias found in many development strategies has contributed directly and indirectly to both an excessive rate of rural-to-urban migration and a rapid rise in urban unemployment

## **2.11 Toward the Shape of a Comprehensive Migration and Employment Strategy**

Dear distance learners, at various points throughout this chapter, we have looked at possible policy approaches designed to improve the very serious migration and employment situation in developing countries. We now conclude with the shape of a comprehensive migration and employment strategy. This would appear to have six key elements:

1. ***Creating an appropriate rural-urban economic balance.*** A more appropriate balance between rural and urban economic opportunities appears to be indispensable to ameliorating both urban and rural unemployment problems and to slowing the pace of rural-urban migration. The main thrust of this activity should be in the integrated development of the rural sector, the spread of small-scale industries throughout the countryside, and the reorientation of economic activity and social investments toward the rural areas.
2. ***Expansion of small-scale, labor-intensive industries.*** The composition or "product mix" of output has obvious effects on the magnitude of employment opportunities because some products require more labor per unit of output and per unit of capital than others. Expansion of these mostly small-scale and labor-intensive industries in both urban and rural areas can be accomplished in two ways: directly, through government investment and incentives, particularly for activities in the urban informal sector, and indirectly through income redistribution to the rural poor, whose structure of consumer demand is both less import-intensive and more labor-intensive than that of the rich.
3. ***Elimination of factor-price distortions.*** There is ample evidence to demonstrate that correcting factor-price distortions primarily by eliminating various capital

subsidies and curtailing the growth of urban wages through market based pricing would increase employment opportunities and make better use of scarce capital resources.

4. ***Choosing appropriate labor-intensive technologies of production.*** One of the principal factors inhibiting the success of any long-run program of employment creation both in urban industry and rural agriculture is the almost complete technological dependence of developing nations on imported (typically laborsaving) machinery and equipment from the developed countries. Both domestic and international efforts must be made to reduce this dependence by developing technological research and adaptation capacities in the developing countries themselves. Such efforts might first be linked to the development of small-scale, labor-intensive rural and urban enterprises; and to the development of low-cost, labor-intensive methods of meeting rural infrastructure needs, including roads, irrigation and drainage systems, and essential health and educational services.
5. ***Modifying the direct linkage between education and employment.*** The emergence of the phenomenon of the educated unemployed is calling into question the appropriateness of the massive quantitative expansion of educational systems, especially at the higher levels. As modern-sector jobs multiply more slowly than the numbers of persons leaving the educational tunnel, it becomes necessary to extend the length of the tunnel and to narrow its exit. Although a full discussion of educational problems and policies must await the next chapter, one way to moderate the excessive demand for additional years of schooling (which in reality is a demand for modern-sector jobs) would be for governments, often the largest employers, to base their hiring practices and their wage structures on other criteria. Moreover, the creation of attractive economic opportunities in rural areas would make it easier to redirect educational systems toward the needs of rural development.
6. ***Reducing population growth through reductions in absolute poverty and inequality, particularly for women, along with the expanded provision of family planning and rural health services.*** Clearly, any long-run solution to LDC employment and urbanization problems must involve a lowering of current high rates of population growth. Even though the labor force size for the next two decades is already determined by today's birthrates, the hidden momentum of

population growth applies equally as well to labor force growth. Together with the demand policies identified in points 1 through 5, population and labor supply reduction policies provide an essential ingredient in any strategy to combat the severe employment problems that developing countries face now and in future years.

## Questions for Review and Discussion

1. Discuss the nature of the employment problem in developing countries. Include in your discussion a review of the various manifestations of the underutilization of labor.
2. Why should we be so concerned with unemployment and underemployment? Why do they constitute a serious development problem?
3. To what extent does traditional economic theory illuminate the employment problems of developing countries? What are some of the limitations? Be specific.
4. What is the relationship, if any, between unemployment (and underemployment) and the problems of poverty and inequality?
5. What are the principal economic reasons for the widespread failure of rapid LDC industrial growth to generate equally rapid employment growth? Is such a large output -employment lag an inevitable result of the process of modern industrial growth? Explain your answer.
6. Why might the problem of rapid urbanization be a more significant population policy issue than curtailing LDC population growth rates over the next two decades? Explain your answer.
7. Describe briefly the essential assumptions and major features of the Todaro model of rural-urban migration. One of the most significant implications of this model is the paradoxical conclusion that government policies designed to create more urban employment may in fact lead to more urban unemployment. Explain the reasons for such a paradoxical result.
8. “The key to solving the serious problem of excessive rural-urban migration and rising urban unemployment and underemployment in” developing countries are to restore a proper balance between urban and rural economic and

social opportunities." Discuss the reasoning behind this statement, and give a few specific examples of government policies that will promote a better balance between urban and rural economic and social opportunities.

9. For many years, the conventional wisdom of development economics assumed an inherent conflict between the objectives of maximizing output growth and promoting rapid industrial employment growth. Why might these two objectives be mutually supportive rather than conflicting? Explain your answer.
10. What is meant by the expression "getting prices right"? Under what conditions will eliminating factor-price distortions generate substantial new employment opportunities? (Be sure to define factor-price distortions.)
11. The informal sector is becoming an ever-larger part of the urban economy. Distinguish between the urban formal and informal sectors, and discuss both the positive and negative aspects of the informal urban labor market.

## Chapter Three

### Education and Development

Dear distance learners, in the first and second chapters of this module we have tried to look the concepts of economic growth, urban unemployment, and investigated the causes and socio-economic consequences of underdevelopment, migration and unemployment. At the end of each chapter we tried to discuss policy implications for developing countries. In this chapter, we explore the relationship between education and economic development and review the past and current trends and implications of investment in education and economic development in developing countries. As usual we conclude the chapter by policy recommendations.

At the end of the chapter will be able to answer the following six basic questions:

1. How does education influence the rate, structure, and character of economic growth?
2. Does education in general and the structure of LDC educational systems in particular contribute to or retard the growth of domestic inequality and poverty?
3. What is the relationship of education to rural-urban migration and urban unemployment?
4. Do women lag behind men in educational attainment, and is there a relationship between the education of women and their desired family size?
5. Do contemporary formal educational systems tend to promote or retard agricultural and rural development?
6. What is the relationship among LDC educational systems, developed country educational systems, and the international migration of highly educated professional and technical workers from the less developed to the more developed nations?

***Dear distance learners, before you dwell into reading the next issues please try to analyze how education contributes to economic development.***

### 3.1 Education and Human Resources

Most economists argue that it is the human resources of a nation, not its physical capital or its natural resources, that ultimately determine the character and pace of its economic and social development. The principal institutional mechanism for developing human skills and knowledge is the formal educational system. Most Third World nations believe that the rapid quantitative expansion of educational opportunities is the key to national development: The more education, the more rapid the development. Therefore all countries have committed themselves to the goal of universal education in the shortest possible time.

Nevertheless, the challenge is now gathering momentum, and it comes from many sources. It can be found most clearly in the character and results of the development process itself. After more than three decades of rapidly expanding enrollments and hundreds of billions of dollars of educational expenditure, the plight of the average citizen in many parts of Africa and Latin America seems little improved. Absolute poverty is chronic and pervasive. Economic disparities between rich and poor widen with each passing year. Unemployment and underemployment have reached staggering proportions, with the "educated" increasingly swelling the ranks of the urban unemployed (refer back to chapter 2).

*Dear distance learners, pause for a moment and ask why???*

It would be foolish and naive to blame these problems on the failures of the **formal educational system**. At the same time, we must recognize that many of the early claims made on behalf of the unfettered quantitative expansion of educational opportunities – that it would accelerate economic growth, that it would raise levels of living especially for the poor, that it would generate widespread and equal employment opportunities for all, that it would acculturate diverse ethnic or tribal groups, and that it would encourage "modern" attitudes-have been shown to be greatly exaggerated.

As a result, there has been a growing awareness in many developing nations that the expansion of formal schooling is not always to be equated with the spread of learning, that the acquisition certificates and higher degrees is not necessarily



associated with an improved ability to undertake productive work, that education oriented almost entirely toward *preparation for work* in the modern urban sector can greatly distort student aspirations, and that too much investment in formal schooling, especially at the secondary and higher levels, can divert scarce resources from more socially productive activities (e.g., direct employment creation) and thus be a drag on national development rather than a stimulus.

The educational systems of developing nations strongly influence and are influenced by the whole nature, magnitude, and character of their development process. The role of formal education is not limited to imparting the knowledge and skills that enable individuals to function as economic change agents in their societies. Formal education also imparts values, ideas, attitudes, and aspirations, which may or may not be in the nation's best developmental interests. Education absorbs the greatest share of LDC recurrent government expenditures, occupies the time and activities of the greatest number of adults and children, and carries the greatest psychological burden of development aspirations. We must therefore examine its fundamental economic basis in developing countries and also its social and institutional ramifications.

## **3.2 Education in Developing Regions**

### **3.2.1 Public Educational Expenditure**

In many developing countries, formal education is the largest "industry" and the greatest consumers of public revenues. Poor nations have invested huge sums of money in education. The reasons are numerous. Literate farmers with at least a primary education are thought to be more productive and more responsive to new agricultural technologies than illiterate farmers. Secondary school graduates with some knowledge of elementary computer operations and information retrieval processes are needed to perform technical and administrative functions in growing public and private bureaucracies. University graduates with advanced are needed to provide the professional and managerial expertise necessary for a modernized public and private sector.

In addition to these obvious human resource needs, the people themselves, both rich and poor, have exerted tremendous political pressure for the expansion of school places in developing countries. Parents have realized that in an era of scarce skilled manpower, the more schooling and the more certificates their children can accumulate, the better will be their chances of getting secure and well paid jobs. More years of schooling have been perceived as the only avenue of hope for poor children to escape from poverty.

As a result of these forces acting on both demand and supply, there has been a tremendous acceleration in LDC public expenditures on education during the past decades. The proportion of national income (budgets) spent on education has increased rapidly. In Africa during the 1960s and 1970s public educational expenditures more than doubled. By the 1990s, educational budgets in many developing nations were absorbing 15% to 27% of total government recurrent expenditure.

*Dear distance learners, please look for any statistical data which shows trends of investment in primary, secondary and tertiary education in Ethiopia*

### **3.2.2 Enrollments**

Between 1960 and 1990, the total number of persons enrolled in the three main levels of education in Africa, Asia, the Middle East, and Latin America rose from 163 million to 440 million – an average annual increase of 5%. Although the largest part of this increase has been in primary education, it is in the secondary and tertiary levels that the greatest proportionate increases have occurred, 12.7% and 14.5% per annum, respectively.

Table 3.1 shows comparative data on enrollment ratios at the primary, secondary and postsecondary levels for selected low - and middle-income developing countries in 1980 and 1995. The remarkable increases in enrollments at both the primary and secondary levels are strikingly evident from this table.

Country	Numbers Enrolled as a Percentage of Age Group					
	Primary		Secondary		Postsecondary	
	1980	1995	1980	1995	1980	1995
<b>Low-income LDCs</b>						
Ethiopia	36	31	9	11	0	1
Haiti	76	n.a.	14	22	0	1
India	83	100	30	49	5	6
<b>Middle-income LDCs</b>						
Colombia	124	114	41	67	9	17
Philippines	112	116	64	79	24	27
Thailand	99	87	29	55	15	20

### 3.2.3 Literacy

*Literacy*, the ability to read, write, and comprehend information, is obviously a fundamental component of human resource development. The percentage of LDC adults who are illiterate has fallen from 60% in 1960 to 31 % in 1995. However, as a result of rapid population growth, the actual number of adult illiterates has risen over this same period by nearly 150 million to an estimated total of over 872 million in 1996. Illiteracy rate in Saharan Africa is 43%.

### 3.2.4 The Gender Gap: Women and Education

Young females receive considerably less education than young males in almost every developing country. In 66 out of 108 countries, women's enrollment in primary and secondary education is lower than that of men by at least 10 percentage points. This educational gender gap is the greatest in the poorest countries and regionally in the Middle East and North Africa. For all developing countries taken together, the female literacy rate was 29% lower than male literacy, women's mean years of schooling were 45% lower than men's, and females' enrollment rates in primary, secondary, and postsecondary schools were 9%, 28%, and 49% lower, respectively, than the corresponding male rate.

Why is female education important? Is it simply a matter of equity? The answer is that there now exist ample empirical evidence that educational discrimination against women hinders economic development in addition to reinforcing social inequality.

Closing the educational gender gap by expanding educational opportunities for women is economically desirable for four reasons:

1. The rate of return on women's education is higher than that on men's in most developing countries.
2. Increasing women's education not only increases their productivity on the farm and in the factory but also results in greater labor force participation, later marriage, lower fertility, and greatly improved child health and nutrition.
3. Improved child health and nutrition and more educated mothers lead to multiplier effects on the quality of a nation's human resources for many generations to come.
4. Because women carry a disproportionate burden of the poverty and landlessness that permeates developing societies, any significant improvements in their role and status via education can have an important impact on breaking the vicious cycle of poverty and inadequate schooling.

### **3.3 Educational Supply and Demand: The Relationship between Employment Opportunities and Educational Demands**

*Critical thinking!!! Dear distance learners before you read the following paragraphs, please ask yourself why you want to learn economics and who provides education in Ethiopia.*

The amount of schooling received by an individual, although affected by many non market factors, can be regarded as largely determined by demand and supply, like any other commodity or service. However, because most education is publicly provided in less developed countries, the determinants of the amount demanded turn out to be much more important than the determinants of supply. On the demand side, the two principal influences on the amount of schooling desired are (1) a more educated student's prospects of earning considerably more income through future modern-sector employment (*the family's private benefits of education*) and (2) the educational costs, both direct and indirect, that a student or family must bear. The amount of education demanded is thus in reality a derived demand for high-wage employment opportunities in the modern sector.

On the supply side, the quantity of school places at the primary, secondary, and university levels is determined largely by political processes, often unrelated to economic criteria. Given mounting political pressure throughout the Third World for greater numbers of school places, public supply of these places is fixed by the level of government educational expenditures. These are in turn influenced by the level of aggregate private demand for education.

Because it is the amount of education that is demanded that largely determines the supply (within the limits of government financial feasibility), let us look more closely at the economic (employment-oriented) determinants of this derived demand.

The amount of schooling demanded sufficient to qualify an individual for modern-sector jobs appears to be determined by the combined influence of the following four variables:

1. ***The wage or income differential.*** This is the wage differential between jobs in the modern sector and those outside it (family farming, rural and urban self employment, etc.), which for simplicity we can call the traditional sector. The greater the income differential between the modern and traditional sectors, the greater the quantity of education demanded.
2. ***The probability of success in finding modern-sector employment.*** An individual who successfully completes the necessary schooling for entry into the modern-sector labor market has a higher probability of getting that well-paid urban job than someone who does not.
3. ***The direct private costs of education.*** We refer here to the current out-of-pocket expenses of financing a child's education. These expenses include school fees, books, clothing, and related costs.
4. ***The indirect or opportunity costs of education.*** An investment in a child's education involves more than just the direct out-of-pocket costs of that education, especially when the child reaches the age at which he can make a productive contribution to family income. At this point, for each year the child continues his education, he in effect foregoes the money income he could expect to earn or the output he could produce for the family farm. This oppor-

tunity cost of education must also be included as a variable affecting its demand.

***Dear distance learners, please discuss whether an increase or a decrease in the above factors is directly or inversely related to the demand for education.***

Although several other important variables, many of them non economic (e.g., cultural traditions, gender, social status, education of parents, and size of family), certainly influence the amount of education demanded, concentrating on the four variables just described can give important insights into the relationship between the quantity of education demanded and the supply of employment opportunities.

Under the conditions where the modern-traditional or urban-rural wage gap is high, employers choose candidates with high educational level even though satisfactory job performance may require no more than a primary education. Governments supported by the political pressure of the educated, tend to bind the going wage to the level of educational attainment of jobholders, and school fees at the early and education level are often nominal or even nonexistent which conform closely to the realities of in many developing nations, we would expect the quantity of education demanded to be substantial. This is because the anticipated private benefits of more schooling would be large compared to the alternative of little or no schooling, while the direct and indirect private educational costs are relatively low. And the demand spirals upward over time. As job opportunities for the uneducated diminish, individuals must safeguard their position by acquiring a complete primary education. This may suffice for a while, but the internal dynamics of the employment demand-supply process eventually lead to a situation in which job prospects for those with only primary education begin to decline. This in turn increases the demand for secondary education. But the amount of primary education must increase concurrently, as some people who were previously content with no education are now being squeezed out of the labor market.

The upshot of all this is the chronic tendency for developing nations to expand their educational facilities at a rate that is extremely difficult to justify either socially or financially in terms of optimal resource allocations. Supply and amount demanded are equated not by a price-adjusting market mechanism but rather institutionally,

largely by the state. The social benefits of education (the payoff to society as a whole) for all levels of schooling fall far short of the private benefits. At first, it is primarily the uneducated who are found among the ranks of the unemployed. However, over time, there is an inexorable tendency for the average educational level of the unemployed to rise as the supply of school graduates continues to exceed the demand for middle – and high – level workers. The diploma and degree thus become basic requirements for employment; they no longer provide entree into a high-paid job, nor do they provide the education they were intended to signify.

Governments and private employers in many LDCs tend to reinforce this trend by continuously upgrading formal educational entry requirements for jobs previously filled by less educated workers. Excess educational qualification becomes formalized and may resist downward adjustment. Moreover, to the extent that trade unions succeed in binding going wages to the educational attainments of jobholders, the going wage for each job will tend to rise (even though worker productivity in that job does not significantly increase). Existing distortions in wage differentials will be magnified, thus stimulating the amount of education demanded even further.

### **3.4 Social versus Private Benefits and Costs**

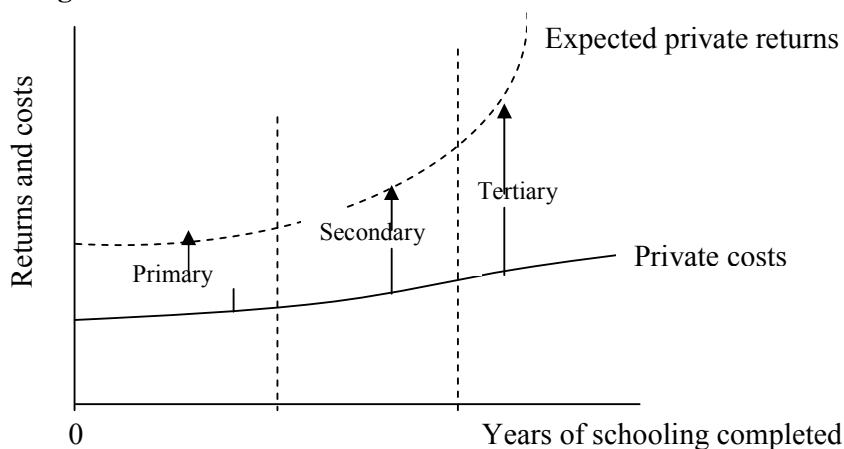
The inexorable attraction of ever-higher levels of education is even more costly than this simple picture suggests. Typically in developing countries, the social costs of education (costs borne by the public) increase rapidly as students climb the educational ladder. The private costs of education (those borne by students themselves) increase more slowly or may even decline.

This widening gap between social and private costs provides an even greater stimulus to the demand for higher education than it does for education at lower levels. Educational demand therefore becomes increasingly exaggerated at the postsecondary levels. But educational opportunities can be accommodated to these distorted demands only at full social cost. As demands are generated progressively through the system, the social cost of accommodation grows much more rapidly than the places provided. More and more resources may be misallocated to educational expansion in terms of social costs, and the potential for creating new jobs will consequently diminish for lack of public financial resources.

Figure 3.1 provides an illustration of this divergence between private and social benefits and costs. It also demonstrates how this divergence can lead to a misallocation of resources when private interests supersede social investment criteria. In Figure 3.1a expected private returns and actual private costs are plotted against years of completed schooling. As a student completes more and more years of schooling, her expected private returns grow at a much faster rate than her private costs, for reasons explained earlier. To maximize the difference between expected benefits and costs, the optimal strategy for a student would be to secure as much schooling as possible.

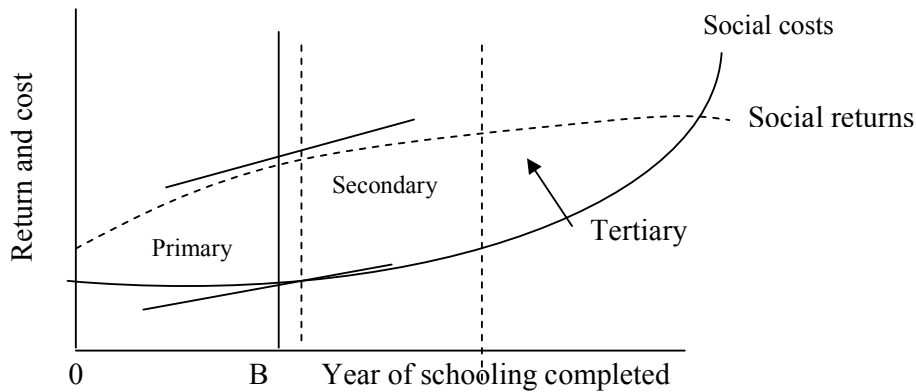
Now consider Figure 3.1b, where social returns and social costs are plotted against years of schooling. The social benefits curve rises sharply at first, reflecting the improved levels of productivity of, say, small farmers and the self-employed that result from receipt of a basic education and the attainment of literacy, arithmetic skills, and elementary vocational skills. Thereafter, the marginal social benefit of additional years of schooling rises more slowly, and the social returns curve begins to level off. By contrast, the social cost curve shows a slow rate of growth for early years of schooling and then a much more rapid growth for higher levels of education. This rapid increase in the marginal social costs of post primary education is the result both of the much more expensive capital and recurrent costs of higher education and, more important, of the fact that much post primary education in developing countries is heavily subsidized.

**Figure 3.1 Private versus Social Benefits and Costs of Education: An illustration**



**(a) Private returns and costs**





**(b) Social returns and costs**

It follows from Figure 3.1b that the optimal strategy from a social viewpoint, the one that maximizes the net social rate of return to educational investment, would be one that focuses on providing all students with at least B years of schooling. Beyond B years, marginal social costs exceed marginal social benefits, so additional public educational investment in new, higher-level school places will yield a negative net social rate of return.

***Dear distance learners, if you are not clear about the terms private and social cost and benefit please ask your instructor for further explanation***

***Critical thinking!!! What are the causes for the divergent in private and social costs and benefits of education??***

To a large degree, the problem of divergent social versus private benefits and costs has been artificially created by inappropriate public and private policies with regard to wage differentials, educational selectivity, and the pricing of educational services. As a result, private calculations of the value of education exceed its social value, which must take account of rising unemployment. As long artificial and non market incentives in the form of disproportionate expected benefits and subsidized costs continue to exist and place a premium on the number of years one spends getting an education, the individual will decide that it is in his or her best private interests to pursue a lengthy formal education process even though he or she may be aware that modern-sector jobs are becoming more scarce and unemployment rates are rising.

### **3.5 Education, Society, and Development: Some Issues**

We cannot discuss the relationship between education and development without explicitly linking the structure of the educational system to the economic and social character of the Third World society in which it is contained. Educational systems more often than not reflect the essential nature of that society. For example, if the society is egalitarian in economic and social structure, the educational system will probably reflect that bias in terms of who is able to proceed through the system. At the same time, education can influence the future shape and direction of society in a number of ways. Thus the link between education and development goes both ways. By reflecting the socioeconomic structures of the societies in which they function (whether egalitarian or not), educational systems tend to perpetuate, reinforce, and reproduce those economic and social structures.

With these general observations in mind, let us look at five specific economic components of the development question—growth, inequality and poverty, population and fertility, migration, and rural development—to see in what way they influence or are influenced by most LDC educational systems. Such an examination will demonstrate the important two-way relationship that exists between education and development. It should also provide us with an even broader understanding of the development problems and issues that have been discussed in previous chapters.

#### **3.5.1 Education and Economic Growth**

For many years, the proposition that educational expansion promoted and in some cases even determined the rate of overall GNP growth remained unquestioned. The logic seemed fairly straightforward. Developing nations were deficient in their supply of semiskilled and skilled manpower. Without such manpower, which, it was assumed, could be created only through the formal educational system, development leadership in both the public and private sectors would be woefully lacking.

Clearly, in the newly independent nations of Africa and Asia, there was an immediate need to build up the human as well as physical capital (infrastructure) in order to provide indigenous leadership for the major tasks of development. Rapid quantitative expansion of enrollments therefore appeared justified in light of the

substantial manpower scarcities of the 1950s and 1960s. And although it is often difficult to document statistically, it seems clear that the expansion of educational opportunities at all levels has contributed to aggregate economic growth by (1) creating a more productive labor force and endowing it with increased knowledge and skills; (2) providing widespread employment and income-earning opportunities (3) creating a class of educated leaders to fill vacancies left by departing expatriates or otherwise vacant positions (4) providing the kind of training and education that would promote literacy and basic skills while encouraging "modern" attitudes on the part of diverse segments of the population. Even if alternative investments in the economy could have generated greater growth, educated and skilled labor force is a necessary condition of sustained economic growth.

However, any evaluation of the role of education in the process of economic development should go beyond the analysis of the single statistic of aggregate growth. We must also consider the structure and pattern of that economic growth and its distribution implications – which benefits.

### **3.5.2 Education, Inequality, and Poverty**

Studies on the economics of education in both developed and developing nations formerly focused on the link among education, labor productivity, and output growth. As a result, the impact of education on the distribution of income and on the elimination of absolute poverty was largely neglected. Recent studies, however, have demonstrated that contrary to what might have been assumed, the educational systems of many developing nations sometimes act to increase rather than to decrease income inequalities.

The basic reason for this perverse effect of formal education on income distribution is the positive correlation between level of education and level of lifetime earnings. This correlation holds especially for workers who are able to complete secondary and university education where income differentials over workers who have completed only part or all of their primary education can be on the order of 300% to 800%. And as levels of earned income are clearly dependent on years of completed schooling, it follows that large income inequalities will be reinforced if students from the middle and upper income brackets are represented disproportionately in

secondary and university enrollments. In short, if for financial or other reasons the poor are effectively denied access to secondary and higher educational opportunities, the educational system can actually perpetuate and even increase inequality in developing countries.

### **3.5.3 Education, Internal Migration, and the Brain Drain**

*Dear distance learners, try to link this part of our discussion with the first chapter to grasp a picture on the relationship between Third World education and migration/brain drain*

Education seems to be an important factor influencing rural-urban migration. Numerous studies of migration in diverse countries have documented the positive relationship between the educational attainment of an individual and his or her propensity to migrate from rural to urban areas. Basically, individuals with higher levels of education face wider urban-rural real-income differentials and higher probabilities of obtaining modern-sector jobs than those with lower levels of education (recall from the previous chapter how income differentials and job probabilities interact to determine migration patterns). The probability variable in particular accounts for the growing proportion of the more educated rural migrants in the face of rising levels of urban unemployment among the less educated.

Education also plays a powerful role in the growing problem of the international migration of high-level educated workers-the so-called brain drain from poor to rich countries. This is particularly true in the case of scientists, engineers, academics, and physicians, many thousands of whom have been trained in home country institutions at considerable social cost only to reap the benefits from and contribute to the further economic growth of the already affluent nations.

The international brain drain deserves mention not only because of its effects on the rate and structure of LDC economic growth but also because of its impact on the style and approach of Third World educational systems. The brain drain, broadly construed, has not merely reduced the supply of vital professional people available within developing countries; perhaps even more serious, it has diverted the attention of the scientists, physicians, architects, engineers, and academics who remain from important local problems and goals. These include the development of appropriate

technology; the promotion of low-cost preventive health care; the construction of low-cost housing, hospitals, schools, other service facilities; the design and building of functional yet inexpensive labor intensive roads, bridges, and machinery; the development of relevant university teaching materials; and the promotion of problem-oriented research on vital domestic development issues. Such needs are often neglected as, dominated by rich-country ideas as to what represents true professional excellence, those highly educated and highly skilled LDC professionals who do not physically migrate to the developed nations nevertheless migrate intellectually in terms of the orientation of their activities. This "internal" brain drain is much more serious than the external one.

### **3.5.4 Education of Women, Fertility, and Child Health**

***Critical thinking!!! Dear distance learners please try to relate education for women and household poverty***

With regard to the education and fertility relationship, the evidence is also clear. Most studies reveal an inverse relationship between the education of women and their size of family, particularly at the lower levels of education. Assuming that lower levels of urban unemployment (especially among the educated) and lower levels of fertility are important policy objectives for LDC governments, the basic issue is whether the continued rapid quantitative expansion of the formal educational system (and the resource allocation decisions implicit therein) will ameliorate or exacerbate the twin problems of accelerating internal migration and rapid population growth. With respect to this issue, both theory and evidence seem once again to indicate that given limited government resources, the further excessive quantitative expansion of school places beyond perhaps basic education is both undesirable and unwise. There are two main reasons for this conclusion.

First, as we discovered earlier in the chapter, any rapid expansion of the formal primary system creates inexorable pressures on the demand side for the expansion of secondary and tertiary school places. The net result is the widespread phenomenon of excessive expansion of school places from the standpoint of real resource needs and the associated dilemma of rising levels of rural-urban migration and urban unemployment among a cadre of increasingly more educated and more politically

vocal migrants.

Second, if, as many observers have argued, the education of women does affect their fertility behavior, primarily through the mechanism of raising the opportunity cost of their time in child-rearing activities, then it follows that unless sufficient employment opportunities for women (as well as for men) can be created, the reliance on educational expansion as a policy instrument for lowering fertility will be much less effective. However, reallocating existing educational resources to women's education, in combination with an aggressive program of rural and urban female employment creation could go a long way toward achieving the twin goals of fertility reduction and poverty alleviation.

Finally, as mentioned earlier in the chapter, educating women has been shown to be a critical ingredient in breaking the vicious cycle of poor child health, low educational performance, low income, high fertility, and poor child health.

### **3.5.5 Education and Rural Development**

If national development is to become a reality in Third World nations, there must be a better balance between rural and urban development. Because most of the priority projects of the past few decades focused on the modernization and development of the urban sector, much more emphasis must be placed in future years on expanding economic and social opportunities in rural areas. Although agricultural development represents the main component of any successful rural development program simply because 60% of LDC rural populations are engaged directly or indirectly in agricultural activities, rural development must nevertheless be viewed in a broader perspective.

First and foremost, it should be viewed in the context of far-reaching transformations of economic and social structures, institutions, relationships, and processes in rural areas. The goals of rural development cannot simply be restricted to agricultural and economic growth. Rather, they must be viewed in terms of a balanced economic and social development with emphasis on the equitable distribution, as well as the rapid generation, of the benefits of higher levels of living. Therefore, are the creation of more productive employment opportunities both on and off the farm; more equitable access to arable land; more equitable distribution of rural income; more widely

distributed improvements in health and nutrition; and broadened access to both formal (in-school) and non formal (out-of-school) education, for adults as well as children, of a sort that will have direct relevance to the needs and aspirations of rural dwellers.

What, then, might be the real and lasting educational needs for rural development? Philip H. Coombs and Manzoor Ahmed have grouped these educational needs for young people and adults, males and females, into four main categories:

1. General or basic education (literacy, arithmetic, an elementary understanding of science and the immediate environment, etc.) – what most primary and secondary schools now seek to achieve.
2. Family improvement education – designed primarily to impart knowledge, skills, and attitudes useful for improving the quality of family life and including such subjects as health and nutrition, homemaking and child care, home repairs and improvements, and family planning.
3. Community improvement education – designed to strengthen local and national institutions and processes through instruction in such matters as local and national government, cooperatives, and community projects.
4. Occupational education – designed to develop particular knowledge and skills associated with various economic activities that are useful in making a living.

**TABLE 3.2 Illustrative Rural Occupational Groups and Their Learning Needs**

<b>Group</b>	<b>Types of Learning Needs at Varying Levels of Sophistication and Specialization</b>
<p><b>A. Persons directly engaged in agriculture</b></p> <ol style="list-style-type: none"> <li>1. Commercial farmers</li> <li>2. Small subsistence and semi subsistence farm families</li> <li>3. Landless farm workers</li> </ol>	<ul style="list-style-type: none"> <li>★ Farm planning and management, rational decision making, recordkeeping, cost and revenue computations, use of credit</li> <li>★ Application of new inputs, varieties, improved farm practices</li> <li>★ Storage, processing, food preservation</li> <li>★ Supplementary skills for farm maintenance and improvement, and sideline jobs for</li> </ul>

	<p>extra income</p> <ul style="list-style-type: none"> <li>★ Knowledge of government services, policies, programs, targets</li> <li>★ Knowledge and skills for family improvement (e.g., health, nutrition, home economics, child care, family planning)</li> <li>★ Civic skills (e.g., knowledge of how cooperatives, local government, national government function)</li> </ul>
<p><b>B. Persons engaged in off-farm commercial activities</b></p> <ol style="list-style-type: none"> <li>1. Retailers and wholesalers of farm supplies and equipment, goods and other items</li> <li>2. Suppliers of repair and maintenance services</li> <li>3. Processors, stores, and shippers of agricultural commodities</li> <li>4. Suppliers of banking and credit services</li> <li>5. Construction and other artisans</li> <li>6. Suppliers of general transport services</li> <li>7. Small manufacturers</li> </ol>	<ul style="list-style-type: none"> <li>★ New and improved technical skills applicable to particular goods and services</li> <li>★ Quality control</li> <li>★ Technical knowledge of goods handled sufficient to advise customers on their use, maintenance, etc.</li> <li>★ Management skills (business planning; recordkeeping and cost accounting;</li> <li>★ procurement and inventory control; market analysis and sales methods; customer and employee relations; knowledge of government services, regulations, taxes; use of credit)</li> </ul>
<p><b>C. General services personnel: rural administrators, planners, technical experts</b></p> <ol style="list-style-type: none"> <li>1. General public administrators, broad-gauged analysts, and planners at subnational levels</li> <li>2. Managers, planners, technicians, and trainers for</li> </ol>	<ul style="list-style-type: none"> <li>★ General skills for administration, planning, implementation, information flows promotional activities</li> <li>★ Technical and management skills applying to particular specialties</li> <li>★ Leadership skills for generating community enthusiasm and collective action, staff team work, and support from</li> </ul>



specific public services (e.g., agriculture, transport, irrigation, health, small industry, education, family services, local government) 3. Managers of cooperatives and other farmer associations 4. Managers and other personnel of credit service's	higher echelons
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### 3.6 Summary and Conclusions: Major Educational Policy Options

*Dear distance learners, we have discussed a wide array of issues concerning education and socio-economic progress in developing countries and tried to look into the realities from wider perspective. Now let us conclude our discussion with important policy implications*

Developing nations are confronted with two basic alternatives in their policy approaches to problems of education. They can continue automatically to expand formal systems at the fastest possible pace with perhaps some minor modifications in curricula, teaching methods, and examinations, while retaining the same institutional labor market structures and educational costing policies. Or they can attempt to reform the overall educational system by modifying the conditions of demand for and the supply of educational opportunities and by reorienting curricula in accordance with the real resource needs of the nation. Evidences leads to the conclusion that the first alternative is likely to exacerbate the problems of unemployment, poverty, inequality, rural stagnation, and international intellectual dominance that now define the conditions of underdevelopment in much of Africa, Asia, and Latin America and that the second alternative should therefore be pursued.

Because educational systems largely reflect and reproduce rather than alter the economic and social structures of the societies in which they exist, any program or set of policies designed to make education more relevant for development needs

must operate simultaneously on two levels:

1. Modifying the economic and social signals and incentives outside the educational system that largely determine the magnitude, structure, and orientation of the aggregate private demand for education and consequently the political response in the form of the public supply of school places.
2. Modifying the internal effectiveness and equity of educational systems through appropriate changes in course content (especially for rural areas), structures of public versus private financing, methods of selection and promotion, and procedures for occupational certification by educational level.

Only by policies designed simultaneously to achieve these two objectives can the real positive links between education and development be successfully forged.

**Let us conclude, therefore, with a brief review of what these external and internal policies might specifically encompass.**

### **3.6.1 Policies Largely External to Educational Systems**

#### ***A. Adjusting Imbalances, Signals, and Incentives***

Policies that tend to remedy major economic imbalances and incentive distortions (e.g., in income and wage differentials) and alleviate social and political constraints on upward mobility can have the multiple beneficial effects of increasing job opportunities, slowing the rate of rural-urban migration, and facilitating development-related modifications of educational systems.

#### ***B. Modifying Job Rationing by Educational Certification***

To break the vicious cycle in which overstated job specifications make over-education necessary for employment, policies are needed that will induce or require public and private employers to seek realistic qualifications. Basic to this procedure would be the elimination of school certificates for many jobs, especially in the public sector (janitors, messengers, file clerks, etc.), which tends to set the pattern for the private sector.

### ***C. Curbing the Brain Drain***

Controlling or taxing the international migration of indigenously trained high-level professional is a very sensitive area. When a nation invests scarce public financial resources in the education and training of its people only then to forgo the social returns on that investment as a result of international migration, it seems both economically and morally justifiable to seek either temporarily to restrict that movement in the national interest or, better, to tax the overseas earnings of professional migrants and reinvest those revenues in programs of national development. Such a tax on overseas earnings would act as a financial disincentive to migrate.

### **3.6.2 Policies Internal to Educational Systems**

#### ***A. Educational Budgets***

Where politically feasible public educational budgets should grow more slowly than in the past to permit more revenue to be used for the creation of rural and urban employment opportunities. Moreover, a larger share of educational budgets should be allocated to the development of primary as opposed to secondary and higher education in order to promote self-education and rural work-related learning experiences in later life.

#### ***B. Subsidies***

Subsidies for the higher levels of education should be reduced as a means of overcoming distortions in the aggregate private demand for education. Policies should be promoted by which the beneficiary of education would bear a larger proportion of educational costs as the student proceeds through the system. This should be done either directly, through loan repayments, or by service in rural areas. At the same time, low income groups should be provided with sufficient subsidies to permit them to overcome the sizable private costs (including opportunity costs) of schooling.

#### ***C. Primary School Curricula in Relation to Rural Needs***

To maximize the productivity of rural human resources, primary school curricula and non-formal educational opportunities for school dropouts and adults should be

directed more toward the occupational requirements of rural inhabitants, whether in small-farm agriculture, non-farm artisan and entrepreneurial activities, or public and commercial services. Such curricula and task-related reorientations of rural learning systems, however, will not be effective in eliciting popular support unless rural economic opportunities are created so that small farmers, artisans, and entrepreneurs can make use of their vocational knowledge and training. Without these incentives, people will justifiably view such formal and non-formal occupational training programs with considerable skepticism. They would probably rather pursue the formal school certificate and take their chances in the urban job lottery.

#### ***D. Quotas***

To compensate for the inequality effects of most existing formal school systems, some form of quotas may be required to ensure that the proportion of low – income students at secondary and higher educational levels at least bears some relationship to their proportion in the overall population. Under present systems, implicit quotas by income status often determine which students precede through the educational system. Replacing this de facto quota system with an alternative that ensures that capable low-income students will be able to improve their own and their family's well-being by overcoming the financial barriers to educational advancement through loans and subsidies would go a long way toward making educational systems true vehicles of economic and social equality.

## Questions for Discussion

1. What reasons would you give for the rather sizable school dropout rates in developing countries? What might be done to lower these rates?
2. What are the differences between formal and non formal education? Give some examples of each.
3. It is often asserted that LDC educational systems, especially in rural areas, are unsuited to the real social and economic needs of development. Do you agree or disagree with this statement? Explain your reasoning.
4. How would you explain the fact that relative costs of and returns to higher education are so much higher in LDCs than in developed countries?
5. What is the supposed rationale for subsidizing higher education in many Third World countries? Do you think that it is a legitimate rationale from an economic viewpoint? Explain your answer.
6. Early childhood environmental factors are said to be important determinants of school performance. What are some of these factors, how important do you think they are, and what might be done to ensure that these factors are not negative?
7. What do we mean by the economics of education? To what extent do you think educational planning and policy decisions ought to be guided by economic considerations? Explain, giving hypothetical or actual examples.
8. What is meant by the statement "The demand for education is a 'derived demand' for high-paying modern-sector job opportunities"? Many educational specialists claim that families and children in LDCs demand education not so much as an investment good but as consumption good. What do you think this statement means and what do you think is the relative importance of the consumption demand for education among your student friends?
9. What are the links among educational systems, labor markets, and employment determination in many developing countries? Describe the process of educational job displacement.
10. Distinguish carefully between private and social benefits and costs of education. What economic factors give rise to the wide divergence between private and social benefit-to-cost valuations in most developing countries? Should

governments attempt through their educational and economic policies to narrow the gap between private and social valuations? Explain.

11. Describe and comment on each of the following education -development relationships:
  - a. Education and economic growth: Does education promote growth? How?
  - b. Education, inequality, and poverty: Do educational systems typical of most LDCs tend to reduce, exacerbate, or have no effect on inequality and poverty? Explain with specific reference to a country with which you are familiar.
  - c. Education and migration: Does education stimulate rural-urban migration? Why?
  - d. Education and fertility: Does the education of women tend to reduce their fertility? Why?
  - e. Education and rural development: Do most LDC formal educational systems contribute substantially to the promotion of rural development? Explain.
  - f. Education and the brain drain: What factors cause the international migration of high-level educated workers from LDCs to developed countries? What do we mean by the internal brain drain? Explain, giving examples.
12. Governments can influence the character, quality, and content of their educational systems by manipulating important economic and noneconomic factors or variables both outside of and within educational systems. What are some of these external and internal factors, and how can government policies make education more relevant to the real meaning of development?