Population Growth and Economic Development: Causes, Consequences, and Controversies

❑The Basic Issue: Population Growth and the Quality of Life

- In 2009, the world's population was estimated to be 6.8 billion people. Projections by the United Nations placed the figure at more than 9.2 billion by the year 2050 (another widely cited projection is higher, at 9.5 billion).
- The overwhelming majority of that population will inhibit growth in the developing world.

- What will be the economic and social implications for development if such projections are realized?
- Is this scenario inevitable, or will it depend on the success or failure of development efforts?
- Finally, even more significant, is rapid population growth per se as serious a problem as many people believe, or is it a manifestation of more fundamental problems of underdevelopment and the *unequal* utilization of global resources between rich and poor nations, as others argue?

- Every year, more than 75 million people are being added to the world's population. Almost all of this net population increase—97%—is in developing countries.
- But the problem of population growth is ***not*** simply a problem of numbers. It is a problem of human welfare and of development.

- Rapid population growth can have ***serious consequences*** for the well-being of all of humanity.
- If **development** entails the improvement in people's levels of living—their incomes, health, education, and general well-being—and if it also encompasses their capabilities, self-esteem, respect, dignity, and freedom to choose, then the *important question* about population growth is this:

- How does the *contemporary population situation* in many developing countries **contribute to** realizing the goals of development, not only for the current generation but also for future generations?
- Conversely, how does development affect population growth?

- Among the major issues relating to this basic question are the following:

1. Will developing countries be capable of improving the levels of living for their people with the current and anticipated levels of population growth? To what extent does rapid population increase make it more difficult to provide essential social services, including housing, transport, sanitation, and security?

2. How will the developing countries be able to cope with the vast increases in their labor forces over the coming decades? Will employment opportunities grow, or will unemployment levels soar?

3. What are the implications of higher population growth rates among the world's poor for their chances of overcoming absolute poverty? Will world food supply and its distribution be sufficient not only to meet the anticipated population increase in the coming decades but also to improve nutritional levels to the point where all humans can have an adequate diet?

4. Will developing countries be able to extend the coverage and improve the quality of their health and educational systems so that everyone can have access to adequate health care and a basic education?

5. Is there a relationship between poverty and family size?

6. Is the inexorable pursuit of increasing affluence among the rich more detrimental to the global environment and to rising living standards among the poor than the absolute increase in their numbers?

❑Population Growth: Past, Present, and Future

➢World Population Growth throughout History

- Turning from absolute numbers to percentage growth rates, for almost the whole of human existence on earth until approximately 300 years ago, population grew at an annual rate not much greater than zero (0.002%)

- Naturally, this overall rate was not steady; there were many ups and downs as a result of natural catastrophes and variations in growth rates among regions.
- By 1750, the population growth rate had accelerated to 0.3% per year. By the 1950s, the rate had again accelerated, tripling to about 1.0% per year. It continued to accelerate until around 1970, when it peaked at 2.35%.
- Today the world's population growth rate remains at a historically high rate of about 1.1% per year, but the rate of increase is slowing.

- However, the population growth rate in Africa is still an extremely high 2.3% per year.(*Note that estimates of population numbers and growth rates differ according to research methods, but the broad trends are similar across major studies*.)

TABLE 6.1 Estimated World Population Growth

Year	Estimated Population (millions)	Estimated Annual Increase in the Intervening Period (%)	Doubling time (years)
10,000 B.C.E.	5		
1 C.E.	250	0.04	1,733
1650	545	0.04	1,733
1750	728	0.29	239
1800	906	0.45	154
1850	1,171	0.53	130
1900	1,608	0.65	106
1950	2,576	0.91	76
1970	3,698	2.09	33
1980	4,448	1.76	39
1990	5,292	1.73	40
2000	6,090	1.48	47
2010	6,892	1.22	57
2050 (projected)	9,200	0.675	103

Sources: Population Reference Bureau, *World Population Data Sheet* (Washington, D.C.: Population Reference Bureau, 2010 and previous annuals). Warren S. Thompson and David T. Lewis, *Population Problems*, 5th ed. (New York: McGraw-Hill, 1965), p. 384: United Nations, *Demographic Yearbook for 1971* (New York: United Nations, 1971); United Nations, *Report on the World Social Situation, 1997* (New York: United Nations, 1997), p. 14, and authors' calculations. An alternate system of broadly comparable and earlier estimates is found in Michael Kremer, "Population Growth and Technological Change: One Million B.C. to 1990," *Quarterly Journal of Economics* 108 (1993): 681-716.

- The reason for the sudden change in overall population trends is that for almost all of recorded history, the rate of population change, whether up or down, had been strongly influenced by the combined effects of ***famine, disease, malnutrition, plague, and war***—conditions that resulted in high and fluctuating death rates.
- In the twentieth century, such conditions came increasingly under technological and economic control. As a result, human mortality (the death rate) is now lower than at any other point in human existence

- It is this decline in mortality resulting from ***rapid technological advances in modern medicine*** and the ***spread of modern sanitation measures*** throughout the world, particularly within the past half century, that has resulted in the unprecedented increases in world population growth, especially in developing countries.

- In short, population growth today is primarily the result of a rapid transition from a long historical era characterized by
  - high birth and death rates
  - to one in which death rates have fallen sharply but
  - birth rates, especially in developing countries, have fallen more slowly from their historically high levels.

Structure of the World's Population

- The world's population is very unevenly distributed by *geographic region*, by *fertility* and *mortality levels*, and by *age structures*.

1. **Geographic Region:**

- More than three-quarters of the world's people live in developing countries; fewer than one person in four lives in an economically developed nation.

2. Fertility and Mortality Trends:

- The **rate of population increase is quantitatively** measured as the *percentage yearly* ***net*** *relative increase* (or *decrease*, in which case it is negative) *in population size* due to **natural increase and net international migration.**

- **Natural increase** simply measures the excess of births over deaths or, in more technical terms, the difference between fertility and mortality.
- **Net international migration** is of very limited, though growing, importance today (although in the nineteenth and early twentieth centuries it was an extremely important source of population increase in North America, Australia, and New Zealand and corresponding relative decrease in western Europe).

- Population increases in developing countries therefore depend almost entirely on the difference between their **crude birth rates (**or simply **birth rates) and death rates.**
- Moreover, developing country birth rates today are still often **higher** than they were in preindustrial western Europe. But there has been a ***substantial decline in fertility*** over the past three decades,

- Nevertheless, the **total fertility rate (TFR)—[(the average number of children a woman would have** assuming that current age-specific birth rates remain constant throughout her childbearing years (15 to 49 years of age)]—remains very high in sub-Saharan Africa (5.3) and western Asia (3.1)

- ***Modern vaccination campaigns*** against malaria, smallpox, yellow fever, and cholera as well as the *proliferation of public health facilities*, *clean water supplies*, *improved nutrition*, and *public education* have all worked together over the past three decades to **lower death rates** by as much as **50%** in parts of Asia and Latin America and by over **30%** in much of Africa and the Middle east.
- Death rates have fallen for all age groups.

- Nevertheless, the *average life span* remains about 12 years greater in the developed countries. This gap has been *sharply reduced* in recent decades.
- For example, in 1950, **life expectancy at birth** for people in developing countries averaged 35 to 40 years, compared with 62 to 65 years in the developed world.
- Considerable progress has been made on reducing the **under-5 mortality rate.**

- In 2009, because of still relatively high under-5 mortality rates and the AIDS epidemic, sub-Saharan Africa had the lowest life expectancy, **51** years, while in the high-income countries, life expectancy at birth averaged nearly **78** years.
- In East Asia and Latin America, life expectancies have now an impressively high, 74 and 73 years, respectively.

3. Age Structure and Dependency Burdens:

- Population is relatively youthful in the developing world. Children under the age of 15 constitute more than 30% of the total population of developing countries but just 17% of developed nations.
- In fact, at least 10 developing nations have over 44% of their population under the age of 15; as of 2009, 43% of Ethiopia’s population, 45% of Nigeria’s, and 38% of Pakistan’s was under 15; for both India and Mexico, the comparable figure is 32%.

- In countries with such an age structure, the **youth dependency ratio—**the proportion of youths (under age 15) to economically active adults (ages 15 to 64)—*is very high*.
- Thus the workforce in developing countries must support almost twice as many children as it does in the wealthier countries.

- In sub-Saharan Africa, the economically active workforce makes up about 54% of the total population (just 3% of the population is over age 65).
- In general, the *more rapid the population growth rate*, the *greater the proportion of dependent children* in the total population and the *more difficult* it is for people who are working to support those who are not.
- This phenomenon of youth dependency also leads to an important concept, the **hidden momentum of population growth.**

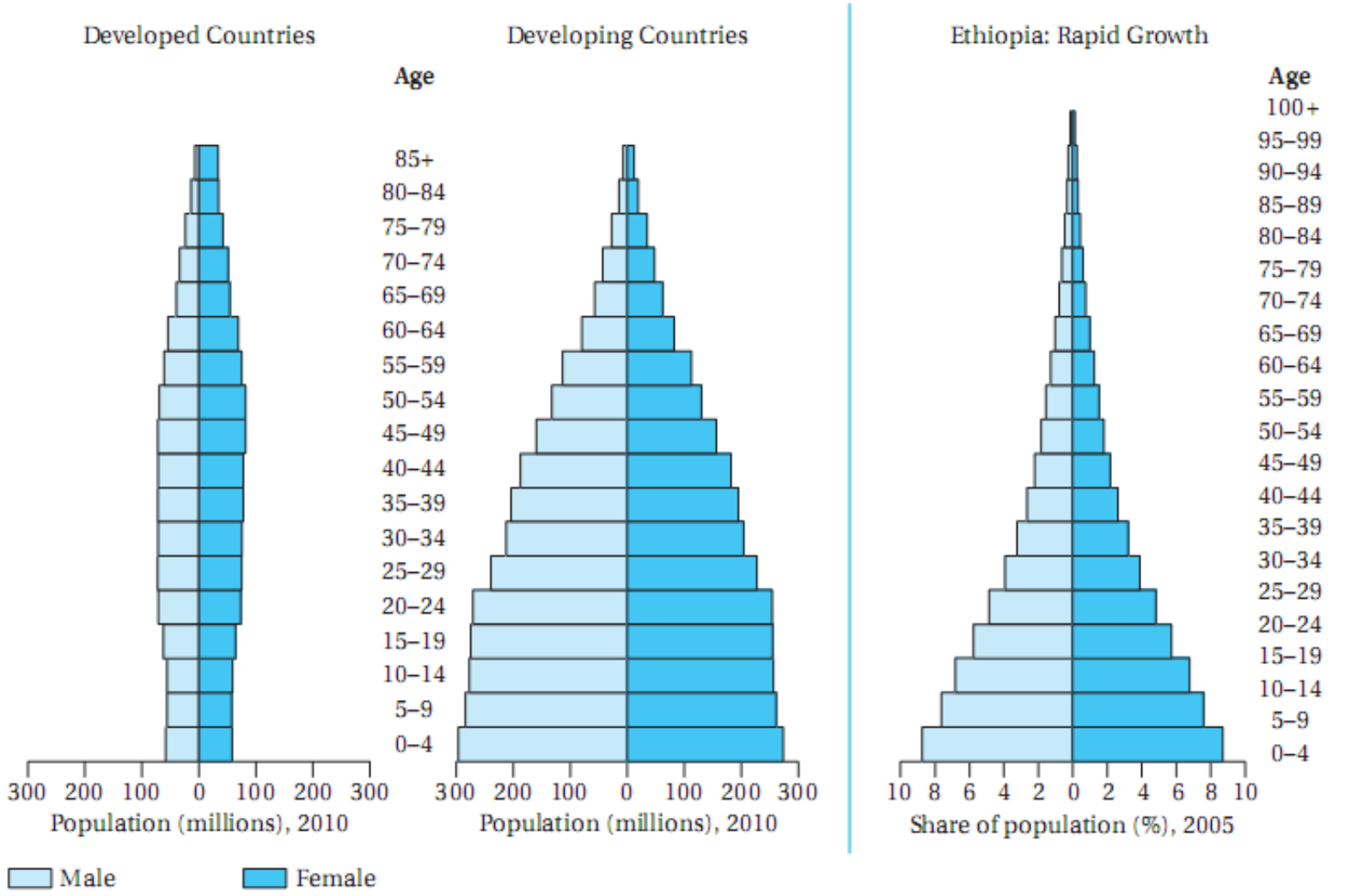
The Hidden Momentum of Population Growth

- Perhaps the least understood aspect of population growth is its tendency to continue even after birth rates have declined substantially.
- There are two basic reasons for this:

- **First**, high *birth rates cannot be altered substantially overnight*. The social, economic, and institutional forces that have influenced fertility rates over the course of centuries do not simply evaporate at the urging of national leaders.
- We know from the experience of European nations that such reductions in birth rates can take many decades. Consequently, even if developing countries assign top priority to the limitation of population growth, it will still take many years to lower national fertility to desired levels.

- The **second** and less obvious reason for the hidden momentum of population growth *relates to the age structure of many developing countries' populations*.
- For *developed* countries, in the contemporary period the *population in middle cohorts is typically greater than that of young cohorts*; this is partly but certainly not exclusively viewed as a transitional feature of a period in which women have been delaying births until later in life.

FIGURE 6.4 Population Pyramids: All Developed and Developing Countries and Case of Ethiopia



▪The Demographic Transition

- The process by which fertility rates eventually decline to replacement levels has been portrayed by a famous concept in economic demography called the **demographic transition.**

- **Demographic transition**: The phasing-out process of population growth rates from a virtually *stagnant growth stage* characterized by high birth rates and death rates through a *rapid-growth stage* with high birth rates and low death rates to a *stable, low- growth stage* in which both birth and death rates are low.

- The demographic transition attempts to explain why all contemporary developed nations have more or less passed through the same **three** stages of modern population history.

Stage 1:

- Before their economic modernization, these countries for centuries had *stable* or *very slow*-growing populations as a result of a combination of high birth rates and almost equally high death rates.

Stage 2:

- Stage 2 began when modernization, associated with better public health methods, healthier diets, higher incomes, and other improvements, led to a marked reduction in mortality that gradually raised life expectancy from under 40 years to over 60 years.
- However, the decline in death rates was not immediately accompanied by a decline in fertility. As a result, the growing divergence between high birth rates and falling death rates led to sharp increases in population growth compared to past centuries.

- Stage 2 thus *marks the beginning of the demographic transition* (the transition from stable or slow-growing populations first to rapidly increasing numbers and then to declining rates).

Stage 3:

- Finally, stage 3 was entered when the forces and influences of modernization and development caused the beginning of a decline in fertility; eventually, falling birth rates converged with lower death rates, leaving little or no population growth.

- **The Causes of High Fertility in Developing Countries: The Malthusian and Household Models**

- When and under what conditions are developing nations likely to experience falling birth rates and a slower expansion of population?
- To answer this question, we need to ask a prior one. *What are the principal determinants or causes of high fertility rates in developing countries, and can these determinants of the "demand" for children be influenced by government policy?*

- To try to answer this critical question, we turn to a very old and famous classical macroeconomic and demographic model, the **Malthusian "population trap,"** and a contemporary and highly influential neoclassical microeconomic model, the **household theory of fertility.**

▪The Malthusian Population Trap

- More than two centuries ago, the Reverend Thomas Malthus put forward *a theory of the relationship between population growth and economic development* that is influential today. Writing in his 1798 *Essay on the Principle of Population* and drawing on the concept of diminishing returns, Malthus postulated a universal tendency for the population of a country, unless checked by dwindling food supplies, to grow at a *geometric rate*, doubling every 30 to 40 years.

- At the same time, because of diminishing returns to the fixed factor, land, food supplies could expand only at a roughly *arithmetic rate*.
- In fact, as each member of the population would have less land to work, his or her marginal contribution to food production would actually start to decline.
- Because the growth in food supplies could not keep pace with the burgeoning population, per capita incomes would have a tendency to fall so low as to lead to a stable population existing barely at or slightly above the subsistence level.

- Malthus therefore contended that the only way to avoid this condition of *chronic low levels of living or absolute poverty* was for people to engage in **“moral restraint”** and limit the number of their progeny.
- Hence we might regard Malthus, indirectly and inadvertently, as the **father of the modern birth control movement.**

- Modern economists have given a name to the *Malthusian idea of a population inexorably forced to live at subsistence levels of income*.
- They have called it the *low-level equilibrium population trap* ***or****, more simply, the* ***Malthusian population trap.***

- **The Malthusian population trap** refers to as The threshold population level anticipated by Thomas Malthus (1766–1834) *at which population increase was bound to stop* because life sustaining resources, which increase at an arithmetic rate, would be insufficient to support human population, which increases at a geometric rate.

▪Criticisms of the Malthusian Model

- The Malthusian population trap provides a theory of the relationship between *population growth* and *economic development*. Unfortunately, it is based on a number of simplistic assumptions and hypotheses that do not stand the test of empirical verification. We can criticize the population trap on *two* major grounds.

- **First**, the model ignores the enormous impact of technological progress in offsetting the growth-inhibiting forces of rapid population increases.

- The **second** basic criticism of the trap focuses on its assumption that national rates of population increase are directly (positively) related to the level of national per capita income.
- According to this assumption, at relatively low levels of per capita income, we should expect to find population growth rates increasing with increasing per capita income. But research indicates that there appears to be no clear correlation between population growth rates and levels of per capita income.

- As a result of modern medicine and public health programs, death rates have fallen rapidly and have become *less dependent* on the level of per capita income. Moreover, birth rates seem to show no rigid relationship with per capita income levels.
- It is not so much the aggregate level of per capita income that matters for population growth but rather *how that income is distributed*. It is the level of household income, not the level of per capita income, that seems to matter most.

- **In sum, Malthusian and neo-Malthusian theories as applied to contemporary developing nations have severely limited relevance for the following reasons:**

1. They do not take adequate account of the role and impact of technological progress.

2. They are based on a hypothesis about a macro relationship between population growth and levels of per capita income that does not stand up to empirical testing of the modern period.

3. They focus on the wrong variable, per capita income, as the principal determinant of population growth rates. A much better and more valid approach to the question of population and development centers on the microeconomics of family size decision making in which *individual*, and not aggregate, *levels of living* become the principal determinant of a family's decision to have more or fewer children.

The Microeconomic Household Theory of Fertility

- The conventional theory of consumer behavior assumes that an individual with a given set of tastes or preferences for a range of goods (a “utility function”) tries to maximize the satisfaction derived from consuming these goods subject to his or her own income constraint and the relative prices of all goods.

- In the application of this theory to fertility analysis, *children* are considered as *a special kind of consumption* (and in developing countries, particularly low income countries, *investment*) *good* so that *fertility becomes a rational economic response to the consumer's (family's) demand for children relative to other goods.*

- That is, if other factors are held constant, the *desired number of children can be expected to vary directly with household income* (this direct relationship may not hold for poor societies; it depends on the *strength of demand for children relative to other consumer goods* and *to the sources of increased income*, such as female employment), *inversely with the price (cost) of children*, and *inversely with the strength of tastes for other goods relative to children.* Mathematically, these relationships can be expressed as follows:

- $C_d = f(Y, Pc, Px, tx), \quad x = 1, \ldots, n$

  where *C_d, the demand for surviving children* is a function of the given level of household income (***Y***), *the "net" price of children (the difference* between anticipated costs, mostly the opportunity cost of a mother's time, and benefits, potential child income and old-age support, *Pc), the prices of all other* goods (*Px), and the tastes for goods relative to children (tx).*

- Under standard neoclassical conditions, we would expect the following (expressed both mathematically and in words):
- $\partial Cd / \partial Y > 0$

  The higher the household income, the greater the demand for children.
- $\partial Cd / \partial Pc < 0$

  The higher the net price of children, the lower the quantity demanded

- ∂ Cd/ ∂ Px > 0

  The higher the prices of all other goods relative to children, the greater the quantity of children demanded

- ∂ Cd/ ∂ tx < 0

  The greater the strength of tastes for goods relative to children, the fewer children demanded.

The Demand for Children in Developing Countries

- The economic theory of fertility assumes that the household demand for children is determined by family **preferences** for a certain number of surviving Children, by the **price** or “opportunity cost” of rearing these children, and by levels of family **income**.

- Children in poor societies are seen partly as ***economic investment goods*** in that there is an expected return in the form of both *child labor* and the *provision of financial support* for parents in old age.
- However, in many developing countries, there is a strong intrinsic psychological and cultural determinant of family size, so the first two or three children should be viewed as “consumer” goods for which demand may not be very responsive to relative price changes

Some Empirical Evidence

- it has been found that *high female employment opportunities* outside the home and *greater female school attendance*, especially at the primary and secondary levels , are associated with significantly *lower levels of fertility*.
- As women become better educated, they tend to earn a larger share of household income and to produce fewer children.
- Moreover, these studies have confirmed the strong association between declines in child mortality and the subsequent decline in fertility.

•Implications for Development and Fertility

- Birth rates among the very poor are likely to fall where the following socioeconomic changes come to pass:

1. An increase in the education of women and a consequent change in their role and status
2. An increase in female nonagricultural wage employment opportunities, which raises the price or cost of their traditional child-rearing activities

3. A rise in family income levels through the increased direct employment and earnings of a husband and wife or through the redistribution of income and assets from rich to poor
4. A reduction in infant mortality through expanded public health programs and better nutritional status for both mother and child and better medical care
5. The development of old-age and other social security systems outside the extended family network to lessen the economic dependence of parents, especially women, on their offspring

6. Expanded schooling opportunities so that parents can better substitute child “quality” for large numbers of children

- In short, expanded efforts to make jobs, education, and health more broadly available to poverty groups in general and women in particular will not only contribute to their economic and psychic well-being but also contribute substantially to their motivation for smaller families which is vital to reducing population growth rates. Where such motivation exists, well-executed **family-planning programs can then be an effective tool**

The Consequences of High Fertility: Some Conflicting Perspectives

- The following discussion summarizes some of the main arguments *for* and *against* the idea that the consequences of rapid population growth lead to serious development problems. It then considers whether some consensus can be reached so that specific policy goals and objectives can be postulated

❑It’s Not a Real Problem

- We can identify ***three*** general lines of argument on the part of people who assert that population growth is not a cause for concern:

- The problem is not population growth but ***other issues***.

- Population growth is a false issue deliberately created by dominant rich country agencies and institutions to keep developing countries in their dependent condition.

- For many developing countries and regions, population growth is in fact desirable

- **Other Issues:**

  Many observers from both rich and poor nations argue that the real problem is not population growth per se but one or all of the following four issues.

1. ***Underdevelopment.***

   If correct strategies are pursued and lead to higher levels of living, greater self-esteem, and expanded freedom, population will take care of itself. Eventually, it will disappear as a problem, as it has in all of the present economically advanced nations. According to this argument, *underdevelopment is the real problem, and development should be the only goal*.

2. ***World Resource Depletion and environmental Destruction.***

According to this argument, developed nations should curtail their excessively high consumption standards instead of asking less developed nations to restrict their population growth. The latter's high fertility is really due to their low levels of living, which are in turn largely the result of the overconsumption of the world's scarce resources by rich nations.

- This combination of rising affluence and extravagant consumption habits in rich countries and among rich people in poor countries, and not population growth, should be the major world concern.

3. ***Population Distribution.***

- According to this third argument, it is not the number of people per se that is causing population problems but their distribution in space.
- Governments should therefore strive not to moderate the rate of population growth but rather to bring about a more natural spatial distribution of the population in terms of available land and other productive resources.

4. ***Subordination of Women.***

- Perhaps most important, as noted previously, women often bear the disproportionate burdens of poverty, poor education, and limited social mobility. In many cases, their inferior roles, low status, and restricted access to birth control are manifested in their high fertility.

- According to this argument, population growth is a *natural outcome* of women's lack of economic opportunity. If women's health, education, and economic well-being are improved along with their role and status in both the family and the community, this empowerment of women will inevitably lead to smaller families and lower population growth.

▪It’s a Deliberately Contrived False Issue

- The second main line of argument denying the significance of population growth as a major development problem is closely allied to the neocolonial dependence theory of underdevelopment.

- Basically, it is argued that the overconcern in the rich nations with the population growth of poor nations is really an attempt by the former to hold down the development of the latter in order to maintain an international status quo that is favorable to the rich nations' self-interests.
- Rich nations are pressuring poor nations to adopt aggressive population control programs even though they themselves went through a period of sizable population increase that accelerated their own development processes.

- A radical neo-Marxist version of this argument views population control efforts by rich countries and their allied international agencies as *racist or genocidal* attempts to reduce the relative or absolute size of the poor, largely nonwhite populations of the world who may someday pose a serious threat to the welfare of the rich, predominantly white societies.

- Worldwide birth control campaigns are seen as manifestations of the fears of the developed world in the face of a possible radical challenge to the international order by the people who are its first victims.

▪It’s a Desirable Phenomenon

- A more conventional economic argument is that of population growth as an essential ingredient to stimulate economic development.
- Larger populations provide the needed consumer demand to generate favorable economies of scale in production, to lower production costs, and to provide a sufficient and low-cost labor supply to achieve higher output levels.

- At the other end of the political spectrum, it has been argued by some developing-world neo-Marxist pronatalists that many rural regions in developing countries are in reality underpopulated in the sense that much unused but arable land could yield large increases in agricultural output if only more people were available to cultivate it.

- Three other noneconomic arguments, each found to some degree in a wide range of developing countries, complete the "*population growth is desirable*" viewpoint.
- **First**, many countries claim a need for population growth to protect currently underpopulated border regions against the expansionist intentions of neighboring nations.

- **Second**, there are many ethnic, racial, and religious groups in less developed countries whose attitudes favoring large family size have to be protected for both moral and political reasons.
- **Finally**, military and political power are often seen as dependent on a large and youthful population

It *Is a Real Problem*

- Positions supporting the need to curtail population growth because of the negative economic, social, and environmental consequences are typically based on one of the following ***three*** arguments.

1. The Extremist Argument: Population and Global Crisis.

- The extreme version of the *population-as-problem* position attempts to attribute almost all of the world's economic and social evils to excessive population growth. Unrestrained population increase is seen as the major crisis facing humankind today. It is regarded as the principal **cause** *of poverty*, *low levels of living*, *malnutrition*, *ill health*, *environmental degradation*, and a wide array of *other social problems*

2. The Theoretical Argument: Population-Poverty Cycles and the Need for Family-Planning Programs.

- The **population-poverty cycle theory is the** main argument advanced by economists who hold that too rapid population growth yields *negative economic consequences* and thus should be a real concern for developing countries.

- Population growth is believed to retard the prospects for a better life for the already born *by reducing savings rates* at the household and national levels.
- It also severely *draws down limited government revenues* simply to provide the most rudimentary economic, health, and social services to the additional people.
- This in turn further reduces the prospects for any improvement in the levels of living of the existing generation and *helps transmit poverty to future generations* of low-income families.

- Because widespread absolute poverty and low levels of living are thus seen as a major cause of large family size, and large families retard economic growth, it follows that economic and social development is a necessary condition for bringing about an eventual slowing or cessation of population growth at low levels of fertility and mortality.

- But according to this argument, it is not a sufficient condition—that is, *development provides people with the incentives and motivations to limit their family size*, but **family-planning programs** are needed to provide them with the technological means to avoid unwanted pregnancies.

3. Other Empirical Arguments: Seven Negative Consequences of Population Growth.

- According to the latest empirical research, the potential negative consequences of population growth for economic development can be divided into seven categories: its impact on ***economic growth, poverty and inequality, education, health, food,*** the ***environment,*** and ***international migration***

1. ***Economic Growth.***

- Evidence shows that although it is not the culprit behind economic stagnation, rapid population growth lowers per capita income growth in most developing countries, especially those that are already poor, dependent on agriculture, and experiencing pressures on land and natural resources.

2. ***Poverty and Inequality.***

- The negative consequences of rapid population growth fall most heavily on the poor because they are the ones who are made landless, suffer first from cuts in government health and education programs, and bear the brunt of environmental damage.
- Poor women once again bear the greatest burden of government austerity programs, and another vicious circle ensues. To the extent that large families perpetuate poverty, they also exacerbate inequality.

3. ***Education.***

- Although the data are sometimes ambiguous on this point, it is generally agreed that large family size and low incomes restrict the opportunities of parents to educate all their children.
- At the national level, rapid population growth causes educational expenditures to be spread more thinly, lowering quality for the sake of quantity.
- This in turn feeds back on economic growth because the stock of human capital is reduced by rapid population growth.

4. ***Health.***

- High fertility harms the health of mothers and children. It increases the health risks of pregnancy, and closely spaced births have been shown to reduce birth weight and increase child mortality rates.

5. ***Food.***

- Feeding the world's population is made more difficult by rapid population growth—a large fraction of developing country food requirements are the result of population increases. New technologies of production must be introduced more rapidly, as the best lands have already been cultivated. International food relief programs become more widespread.

6. ***Environment.***

- Rapid population growth contributes to environmental degradation in the form of forest encroachment, deforestation, fuelwood depletion, soil erosion, declining fish and animal stocks, inadequate and unsafe water, air pollution, and urban congestion

7. ***International Migration.***

- Many observers consider the increase in international migration, both legal and illegal, to be one of the major consequences of developing countries' population growth.

- Though many factors spur migration , an excess of job seekers (caused by rapid population growth) over job opportunities is surely one of them. However, unlike the first six consequences listed here, some of the economic and social costs of international migration fall on recipient countries, increasingly in the developed world.

Goals and Objectives: Toward a Consensus

- In spite of what may appear to be seriously conflicting arguments about the positive and negative consequences of population growth, *a common ground has emerged on which many people on both sides of the debate can agree*. This position is best characterized by Robert Cassen in *Population Policy: A New Consensus:*

- ”After decades of controversy over the issue of population policy, there is a new international consensus among and between industrial and developing countries that *individuals*, *countries, and the world at large would be better off if population were to grow more slowly.*
- The consequences of rapid population growth should be neither exaggerated nor minimized. Some past expressions of alarm have been counterproductive, alienating the very audiences they were intended to persuade; at the same time, claims that population growth was not all that important have had the effect of diminishing a proper concern for the subject”

- The following **three** propositions constitute the essential components of this intermediate or consensus opinion.

1. Population growth is not the primary cause of low levels of living, extreme inequalities, or the limited freedom of choice that characterize much of the developing world. The fundamental causes of these problems must be sought, rather, in the *plight of poor families, especially women*, and the *failure of other aspects of domestic and international development policy.*

2. The problem of population is not simply one of numbers but involves the quality of life and material well-being. Thus developing country population size must be viewed in conjunction with developed-country affluence in relation to the quantity, distribution, and utilization of world resources, not just in relation to developing countries' indigenous resources.

3. Rapid population growth does serve to intensify problems of underdevelopment and make prospects for development that much more remote.

As noted, the momentum of growth means that, barring catastrophe, the population of developing countries will increase dramatically over the coming decades, no matter what fertility control measures are adopted now.

- It follows that high population growth rates, though not the principal cause of underdevelopment, are nevertheless important contributing factors in specific countries and regions of the world.

- **In view of these three propositions**, we may conclude that the following ***three policy goals and objectives*** might be included in any realistic approach to the issue of population growth in developing countries.

1. In countries or regions where population size, distribution, and growth are viewed as an existing or potential problem, the primary objective of any strategy to limit further growth must deal not only with the population variable per se but also with the underlying social and economic conditions of underdevelopment.

- Problems such as
  - absolute poverty,
  - gross inequality,
  - widespread unemployment (especially among women),
  - limited female access to education,
  - malnutrition, and
  - poor health facilities

must be given high priority.

- Their amelioration is both a necessary concomitant of development and a fundamental motivational basis for the expanded freedom of the individual to choose an optimal—and in many cases, smaller—family size.

2. To bring about smaller families through *development-induced motivations*, *family-planning programs* providing both the education and the technological means to regulate fertility for people who wish to regulate it should be established.

3. Developed countries should help developing countries achieve their lowered fertility and mortality objectives not only by providing contraceptives and funding family-planning clinics but, even more important, *by curtailing their own excessive depletion of nonrenewable world resources through programs designed to cut back on the unnecessary consumption of products that intensively use such resources*; by making genuine commitments to eradicating poverty, illiteracy, disease, and malnutrition in developing countries as well as their own;

❑Some Policy Approaches

- In view of these broad goals and objectives, what kinds of economic and social policies might developing and developed-country governments and international assistance agencies consider to bring about long-term reductions in the overall rate of world population growth?
- **Three areas of policy** can have important direct and indirect influences on the well-being of present and future world populations:

1. General and specific policies that **developing country** governments can initiate to influence and perhaps even control their population growth and distribution

2. General and specific policies that **developed-country** governments can initiate in their own countries to lessen their disproportionate consumption of limited world resources and promote a more equitable distribution of the benefits of global economic progress

3. General and specific policies that developed-country governments and international assistance agencies can initiate to help developing countries achieve their population objectives.

Let us deal with each of these areas in turn.

What *Developing* Countries Can Do

- There are five more specific policies that developing country governments might try to adopt to lower birth rates in the short run:

  First, they can try to *persuade people* to have smaller families through the media and the educational process, both formal (school system) and informal (adult education).

Second, they can *enhance family-planning programs* to provide health and contraceptive services to encourage the desired behavior. Such publicly sponsored or officially supported programs now exist in most developing countries. Today only a few countries do not have such publicly sponsored or officially endorsed family-planning programs.

Third, they can deliberately *manipulate economic incentives and disincentives* for having children. For example:

- through the elimination or reduction of maternity leaves and benefits,
- the reduction or elimination of financial incentives, or
- the imposition of financial penalties for having children beyond a certain number;

- the establishment of old-age social security provisions and minimum-age child labor laws;

- the raising of school fees and the elimination of heavy public subsidies for higher education; and

- the subsidization of smaller families through direct money payments.

Fourth, governments can attempt to *coerce people* into having smaller families through the power of state legislation and penalties. For obvious reasons, few governments would attempt to engage in such coercion; not only is it often morally repugnant and politically unacceptable, but it is also almost always extremely difficult to administer.

The defeat of Indian Prime Minister Indira Gandhi's government in 1977 was largely due to popular resentment of the government's forced-sterilization program.

Finally, no policy measures will be successful in controlling fertility unless efforts are made to *raise the social and economic status of women and hence create* conditions favorable to delayed marriage and lower marital fertility

What the Developed Countries Can Do

- Any worldwide program designed to engender a better balance between resources and people by limiting developing country population growth through social intervention and family planning must also include the responsibility of rich nations to *simplify their own consumption demands and lifestyles*.
- Such changes would free resources that could then be used by poor nations to generate the social and economic development essential to slowing population growth.

- In addition, internal policy that rich nations could adopt to mitigate current world population problems would be to liberalize the legal conditions for the international immigration of poor, unskilled workers and their families from Africa, Asia, and Latin America to North America, Europe, Japan, and Australia.

-How Developed Countries Can Help Developing Countries with Their Population Programs

- There are a number of ways in which the governments of rich countries and multilateral donor agencies can help the governments of developing countries achieve their population policy objectives sooner

1. the willingness of rich countries to be of genuine assistance to poor countries in their development efforts. Such genuine support would consist :

- expanded public and private financial assistance

- improved trade relations, such as tariff- and quota

- free access to developed-country markets,

- more appropriate technology transfers,

- assistance in developing indigenous scientific research capacities,

- better international commodity-pricing policies, and

- a more equitable sharing of the world’s scarce natural resources