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PRESIDENT CLAUSEN
ITINERARY FILES

Kenya

1984 (3)

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President A. W. Clausen Itinerary - Briefing files - Kenya - Correspondence
Volume 3

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OFFICE MEMORANDUM

July 3, 1984

TO: Mr. A. W. Clausen, President
FROM: Julian Grenfell, Chief, Speechwriting Unit, IPA
SUBJECT: Your Nairobi Speech

Herewith the oral version of the Nairobi speech. Some of the pages are short, so I estimate it will run about 38 minutes.

Attachment

J.Grenfell/tb

Address

As Prepared for Delivery

By

A. W. Clausen, President

The World Bank

and

International Finance Corporation

before the

National Leaders' Seminar on Population and Development

Nairobi, Kenya

July 11, 1984

DELIVERY
COPY

Mr. Vice President,

Your Excellencies,

Ladies and Gentlemen:

GOOD MORNING TO YOU ALL!

I am ^(indeed) honored and delighted by your invitation to address this distinguished gathering. It is always a pleasure to come to this wonderful country, and I wish to thank you warmly, Mr. Vice President, for giving me this opportunity to share with you today some thoughts on the subject of population growth and development.

As all of us here agree, it is a subject of vast importance and undeniable urgency. While the effects of fast population growth may vary widely, (depending on the institutional, economic, cultural, and demographic setting), all the evidence points overwhelmingly to the conclusion that it slows development in the developing countries. And the poor of these countries are the principal victims of the slowdown.

As I believe we can also agree: it is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can. And what if our assumptions about the decline in the average number of children born to women of child-bearing age are proven too optimistic? How many more billions will be added?

Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Pause

Our gathering here is one more demonstration of the deep concern and commitment of President Anap Moi, of you, Mr. Vice President, and of the government of Kenya, to meet the challenge of rapid population growth in your own country. There is indeed a strong link between population growth rates and the rate of economic and social development. You have boldly recognized that link, and we wish you well in your determined efforts not to let the pace of the former undermine the prospects of the latter.

But we should not be content just to wish you well. The World Bank is determined to support the broad spectrum of initiatives which you and the peoples of all developing nations are taking in the struggle against poverty. And here in Kenya we are especially anxious to help you in the population field by supporting your Family Planning Program in particular and your primary level health services and your education services in general. We are much encouraged that you have asked us to be one of your partners in this endeavor.

Pause

Population growth is a key issue in development! And we at The World Bank are reaffirming our recognition of that basic fact by devoting the major part of the 1984 World Development Report, (published today) to this problem. In humbly commending the Report to you, I would like to address the principal issues it raises. In broad terms, there are three.

First, rapid population growth is a central development problem. Continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people. The main cost of such growth, [borne principally by the poor in developing countries,] is lost opportunities for improving people's lives.

Second, family and fertility are areas of life in which the most fundamental human values are at stake. The question is: are there public policies seeking to reduce fertility which are appropriate to an area where private rights are paramount? Our answer ^{TO THIS QUESTION} is a firm "yes!"

Third, in the past two decades, (and especially in the past ten years,) many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has taught us that policy and programs can and do make a difference.

Pause

Before expanding on these three themes, let me say a few words about past and future population growth in the developing world.

Until the twentieth century, prosperity and population increase went hand-in-hand. But in this century, (and particularly since 1950), population growth has been faster where income is low, and concentrated in developing countries. Of the 1984 world population increase of at least 80 million, more than 70 million will be added in developing countries, which now contain about three-quarters of ^{TOTAL WORLD} ~~the global~~ population.

No group of people appreciates the implications of this better than we who are assembled here today in a country where the population growth rate has been projected this year at ^(AROUND 4) ~~some 3.8~~ percent. That is most probably the highest rate in the world, and one that would double (Kenya's population) about every eighteen years!

Pause

For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about 2 percent today. But further decline will not come automatically. Much of the slow-down so far can be attributed to the People's Republic of China, where fertility is already low -- close to an average of 2.5 children per family. Most families in other developing countries now have at least four children; in rural areas five or more. For much of Sub-Saharan Africa, population growth rates are actually rising, and could rise still further.

In Africa, many if not most couples say they want more children than in fact they are having, whereas mortality, (still high), can be expected to decline. For example, The World Fertility Survey's findings on Kenya (relating to the period 1977-78) indicated a strong desire for large families. But while desired family size in Kenya is high, actual family size is even higher, indicating that some couples have more children than they want. The Survey found that mean desired family size was about seven; but the number of children each mother was having averaged eight. This suggests that in Kenya there is an unmet need for family planning services. But a substantial decline in fertility can only occur if desired family size falls!

We must expect growth rates to remain high in developing countries for several decades, even if couples have fewer children. And they will remain high through the end of this century since the baby "bulge", which resulted from high fertility and falling mortality twenty years ago, has itself now entered childbearing age.

Let me stress that population projections should not be treated as predictions, ~~but~~ ^{RATHER THEY SHOULD BE TREATED} as illustrations of what can happen given reasonable assumptions. If the assumptions underlying what we call the "standard" projections of The World Bank are correct, world population would rise from almost 4.8 billion today to almost 10 billion by the middle of the next century. The population of today's developed countries would grow from about 1.2 billion today to 1.4 billion in the year 2050. But in today's developing countries the numbers would grow from 3.6 billion to 8.4 billion. By the time the world population stabilized (at over 11 billion in about the year 2150), the population of India would be 1.8 billion, --- making it the most populous nation on earth. And Kenya's population would have risen from 19.7 million today to a staggering 160 million, a situation surely as impermissible as it is unimaginable.

ONLY
65 YEARS
FROM NOW

These are awe-inspiring projections! And yet, in some respects, the assumptions underlying these projections may well be optimistic! Maybe fertility will not have fallen to replacement level in all developing countries sixty years from now. And maybe mortality will not continue to fall rapidly. Even with rapid income growth and advances in literacy (in the next two decades), the poorer countries of Africa and South Asia are not likely to reach the income and literacy levels that triggered fertility declines in such countries as Brazil, Korea, and Malaysia in the 1960s. Yet their fertility is projected to decline significantly. But even with those declines, their population will more than double in the next fifty years. One might well ask whether population increases of this order -- (trebling, quadrupling, or more) -- would not put an unbearable strain on the existing social fabric, and plunge countries into chaos.

Even under an alternative projection of fertility decline as rapid as achieved in China, Colombia, and Thailand in the past two decades, population growth could remain high in most developing countries. For instance, there is the likelihood that population growth will accelerate in Africa because mortality still has far to fall and can be brought down fairly rapidly. In the long run, many countries may wish to reduce ^{their} population growth rate to less than one percent. But the alternative projections of fertility decline make one thing painfully clear: // for the next several decades, most developing countries will need to make a concerted effort just to reduce population growth to a rate closer to one percent.

PAUSE

CONTAINED IN OUR 1984 WORLD DEVELOPMENT REPORT

Now let us return to the first of our three principal messages, that rapid population growth is a development problem! There are three main reasons why this is so.

★ THE FIRST PRINCIPAL MESSAGE

#1

★ First, as population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical capital and "human" capital -- that is to say, a person's education, health and skills. Every effort is thus required simply to maintain the status quo. And where it is hard to raise the level of capital and skills per worker, it is even harder to raise incomes and living standards!

#1

To illustrate this briefly: in most developing countries, the high fertility and falling infant mortality of the mid-1960s mean that about 40 percent of populations are aged under fifteen. Countries such as Malawi face a doubling or tripling of their school-age population by the end of the century. With rapid fertility decline could come savings of more than 50 percent in the school system thirty years from now; savings that could be used to improve the quality of schooling. The same is true of jobs.

Nigeria's high fertility in the 1970s guarantees that its working-age population will double by the end of this century.

Kenya can expect an even larger increase, whereas China will experience a rise of no more than 45 percent.

Second, in many countries increases in population threaten what is already a precarious balance between natural resources and people, as here in Kenya. Where populations are still highly dependent on agriculture, continuing large increases in population can contribute to overuse of limited natural resources, such as land, ^{thus} mortgaging the welfare of future generations. In many parts of Africa, strains on natural resources are already acute -- for example in this country, in Burundi, Malawi, eastern Nigeria, Rwanda, and parts of the Sahel region. But countries rich in natural resources do not escape the problem of rapid population growth. To exploit their natural resources, --- such countries need extra skills, as well as heavy investment in roads and storage and distribution systems -- a more difficult goal if population is growing rapidly.

Second Reason
Why Population
Growth is A
Developmental
Problem!

In many countries, much of the huge projected increases in the labor force will have to be absorbed in agriculture. Here in Kenya, assuming a 4 percent annual increase in the number of jobs outside agriculture, and an immediate start of fertility decline, 70 percent of the labor force will still be going into agriculture forty years from now, and their number will be twice what they are today. With farm size already averaging only about three acres of prime arable or equivalent land, we are bound to ask --- how Kenya can sustain such numbers!

Elsewhere in Africa, in parts of China, Bangladesh, and Indonesia, population pressure has already forced people to work harder, often on marginal land and shrinking farms, just to maintain household income in traditional agriculture. And when undue stress is placed on traditional agricultural systems and the environment is damaged, the economic well-being of the poor is particularly threatened. Here in Kenya, (as elsewhere), women have to go farther and farther to find wood and water. In Addis Ababa, Ethiopia, the price (of increasingly scarce wood for fuel) has risen tenfold during the 1970s and now claims up to 20 percent of household incomes.

Pause

REASON WHY POPULATION GROWTH IS A DEVELOPMENTAL PROBLEM IS THAT
THE Third cities (in developing countries) are growing to a size for which there is no prior experience anywhere! Between 1950 and 1980 the proportion of urban dwellers in developing countries in cities of more than 5 million ^{people} increased from 2 ^{PERCENT} to 14 percent! London, the world's second largest city in 1950, will not even be ranked among the twenty-five largest by the end of ^{THIS} the century. The rise in urban population, (60 percent of which is due to natural increase), poses unprecedented problems of management even to maintain, (let alone ^{TO} improve,) the living conditions of city dwellers.

Must we conclude from these disturbing facts that the population brake on development in the Third World can nowhere be released?

Question?

Countries in which education levels are already high, where much investment in transportation and communications is already in place, and where political and economic systems are relatively stable -- these countries are better equipped to cope with the problem of rapid population growth. But these tend also to be countries in which population growth is now slowing.

Those countries where there is rapid population growth could also cope better with the problem if the right economic and social adjustments could be made fast enough, if technical change could be guaranteed, and if rapid population growth itself inspired technical change. But such growth, if anything, makes adjustment more difficult. It brings at best only the gradual adaptation which is typical of agriculture, maintaining but not increasing per capita output.

Policies to reduce population growth are neither a panacea for development nor substitutes for sensible macroeconomic and sectoral policies. But failure to address the population problem will itself reduce the range of development policies capable of implementation and permanently foreclose some long-run development options.

well, This brings me to ~~our~~ the second message there are appropriate policies to slow population growth.

Pause

IN OUR 1984 WORLD DEVELOPMENT REPORT:

#2 ☆

#2

Pause

It is the poor, ^(those) with little education, ^{with} low and insecure income, and poor health and family planning services who have many children! Yet it is also the poor who are the principal losers as rapid population growth hampers development. All parents everywhere get pleasure from children! But parents have to spend time and money bringing them up. For poor parents in developing countries, however, these economic costs can seem low in relation to the benefits.

Let me cite a few reasons ^{for this:}

- One 1. When wages are low, the difference between children's and a mother's earnings will be small; income lost by the mother during a child's infancy may often be easily recovered by the child later on.
- Two 2. When schooling opportunities for children are lacking, how can one argue that it is a better investment to have two or three educated children than a large family that cannot be educated?

And Three

3. Poor parents worry about who will take care of them in their old age or when they are ill, and for many the need for support in old age outweighs the immediate costs of children. And since one out of five children dies before reaching the age of one in some parts of Africa, and one out of seven in much of Bangladesh, India, and Pakistan, the incentive to have many babies to ensure that a few survive is very great. Horror!

However, parents and children do not always gain where there are many children. Inadequate access to land, or the poor health of both mothers and children, often as a result of closely spaced births, can confound the parents' expectations. Thus, if parents have many children in the hope of economic gain, the first step (in reducing fertility) must inevitably be to work towards the reduction of their poverty and of the uncertainty about their own future. In this sense, the persistence of high fertility in today's developing countries is a symptom of lack of access to services that the industrial world more or less takes for granted;

- for example,
- o to health services, which reduce the need for many births to insure against infant and child mortality;
 - o to education, which would raise parents' hopes for their children and would broaden a woman's outlook;

- o to social security and other forms of insurance for old age;
- o to consumer goods and social opportunities that compete with child-bearing;
- o and to family planning services, which provide the means to limit births.

The general components of the solution to high fertility would therefore seem clear enough. But in countries where there is as yet no national policy on population size and no family planning effort supported by the government, there remains the question of the justification of government action to encourage people to have fewer children. I would like to suggest two broad justifications for such action.

The first is that a government cannot remain indifferent to the gap that exists between an individual couple's hopes for private gain from having many children and the prospects for social gains for the community as a whole. It is not easy to persuade a couple to give up the possible private benefits of many children, when its sacrifice alone would provide only minuscule benefits to other families' children and grandchildren. One family's restraint will have little negative effect on the availability of land, or on resources for investment in schooling and jobs. But, as governments are all too aware, many children born of many families will!

At the root of the conflict between private preference and the public good is poverty; not just low income, but also lack of economic and social opportunities, an insecure future, and limited access to education, health and family planning services. That conflict can only be removed when governments provide tangible evidence that it really is in the best private interests of parents to have fewer children. That will encourage people to make, (through their government,) a contract with each other: "if each of us has fewer children," they will say, "we can rely on government support for nationwide measures to improve access to family planning services and to create incentives for their use, thus ensuring that everybody makes the same decision. That way we and all our children will enjoy a better chance in life."

By encouraging and supporting such a social contract, the government frees each individual couple from its need to decide in isolation to produce more children than it would want if others ^{also} were limiting their family size. That is the first justification for government action.

Pause

The second justification is that people may have more children than they want, or would want had they more information about, and access to, easier fertility control. There are an estimated 65 million couples in developing countries, (many of them poor inhabitants of remote rural areas), who do not want more children, but who do not use any contraception. This is often for lack of access to effective contraceptives. This unmet need is the strongest possible argument for government support of family planning programs.

How ESTIMATED?

Pause

(IN THIS YEAR'S WORLD DEVELOPMENT REPORT)

#3 ★ The third message is that we know from experience that public policy and programs can and do make a difference. Many developing countries have already shown that fertility can be reduced substantially, (and over a short period of time!).

#3

It was once assumed that reducing fertility in developing countries would require a typical sequence of economic advance: urbanization, industrialization, a shift from production in the household to factory production, and incomes rising to levels enjoyed by today's developed countries. This view seemed to be confirmed by the fertility declines of the 1960s, particularly in the industrializing economies of Korea, Singapore, and Hong Kong. But fertility declines beginning in other developing countries in the late 1960s, and spreading to more in the 1970s, came with a different kind of development: education, health, the alleviation of poverty, improved opportunities for women, and government effort to assure widespread access to family planning services. Declines in birth rates since 1965 have been much more closely associated with adult literacy and life expectancy than with GNP per capita. For example, despite high average incomes, rapid industrialization, and fast economic growth, birth rates fell less in Brazil and Venezuela (between 1965 and 1975) than in Sri Lanka, Thailand, and Turkey where income gains and social services were more evenly distributed.

The association of social development with low fertility // is not surprising! When children have a better chance of surviving and of enjoying a wider range of opportunities, their parents are willing to devote more time and money to educating them, and then have fewer of them. And as education brings an increase in opportunities for women outside the home, those opportunities substitute for the benefits of having many children.

But the experience of many developing countries shows that it is public support for family planning programs which really can lower fertility quickly. When family planning services are widespread and affordable, fertility has declined more rapidly than social and economic progress alone would predict. For example, fertility has fallen faster in Egypt and Tunisia, [countries with demographic objectives], than in their richer neighbor, Algeria. *paire*

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception!

In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly as the education of mothers increases above the primary school level. Education delays marriage for women, either because marriage is put off during schooling, or because educated women are more likely to work or to take time to find suitable husbands. Educated women are also more likely to know about and adopt new methods of birth control. Here in Kenya, 22 percent of those with nine or more years of education use contraception, as opposed to only 7 percent with five or fewer years of education. Furthermore, once parents know that schooling will open up new opportunities for their children, they accept the risk of having fewer children in order to invest more in each one. Evidence from household surveys in India, Egypt, and Nigeria show that parents have fewer children when education is readily available.

African governments should therefore not weaken their commitment to basic education for all, ^{AND} especially for women, despite current financial strains. The commitment to primary education here in Africa is strong indeed. But the indispensability of more education to less fertility should spur African governments to act even more determinedly on that commitment.

The second central policy ^{FOR REDUCING FERTILITY} is making access to contraception easier. Experience has shown us clearly that programs providing publicly subsidized information and access to modern contraceptive methods help reduce fertility.

But family planning is also a health measure! In much of Africa, child spacing of at least two years can reduce child mortality by about 15 percent, and also significantly reduce maternal mortality. Moreover, the provision of safe and effective family planning services can discourage recourse to traditional family planning methods that may be relatively unsafe or unworkable.

Some eighty-seven countries in the developing world, representing about 95 percent of its population, now provide such publicly subsidized family planning programs. And about 40 percent of all couples in the developing world now use some form of contraception. But much more needs to be done! Twenty-six countries have yet to introduce family planning programs, and almost half of these are in Africa. But in all countries surveyed, the number of women of childbearing age who want no more children exceeds the number practising contraception.

About \$2 billion ^{DOLLARS} is currently spent on public family planning programs in developing countries each year. In most countries it is less than \$1 per ^{DOLLAR} head of population (about \$21 per ^{DOLLARS} user). To fill the unmet needs today ^{DOLLARS} of women who would like to space or limit births but who are not practising contraception would require another \$1 billion ^{DOLLARS} per year.

In the next two decades, program spending will need to rise even further, because of the growing number of women of childbearing age, and the increasing proportion of them who are likely to want to use modern contraceptives. The estimated per capita expenditure (on population programs in developing countries today) is 62 cents. By the year 2000, developing country governments will need to be spending \$1.66 per capita to achieve a rapid decline in fertility, or \$1.14 per capita to achieve a standard decline. And the difference between those two levels of per capita expenditures could make the difference between 6.5 billion people and 8.4 billion people in the developing world by the middle of the next century!!!

The same is true for international aid for population programs. Only about 1 percent of official development aid now goes for population assistance, and less for family planning. It supports about 25 percent of all family planning costs in developing countries, and about 50 percent of family planning programs outside China. Assuming these proportions did not change, population assistance would need to triple its current level by the year 2000 to achieve standard fertility decline, or quadruple it for the rapid decline. A quadrupling would raise annual population assistance from about \$500 million in 1981 to \$2 billion ^{dollars} (in 1980 ^{dollars}) by the end of the century. These relatively modest increases in donor assistance could, (given effective policies in developing countries), make a vast difference in population change, // and significantly improve maternal and child health. We urge, therefore, that these increases be forthcoming.

Since Sweden made its first population grant in 1968, // donors have transferred more than \$7 billion ^{DOLLARS} in population aid. The assistance is provided both directly to country programs) and through multilateral and non-governmental organizations, of whom the two largest are the United Nations Fund for Population Activities (UNFPA) and the non-governmental International Planned Parenthood Federation (IPPF).

The World Bank attaches considerable importance to this key development issue of rapid population growth, and offers its support in three ways:

1. by helping ^{to} improve understanding, through its economic and sector work and through policy dialogue with member countries, of the consequences for development of faster or slower population growth; *as exemplified, by our 1984 World Development Report, released today!*
2. by helping ^{to} support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;
- and 3, by helping ^{to} supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

3 WAYS
IN WHICH
WORLD BANK
SUPPORTS TO
"POPULATION"
PROGRAMS

Over a period of fourteen years, the Bank has committed about \$500 million ^{DOLLARS} for population projects, and over \$100 million ^{DOLLARS} for health projects. In the next few years, the Bank intends at least to double its population and related health lending. The major focus will be on Africa and Asia, and we look forward to cooperating with governments in the design and implementation of effective population policies and programs. During the next five years, the number of population and related health projects that we plan to finance in Sub-Saharan Africa will rise to twenty-one from the total of three financed by the Bank in the five years ^{PRIOR} to mid-1983. And the number of countries of the region which will be borrowing from us for that purpose will likely rise from three to seventeen!

Small increases in spending can make a big difference! But sustained progress requires not just donor funds, but also a firm commitment on the part of the international community to population progress as a critical part of the overall development effort. And the strongest commitment must be made by the governments of the developing countries themselves. Where progress has been made, it has been because governments, setting explicit demographic goals, have been employing a wide range of policies, (direct and indirect,) to reduce the attractions of high fertility.

Pause

Let me now sum up. !

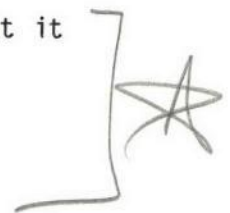
Ten years ago, at the World Population Conference in Bucharest, a debate raged about the relative merits of development and family planning programs as alternative ways of slowing population growth. It is now clear that the dichotomy is false. Accumulating evidence on population change in developing countries shows that it is the combination of social development and family planning that is so powerful in reducing fertility.

But further fertility decline, and the initiation of decline where it has not ^{yet} begun, will not come automatically. In rural areas and among the less educated, desired family size will not be reduced much without sustained improvements in living standards. But measures to raise living standards do not quickly bring about fertility reductions. The need is to act now in education, primary health care, family planning, and improving women's opportunities, so as to bring a sustained decline in fertility over the long run. In the meantime, too many couples still do not benefit from adequate family planning services. Family planning programs, (successful as they have been,) have by no means reached their full potential. Action there will provide an immediate payoff.

In concluding, let me stress the key message on population growth in the World Bank's 1984 World Development Report.

Economic and social progress helps slow population growth; but at the same time / rapid population growth / hampers economic development. It is therefore imperative that governments act simultaneously on both fronts... *the economic front and the social front.*

No one would argue that slower population growth alone will assure progress. But the evidence in the World Development Report seems conclusive: poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to slow population growth / if development is to be achieved. But it must be slowed through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.



World population has grown faster, and to higher numbers, than Malthus would ever have imagined. But so have world production and income. If we can correct the current mismatch between population and income-producing ability, a mismatch that leaves many of the world's people in a vicious circle of poverty and high fertility, we may yet evade the doom which Malthus saw as inevitable. It is not inevitable that history will vindicate his dire prediction of human numbers outrunning global resources. We have a choice.

But that choice must be made now!

Opportunity is on our side.

But time is not!

Thank you.

END

ORAL VERSION

Address

As Prepared for Delivery

By

A. W. Clausen, President

The World Bank

and

International Finance Corporation

before the

National Leaders' Seminar on Population and Development

Nairobi, Kenya

July 11, 1984

Mr. Vice President,
Your Excellencies,
Ladies and Gentlemen:

I am honored and delighted by your invitation to address this distinguished gathering. It is always a pleasure to come to this wonderful country, and I wish to thank you warmly, Mr. Vice President, for giving me this opportunity to share with you today some thoughts on the subject of population growth and development.

As all of us here agree, it is a subject of vast importance and undeniable urgency. While the effects of fast population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, all the evidence points overwhelmingly to the conclusion that it slows development in the developing countries. And the poor of these countries are the principal victims of the slowdown.

As I believe we can also agree: it is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can. And what if our assumptions about the decline in the average number of children born to women of child-bearing age are proven too optimistic? How many more billions will be added?

Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Our gathering here is one more demonstration of the deep concern and commitment of President Arap Moi, of you, Mr. Vice President, and of the government of Kenya, to meet the challenge of rapid population growth in your own country. There is indeed a strong link between population growth rates and the rate of economic and social development. You have boldly recognized that link, and we wish you well in your determined efforts not to let the pace of the former undermine the prospects of the latter.

But we should not be content just to wish you well. The World Bank is determined to support the broad spectrum of initiatives which you and the peoples of all developing nations are taking in the struggle against poverty. And here in Kenya we are especially anxious to help you in the population field by supporting your Family Planning Program in particular and your primary level health services and your education services in general. We are much encouraged that you have asked us to be one of your partners in this endeavor.

Population growth is a key issue in development. And we at The World Bank are reaffirming our recognition of that basic fact by devoting the major part of the 1984 World Development Report, published today, to this problem. In humbly commending the Report to you, I would like to address the principal issues it raises. In broad terms, there are three.

First, rapid population growth is a central development problem. Continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people. The main cost of such growth, borne principally by the poor in developing countries, is lost opportunities for improving people's lives.

Second, family and fertility are areas of life in which the most fundamental human values are at stake. The question is: are there public policies seeking to reduce fertility which are appropriate to an area where private rights are paramount? Our answer is a firm "yes."

Third, in the past two decades, and especially in the past ten years, many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has taught us that policy and programs can and do make a difference.

Before expanding on these three themes, let me say a few words about past and future population growth in the developing world.

Until the twentieth century, prosperity and population increase went hand-in-hand. But in this century, and particularly since 1950, population growth has been faster where income is low, and concentrated in developing countries. Of the 1984 world population increase of at least 80 million, more than 70 million will be added in developing countries, which now contain about three-quarters of the global population.

No group of people appreciates the implications of this better than we who are assembled here today in a country where the population growth rate has been projected this year at some 3.8 percent. That is most probably the highest rate in the world, and one that would double Kenya's population about every eighteen years.

For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about 2 percent today. But further decline will not come automatically. Much of the slow-down so far can be attributed to the People's Republic of China, where fertility is already low -- close to an average of 2.5 children per family. Most families in other developing countries now have at least four children; in rural areas five or more. For much of Sub-Saharan Africa, population growth rates are actually rising, and could rise still further.

In Africa, many if not most couples say they want more children than in fact they are having, whereas mortality, still high, can be expected to decline. For example, The World Fertility Survey's findings on Kenya relating to the period 1977-78 indicated a strong desire for large families. But while desired family size in Kenya is high, actual family size is even higher, indicating that some couples have more children than they want. The Survey found that mean desired family size was about seven; but the number of children each mother was having averaged eight. This suggests that in Kenya there is an unmet need for family planning services. But a substantial decline in fertility can only occur if desired family size falls.

We must expect growth rates to remain high in developing countries for several decades, even if couples have fewer children. And they will remain high through the end of this century since the baby "bulge", which resulted from high fertility and falling mortality twenty years ago, has itself now entered childbearing age.

Let me stress that population projections should not be treated as predictions, but as illustrations of what can happen given reasonable assumptions. If the assumptions underlying what we call the "standard" projections of The World Bank are correct, world population would rise from almost 4.8 billion today to almost 10 billion by the middle of the next century. The population of today's developed countries would grow from about 1.2 billion today to 1.4 billion in the year 2050. But in today's developing countries the numbers would grow from 3.6 billion to 8.4 billion. By the time the world population stabilized at over 11 billion in about the year 2150, the population of India would be 1.8 billion, making it the most populous nation on earth. And Kenya's population would have risen from 19.7 million today to a staggering 160 million, a situation surely as impermissible as it is unimaginable.

These are awe-inspiring projections. And yet, in some respects, the assumptions underlying these projections may well be optimistic. Maybe fertility will not have fallen to replacement level in all developing countries sixty years from now. And maybe mortality will not continue to fall rapidly. Even with rapid income growth and advances in literacy in the next two decades, the poorer countries of Africa and South Asia are not likely to reach the income and literacy levels that triggered fertility declines in such countries as Brazil, Korea, and Malaysia in the 1960s. Yet their fertility is projected to decline significantly. But even with those declines their population will more than double in the next fifty years. One might well ask whether population increases of this order -- trebling, quadrupling, or more -- would not put an unbearable strain on the existing social fabric, and plunge countries into chaos.

Even under an alternative projection of fertility decline as rapid as achieved in China, Colombia, and Thailand in the past two decades, population growth could remain high in most developing countries. For instance, there is the likelihood that population growth will accelerate in Africa because mortality still has far to fall and can be brought down fairly rapidly. In the long run, many countries may wish to reduce population growth rate to less than one percent. But the alternative projections of fertility decline make one thing painfully clear: for the next several decades, most developing countries will need to make a concerted effort just to reduce population growth to a rate closer to one percent.

Now let us return to the first of our three principal messages: that rapid population growth is a development problem. There are three main reasons why this is so.

First, as population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical capital and "human" capital -- that is to say, a person's education, health and skills. Every effort is thus required simply to maintain the status quo. And where it is hard to raise the level of capital and skills per worker, it is even harder to raise incomes and living standards.

To illustrate this briefly: in most developing countries, the high fertility and falling infant mortality of the mid-1960s mean that about 40 percent of populations are aged under fifteen. Countries such as Malawi face a doubling or tripling of their school-age population by the end of the century. With rapid fertility decline could come savings of more than 50 percent in the school system thirty years from now; savings that could be used to improve the quality of schooling. The same is true of jobs. Nigeria's high fertility in the 1970s guarantees that its working-age population will double by the end of this century. Kenya can expect an even larger increase, whereas China will experience a rise of no more than 45 percent.

Second, in many countries increases in population threaten what is already a precarious balance between natural resources and people, as here in Kenya. Where populations are still highly dependent on agriculture, continuing large increases in population can contribute to overuse of limited natural resources, such as land, mortgaging the welfare of future generations. In many parts of Africa, strains on natural resources are already acute -- for example in this country, in Burundi, Malawi, eastern Nigeria, Rwanda, and parts of the Sahel region. But countries rich in natural resources do not escape the problem of rapid population growth. To exploit their natural resources, such countries need extra skills, as well as heavy investment in roads and storage and distribution systems -- a more difficult goal if population is growing rapidly.

In many countries, much of the huge projected increases in the labor force will have to be absorbed in agriculture. Here in Kenya, assuming a 4 percent annual increase in the number of jobs outside agriculture, and an immediate start of fertility decline, 70 percent of the labor force will still be going into agriculture forty years from now, and their number will be twice what they are today. With farm size already averaging only about three acres of prime arable or equivalent land, we are bound to ask how Kenya can sustain such numbers.

Elsewhere in Africa, in parts of China, Bangladesh, and Indonesia, population pressure has already forced people to work harder, often on marginal land and shrinking farms, just to maintain household income in traditional agriculture. And when undue stress is placed on traditional agricultural systems and the environment is damaged, the economic well-being of the poor is particularly threatened. Here in Kenya, as elsewhere, women have to go farther and farther to find wood and water. In Addis Ababa, Ethiopia, the price of increasingly scarce wood for fuel has risen tenfold during the 1970s and now claims up to 20 percent of household incomes.

Third, cities in developing countries are growing to a size for which there is no prior experience anywhere. Between 1950 and 1980 the proportion of urban dwellers in developing countries in cities of more than 5 million increased from 2 to 14 percent. London, the world's second largest city in 1950, will not even be ranked among the twenty-five largest by the end of the century. The rise in urban population, 60 percent of which is due to natural increase, poses unprecedented problems of management even to maintain, let alone improve, the living conditions of city dwellers.

Must we conclude from these disturbing facts that the population brake on development in the Third World can nowhere be released?

Countries in which education levels are already high, where much investment in transportation and communications is already in place, and where political and economic systems are relatively stable -- these countries are better equipped to cope with the problem of rapid population growth. But these tend also to be countries in which population growth is now slowing.

Those countries where there is rapid population growth could also cope better with the problem if the right economic and social adjustments could be made fast enough, if technical change could be guaranteed, and if rapid population growth itself inspired technical change. But such growth, if anything, makes adjustment more difficult. It brings at best only the gradual adaptation which is typical of agriculture, maintaining but not increasing per capita output.

Policies to reduce population growth are neither a panacea for development nor substitutes for sensible macroeconomic and sectoral policies. But failure to address the population problem will itself reduce the range of development policies capable of implementation and permanently foreclose some long-run development options.

This brings me to our second message: there are appropriate policies to slow population growth.

It is the poor, with little education, low and insecure income, and poor health and family planning services who have many children. Yet it is also the poor who are the principal losers as rapid population growth hampers development. All parents everywhere get pleasure from children. But parents have to spend time and money bringing them up. For poor parents in developing countries, however, these economic costs can seem low in relation to the benefits.

Let me cite a few reasons:

1. When wages are low, the difference between children's and a mother's earnings will be small; income lost by the mother during a child's infancy may often be easily recovered by the child later on.
2. When schooling opportunities for children are lacking, how can one argue that it is a better investment to have two or three educated children than a large family that cannot be educated?

3. Poor parents worry about who will take care of them in their old age or when they are ill, and for many the need for support in old age outweighs the immediate costs of children. And since one out of five children dies before reaching the age of one in some parts of Africa, and one out of seven in much of Bangladesh, India, and Pakistan, the incentive to have many babies to ensure that a few survive is very great.

However, parents and children do not always gain where there are many children. Inadequate access to land, or the poor health of both mothers and children, often as a result of closely spaced births, can confound the parents' expectations. Thus, if parents have many children in the hope of economic gain, the first step in reducing fertility must inevitably be to work towards the reduction of their poverty and of the uncertainty about their own future. In this sense, the persistence of high fertility in today's developing countries is a symptom of lack of access to services that the industrial world more or less takes for granted:

- o to health services, which reduce the need for many births to insure against infant and child mortality;
- o to education, which would raise parents' hopes for their children and would broaden a woman's outlook;

- o to social security and other forms of insurance for old age;
- o to consumer goods and social opportunities that compete with child-bearing;
- o and to family planning services, which provide the means to limit births.

The general components of the solution to high fertility would therefore seem clear enough. But in countries where there is as yet no national policy on population size and no family planning effort supported by the government, there remains the question of the justification of government action to encourage people to have fewer children. I would like to suggest two broad justifications for such action.

The first is that a government cannot remain indifferent to the gap that exists between an individual couple's hopes for private gain from having many children and the prospects for social gains for the community as a whole. It is not easy to persuade a couple to give up the possible private benefits of many children, when its sacrifice alone would provide only minuscule benefits to other families' children and grandchildren. One family's restraint will have little negative effect on the availability of land, or on resources for investment in schooling and jobs. But, as governments are all too aware, many children born of many families will.

At the root of the conflict between private preference and the public good is poverty; not just low income, but also lack of economic and social opportunities, an insecure future, and limited access to education, health and family planning services. That conflict can only be removed when governments provide tangible evidence that it really is in the best private interests of parents to have fewer children. That will encourage people to make, through their government, a contract with each other: "if each of us has fewer children," they will say, "we can rely on government support for nationwide measures to improve access to family planning services and to create incentives for their use, thus ensuring that everybody makes the same decision. That way we and all our children will enjoy a better chance in life."

By encouraging and supporting such a social contract, the government frees each individual couple from its need to decide in isolation to produce more children than it would want if others were limiting their family size. That is the first justification for government action.

The second justification is that people may have more children than they want, or would want had they more information about, and access to, easier fertility control. There are an estimated 65 million couples in developing countries, many of them poor inhabitants of remote rural areas, who do not want more children, but who do not use any contraception. This is often for lack of access to effective contraceptives. This unmet need is the strongest possible argument for government support of family planning programs.

The third message is that we know from experience that public policy and programs can and do make a difference. Many developing countries have already shown that fertility can be reduced substantially, and over a short period of time.

It was once assumed that reducing fertility in developing countries would require a typical sequence of economic advance: urbanization, industrialization, a shift from production in the household to factory production, and incomes rising to levels enjoyed by today's developed countries. This view seemed to be confirmed by the fertility declines of the 1960s, particularly in the industrializing economies of Korea, Singapore, and Hong Kong. But fertility declines beginning in other developing countries in the late 1960s, and spreading to more in the 1970s, came with a different kind of development: education, health, the alleviation of poverty, improved opportunities for women, and government effort to assure widespread access to family planning services. Declines in birth rates since 1965 have been much more closely associated with adult literacy and life expectancy than with GNP per capita. For example, despite high average incomes, rapid industrialization, and fast economic growth, birth rates fell less in Brazil and Venezuela between 1965 and 1975 than in Sri Lanka, Thailand, and Turkey where income gains and social services were more evenly distributed.

The association of social development with low fertility is not surprising. When children have a better chance of surviving and of enjoying a wider range of opportunities, their parents are willing to devote more time and money to educating them, and then have fewer of them. And as education brings an increase in opportunities for women outside the home, those opportunities substitute for the benefits of having many children.

But the experience of many developing countries shows that it is public support for family planning programs which really can lower fertility quickly. When family planning services are widespread and affordable, fertility has declined more rapidly than social and economic progress alone would predict. For example, fertility has fallen faster in Egypt and Tunisia, countries with demographic objectives, than in their richer neighbor, Algeria.

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception.

In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly as the education of mothers increases above the primary school level. Education delays marriage for women, either because marriage is put off during schooling, or because educated women are more likely to work or to take time to find suitable husbands. Educated women are also more likely to know about and adopt new methods of birth control. Here in Kenya, 22 percent of those with nine or more years of education use contraception, as opposed to only 7 percent with five or fewer years of education. Furthermore, once parents know that schooling will open up new opportunities for their children, they accept the risk of having fewer children in order to invest more in each one. Evidence from household surveys in India, Egypt, and Nigeria show that parents have fewer children when education is readily available.

African governments should therefore not weaken their commitment to basic education for all, especially for women, despite current financial strains. The commitment to primary education here in Africa is strong indeed. But the indispensability of more education to less fertility should spur African governments to act even more determinedly on that commitment.

The second central policy is making access to contraception easier. Experience has shown us clearly that programs providing publicly subsidized information and access to modern contraceptive methods help reduce fertility.

But family planning is also a health measure. In much of Africa, child spacing of at least two years can reduce child mortality by about 15 percent, and also significantly reduce maternal mortality. Moreover, the provision of safe and effective family planning services can discourage recourse to traditional family planning methods that may be relatively unsafe or unworkable.

Some eighty-seven countries in the developing world, representing about 95 percent of its population, now provide such publicly subsidized family planning programs. And about 40 percent of all couples in the developing world now use some form of contraception. But much more needs to be done. Twenty-six countries have yet to introduce family planning programs, and almost half of these are in Africa. But in all countries surveyed, the number of women of childbearing age who want no more children exceeds the number practising contraception.

About \$2 billion is currently spent on public family planning programs in developing countries each year. In most countries it is less than \$1 per head of population (about \$21 per user). To fill the unmet needs today of women who would like to space or limit births but who are not practising contraception would require another \$1 billion per year.

In the next two decades, program spending will need to rise even further, because of the growing number of women of childbearing age, and the increasing proportion of them who are likely to want to use modern contraceptives. The estimated per capita expenditure on population programs in developing countries today is 62 cents. By the year 2000, developing country governments will need to be spending \$1.66 per capita to achieve a rapid decline in fertility, or \$1.14 per capita to achieve a standard decline. And the difference between those two levels of per capita expenditures could make the difference between 6.5 billion and 8.4 billion people in the developing world by the middle of the next century.

The same is true for international aid for population programs. Only about 1 percent of official development aid now goes for population assistance, and less for family planning. It supports about 25 percent of all family planning costs in developing countries, and about 50 percent of family planning programs outside China. Assuming these proportions did not change, population assistance would need to triple its current level by the year 2000 to achieve standard fertility decline, or quadruple it for the rapid decline. A quadrupling would raise annual population assistance from about \$500 million in 1981 to \$2 billion (in 1980 dollars) by the end of the century. These relatively modest increases in donor assistance could, given effective policies in developing countries, make a vast difference in population change, and significantly improve maternal and child health. We urge, therefore, that these increases be forthcoming.

Since Sweden made its first population grant in 1968, donors have transferred more than \$7 billion in population aid. The assistance is provided both directly to country programs and through multilateral and non-governmental organizations, of whom the two largest are the United Nations Fund for Population Activities (UNFPA) and the non-governmental International Planned Parenthood Federation (IPPF).

The World Bank attaches considerable importance to this key development issue of rapid population growth, and offers its support in three ways:

1. by helping improve understanding, through its economic and sector work and through policy dialogue with member countries, of the consequences for development of faster or slower population growth;
 2. by helping support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;
- and 3, by helping supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

Over a period of fourteen years, the Bank has committed about \$500 million for population projects, and over \$100 million for health projects. In the next few years, the Bank intends at least to double its population and related health lending. The major focus will be on Africa and Asia, and we look forward to cooperating with governments in the design and implementation of effective population policies and programs. During the next five years, the number of population and related health projects that we plan to finance in Sub-Saharan Africa will rise to twenty-one from the total of three financed by the Bank in the five years to mid-1983. And the number of countries of the region which will be borrowing from us for that purpose will likely rise from three to seventeen.

Small increases in spending can make a big difference. But sustained progress requires not just donor funds, but also a firm commitment on the part of the international community to population progress as a critical part of the overall development effort. And the strongest commitment must be made by the governments of the developing countries themselves. Where progress has been made, it has been because governments, setting explicit demographic goals, have been employing a wide range of policies, direct and indirect, to reduce the attractions of high fertility.

Let me now sum up.

Ten years ago, at the World Population Conference in Bucharest, a debate raged about the relative merits of development and family planning programs as alternative ways of slowing population growth. It is now clear that the dichotomy is false. Accumulating evidence on population change in developing countries shows that it is the combination of social development and family planning that is so powerful in reducing fertility.

But further fertility decline, and the initiation of decline where it has not begun, will not come automatically. In rural areas and among the less educated, desired family size will not be reduced much without sustained improvements in living standards. But measures to raise living standards do not quickly bring about fertility reductions. The need is to act now in education, primary health care, family planning, and improving women's opportunities, so as to bring a sustained decline in fertility over the long run. In the meantime, too many couples still do not benefit from adequate family planning services. Family planning programs, successful as they have been, have by no means reached their full potential. Action there will provide an immediate payoff.

In concluding, let me stress the key message on population growth in the World Bank's 1984 World Development Report.

Economic and social progress helps slow population growth; but at the same time rapid population growth hampers economic development. It is therefore imperative that governments act simultaneously on both fronts.

No one would argue that slower population growth alone will assure progress. But the evidence in the World Development Report seems conclusive: poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to slow population growth if development is to be achieved. But it must be slowed through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.

World population has grown faster, and to higher numbers, than Malthus would ever have imagined. But so have world production and income. If we can correct the current mismatch between population and income-producing ability, a mismatch that leaves many of the world's people in a vicious circle of poverty and high fertility, we may yet evade the doom which Malthus saw as inevitable. It is not inevitable that history will vindicate his dire prediction of human numbers outrunning global resources. We have a choice.

But that choice must be made now.

Opportunity is on our side.

But time is not.

Thank you.

END

Address
As Prepared for Delivery
By

A. W. Clausen, President
The World Bank
and
International Finance Corporation

before the
National Leaders' Seminar on Population and Development

Nairobi, Kenya
July 11, 1984

Mr. Vice President,
Your Excellencies,
Ladies and Gentlemen:

I am honored and delighted by your invitation to address this distinguished gathering. It is always a pleasure to come to this wonderful country, and I wish to thank you warmly, Mr. Vice President, for giving me this opportunity to share with you today some thoughts on the subject of population growth and development.

As all of us here agree, it is a subject of vast importance and undeniable urgency. While the effects of fast population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, all the evidence points overwhelmingly to the conclusion that it slows development in the developing countries. And the poor of these countries are the principal victims of the slowdown.

As I believe we can also agree: it is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can. And what if our assumptions about the decline in the average number of children born to women of child-bearing age are proven too optimistic? How many more billions will be added?

Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Our gathering here is one more demonstration of the deep concern and commitment of President Arap Moi, of you, Mr. Vice President, and of the government of Kenya, to meet the challenge of rapid population growth in your own country. There is indeed a strong link between population growth rates on the one hand and the rate of economic and social development on the other. You have boldly recognized that link, and we wish you well in your determined efforts not to let the pace of the former undermine the prospects of the latter.

But we should not be content just to wish you well. The World Bank is determined to support the broad spectrum of initiatives which you and the peoples of all developing nations are taking in the struggle against poverty. And here in Kenya we are especially anxious to help you in the population field by supporting your Family Planning Program in particular and your primary level health services and your education services in general. We are much encouraged that you have asked us to be one of your partners in this endeavor. We will do all we can to make that participation as helpful to you as possible.

You will readily understand why The World Bank, devoted as it is to the promotion of economic and social development in the developing countries, should be profoundly concerned with the population issue. Population growth is a key issue in development. And we are reaffirming our recognition of that basic fact by devoting the major part of the 1984 World Development Report, published today, to this problem. In humbly commending it to you, I would like to address the principal issues it raises concerning the problem. Complex as the problem is, the message I wish to convey about it can be clearly stated in three parts.

First, rapid population growth is a central development problem. Continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people. The main cost of such growth, borne principally by the poor in developing countries, has been, and will continue to be, lost opportunities for improving people's lives.

Second, proposals for reducing population growth raise difficult questions about the proper domain of public policy. Family and fertility are areas of life in which the most fundamental human values are at stake. Many public policy measures inevitably influence private decisions about family size. The question is: are there public policies seeking to reduce fertility which are appropriate to an area where private rights are paramount? Our answer is a firm "yes."

Third, in the past two decades, and especially in the past ten years, many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has taught us that policy and programs can and do make a difference.

Let me now expand on these three themes. And as a preface to what I want to say first about rapid population growth as a development problem, let me say something about past and future population growth in the developing world.

The second half of the twentieth century stands out in history as a period of remarkable population growth. Through most of the first half of this century, population growth was at the historically rapid rate of one percent. But then it accelerated to twice that rate, and between 1950 and today, the world's population has nearly doubled, from 2.5 billion to almost 4.8 billion.

Until the twentieth century, prosperity and population increase went hand-in-hand. But in this century, and particularly since 1950, population growth has been faster where income is low, and concentrated in developing countries. Of the 1984 world population increase of at least 80 million, more than 70 million will be added in developing countries, which now contain about three-quarters of the global population.

The delinking of population growth and prosperity occurred in part as public health and improved communications brought death rates down even where gains in living standards were small. A combination of continued high fertility and much reduced mortality has led to population growth of between 2 and 4 percent a year in most developing countries as compared with one percent a year in most developed countries.

The stark facts are that growth at three percent per year means that in seventy years population grows eightfold; at one percent a year it merely doubles. No group of people appreciates the implications of this better than we who are assembled here today in a country where the population growth rate has been projected this year at some 3.8 percent. That is most probably the highest rate in the world, and one that would double Kenya's population about every eighteen years.

For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about 2 percent today. But further decline in population growth in developing countries will not come automatically. Much of the slow-down so far can be attributed to the People's Republic of China, where fertility is already low -- close to an average of 2.5 children per family. Most families in other developing countries now have at least four children; in rural areas five or more.

For parts of South Asia and the Middle East, forecasts of a lower rate of population growth are based more on hope than on present trends. For much of Sub-Saharan Africa, population growth rates are actually rising, and could rise still further.

In Africa, many if not most couples say they want more children than in fact they are having, whereas mortality, still high, can be expected to decline. For example, The World Fertility Survey's findings on Kenya indicated a strong desire for large families. Relating to the period 1977-78, only 17 percent of then married women stated that they wanted no more children. Among those with eight living children, only 48 percent wanted no more. At the same time, though desired family size is high, actual family size is even higher, indicating that some couples have more children than they want. The mean desired family size in 1977-78 was about seven; but the number of children each mother was having averaged eight. All this suggests that in Kenya there is an unmet need for family planning services. But a substantial decline in fertility can only occur if desired family size falls.

We should be aware, moreover, of the effects of what we call "population momentum." This simply means that growth rates will remain high in developing countries for several decades, even if couples have fewer children. Absolute annual increases in population are likely to rise to over 80 million people a year. And they will remain that high through the end of this century since the baby "bulge," which resulted from high fertility and falling mortality twenty years ago, has itself now entered childbearing age.

Let me stress that population projections should not be treated as predictions, but as illustrations of what can happen given reasonable assumptions. If the assumptions underlying the "standard" projections of The World Bank are correct, world population would rise from almost 4.8 billion today to almost 10 billion by the middle of the next century.

The population of today's developed countries would grow from about 1.2 billion today to 1.4 billion in 2050 -- an increase of some 16 1/2 percent. But the countries we currently classify as developing would see their total population grow from 3.6 billion to 8.4 billion, an increase of 133 percent.

By the time the world population stabilized at over 11 billion in about the year 2150, the population of India would be 1.8 billion, making it the most populous nation on earth. And Kenya's population would have risen from 19.7 million today to a staggering 160 million, a situation surely as impermissible as it is unimaginable. And as a group, the countries of South Asia and Sub-Saharan Africa would account for about 50 percent of the world's people, compared with about 30 percent today.

These are awe-inspiring projections. And yet, in some respects, the assumptions underlying these projections may well be optimistic. Maybe fertility will not have fallen to replacement level in all developing countries sixty years from now. And maybe -- even though a lesser factor in high population growth -- mortality will not continue to fall rapidly. Even with rapid income growth and advances in literacy in the next two decades, the poorer countries of Africa and South Asia are not likely to reach the income and literacy levels that triggered fertility declines in such countries as Brazil, Korea, and Malaysia in the 1960s. Yet their fertility is projected to decline significantly. But even with those declines their population will more than double in the next fifty years.

One might well ask whether population increases of this order -- trebling, quadrupling, or more -- would not put an unbearable strain on the existing social fabric, and plunge countries into chaos. Would not rising unemployment and increasing landlessness overwhelm social and political institutions? Would not fragile administrative systems be unable to maintain health programs? Would, then, rising death rates, rather than falling birth rates, be the check on further population growth?

Even under an alternative projection of still more rapid fertility decline -- a decline such as achieved in China, Colombia, and Thailand in the past two decades -- population growth could remain great in most developing countries. We must accept the likelihood that population growth will accelerate in Africa because mortality still has far to fall and can be brought down fairly rapidly. Kenya would still have a growth rate around 2 1/2 percent in the year 2000, and India and Brazil around 1 1/2 percent. In the long run, many countries may wish to reduce population growth rate to less than one percent, which is already China's goal. But the alternative projections of rates of fertility decline make one thing painfully clear: for the next several decades, most developing countries will need to make a concerted effort just to reduce population growth to a rate closer to one percent.

To sum up this brief demographic overview:

It has been almost two decades since the peak of population growth in developing countries as a whole was passed. But the turnaround to a reduced rate of growth has been slow, and has been far from pervasive. Increases in population size are projected to mount for at least another two decades. In many countries of the developing world, populations will triple in size, or more, by the year 2050, even assuming substantial declines in fertility.

Thus, two decades after the turnaround, the slow pace of change and its uneven incidence point more than ever to rapid population growth as a central development problem.

Now let us return to the first of our three principal messages: that rapid population growth is a development problem. Why does it put a brake on development? There are three main reasons.

First, it exacerbates the difficult choice between higher consumption now and the investment needed to bring higher consumption in the future. As population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical capital and "human" capital -- that is to say, a person's education, health and skills. Otherwise, each worker will have less equipment and skills to work with, and productivity and incomes will stagnate or even fall. Every effort is thus required simply to maintain the status quo. And where it is hard to raise the level of capital and skills per worker, it is even harder to raise incomes and living standards.

To illustrate this briefly: in most developing countries, the high fertility and falling infant mortality of the mid-1960s mean that about 40 percent of populations are aged under fifteen. Countries such as Malawi face a doubling or tripling of their school-age population by the end of the century. With rapid fertility decline could come savings of more than 50 percent in the school system thirty years from now; savings that could be used to improve the quality of schooling.

The same is also true of jobs. High-fertility countries face large increases in their labor forces. As an example, Nigeria's high fertility in the 1970s guarantees that its working-age population will double by the end of this century. Kenya can expect an even larger increase, whereas China will experience a rise of no more than 45 percent.

Second, in many countries increases in population threaten what is already a precarious balance between natural resources and people, as here in Kenya. Where populations are still highly dependent on agriculture, continuing large increases in population can contribute to overuse of limited natural resources, such as land, mortgaging the welfare of future generations.

In many parts of Africa, strains on natural resources are already acute -- for example in this country, in Burundi, Malawi, eastern Nigeria, Rwanda, and parts of the Sahel region. But countries rich in natural resources do not escape the problem of rapid population growth. To exploit their natural resources, countries such as Angola, Ivory Coast, Nigeria, Zaire, and Zambia need extra skills, as well as heavy investment in roads and storage and distribution systems -- a more difficult goal if population is growing rapidly.

In part, the problem arises because rapid population growth slows the transfer of labor out of low-productivity agriculture into modern agriculture and other modern jobs. In many countries, much of the huge projected increases in the labor force will have to be absorbed in agriculture, a difficulty which today's developed countries never faced during the period of their economic transformation. Here in Kenya, assuming a 4 percent annual increase in the number of jobs outside agriculture, and an immediate start of fertility decline, 70 percent of the labor force will still be going into agriculture forty years from now, and their number will be twice what they are today. With farm size already averaging only about three acres of prime arable or equivalent land, we are bound to ask how Kenya can sustain such numbers.

Elsewhere in Africa, in parts of China, Bangladesh, and Indonesia, population pressure has already forced people to work harder, often on marginal land and shrinking farms, just to maintain household income in traditional agriculture. But the problem is not just continuing low income for many families. When undue stress is placed on traditional agricultural systems and the environment is damaged, the economic well-being of the poor is particularly threatened. Here in Kenya, as elsewhere, women have to go farther and farther to find wood and water. In Addis Ababa, Ethiopia, the price of increasingly scarce wood for fuel has risen

tenfold during the 1970s and now claims up to 20 percent of household incomes. In lowland areas surrounding the Ganges in southern Asia, population growth and competition for land have forced many people to live too close to the river, in the path of annual floods.

Third, rapid population growth is creating urban economic and social problems that risk becoming wholly unmanageable. Cities in developing countries are growing to a size for which there is no prior experience anywhere. Between 1950 and 1980 the proportion of urban dwellers in developing countries in cities of more than 5 million increased from 2 to 14 percent, growing at a rate of 15 percent a year. Brazil's Sao Paulo, which by the year 2000 could well be the world's second largest city after Mexico City, was smaller in 1950 than either Manchester, Detroit, or Naples. London, the world's second largest city in 1950, will not even be ranked among the twenty-five largest by the end of the century. The rise in urban population, 60 percent of which is due to natural increase, poses unprecedented problems of management even to maintain, let alone improve, the living conditions of city dwellers.

In the light of these disturbing facts about the impact of rapid population growth on development, must we conclude that the population brake on development in the Third World can nowhere be released?

Countries in which education levels are already high, where much investment in transportation and communications is already in place, and where political and economic systems are relatively stable -- these countries are better equipped to cope with the problem of rapid population growth. This is true whether or not their natural resources are limited or their countries already crowded, such as in economically rising East Asian countries like Korea and Singapore. But these tend also to be countries in which population growth is now slowing.

Those countries where there is rapid population growth could also cope better with the problem if the right economic and social adjustments could be made fast enough, if technical change could be guaranteed, and if rapid population growth itself inspired technical change. But such growth, if anything, makes adjustment more difficult. It brings at best only the gradual adaptation which is typical of agriculture, maintaining but not increasing per capita output. It is the rich countries, where population growth rates are slow, that are the architects of technological change. And their interest is in labor-saving, not labor-using, innovations.

While the effects of rapid population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, the evidence points overwhelmingly to the conclusion that it slows development. And conversely, that slower population growth can help accelerate development.

Policies to reduce population growth are not, of course, a panacea for development, nor are they substitutes for sensible macroeconomic and sectoral policies. Trade and exchange rate policies that promote economic efficiency and do not penalize labor, and the dismantling of institutional barriers to job creation, would ease employment problems. Correct pricing policies in agriculture, and more resources allocated to rural credit, agricultural research and extension, would help increase agricultural output. But failure to address the population problem will itself reduce the set of development policies that are capable of implementation. And it would permanently foreclose some long-run development options.

This brings me to our second message: there are appropriate policies to slow population growth.

It is the poor, with little education, low and insecure income, and poor health and family planning services who have many children. Yet it is also the poor who are the principal losers as rapid population growth hampers development. This seeming paradox provides the starting point for understanding the need for, and the designing of, appropriate policies to reduce fertility.

All parents everywhere get pleasure from children. But children involve economic costs; parents have to spend time and money bringing them up. For poor parents in developing countries, however, the economic costs can seem low in relation to the benefits.

Let me cite a few reasons:

- o When wages are low, the difference between children's and a mother's earnings will be small; income lost by the mother during a child's infancy may often be easily recovered by the child later on.

- o When schooling opportunities for children are lacking, how can one argue that it is a better investment to have two or three educated children than a large family that cannot be educated?

- o Poor parents worry about who will take care of them in their old age or when they are ill, and for many the need for support in old age outweighs the immediate costs of children. And since many children die young -- for example, one out of five children dies before reaching the age of one in some parts of Africa, and one out of seven in much of Bangladesh, India, and Pakistan -- the incentive to have many babies to ensure that a few survive is very great.

These are but three of the many factors encouraging large families. Add to that the limited information about, and access to, modern and safe means of contraception, and we can well understand why high fertility among the poor is so prevalent.

However, parents and children do not always gain where there are many children. Inadequate access to land, or the poor health of both mothers and children, often as a result of closely spaced births, can confound the parents' expectations.

Thus, if parents have many children in the hope of economic gain, the first step in reducing fertility must inevitably be to work towards the reduction of their poverty and of the uncertainty about their own future. In this sense, the persistence of high fertility in today's developing countries is a symptom of lack of access to services that the industrial world more or less takes for granted:

- o to health services, which reduce the need for many births to insure against infant and child mortality;
- o to education, which would raise parents' hopes for their children and would broaden a woman's outlook;
- o to social security and other forms of insurance for old age;
- o to consumer goods and social opportunities that compete with child-bearing;
- o and to family planning services, which provide the means to limit births.

The general components of the solution to high fertility would therefore seem clear enough. But in countries where there is as yet no national policy on population size and no family planning effort supported by the government, there remains the question of the justification of government action to encourage people to have fewer children. As I said at the outset, family and fertility are areas of life in which the most fundamental human values are at stake. And governments need to be very sure that public policy has a place in such private areas.

I would like to suggest, therefore, two broad justifications for government action.

The first is that a government owes a duty to society as a whole. It cannot remain indifferent to the gap that exists between an individual couple's hopes for private gain from having many children and the prospects for social gains for the community as a whole. "We wish to benefit from a large family" the couple may say, "but we wish our neighbors would have fewer children so that ours would face less competition for land and jobs." It is not easy to persuade a couple to give up the possible private benefits of many children, when its sacrifice alone would provide only minuscule benefits to other families' children and grandchildren. One family's restraint will have little negative effect on the availability of land, or on resources for investment in schooling and jobs. But, as governments are all too aware, many children born of many families will.

Governments are expected to have long time horizons, and to weigh the interests of future generations against those of the present. They have to bear in mind not only the pressure on land and jobs that results from high fertility rates. They must also weigh the fact that health and education costs of children are heavily subsidized by the public sector, and that high fertility constrains the amount of resources available for investment, and hence for future income growth.

But can high fertility be reduced so long as the individual couple's wish for itself is in conflict with its wish for society as a whole? The cause of the conflict is poverty; not just low income, but also lack of economic and social opportunities, an insecure future, and limited access to education, health and family planning services. Such a conflict requires public policy to provide alternative ways of securing the benefits that a large family of children can provide to their parents. In short, governments need to provide tangible evidence that it really is in the best private interests of parents to have fewer children. That will encourage people to make, through their government, a contract with each other: "if each of us has fewer children, we can rely on government support for nationwide measures to improve access to family planning services and to create incentives for their use, thus ensuring that everybody makes the same decision. That way we and all our children will enjoy a better chance in life."

By encouraging and supporting such a social contract, the government frees each individual couple from its need to decide in isolation to produce more children than it would want if others were limiting their family size.

That is the first justification for government action.

The second justification is that people may have more children than they want, or would want had they more information about, and access to, easier fertility control. They may lack, or disbelieve, information about falling child mortality; about the benefits to existing children of limiting family size; about the health risks to both mother and children of too many and too closely spaced births. The very idea of planning pregnancies may be unknown, and even if they know about family planning, couples may not know how to practise it.

Here the government's role as the disseminator of information and services is critical. It can encourage the wider provision of modern contraceptives by private suppliers. But in many countries where distribution systems are poor, health care inadequate, and demand unknown and possibly limited, governments will need to play a more direct role, subsidizing or even organizing contraceptive services.

There are an estimated 65 million couples in developing countries, many of them poor inhabitants of remote rural areas, who do not want more children, but who do not use any contraception. This is often for lack of access to effective contraceptives. This unmet need for family planning services is the strongest possible argument for government support of programs that can enhance the welfare of the parents and give their children a better chance in life.

To complement family planning services and social programs that help to reduce fertility, governments may wish to consider financial and other incentives and disincentives. Incentives compensate individuals for the economic and social losses of delaying births or having fewer children. They extend further the subsidy governments provide when they use public resources to deliver family planning services. Deferred incentives, that is compensation at a later date for a couple's decision to delay or limit births, is an alternative less costly than more conventional payments for restricting fertility. The expenditures come in the future, at a time when the saving to society from fewer births is being reaped. Disincentives are the withholding of certain social benefits from those whose family size exceed a desired norm.

Incentives and disincentives provide individuals with direct and voluntary trade-offs between the number of children and possible rewards and penalties. Those who accept payment for not having children do so because they find this trade-off worthwhile; they are compensated for some of the public savings from lower fertility. Similarly with disincentives, those who choose to pay the higher costs of additional children compensate society as a whole for that private benefit. Thus incentives and disincentives afford a choice. But choice will be preserved only if programs are well-designed and carefully and fairly implemented.

The third message is that we know from experience that public policy and programs can and do make a difference. Many developing countries have already shown that fertility can be reduced substantially, and over a short period of time.

In today's developed countries, as development progressed, fertility fell. But current rates of population growth are so much greater in the developing world than they were at comparable income levels in today's developed countries. Thus many developing countries cannot afford to wait for fertility to decline spontaneously. They need to place strong emphasis on policies that will accelerate fertility decline, especially education for women, and good family planning services to achieve it. It is encouraging, therefore, that some developing countries have already shown that these and related measures can in fact bring fertility down significantly.

It was once assumed that reducing fertility in developing countries would require a typical sequence of economic advance: urbanization, industrialization, a shift from production in the household to factory production, and incomes rising to levels enjoyed by today's developed countries. This view seemed to be confirmed by the fertility declines of the 1960s, particularly in the industrializing economies of Korea, Singapore, and Hong Kong. But fertility declines beginning in other developing countries in the late 1960s, and spreading to more in the 1970s, came with a different kind of development: education, health, the alleviation of poverty, improved opportunities for women, and government effort to assure widespread access to family planning services. Declines in birth rates since 1965 have been much more closely associated with adult literacy and life expectancy than with GNP per capita. For example, despite high average incomes, rapid industrialization, and fast economic growth, birth rates fell less in Brazil and Venezuela between 1965 and 1975 than in Sri Lanka, Thailand, and Turkey where income gains and social services were more evenly distributed.

The association of social development -- including gains in literacy and life expectancy -- with low fertility is not surprising. When children have a better chance of surviving and of enjoying a wider range of opportunities, their parents are willing to devote more time and money to educating them, and then have fewer of them. And as education brings an increase in opportunities for women outside the home, those opportunities substitute for the benefits of having many children.

Social development, however, comes only gradually. Encouragement of later marriage and longer breast-feeding can help reduce the birth rate. But the experience of many developing countries shows that it is public support for family planning programs which really can lower fertility quickly.

When family planning services are widespread and affordable, fertility has declined more rapidly than social and economic progress alone would predict. For example fertility has fallen faster and to lower levels in Colombia, where family planning programs received government support starting in the late 1960s, than in Brazil, a richer country where central government involvement is minimal. It has fallen more in Egypt and Tunisia, countries with demographic objectives, than in their richer neighbor, Algeria.

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception.

In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly -- and usually substantially -- as the education of mothers increases above the primary school level. The differences can be large; about four children between the highest and lowest groups in Colombia, for example.

Education delays marriage for women, either because marriage is put off during schooling, or because educated women are more likely to work or to take time to find suitable husbands. Educated women are also more likely to know about and adopt new methods of birth control. Here in Kenya, 22 percent of those with nine or more years of education use contraception, as opposed to only 7 percent with five or fewer years of education.

Improving both boys' and girls' educational opportunities can have an immediate payoff in terms of lower fertility of their parents. Once they know that schooling will open up new opportunities for their children, the parents accept the risk of having fewer children in order to invest more in each one. Evidence from household surveys in India, Egypt, and Nigeria show that parents have fewer children when education is readily available.

African governments should therefore not weaken their commitment to basic education for all, especially for women, despite current financial strains. The commitment to primary education here in Africa is strong indeed. But the indispensability of more education to less fertility should spur African governments to act even more determinedly on that commitment.

The second central policy is making access to contraception easier. Fertility declines have everywhere been eventually tied to increasing use of contraception. Cross-country analysis has shown that, for the average country, previous fertility decline, indicating a continuing trend away from large families, accounted for 33 percent of the total fall in fertility between 1965 and 1976; socioeconomic change accounted for 27 percent. But family planning effort accounted for more than either: 40 percent. Clearly, programs providing publicly subsidized information and access to modern contraceptive methods can reduce fertility.

But family planning is also a health measure. In much of Africa, where the health of children and mothers is relatively poor compared to other regions, child spacing of at least two years can reduce child mortality by about 15 percent. It can also significantly reduce maternal mortality. And in addition to child spacing for health, family planning programs can help adolescents, including young newlyweds, to avoid first births that come too early for young women. In Africa's circumstances, in particular, the provision of safe and effective family planning services can discourage recourse to traditional family planning methods that may be relatively unsafe or unworkable.

Some eighty-seven countries in the developing world, representing about 95 percent of its population, now provide such publicly subsidized family planning programs. Tremendous progress has been made in improving couples' access to information and services. But much more needs to be done. Nearly all programs fail to reach most rural people; even in the towns and cities the quality of services is often poor and discontinuation rates of users high. In many countries the potential of the private sector to provide family planning services has hardly been tapped; in others the gap in services provided privately can be filled only by enlarging public programs. Twenty-six countries have yet to introduce family planning programs. Almost half of these are in Africa, where incomes are among the lowest in the world, population growth is the highest, and the potential benefits from family planning may be the greatest.

About 40 percent of all couples in the developing world now use some form of contraception, ranging from 70 percent in China and Singapore to less than 10 percent in most of Africa. But in all countries surveyed, the number of women of childbearing age who want no more children exceeds the number practising contraception. About \$2 billion is currently spent on public family planning programs in developing countries each year. In most countries it is less than \$1 per head of population (about \$21 per user). To fill unmet needs today of women who would like to space or limit births but who are not practising contraception would require another \$1 billion per year.

In the next two decades, program spending will need to rise even further, because of the growing number of women of childbearing age, and the increasing proportion of them who are likely to want to use modern contraceptives. If developing countries are to achieve a rapid decline in fertility, leading to a developing world population of 6.5 billion in the middle of the next century, an estimated \$7.6 billion (in 1980 US dollars), or \$1.66 per capita, would be needed in the last year of this century. What we call the standard decline, leading to a developing world population of 8.4 billion in 2050, would require \$5.6 billion a year at the end of this century, or \$1.14 per capita. The estimated per capita expenditure on population programs in developing countries today is 62 cents. That can be compared with government spending per capita of about \$7 on all health programs in developing countries in 1982.

The figures make it clear: relatively small increases in government spending could go a long way toward meeting the projected financial requirement for supplying family planning services. And that could make the difference between 6.5 billion and 8.4 billion people in the developing world by the middle of the next century.

The same is true for external assistance. International aid for population programs has two major objectives: to assist governments and private organizations in providing family planning, information, and services, and to assist governments in developing population policies as part of their overall development strategy.

Only about 1 percent of official development aid now goes for population assistance, and less for family planning. It supports about 25 percent of all family planning costs in developing countries, and about 50 percent of family planning programs outside China. Assuming these proportions did not change, population assistance would need to triple its current level by the year 2000 to achieve standard fertility decline, or quadruple it for the rapid decline. A quadrupling would raise annual population assistance from about \$500 million in 1981 to \$2 billion (in 1980 dollars) by the end of the century. Few could dispute that relatively small increases in donor assistance can, given effective policies in developing countries, make a vast difference in population change, and significantly improve maternal and child health. Those relatively small increases must be forthcoming.

Since Sweden made its first population grant in 1968, donors have transferred more than \$7 billion in population aid. Although its contribution has been falling in real terms since 1972, the United States has remained until now the biggest supporter of population programs, providing, along with private U.S. foundations, about 40 percent of all population aid. Japan is the second largest donor. Canada, the Federal Republic of Germany, the Netherlands, and Norway have all increased their share of the total. Donor assistance is provided both directly to country programs and through multilateral and non-governmental organizations, of whom the two largest are the United Nations Fund for Population Activities (UNFPA) and the non-governmental International Planned Parenthood Federation (IPPF).

The World Bank also has an active role to play in helping address the problem of rapid population growth. The Bank attaches major importance to this key development issue, and offers its support in three ways:

- o by helping improve understanding, through its economic and sector work and through policy dialogue with member countries, of the consequences for development of faster or slower population growth;

- o by helping support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;

- o and by helping supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

Over a period of fourteen years, the Bank has committed about \$500 million for population projects, and over \$100 million for health projects. Its operations grew in real terms by more than 5 percent per year between 1977 and 1983, despite the fact that the terms of its finance are not as easy as most population assistance, which is in grant form. Meanwhile, the Bank cooperates with other U.N. organizations, especially UNFPA and the World Health Organization (WHO), in research analysis, and operations requested by member governments.

In the next few years, as part of a major effort involving donors and developing countries to increase resources for population programs, the Bank intends at least to double its population and related health lending. The major focus will be on Africa and Asia. We believe that the opportunity is there, and we look forward to cooperating with governments in the design and implementation of effective population policies and programs. During the next five years, the number of population and related health projects that we plan to finance in Sub-Saharan Africa will rise to twenty-one from the total of three financed by the Bank in the five years to mid-1983. And the number of countries of the region which will be borrowing from us for that purpose will likely rise from three to seventeen.

Small increases in spending, as I have noted, can make a big difference. Sustained progress, however, requires not just donor funds. It requires a firm commitment on the part of the international community to population progress as a critical part of the overall development effort. And the strongest commitment must be made by the governments of the developing countries themselves.

Religious and cultural characteristics cannot be ignored in designing an effective policy to reduce fertility. But they do not rule out effective action. In every part of the developing world during the past decade, some governments have made significant progress in developing a policy to reduce population growth. And where progress has been made, it has been because governments, setting explicit demographic goals, have been employing a wide range of policies, direct and indirect, to reduce the attractions of high fertility.

An effective policy requires the participation of many ministries, not just the Ministry of Health, and clear direction and support from the most senior levels of government. It requires the collection of reliable data and expert analysis of it to identify rapid population growth and project its consequences. Such information is critical to generating and sustaining the political commitment of leaders to slow growth. And strong institutions, both central and local, are needed to translate that political commitment into effective policy and action.

Let me now sum up.

Ten years ago, at the World Population Conference in Bucharest, a debate raged about the relative merits of development and family planning programs as alternative ways of slowing population growth. It is now clear that the dichotomy is false. Accumulating evidence on population change in developing countries shows that it is the combination of social development and family planning that is so powerful in reducing fertility.

But further fertility decline, and the initiation of decline where it has not begun, will not come automatically. In rural areas and among the less educated, desired family size will not be reduced much without sustained improvements in living conditions. The gap between the private and social gains of high fertility, itself the product of poverty, calls out for government action, especially in areas relating to women, that merit government action anyway.

But measures to raise living standards do not quickly bring about fertility reductions. The need is to act now in education, primary health care, family planning, and improving women's opportunities, so as to bring a sustained decline in fertility over the long run. In the meantime, too many couples still do not benefit from adequate family planning services. Family planning programs, successful as they have been, have by no means reached their full potential. Action there will provide an immediate payoff.

In concluding, let me stress the central message on population growth in the World Bank's 1984 World Development Report.

Economic and social progress helps slow population growth; but at the same time rapid population growth hampers economic development. It is therefore imperative that governments act simultaneously on both fronts. For the poorest countries, development may not be possible at all unless slower population growth can be achieved soon. In the better-off developing countries, continuing high fertility, especially among poor people, could prolong indefinitely the long wait for development to improve measurably the quality of their lives.

No one would argue that slower population growth alone will assure progress. But the evidence in the World Development Report seems conclusive. Poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to slow population growth if development is to be achieved. But it must be slowed through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.

World population has grown faster, and to higher numbers, than Malthus would ever have imagined. But so have world production and income. If we can correct the current mismatch between population and income-producing ability, a mismatch that leaves many of the world's people in a vicious circle of poverty and high fertility, we may yet evade the doom which Malthus saw as inevitable. It is not inevitable that history will vindicate his dire prediction of human numbers outrunning global resources. We have a choice.

But that choice must be made now.

Opportunity is on our side.

But time is not.

Thank you.

END

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J.Grenfell
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Address

As Prepared for Delivery

By

A. W. Clausen, President

The World Bank

and

International Finance Corporation

before the

Population and Family Planning Seminar

Nairobi, Kenya

July 11, 1984

Mr. Vice President,
Your Excellencies,
Ladies and Gentlemen:

I am honored and delighted by your invitation to address this distinguished gathering. It is always a pleasure to come to this wonderful country, and I wish to thank you warmly, Mr. Vice President, for giving me this opportunity to share with you today some thoughts on the subject of population growth and development.

As all of us here agree, it is a subject of vast importance and undeniable urgency. While the effects of fast population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, all the evidence points overwhelmingly to the conclusion that it slows development in the developing countries. And the poor of these countries are the principal victims of the slowdown.

As I believe we can also agree: it is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can. And what if our assumptions about the decline in the average number of children born to women of child-bearing age are proven too optimistic? How many more billions will be added?

Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Our gathering here is one more demonstration of the deep concern and commitment of President Arap Moi, of you, Mr. Vice President, and of the government of Kenya, to meet the challenge of rapid population growth in your own country. There is indeed a strong link between population growth rates on the one hand and the rate of economic and social development on the other. You have boldly recognized that link, and we wish you well in your determined efforts not to let the pace of the former undermine the prospects of the latter.

But we should not be content just to wish you well. The World Bank is determined to support the broad spectrum of initiatives which you and the peoples of all developing nations are taking in the struggle against poverty. And here in Kenya we are especially anxious to help you in the population field by supporting your Family Planning Program in particular and your primary level health services and your education services in general. We are much encouraged that you have asked us to be one of your partners in this endeavor. We will do all we can to make that participation as helpful to you as possible.

You will readily understand why The World Bank, devoted as it is to the promotion of economic and social development in the developing countries, should be profoundly concerned with the population issue. Population growth is a key issue in development. And we are reaffirming our recognition of that basic fact by devoting the major part of the 1984 World Development Report, published today, to this problem. In humbly commending it to you, I would like to address the principal issues it raises concerning the problem. Complex as the problem is, the message I wish to convey about it can be clearly stated in three parts.

First, rapid population growth is a central development problem. Continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people. The main cost of such growth, borne principally by the poor in developing countries, has been, and will continue to be, lost opportunities for improving people's lives.

Second, proposals for reducing population growth raise difficult questions about the proper domain of public policy. Family and fertility are areas of life in which the most fundamental human values are at stake. Many public policy measures inevitably influence private decisions about family size. The question is: are there public policies seeking to reduce fertility which are appropriate to an area where private rights are paramount? Our answer is a firm "yes."

Third, in the past two decades, and especially in the past ten years, many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has taught us that policy and programs can and do make a difference.

Let me now expand on these three themes. And as a preface to what I want to say first about rapid population growth as a development problem, let me say something about past and future population growth in the developing world.

The second half of the twentieth century stands out in history as a period of remarkable population growth. Through most of the first half of this century, population growth was at the historically rapid rate of one percent. But then it accelerated to twice that rate, and between 1950 and today, the world's population has nearly doubled, from 2.5 billion to almost 4.8 billion.

Until the twentieth century, prosperity and population increase went hand-in-hand. But in this century, and particularly since 1950, population growth has been faster where income is low, and concentrated in developing countries. Of the 1984 world population increase of at least 80 million, more than 70 million will be added in developing countries, which now contain about three-quarters of the global population.

The delinking of population growth and prosperity occurred in part as public health and improved communications brought death rates down even where gains in living standards were small. A combination of continued high fertility and much reduced mortality has led to population growth of between 2 and 4 percent a year in most developing countries as compared with one percent a year in most developed countries.

The stark facts are that growth at three percent per year means that in seventy years population grows eightfold; at one percent a year it merely doubles. No group of people appreciates the implications of this better than we who are assembled here today in a country where the population growth rate has been projected this year at some 3.8 percent. That is most probably the highest rate in the world, and one that would double Kenya's population about every eighteen years.

For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about 2 percent today. But further decline in population growth in developing countries will not come automatically. Much of the slow-down so far can be attributed to the People's Republic of China, where fertility is already low -- close to an average of 2.5 children per family. Most families in other developing countries now have at least four children; in rural areas five or more.

For parts of South Asia and the Middle East, forecasts of a lower rate of population growth are based more on hope than on present trends. For much of Sub-Saharan Africa, population growth rates are actually rising, and could rise still further.

In Africa, many if not most couples say they want more children than in fact they are having, whereas mortality, still high, can be expected to decline. For example, The World Fertility Survey's findings on Kenya indicated a strong desire for large families. Relating to the period 1977-78, only 17 percent of then married women stated that they wanted no more children. Among those with eight living children, only 48 percent wanted no more. At the same time, though desired family size is high, actual family size is even higher, indicating that some couples have more children than they want. The mean desired family size in 1977-78 was about seven; but the number of children each mother was having averaged eight. All this suggests that in Kenya there is an unmet need for family planning services. But a substantial decline in fertility can only occur if desired family size falls.

We should be aware, moreover, of the effects of what we call "population momentum." This simply means that growth rates will remain high in developing countries for several decades, even if couples have fewer children. Absolute annual increases in population are likely to rise to over 80 million people a year. And they will remain that high through the end of this century since the baby "bulge," which resulted from high fertility and falling mortality twenty years ago, has itself now entered childbearing age.

Let me stress that population projections should not be treated as predictions, but as illustrations of what can happen given reasonable assumptions. If the assumptions underlying the "standard" projections of The World Bank are correct, world population would rise from almost 4.8 billion today to almost 10 billion by the middle of the next century.

The population of today's developed countries would grow from about 1.2 billion today to 1.4 billion in 2050 -- an increase of some 16 1/2 percent. But the countries we currently classify as developing would see their total population grow from 3.6 billion to 8.4 billion, an increase of 133 percent.

By the time the world population stabilized at over 11 billion in about the year 2150, the population of India would be 1.8 billion, making it the most populous nation on earth. And Kenya's population would have risen from 19.7 million today to a staggering 160 million, a situation surely as impermissible as it is unimaginable. And as a group, the countries of South Asia and Sub-Saharan Africa would account for about 50 percent of the world's people, compared with about 30 percent today.

These are awe-inspiring projections. And yet, in some respects, the assumptions underlying these projections may well be optimistic. Maybe fertility will not have fallen to replacement level in all developing countries seventy years from now. And maybe -- even though a lesser factor in high population growth -- mortality will not continue to fall rapidly. Even with rapid income growth and advances in literacy in the next two decades, the poorer countries of Africa and South Asia are not likely to reach the income and literacy levels that triggered fertility declines in such countries as Brazil, Korea, and Malaysia in the 1960s. Yet their fertility is projected to decline significantly. But even with those declines their population will more than double in the next fifty years.

One might well ask whether population increases of this order -- trebling, quadrupling, or more -- would not put an unbearable strain on the existing social fabric, and plunge countries into chaos. Would not rising unemployment and increasing landlessness overwhelm social and political institutions? Would not fragile administrative systems be unable to maintain health programs? Would, then, rising death rates, rather than falling birth rates, be the check on further population growth?

Even under an alternative projection of still more rapid fertility decline -- a decline such as achieved in China, Colombia, and Thailand in the past two decades -- population growth could remain great in most developing countries. We must accept the likelihood that population growth will accelerate in Africa because mortality still has far to fall and can be brought down fairly rapidly. Kenya would still have a growth rate around 2 1/2 percent in the year 2000, and India and Brazil around 1 1/2 percent. In the long run, many countries may wish to reduce population growth rate to less than one percent, which is already China's goal. But the alternative projections of rates of fertility decline make one thing painfully clear: for the next several decades, most developing countries will need to make a concerted effort just to reduce population growth to a rate closer to one percent.

To sum up this brief demographic overview:

It has been almost two decades since the peak of population growth in developing countries as a whole was passed. But the turnaround to a reduced rate of growth has been slow, and has been far from pervasive. Increases in population size are projected to mount for at least another two decades. In many countries of the developing world, populations will triple in size, or more, by the year 2050, even assuming substantial declines in fertility.

Thus, two decades after the turnaround, the slow pace of change and its uneven incidence point more than ever to rapid population growth as a central development problem.

Now let us return to the first of our three principal messages: that rapid population growth is a development problem. Why does it put a brake on development? There are three main reasons.

First, it exacerbates the difficult choice between higher consumption now and the investment needed to bring higher consumption in the future. As population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical capital and "human" capital -- that is to say, a person's education, health and skills. Otherwise, each worker will have less equipment and skills to work with, and productivity and incomes will stagnate or even fall. Every effort is thus required simply to maintain the status quo. And where it is hard to raise the level of capital and skills per worker, it is even harder to raise incomes and living standards.

To illustrate this briefly: in most developing countries, the high fertility and falling infant mortality of the mid-1960s mean that about 40 percent of populations are aged under fifteen. Countries such as Malawi face a doubling or tripling of their school-age population by the end of the century. With rapid fertility decline could come savings of more than 50 percent in the school system thirty years from now; savings that could be used to improve the quality of schooling.

The same is also true of jobs. High-fertility countries face large increases in their labor forces. As an example, Nigeria's high fertility in the 1970s guarantees that its working-age population will double by the end of this century. Kenya can expect an even larger increase, whereas China will experience a rise of no more than 45 percent.

Second, in many countries increases in population threaten what is already a precarious balance between natural resources and people, as here in Kenya. Where populations are still highly dependent on agriculture, continuing large increases in population can contribute to overuse of limited natural resources, such as land, mortgaging the welfare of future generations.

In many parts of Africa, strains on natural resources are already acute -- for example in this country, in Burundi, Malawi, eastern Nigeria, Rwanda, and parts of the Sahel region. But countries rich in natural resources do not escape the problem of rapid population growth. To exploit their natural resources, countries such as Angola, Ivory Coast, Nigeria, Zaire, and Zambia need extra skills, as well as heavy investment in roads and storage and distribution systems -- a more difficult goal if population is growing rapidly.

In part, the problem arises because rapid population growth slows the transfer of labor out of low-productivity agriculture into modern agriculture and other modern jobs. In many countries, much of the huge projected increases in the labor force will have to be absorbed in agriculture, a difficulty which today's developed countries never faced during the period of their economic transformation. Here in Kenya, assuming a 4 percent annual increase in the number of jobs outside agriculture, and an immediate start of fertility decline, 70 percent of the labor force will still be going into agriculture forty years from now, and their number will be twice what they are today. With farm size already averaging only about three acres of prime arable or equivalent land, we are bound to ask how Kenya can sustain such numbers.

Elsewhere in Africa, in parts of China, Bangladesh, and Indonesia, population pressure has already forced people to work harder, often on marginal land and shrinking farms, just to maintain household income in traditional agriculture. But the problem is not just continuing low income for many families. When undue stress is placed on traditional agricultural systems and the environment is damaged, the economic well-being of the poor is particularly threatened. Here in Kenya, as elsewhere, women have to go farther and farther to find wood and water. In Addis Ababa, Ethiopia, the price of increasingly scarce wood for fuel has risen

tenfold during the 1970s and now claims up to 20 percent of household incomes. In lowland areas surrounding the Ganges in southern Asia, population growth and competition for land have forced many people to live too close to the river, in the path of annual floods.

Third, rapid population growth is creating urban economic and social problems that risk becoming wholly unmanageable. Cities in developing countries are growing to a size for which there is no prior experience anywhere. Between 1950 and 1980 the proportion of urban dwellers in developing countries in cities of more than 5 million increased from 2 to 14 percent, growing at a rate of 15 percent a year. Brazil's Sao Paulo, which by the year 2000 could well be the world's second largest city after Mexico City, was smaller in 1950 than either Manchester, Detroit, or Naples. London, the world's second largest city in 1950, will not even be ranked among the twenty-five largest by the end of the century. The rise in urban population, 60 percent of which is due to natural increase, poses unprecedented problems of management even to maintain, let alone improve, the living conditions of city dwellers.

In the light of these disturbing facts about the impact of rapid population growth on development, must we conclude that the population brake on development in the Third World can nowhere be released?

Countries in which education levels are already high, where much investment in transportation and communications is already in place, and where political and economic systems are relatively stable -- these countries are better equipped to cope with the problem of rapid population growth. This is true whether or not their natural resources are limited or their countries already crowded, such as in economically rising East Asian countries like Korea and Singapore. But these tend also to be countries in which population growth is now slowing.

Those countries where there is rapid population growth could also cope better with the problem if the right economic and social adjustments could be made fast enough, if technical change could be guaranteed, and if rapid population growth itself inspired technical change. But such growth, if anything, makes adjustment more difficult. It brings at best only the gradual adaptation which is typical of agriculture, maintaining but not increasing per capita output. It is the rich countries, where population growth rates are slow, that are the architects of technological change. And their interest is in labor-saving, not labor-using, innovations.

While the effects of rapid population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, the evidence points overwhelmingly to the conclusion that it slows development. And conversely, that slower population growth can help accelerate development.

Policies to reduce population growth are not, of course, a panacea for development, nor are they substitutes for sensible macroeconomic and sectoral policies. Trade and exchange rate policies that promote economic efficiency and do not penalize labor, and the dismantling of institutional barriers to job creation, would ease employment problems. Correct pricing policies in agriculture, and more resources allocated to rural credit, agricultural research and extension, would help increase agricultural output. But failure to address the population problem will itself reduce the set of development policies that are capable of implementation. And it would permanently foreclose some long-run development options.

This brings me to our second message: there are appropriate policies to slow population growth.

It is the poor, with little education, low and insecure income, and poor health and family planning services who have many children. Yet it is also the poor who are the principal losers as rapid population growth hampers development. This seeming paradox provides the starting point for understanding the need for, and the designing of, appropriate policies to reduce fertility.

All parents everywhere get pleasure from children. But children involve economic costs; parents have to spend time and money bringing them up. For poor parents in developing countries, however, the economic costs can seem low in relation to the benefits.

Let me cite a few reasons:

- o When wages are low, the difference between children's and a mother's earnings will be small; income lost by the mother during a child's infancy may often be easily recovered by the child later on.

- o When schooling opportunities for children are lacking, how can one argue that it is a better investment to have two or three educated children than a large family that cannot be educated?

- o Poor parents worry about who will take care of them in their old age or when they are ill, and for many the need for support in old age outweighs the immediate costs of children. And since many children die young -- for example, one out of five children dies before reaching the age of one in some parts of Africa, and one out of seven in much of Bangladesh, India, and Pakistan -- the incentive to have many babies to ensure that a few survive is very great.

These are but three of the many factors encouraging large families. Add to that the limited information about, and access to, modern and safe means of contraception, and we can well understand why high fertility among the poor is so prevalent.

However, parents and children do not always gain where there are many children. Inadequate access to land, or the poor health of both mothers and children, often as a result of closely spaced births, can confound the parents' expectations.

Thus, if parents have many children in the hope of economic gain, the first step in reducing fertility must inevitably be to work towards the reduction of their poverty and of the uncertainty about their own future. In this sense, the persistence of high fertility in today's developing countries is a symptom of lack of access to services that the industrial world more or less takes for granted:

- o to health services, which reduce the need for many births to insure against infant and child mortality;
- o to education, which would raise parents' hopes for their children and would broaden a woman's outlook;
- o to social security and other forms of insurance for old age;
- o to consumer goods and social opportunities that compete with child-bearing;
- o and to family planning services, which provide the means to limit births.

The general components of the solution to high fertility would therefore seem clear enough. But in countries where there is as yet no national policy on population size and no family planning effort supported by the government, there remains the question of the justification of government action to encourage people to have fewer children. As I said at the outset, family and fertility are areas of life in which the most fundamental human values are at stake. And governments need to be very sure that public policy has a place in such private areas.

I would like to suggest, therefore, two broad justifications for government action.

The first is that a government owes a duty to society as a whole. It cannot remain indifferent to the gap that exists between an individual couple's hopes for private gain from having many children and the prospects for social gains for the community as a whole. "We wish to benefit from a large family" the couple may say, "but we wish our neighbors would have fewer children so that ours would face less competition for land and jobs." It is not easy to persuade a couple to give up the possible private benefits of many children, when its sacrifice alone would provide only minuscule benefits to other families' children and grandchildren. One family's restraint will have little negative effect on the availability of land, or on resources for investment in schooling and jobs. But, as governments are all too aware, many children born of many families will.

Governments are expected to have long time horizons, and to weigh the interests of future generations against those of the present. They have to bear in mind not only the pressure on land and jobs that results from high fertility rates. They must also weigh the fact that health and education costs of children are heavily subsidized by the public sector, and that high fertility constrains the amount of resources available for investment, and hence for future income growth.

But can high fertility be reduced so long as the individual couple's wish for itself is in conflict with its wish for society as a whole? The cause of the conflict is poverty; not just low income, but also lack of economic and social opportunities, an insecure future, and limited access to education, health and family planning services. Such a conflict requires public policy to provide alternative ways of securing the benefits that a large family of children can provide to their parents. In short, governments need to provide tangible evidence that it really is in the best private interests of parents to have fewer children. That will encourage people to make, through their government, a contract with each other: "if each of us has fewer children, we can rely on government support for nationwide measures to improve access to family planning services and to create incentives for their use, thus ensuring that everybody makes the same decision. That way we and all our children will enjoy a better chance in life."

By encouraging and supporting such a social contract, the government frees each individual couple from its need to decide in isolation to produce more children than it would want if others were limiting their family size.

That is the first justification for government action.

The second justification is that people may have more children than they want, or would want had they more information about, and access to, easier fertility control. They may lack, or disbelieve, information about falling child mortality; about the benefits to existing children of limiting family size; about the health risks to both mother and children of too many and too closely spaced births. The very idea of planning pregnancies may be unknown, and even if they know about family planning, couples may not know how to practise it.

Here the government's role as the disseminator of information and services is critical. It can encourage the wider provision of modern contraceptives by private suppliers. But in many countries where distribution systems are poor, health care inadequate, and demand unknown and possibly limited, governments will need to play a more direct role, subsidizing or even organizing contraceptive services.

There are an estimated 65 million couples in developing countries, many of them poor inhabitants of remote rural areas, who do not want more children, but who do not use any contraception. This is often for lack of access to effective contraceptives. This unmet need for family planning services is the strongest possible argument for government support of programs that can enhance the welfare of the parents and give their children a better chance in life.

To complement family planning services and social programs that help to reduce fertility, governments may wish to consider financial and other incentives and disincentives. Incentives compensate individuals for the economic and social losses of delaying births or having fewer children. They extend further the subsidy governments provide when they use public resources to deliver family planning services. Deferred incentives, that is compensation at a later date for a couple's decision to delay or limit births, is an alternative less costly than more conventional payments for restricting fertility. The expenditures come in the future, at a time when the saving to society from fewer births is being reaped. Disincentives are the withholding of certain social benefits from those whose family size exceed a desired norm.

Incentives and disincentives provide individuals with direct and voluntary trade-offs between the number of children and possible rewards and penalties. Those who accept payment for not having children do so because they find this trade-off worthwhile; they are compensated for some of the public savings from lower fertility. Similarly with disincentives, those who choose to pay the higher costs of additional children compensate society as a whole for that private benefit. Thus incentives and disincentives afford a choice. But choice will be preserved only if programs are well-designed and carefully and fairly implemented.

The third message is that we know from experience that public policy and programs can and do make a difference. Many developing countries have already shown that fertility can be reduced substantially, and over a short period of time.

In today's developed countries, as development progressed, fertility fell. But current rates of population growth are so much greater in the developing world than they were at comparable income levels in today's developed countries. Thus many developing countries cannot afford to wait for fertility to decline spontaneously. They need to place strong emphasis on policies that will accelerate fertility decline, especially education for women, and good family planning services to achieve it. It is encouraging, therefore, that some developing countries have already shown that these and related measures can in fact bring fertility down significantly.

It was once assumed that reducing fertility in developing countries would require a typical sequence of economic advance: urbanization, industrialization, a shift from production in the household to factory production, and incomes rising to levels enjoyed by today's developed countries. This view seemed to be confirmed by the fertility declines of the 1960s, particularly in the industrializing economies of Korea, Singapore, and Hong Kong. But fertility declines beginning in other developing countries in the late 1960s, and spreading to more in the 1970s, came with a different kind of development: education, health, the alleviation of poverty, improved opportunities for women, and government effort to assure widespread access to family planning services. Declines in birth rates since 1965 have been much more closely associated with adult literacy and life expectancy than with GNP per capita. For example, despite high average incomes, rapid industrialization, and fast economic growth, birth rates fell less in Brazil and Venezuela between 1965 and 1975 than in Sri Lanka, Thailand, and Turkey where income gains and social services were more evenly distributed.

The association of social development -- including gains in literacy and life expectancy -- with low fertility is not surprising. When children have a better chance of surviving and of enjoying a wider range of opportunities, their parents are willing to devote more time and money to educating them, and then have fewer of them. And as education brings an increase in opportunities for women outside the home, those opportunities substitute for the benefits of having many children.

Social development, however, comes only gradually. The practices of later marriage and longer breast-feeding can help reduce the birth rate. But the experience of many developing countries shows that it is public support for family planning programs which really can lower fertility quickly.

When family planning services are widespread and affordable, fertility has declined more rapidly than social and economic progress alone would predict. For example fertility has fallen faster and to lower levels in Colombia, where family planning programs received government support starting in the late 1960s, than in Brazil, a richer country where central government involvement is minimal. It has fallen more in Egypt and Tunisia, countries with demographic objectives, than in their richer neighbor, Algeria.

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception.

In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly -- and usually substantially -- as the education of mothers increases above the primary school level. The differences can be large; about four children between the highest and lowest groups in Colombia, for example.

Education delays marriage for women, either because marriage is put off during schooling, or because educated women are more likely to work or to take time to find suitable husbands. Educated women are also more likely to know about and adopt new methods of birth control. Here in Kenya, 22 percent of those with nine or more years of education use contraception, as opposed to only 7 percent with five or fewer years of education.

Improving both boys' and girls' educational opportunities can have an immediate payoff in terms of lower fertility of their parents. Once they know that schooling will open up new opportunities for their children, the parents accept the risk of having fewer children in order to invest more in each one. Evidence from household surveys in India, Egypt, and Nigeria show that parents have fewer children when education is readily available.

African governments should therefore not weaken their commitment to basic education for all, especially for women, despite current financial strains. The commitment to primary education here in Africa is strong indeed. But the indispensability of more education to less fertility should spur African governments to act even more determinedly on that commitment.

The second central policy is making access to contraception easier. Fertility declines have everywhere been eventually tied to increasing use of contraception. Cross-country analysis has shown that, for the average country, previous fertility decline, indicating a continuing trend away from large families, accounted for 33 percent of the total fall in fertility between 1965 and 1976; socioeconomic change accounted for 27 percent. But family planning effort accounted for more than either: 40 percent. Clearly, programs providing publicly subsidized information and access to modern contraceptive methods can reduce fertility.

But family planning is also a health measure. In much of Africa, where the health of children and mothers is relatively poor compared to other regions, child spacing of at least two years can reduce child mortality by about 15 percent. It can also significantly reduce maternal mortality. And in addition to child spacing for health, family planning programs can help adolescents, including young newlyweds, to avoid first births that come too early for young women. In Africa's circumstances, in particular, the provision of safe and effective family planning services can discourage recourse to traditional family planning methods that may be relatively unsafe or unworkable.

Some eighty-seven countries in the developing world, representing about 95 percent of its population, now provide such publicly subsidized family planning programs. Tremendous progress has been made in improving couples' access to information and services. But much more needs to be done. Nearly all programs fail to reach most rural people; even in the towns and cities the quality of services is often poor and discontinuation rates of users high. In many countries the potential of the private sector to provide family planning services has hardly been tapped; in others the gap in services provided privately can be filled only by enlarging public programs. Twenty-six countries have yet to introduce family planning programs. Almost half of these are in Africa, where incomes are among the lowest in the world, population growth is the highest, and the potential benefits from family planning may be the greatest.

About 40 percent of all couples in the developing world now use some form of contraception, ranging from 70 percent in China and Singapore to less than 10 percent in most of Africa. But in all countries surveyed, the number of women of childbearing age who want no more children exceeds the number practising contraception. About \$2 billion is currently spent on public family planning programs in developing countries each year. In most countries it is less than \$1 per head of population (about \$21 per user). To fill unmet needs today of women who would like to space or limit births but who are not practising contraception would require another \$1 billion per year.

In the next two decades, program spending will need to rise even further, because of the growing number of women of childbearing age, and the increasing proportion of them who are likely to want to use modern contraceptives. If developing countries are to achieve a rapid decline in fertility, leading to a developing world population of 6.5 billion in the middle of the next century, an estimated \$7.6 billion (in 1980 US dollars), or \$1.66 per capita, would be needed in the last year of this century. What we call the standard decline, leading to a developing world population of 8.4 billion in 2050, would require \$5.6 billion a year at the end of this century, or \$1.14 per capita. The estimated per capita expenditure on population programs in developing countries today is 62 cents. That can be compared with government spending per capita of about \$7 on all health programs in developing countries in 1982.

The figures make it clear: relatively small increases in government spending could go a long way toward meeting the projected financial requirement for supplying family planning services. And that could make the difference between 6.5 billion and 8.4 billion people in the developing world by the middle of the next century.

The same is true for external assistance. International aid for population programs has two major objectives: to assist governments and private organizations in providing family planning, information, and services, and to assist governments in developing population policies as part of their overall development strategy.

Only about 1 percent of official development aid now goes for population assistance, and less for family planning. It supports about 25 percent of all family planning costs in developing countries, and about 50 percent of family planning programs outside China. Assuming these proportions did not change, population assistance would need to triple its current level by the year 2000 to achieve standard fertility decline, or quadruple it for the rapid decline. A quadrupling would raise annual population assistance from about \$500 million in 1981 to \$2 billion (in 1980 dollars) by the end of the century. Few could dispute that relatively small increases in donor assistance can, given effective policies in developing countries, make a vast difference in population change, and significantly improve maternal and child health. Those relatively small increases must be forthcoming.

Since Sweden made its first population grant in 1968, donors have transferred more than \$7 billion in population aid. Although its contribution has been falling in real terms since 1972, the United States has remained until now the biggest supporter of population programs, providing, along with private U.S. foundations, about 40 percent of all population aid. Japan is the second largest donor. Canada, the Federal Republic of Germany, the Netherlands, and Norway have all increased their share of the total. Donor assistance is provided both directly to country programs and through multilateral and non-governmental organizations, of whom the two largest are the United Nations Fund for Population Activities (UNFPA) and the non-governmental International Planned Parenthood Federation (IPPF).

The World Bank also has an active role to play in helping address the problem of rapid population growth. The Bank attaches importance to this key development issue, and offers its support in three ways:

- o by helping improve understanding, through its economic and sector work and through policy dialogue with member countries, of the consequences for development of faster or slower population growth;

- o by helping support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;

- o and by helping supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

Over a period of fourteen years, the Bank has committed about \$500 million for population projects, and over \$100 million for health projects. Its operations grew in real terms by more than 5 percent per year between 1977 and 1983, despite the fact that the terms of its finance are not as easy as most population assistance, which is in grant form. Meanwhile, the Bank cooperates with other U.N. organizations, especially UNFPA and the World Health Organization (WHO), in research analysis, and operations requested by member governments.

In the next few years, as part of a major effort involving donors and developing countries to increase resources for population programs, the Bank intends at least to double its population and related health lending. The major focus will be on Africa and Asia. We believe that the opportunity is there, and we look forward to cooperating with governments in the design and implementation of effective population policies and programs. During the next five years, the number of population and related health projects that we plan to finance in Sub-Saharan Africa will rise to twenty-one from the total of three financed by the Bank in the five years to mid-1983. And the number of countries of the region which will be borrowing from us for that purpose will likely rise from three to seventeen.

Small increases in spending, as I have noted, can make a big difference. Sustained progress, however, requires not just donor funds. It requires a firm commitment on the part of the international community to population progress as a critical part of the overall development effort. And the strongest commitment must be made by the governments of the developing countries themselves.

Religious and cultural characteristics cannot be ignored in designing an effective policy to reduce fertility. But they do not rule out effective action. In every part of the developing world during the past decade, some governments have made significant progress in developing a policy to reduce population growth. And where progress has been made, it has been because governments, setting explicit demographic goals, have been employing a wide range of policies, direct and indirect, to reduce the attractions of high fertility.

An effective policy requires the participation of many ministries, not just the Ministry of Health, and clear direction and support from the most senior levels of government. It requires the collection of reliable data and expert analysis of it to identify rapid population growth and project its consequences. Such information is critical to generating and sustaining the political commitment of leaders to slow growth. And strong institutions, both central and local, are needed to translate that political commitment into effective policy and action.

Let me now sum up.

Ten years ago, at the World Population Conference in Bucharest, a debate raged about the relative merits of development and family planning programs as alternative ways of slowing population growth. It is now clear that the dichotomy is false. Accumulating evidence on population change in developing countries shows that it is the combination of social development and family planning that is so powerful in reducing fertility.

But further fertility decline, and the initiation of decline where it has not begun, will not come automatically. In rural areas and among the less educated, desired family size will not be reduced much without sustained improvements in living conditions. The gap between the private and social gains of high fertility, itself the product of poverty, calls out for government action, especially in areas relating to women, that merit government action anyway.

But measures to raise living standards do not quickly bring about fertility reductions. The need is to act now in education, primary health care, family planning, and improving women's opportunities, so as to bring a sustained decline in fertility over the long run. In the meantime, too many couples still do not benefit from adequate family planning services. Family planning programs, successful as they have been, have by no means reached their full potential. Action there will provide an immediate payoff.

In concluding, let me stress the central message on population growth in the World Bank's 1984 World Development Report.

Economic and social progress helps slow population growth; but at the same time rapid population growth hampers economic development. It is therefore imperative that governments act simultaneously on both fronts. For the poorest countries, development may not be possible at all unless slower population growth can be achieved soon. In the better-off developing countries, continuing high fertility, especially among poor people, could prolong indefinitely the long wait for development to improve measurably the quality of their lives.

No one would argue that slower population growth alone will assure progress. But the evidence in the World Development Report seems conclusive. Poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to slow population growth if development is to be achieved. But it must be slowed through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.

World population has grown faster, and to higher numbers, than Malthus would ever have imagined. But so have world production and income. If we can correct the current mismatch between population and income-producing ability, a mismatch that leaves many of the world's people in a vicious circle of poverty and high fertility, we may yet evade the doom which Malthus saw as inevitable. It is not inevitable that history will vindicate his dire prediction of human numbers outrunning global resources. We have a choice.

But that choice must be made now.

Opportunity is on our side.

But time is not.

Thank you.

END

OFFICE MEMORANDUM

June 28, 1984

TO: Mr. A. W. Clausen, President

FROM: Julian Grenfell, ^FChief, Speechwriting Unit, IPA

SUBJECT: Your Nairobi Speech

Herewith the draft text, cleared by the staff, of what will be the printed version of your speech.

While awaiting your comments and clearance, I am starting work on a 35-40 minute oral version of it.

The press will receive the long version, together with a press release, embargoed for the day of your meeting in Nairobi.

Attachment

J.Grenfell/avs

THE WORLD BANK/INTERNATIONAL FINANCE CORPORATION
OFFICE MEMORANDUM

June 21, 1984

TO: Mr. A. W. Clausen, President

FROM: Julian Grenfell, Chief, Speechwriting Unit, IPA

SUBJECT: Your Nairobi Population Speech

Attached is a draft which is not yet cleared by all the interested parties, and into which some comments I have received have yet to be incorporated. I thought, however, you might like to get a look at it in its current form, as the consensus in ERS and OPS appears to be that it is, in substance, on target, but requires a little reworking and refining here and there. This will be done over the weekend. A shorter, oral, version will also be prepared.

For your information, Ernie Stern's comment on the draft is:

"I think this is a fine speech. The only point I would add is that the projected levels of population cannot happen while countries maintain stable political/social/economic systems. The question is, therefore, how do we avoid these numbers from coming to be? How can we avoid them happening in a systematic, human way?"

It's a good question, and I will try to address it with some suitable new language.

I will definitely be adding a paragraph on financial and other incentives as a legitimate way for governments to bring social and private interests together. There is also some feeling that we could put more in on Africa and Kenya. I don't want to overdo that because, in fact, you are addressing the world from Nairobi as much as you are addressing Kenyans in Nairobi. But we can strengthen it a little.

I look forward to sending you on Monday the refined draft incorporating all staff comments to date. We would like to get your final approval on the longer text by Friday, June 29, so that we can send advance copies out to the press, together with a press release.

J.Grenfell/avs

Attachment

OFFICE MEMORANDUM

June 27, 1984

TO: Mr. A. W. Clausen, President

FROM: Julian Grenfell, Chief, Speechwriting Unit, IPA

SUBJECT: Taping Excerpts from your Nairobi Speech

For your radio taping this Thursday afternoon, I think these excerpts might be suitable. They are in the sequence of the speech's organization and touch on the main points. I have selected only passages that have been through final staff clearance.

The clearance of the full text of the speech is near completion. We will have it ready for you late Thursday (28) or early Friday (29). We would like your comments by the following Monday midday, if possible.

Attachment

J.Grenfell/avs

EXCERPTS FROM THE NAIROBI SPEECH FOR YOUR RADIO TAPING

Rapid population growth is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can! And what if our assumptions are proven too optimistic? How many more billions ^{of people} will be added? Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Rapid population growth is a central development problem. And continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people.

But, in the past two decades, and especially in the past ten years, many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has therefore taught us that policy and programs can and do make a difference.

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; ^{AND} the other is easier access to contraception. In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly -- and usually substantially -- as the education of mothers increases above the primary school level. Fertility declines have everywhere been eventually tied to increasing use of contraception. Clearly, programs providing publicly subsidized information and access to modern contraceptive methods can bring about this reduction.

Some eighty-seven countries in the developing world, (representing about 95 percent of its population,) now provide such publicly subsidized family planning programs. Tremendous progress has been made in improving couples' access to information and services. But much more needs to be done.

Few could dispute that relatively small increases in official development aid for population assistance can, (given effective policies in developing countries,) make a vast difference in population change, and significantly improve maternal and child health. Those relatively small increases must be forthcoming.

The World Bank has an active role to play (in helping address the problem of rapid population growth). The Bank attaches special importance to this key development issue, and offers its support in three ways:

- ONE
o by helping improve understanding, (through its economic and sector work and through policy dialogue with member countries,) of the consequences for development of faster or slower population growth;
- TWO
o by helping support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;
- THREE
o and by helping supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

No one would argue that slower population growth alone will assure progress in development. But the evidence seems conclusive. Poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to help slow population growth if development is to be achieved.

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Address

As Prepared for Delivery

By

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The World Bank

and

International Finance Corporation

before the

National Leaders' Seminar on Population and Development

Nairobi, Kenya

July 11, 1984

Mr. Vice President,
Your Excellencies,
Ladies and Gentlemen:

I am honored and delighted by your invitation to address this distinguished gathering. It is always a pleasure to come to this wonderful country, and I wish to thank you warmly, Mr. Vice President, for giving me this opportunity to share with you today some thoughts on the subject of population growth and development.

As all of us here agree, it is a subject of vast importance and undeniable urgency. While the effects of fast population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, all the evidence points overwhelmingly to the conclusion that it slows development in the developing countries. And the poor of these countries are the principal victims of the slowdown.

As I believe we can also agree: it is a problem that is insufficiently understood in many quarters of the globe. One wonders why. Even under the most optimistic assumptions, we contemplate the developing world's population of today more than doubling by the middle of the next century. In what conditions will those 6.5 billion people be forced to live? If live they can. And what if our assumptions about the decline in the average number of children born to women of child-bearing age are proven too optimistic? How many more billions will be added?

Unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.

Our gathering here is one more demonstration of the deep concern and commitment of President Arap Moi, of you, Mr. Vice President, and of the government of Kenya, to meet the challenge of rapid population growth in your own country. There is indeed a strong link between population growth rates on the one hand and the rate of economic and social development on the other. You have boldly recognized that link, and we wish you well in your determined efforts not to let the pace of the former undermine the prospects of the latter.

But we should not be content just to wish you well. The World Bank is determined to support the broad spectrum of initiatives which you and the peoples of all developing nations are taking in the struggle against poverty. And here in Kenya we are especially anxious to help you in the population field by supporting your Family Planning Program in particular and your primary level health services and your education services in general. We are much encouraged that you have asked us to be one of your partners in this endeavor. We will do all we can to make that participation as helpful to you as possible.

You will readily understand why The World Bank, devoted as it is to the promotion of economic and social development in the developing countries, should be profoundly concerned with the population issue. Population growth is a key issue in development. And we are reaffirming our recognition of that basic fact by devoting the major part of the 1984 World Development Report, published today, to this problem. In humbly commending it to you, I would like to address the principal issues it raises concerning the problem. Complex as the problem is, the message I wish to convey about it can be clearly stated in three parts.

First, rapid population growth is a central development problem. Continuing rapid growth on an ever larger base will mean lower living standards for hundreds of millions of people. The main cost of such growth, borne principally by the poor in developing countries, has been, and will continue to be, lost opportunities for improving people's lives.

Second, proposals for reducing population growth raise difficult questions about the proper domain of public policy. Family and fertility are areas of life in which the most fundamental human values are at stake. Many public policy measures inevitably influence private decisions about family size. The question is: are there public policies seeking to reduce fertility which are appropriate to an area where private rights are paramount? Our answer is a firm "yes."

Third, in the past two decades, and especially in the past ten years, many developing countries have shown that quick, effective measures can be taken to reduce fertility. Experience has taught us that policy and programs can and do make a difference.

Let me now expand on these three themes. And as a preface to what I want to say first about rapid population growth as a development problem, let me say something about past and future population growth in the developing world.

The second half of the twentieth century stands out in history as a period of remarkable population growth. Through most of the first half of this century, population growth was at the historically rapid rate of one percent. But then it accelerated to twice that rate, and between 1950 and today, the world's population has nearly doubled, from 2.5 billion to almost 4.8 billion.

Until the twentieth century, prosperity and population increase went hand-in-hand. But in this century, and particularly since 1950, population growth has been faster where income is low, and concentrated in developing countries. Of the 1984 world population increase of at least 80 million, more than 70 million will be added in developing countries, which now contain about three-quarters of the global population.

The delinking of population growth and prosperity occurred in part as public health and improved communications brought death rates down even where gains in living standards were small. A combination of continued high fertility and much reduced mortality has led to population growth of between 2 and 4 percent a year in most developing countries as compared with one percent a year in most developed countries.

The stark facts are that growth at three percent per year means that in seventy years population grows eightfold; at one percent a year it merely doubles. No group of people appreciates the implications of this better than we who are assembled here today in a country where the population growth rate has been projected this year at some 3.8 percent. That is most probably the highest rate in the world, and one that would double Kenya's population about every eighteen years.

For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about 2 percent today. But further decline in population growth in developing countries will not come automatically. Much of the slow-down so far can be attributed to the People's Republic of China, where fertility is already low -- close to an average of 2.5 children per family. Most families in other developing countries now have at least four children; in rural areas five or more.

For parts of South Asia and the Middle East, forecasts of a lower rate of population growth are based more on hope than on present trends. For much of Sub-Saharan Africa, population growth rates are actually rising, and could rise still further.

In Africa, many if not most couples say they want more children than in fact they are having, whereas mortality, still high, can be expected to decline. For example, The World Fertility Survey's findings on Kenya indicated a strong desire for large families. Relating to the period 1977-78, only 17 percent of then married women stated that they wanted no more children. Among those with eight living children, only 48 percent wanted no more. At the same time, though desired family size is high, actual family size is even higher, indicating that some couples have more children than they want. The mean desired family size in 1977-78 was about seven; but the number of children each mother was having averaged eight. All this suggests that in Kenya there is an unmet need for family planning services. But a substantial decline in fertility can only occur if desired family size falls.

We should be aware, moreover, of the effects of what we call "population momentum." This simply means that growth rates will remain high in developing countries for several decades, even if couples have fewer children. Absolute annual increases in population are likely to rise to over 80 million people a year. And they will remain that high through the end of this century since the baby "bulge," which resulted from high fertility and falling mortality twenty years ago, has itself now entered childbearing age.

Let me stress that population projections should not be treated as predictions, but as illustrations of what can happen given reasonable assumptions. If the assumptions underlying the "standard" projections of The World Bank are correct, world population would rise from almost 4.8 billion today to almost 10 billion by the middle of the next century.

The population of today's developed countries would grow from about 1.2 billion today to 1.4 billion in 2050 — an increase of some 16 1/2 percent. But the countries we currently classify as developing would see their total population grow from 3.6 billion to 8.4 billion, an increase of 133 percent.

By the time the world population stabilized at over 11 billion in about the year 2150, the population of India would be 1.8 billion, making it the most populous nation on earth. And Kenya's population would have risen from 19.7 million today to a staggering 160 million, a situation surely as impermissible as it is unimaginable. And as a group, the countries of South Asia and Sub-Saharan Africa would account for about 50 percent of the world's people, compared with about 30 percent today.

These are awe-inspiring projections. And yet, in some respects, the assumptions underlying these projections may well be optimistic. Maybe fertility will not have fallen to replacement level in all developing countries sixty years from now. And maybe -- even though a lesser factor in high population growth -- mortality will not continue to fall rapidly. Even with rapid income growth and advances in literacy in the next two decades, the poorer countries of Africa and South Asia are not likely to reach the income and literacy levels that triggered fertility declines in such countries as Brazil, Korea, and Malaysia in the 1960s. Yet their fertility is projected to decline significantly. But even with those declines their population will more than double in the next fifty years.

One might well ask whether population increases of this order -- trebling, quadrupling, or more -- would not put an unbearable strain on the existing social fabric, and plunge countries into chaos. Would not rising unemployment and increasing landlessness overwhelm social and political institutions? Would not fragile administrative systems be unable to maintain health programs? Would, then, rising death rates, rather than falling birth rates, be the check on further population growth?

Even under an alternative projection of still more rapid fertility decline -- a decline such as achieved in China, Colombia, and Thailand in the past two decades -- population growth could remain great in most developing countries. We must accept the likelihood that population growth will accelerate in Africa because mortality still has far to fall and can be brought down fairly rapidly. Kenya would still have a growth rate around 2 1/2 percent in the year 2000, and India and Brazil around 1 1/2 percent. In the long run, many countries may wish to reduce population growth rate to less than one percent, which is already China's goal. But the alternative projections of rates of fertility decline make one thing painfully clear: for the next several decades, most developing countries will need to make a concerted effort just to reduce population growth to a rate closer to one percent.

To sum up this brief demographic overview:

It has been almost two decades since the peak of population growth in developing countries as a whole was passed. But the turnaround to a reduced rate of growth has been slow, and has been far from pervasive. Increases in population size are projected to mount for at least another two decades. In many countries of the developing world, populations will triple in size, or more, by the year 2050, even assuming substantial declines in fertility.

Thus, two decades after the turnaround, the slow pace of change and its uneven incidence point more than ever to rapid population growth as a central development problem.

Now let us return to the first of our three principal messages: that rapid population growth is a development problem. Why does it put a brake on development? There are three main reasons.

First, it exacerbates the difficult choice between higher consumption now and the investment needed to bring higher consumption in the future. As population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical capital and "human" capital -- that is to say, a person's education, health and skills. Otherwise, each worker will have less equipment and skills to work with, and productivity and incomes will stagnate or even fall. Every effort is thus required simply to maintain the status quo. And where it is hard to raise the level of capital and skills per worker, it is even harder to raise incomes and living standards.

To illustrate this briefly: in most developing countries, the high fertility and falling infant mortality of the mid-1960s mean that about 40 percent of populations are aged under fifteen. Countries such as Malawi face a doubling or tripling of their school-age population by the end of the century. With rapid fertility decline could come savings of more than 50 percent in the school system thirty years from now; savings that could be used to improve the quality of schooling.

The same is also true of jobs. High-fertility countries face large increases in their labor forces. As an example, Nigeria's high fertility in the 1970s guarantees that its working-age population will double by the end of this century. Kenya can expect an even larger increase, whereas China will experience a rise of no more than 45 percent.

Second, in many countries increases in population threaten what is already a precarious balance between natural resources and people, as here in Kenya. Where populations are still highly dependent on agriculture, continuing large increases in population can contribute to overuse of limited natural resources, such as land, mortgaging the welfare of future generations.

In many parts of Africa, strains on natural resources are already acute -- for example in this country, in Burundi, Malawi, eastern Nigeria, Rwanda, and parts of the Sahel region. But countries rich in natural resources do not escape the problem of rapid population growth. To exploit their natural resources, countries such as Angola, Ivory Coast, Nigeria, Zaire, and Zambia need extra skills, as well as heavy investment in roads and storage and distribution systems -- a more difficult goal if population is growing rapidly.

In part, the problem arises because rapid population growth slows the transfer of labor out of low-productivity agriculture into modern agriculture and other modern jobs. In many countries, much of the huge projected increases in the labor force will have to be absorbed in agriculture, a difficulty which today's developed countries never faced during the period of their economic transformation. Here in Kenya, assuming a 4 percent annual increase in the number of jobs outside agriculture, and an immediate start of fertility decline, 70 percent of the labor force will still be going into agriculture forty years from now, and their number will be twice what they are today. With farm size already averaging only about three acres of prime arable or equivalent land, we are bound to ask how Kenya can sustain such numbers.

Elsewhere in Africa, in parts of China, Bangladesh, and Indonesia, population pressure has already forced people to work harder, often on marginal land and shrinking farms, just to maintain household income in traditional agriculture. But the problem is not just continuing low income for many families. When undue stress is placed on traditional agricultural systems and the environment is damaged, the economic well-being of the poor is particularly threatened. Here in Kenya, as elsewhere, women have to go farther and farther to find wood and water. In Addis Ababa, Ethiopia, the price of increasingly scarce wood for fuel has risen tenfold during the 1970s and now claims up to 20 percent of household incomes. In lowland areas surrounding the Ganges in southern Asia, population growth and competition for land have forced many people to live too close to the river, in the path of annual floods.

Third, rapid population growth is creating urban economic and social problems that risk becoming wholly unmanageable. Cities in developing countries are growing to a size for which there is no prior experience anywhere. Between 1950 and 1980 the proportion of urban dwellers in developing countries in cities of more than 5 million increased from 2 to 14 percent, growing at a rate of 15 percent a year. Brazil's Sao Paulo, which by the year 2000 could well be the world's second largest city after Mexico City, was smaller in 1950 than either Manchester, Detroit, or Naples. London, the world's second largest city in 1950, will not even be ranked among the twenty-five largest by the end of the century. The rise in urban population, 60 percent of which is due to natural increase, poses unprecedented problems of management even to maintain, let alone improve, the living conditions of city dwellers.

In the light of these disturbing facts about the impact of rapid population growth on development, must we conclude that the population brake on development in the Third World can nowhere be released?

Countries in which education levels are already high, where much investment in transportation and communications is already in place, and where political and economic systems are relatively stable -- these countries are better equipped to cope with the problem of rapid population growth. This is true whether or not their natural resources are limited or their countries already crowded, such as in economically rising East Asian countries like Korea and Singapore. But these tend also to be countries in which population growth is now slowing.

Those countries where there is rapid population growth could also cope better with the problem if the right economic and social adjustments could be made fast enough, if technical change could be guaranteed, and if rapid population growth itself inspired technical change. But such growth, if anything, makes adjustment more difficult. It brings at best only the gradual adaptation which is typical of agriculture, maintaining but not increasing per capita output. It is the rich countries, where population growth rates are slow, that are the architects of technological change. And their interest is in labor-saving, not labor-using, innovations.

While the effects of rapid population growth may vary widely, depending on the institutional, economic, cultural, and demographic setting, the evidence points overwhelmingly to the conclusion that it slows development. And conversely, that slower population growth can help accelerate development.

Policies to reduce population growth are not, of course, a panacea for development, nor are they substitutes for sensible macroeconomic and sectoral policies. Trade and exchange rate policies that promote economic efficiency and do not penalize labor, and the dismantling of institutional barriers to job creation, would ease employment problems. Correct pricing policies in agriculture, and more resources allocated to rural credit, agricultural research and extension, would help increase agricultural output. But failure to address the population problem will itself reduce the set of development policies that are capable of implementation. And it would permanently foreclose some long-run development options.

This brings me to our second message: there are appropriate policies to slow population growth.

It is the poor, with little education, low and insecure income, and poor health and family planning services who have many children. Yet it is also the poor who are the principal losers as rapid population growth hampers development. This seeming paradox provides the starting point for understanding the need for, and the designing of, appropriate policies to reduce fertility.

All parents everywhere get pleasure from children. But children involve economic costs; parents have to spend time and money bringing them up. For poor parents in developing countries, however, the economic costs can seem low in relation to the benefits.

Let me cite a few reasons:

- o When wages are low, the difference between children's and a mother's earnings will be small; income lost by the mother during a child's infancy may often be easily recovered by the child later on.
- o When schooling opportunities for children are lacking, how can one argue that it is a better investment to have two or three educated children than a large family that cannot be educated?
- o Poor parents worry about who will take care of them in their old age or when they are ill, and for many the need for support in old age outweighs the immediate costs of children. And since many children die young -- for example, one out of five children dies before reaching the age of one in some parts of Africa, and one out of seven in much of Bangladesh, India, and Pakistan -- the incentive to have many babies to ensure that a few survive is very great.

These are but three of the many factors encouraging large families. Add to that the limited information about, and access to, modern and safe means of contraception, and we can well understand why high fertility among the poor is so prevalent.

However, parents and children do not always gain where there are many children. Inadequate access to land, or the poor health of both mothers and children, often as a result of closely spaced births, can confound the parents' expectations.

Thus, if parents have many children in the hope of economic gain, the first step in reducing fertility must inevitably be to work towards the reduction of their poverty and of the uncertainty about their own future. In this sense, the persistence of high fertility in today's developing countries is a symptom of lack of access to services that the industrial world more or less takes for granted:

- o to health services, which reduce the need for many births to insure against infant and child mortality;
- o to education, which would raise parents' hopes for their children and would broaden a woman's outlook;

- o to social security and other forms of insurance for old age;
- o to consumer goods and social opportunities that compete with child-bearing;
- o and to family planning services, which provide the means to limit births.

The general components of the solution to high fertility would therefore seem clear enough. But in countries where there is as yet no national policy on population size and no family planning effort supported by the government, there remains the question of the justification of government action to encourage people to have fewer children. As I said at the outset, family and fertility are areas of life in which the most fundamental human values are at stake. And governments need to be very sure that public policy has a place in such private areas.

I would like to suggest, therefore, two broad justifications for government action.

The first is that a government owes a duty to society as a whole. It cannot remain indifferent to the gap that exists between an individual couple's hopes for private gain from having many children and the prospects for social gains for the community as a whole. "We wish to benefit from a large family" the couple may say, "but we wish our neighbors would have fewer children so that ours would face less competition for land and jobs." It is not easy to persuade a couple to give up the possible private benefits of many children, when its sacrifice alone would provide only minuscule benefits to other families' children and grandchildren. One family's restraint will have little negative effect on the availability of land, or on resources for investment in schooling and jobs. But, as governments are all too aware, many children born of many families will.

Governments are expected to have long time horizons, and to weigh the interests of future generations against those of the present. They have to bear in mind not only the pressure on land and jobs that results from high fertility rates. They must also weigh the fact that health and education costs of children are heavily subsidized by the public sector, and that high fertility constrains the amount of resources available for investment, and hence for future income growth.

But can high fertility be reduced so long as the individual couple's wish for itself is in conflict with its wish for society as a whole? The cause of the conflict is poverty; not just low income, but also lack of economic and social opportunities, an insecure future, and limited access to education, health and family planning services. Such a conflict requires public policy to provide alternative ways of securing the benefits that a large family of children can provide to their parents. In short, governments need to provide tangible evidence that it really is in the best private interests of parents to have fewer children. That will encourage people to make, through their government, a contract with each other: "if each of us has fewer children, we can rely on government support for nationwide measures to improve access to family planning services and to create incentives for their use, thus ensuring that everybody makes the same decision. That way we and all our children will enjoy a better chance in life."

By encouraging and supporting such a social contract, the government frees each individual couple from its need to decide in isolation to produce more children than it would want if others were limiting their family size.

That is the first justification for government action.

The second justification is that people may have more children than they want, or would want had they more information about, and access to, easier fertility control. They may lack, or disbelieve, information about falling child mortality; about the benefits to existing children of limiting family size; about the health risks to both mother and children of too many and too closely spaced births. The very idea of planning pregnancies may be unknown, and even if they know about family planning, couples may not know how to practise it.

Here the government's role as the disseminator of information and services is critical. It can encourage the wider provision of modern contraceptives by private suppliers. But in many countries where distribution systems are poor, health care inadequate, and demand unknown and possibly limited, governments will need to play a more direct role, subsidizing or even organizing contraceptive services.

There are an estimated 65 million couples in developing countries, many of them poor inhabitants of remote rural areas, who do not want more children, but who do not use any contraception. This is often for lack of access to effective contraceptives. This unmet need for family planning services is the strongest possible argument for government support of programs that can enhance the welfare of the parents and give their children a better chance in life.

To complement family planning services and social programs that help to reduce fertility, governments may wish to consider financial and other incentives and disincentives. Incentives compensate individuals for the economic and social losses of delaying births or having fewer children. They extend further the subsidy governments provide when they use public resources to deliver family planning services. Deferred incentives, that is compensation at a later date for a couple's decision to delay or limit births, is an alternative less costly than more conventional payments for restricting fertility. The expenditures come in the future, at a time when the saving to society from fewer births is being reaped. Disincentives are the withholding of certain social benefits from those whose family size exceed a desired norm.

Incentives and disincentives provide individuals with direct and voluntary trade-offs between the number of children and possible rewards and penalties. Those who accept payment for not having children do so because they find this trade-off worthwhile; they are compensated for some of the public savings from lower fertility. Similarly with disincentives, those who choose to pay the higher costs of additional children compensate society as a whole for that private benefit. Thus incentives and disincentives afford a choice. But choice will be preserved only if programs are well-designed and carefully and fairly implemented.

The third message is that we know from experience that public policy and programs can and do make a difference. Many developing countries have already shown that fertility can be reduced substantially, and over a short period of time.

In today's developed countries, as development progressed, fertility fell. But current rates of population growth are so much greater in the developing world than they were at comparable income levels in today's developed countries. Thus many developing countries cannot afford to wait for fertility to decline spontaneously. They need to place strong emphasis on policies that will accelerate fertility decline, especially education for women, and good family planning services to achieve it. It is encouraging, therefore, that some developing countries have already shown that these and related measures can in fact bring fertility down significantly.

It was once assumed that reducing fertility in developing countries would require a typical sequence of economic advance: urbanization, industrialization, a shift from production in the household to factory production, and incomes rising to levels enjoyed by today's developed countries. This view seemed to be confirmed by the fertility declines of the 1960s, particularly in the industrializing economies of Korea, Singapore, and Hong Kong. But fertility declines beginning in other developing countries in the late 1960s, and spreading to more in the 1970s, came with a

different kind of development: education, health, the alleviation of poverty, improved opportunities for women, and government effort to assure widespread access to family planning services. Declines in birth rates since 1965 have been much more closely associated with adult literacy and life expectancy than with GNP per capita. For example, despite high average incomes, rapid industrialization, and fast economic growth, birth rates fell less in Brazil and Venezuela between 1965 and 1975 than in Sri Lanka, Thailand, and Turkey where income gains and social services were more evenly distributed.

The association of social development -- including gains in literacy and life expectancy -- with low fertility is not surprising. When children have a better chance of surviving and of enjoying a wider range of opportunities, their parents are willing to devote more time and money to educating them, and then have fewer of them. And as education brings an increase in opportunities for women outside the home, those opportunities substitute for the benefits of having many children.

Social development, however, comes only gradually. Encouragement of later marriage and longer breast-feeding can help reduce the birth rate. But the experience of many developing countries shows that it is public support for family planning programs which really can lower fertility quickly.

When family planning services are widespread and affordable, fertility has declined more rapidly than social and economic progress alone would predict. For example fertility has fallen faster and to lower levels in Colombia, where family planning programs received government support starting in the late 1960s, than in Brazil, a richer country where central government involvement is minimal. It has fallen more in Egypt and Tunisia, countries with demographic objectives, than in their richer neighbor, Algeria.

The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception.

In all countries, women who have completed primary school have fewer children than those with no education. And everywhere the number of children declines regularly -- and usually substantially -- as the education of mothers increases above the primary school level. The differences can be large; about four children between the highest and lowest groups in Colombia, for example.

Education delays marriage for women, either because marriage is put off during schooling, or because educated women are more likely to work or to take time to find suitable husbands. Educated women are also more likely to know about and adopt new methods of birth control. Here in Kenya, 22 percent of those with nine or more years of education use contraception, as opposed to only 7 percent with five or fewer years of education.

Improving both boys' and girls' educational opportunities can have an immediate payoff in terms of lower fertility of their parents. Once they know that schooling will open up new opportunities for their children, the parents accept the risk of having fewer children in order to invest more in each one. Evidence from household surveys in India, Egypt, and Nigeria show that parents have fewer children when education is readily available.

African governments should therefore not weaken their commitment to basic education for all, especially for women, despite current financial strains. The commitment to primary education here in Africa is strong indeed. But the indispensability of more education to less fertility should spur African governments to act even more determinedly on that commitment.

The second central policy is making access to contraception easier. Fertility declines have everywhere been eventually tied to increasing use of contraception. Cross-country analysis has shown that, for the average country, previous fertility decline, indicating a continuing trend away from large families, accounted for 33 percent of the total fall in fertility between 1965 and 1976; socioeconomic change accounted for 27 percent. But family planning effort accounted for more than either: 40 percent. Clearly, programs providing publicly subsidized information and access to modern contraceptive methods can reduce fertility.

But family planning is also a health measure. In much of Africa, where the health of children and mothers is relatively poor compared to other regions, child spacing of at least two years can reduce child mortality by about 15 percent. It can also significantly reduce maternal mortality. And in addition to child spacing for health, family planning programs can help adolescents, including young newlyweds, to avoid first births that come too early for young women. In Africa's circumstances, in particular, the provision of safe and effective family planning services can discourage recourse to traditional family planning methods that may be relatively unsafe or unworkable.

Some eighty-seven countries in the developing world, representing about 95 percent of its population, now provide such publicly subsidized family planning programs. Tremendous progress has been made in improving couples' access to information and services. But much more needs to be done. Nearly all programs fail to reach most rural people; even in the towns and cities the quality of services is often poor and discontinuation rates of users high. In many countries the potential of the private sector to provide family planning services has hardly been tapped; in others the gap in services provided privately can be filled only by enlarging public programs. Twenty-six countries have yet to introduce family planning programs. Almost half of these are in Africa, where incomes are among the lowest in the world, population growth is the highest, and the potential benefits from family planning may be the greatest.

About 40 percent of all couples in the developing world now use some form of contraception, ranging from 70 percent in China and Singapore to less than 10 percent in most of Africa. But in all countries surveyed, the number of women of childbearing age who want no more children exceeds the number practising contraception. About \$2 billion is currently spent on public family planning programs in developing countries each year. In most countries it is less than \$1 per head of population (about \$21 per user). To fill unmet needs today of women who would like to space or limit births but who are not practising contraception would require another \$1 billion per year.

In the next two decades, program spending will need to rise even further, because of the growing number of women of childbearing age, and the increasing proportion of them who are likely to want to use modern contraceptives. If developing countries are to achieve a rapid decline in fertility, leading to a developing world population of 6.5 billion in the middle of the next century, an estimated \$7.6 billion (in 1980 US dollars), or \$1.66 per capita, would be needed in the last year of this century. What we call the standard decline, leading to a developing world population of 8.4 billion in 2050, would require \$5.6 billion a year at the end of this century, or \$1.14 per capita. The estimated per capita expenditure on population programs in developing countries today is 62 cents. That can be compared with government spending per capita of about \$7 on all health programs in developing countries in 1982.

The figures make it clear: relatively small increases in government spending could go a long way toward meeting the projected financial requirement for supplying family planning services. And that could make the difference between 6.5 billion and 8.4 billion people in the developing world by the middle of the next century.

The same is true for external assistance. International aid for population programs has two major objectives: to assist governments and private organizations in providing family planning, information, and services, and to assist governments in developing population policies as part of their overall development strategy.

Only about 1 percent of official development aid now goes for population assistance, and less for family planning. It supports about 25 percent of all family planning costs in developing countries, and about 50 percent of family planning programs outside China. Assuming these proportions did not change, population assistance would need to triple its current level by the year 2000 to achieve standard fertility decline, or quadruple it for the rapid decline. A quadrupling would raise annual population assistance from about \$500 million in 1981 to \$2 billion (in 1980 dollars) by the end of the century. Few could dispute that relatively small increases in donor assistance can, given effective policies in developing countries, make a vast difference in population change, and significantly improve maternal and child health. Those relatively small increases must be forthcoming.

Since Sweden made its first population grant in 1968, donors have transferred more than \$7 billion in population aid. Although its contribution has been falling in real terms since 1972, the United States has remained until now the biggest supporter of population programs, providing, along with private U.S. foundations, about 40 percent of all population aid. Japan is the second largest donor. Canada, the Federal Republic of Germany, the Netherlands, and Norway have all increased their share of the total. Donor assistance is provided both directly to country programs and through multilateral and non-governmental organizations, of whom the two largest are the United Nations Fund for Population Activities (UNFPA) and the non-governmental International Planned Parenthood Federation (IPPF).

The World Bank also has an active role to play in helping address the problem of rapid population growth. The Bank attaches major importance to this key development issue, and offers its support in three ways:

- o by helping improve understanding, through its economic and sector work and through policy dialogue with member countries, of the consequences for development of faster or slower population growth;
- o by helping support development strategies that naturally build demand for smaller families, especially by improving women's opportunities in education and income generation;

- o and by helping supply safe, effective, and affordable family planning and other basic health services focussed on the poor in both urban and rural areas.

Over a period of fourteen years, the Bank has committed about \$500 million for population projects, and over \$100 million for health projects. Its operations grew in real terms by more than 5 percent per year between 1977 and 1983, despite the fact that the terms of its finance are not as easy as most population assistance, which is in grant form. Meanwhile, the Bank cooperates with other U.N. organizations, especially UNFPA and the World Health Organization (WHO), in research analysis, and operations requested by member governments.

In the next few years, as part of a major effort involving donors and developing countries to increase resources for population programs, the Bank intends at least to double its population and related health lending. The major focus will be on Africa and Asia. We believe that the opportunity is there, and we look forward to cooperating with governments in the design and implementation of effective population policies and programs. During the next five years, the number of population and related health projects that we plan to finance in Sub-Saharan Africa will rise to twenty-one from the total of three financed by the Bank in the five years to mid-1983. And the number of countries of the region which will be borrowing from us for that purpose will likely rise from three to seventeen.

Small increases in spending, as I have noted, can make a big difference. Sustained progress, however, requires not just donor funds. It requires a firm commitment on the part of the international community to population progress as a critical part of the overall development effort. And the strongest commitment must be made by the governments of the developing countries themselves.

Religious and cultural characteristics cannot be ignored in designing an effective policy to reduce fertility. But they do not rule out effective action. In every part of the developing world during the past decade, some governments have made significant progress in developing a policy to reduce population growth. And where progress has been made, it has been because governments, setting explicit demographic goals, have been employing a wide range of policies, direct and indirect, to reduce the attractions of high fertility.

An effective policy requires the participation of many ministries, not just the Ministry of Health, and clear direction and support from the most senior levels of government. It requires the collection of reliable data and expert analysis of it to identify rapid population growth and project its consequences. Such information is critical to generating and sustaining the political commitment of leaders to slow growth. And strong institutions, both central and local, are needed to translate that political commitment into effective policy and action.

Let me now sum up.

Ten years ago, at the World Population Conference in Bucharest, a debate raged about the relative merits of development and family planning programs as alternative ways of slowing population growth. It is now clear that the dichotomy is false. Accumulating evidence on population change in developing countries shows that it is the combination of social development and family planning that is so powerful in reducing fertility.

But further fertility decline, and the initiation of decline where it has not begun, will not come automatically. In rural areas and among the less educated, desired family size will not be reduced much without sustained improvements in living conditions. The gap between the private and social gains of high fertility, itself the product of poverty, calls out for government action, especially in areas relating to women, that merit government action anyway.

But measures to raise living standards do not quickly bring about fertility reductions. The need is to act now in education, primary health care, family planning, and improving women's opportunities, so as to bring a sustained decline in fertility over the long run. In the meantime, too many couples still do not benefit from adequate family planning services. Family planning programs, successful as they have been, have by no means reached their full potential. Action there will provide an immediate payoff.

In concluding, let me stress the central message on population growth in the World Bank's 1984 World Development Report.

Economic and social progress helps slow population growth; but at the same time rapid population growth hampers economic development. It is therefore imperative that governments act simultaneously on both fronts. For the poorest countries, development may not be possible at all unless slower population growth can be achieved soon. In the better-off developing countries, continuing high fertility, especially among poor people, could prolong indefinitely the long wait for development to improve measurably the quality of their lives.

No one would argue that slower population growth alone will assure progress. But the evidence in the World Development Report seems conclusive. Poverty and rapid population growth reinforce each other. Therefore the international community has no alternative but to cooperate, with a sense of urgency, in an effort to slow population growth if development is to be achieved. But it must be slowed through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.

World population has grown faster, and to higher numbers, than Malthus would ever have imagined. But so have world production and income. If we can correct the current mismatch between population and income-producing ability, a mismatch that leaves many of the world's people in a vicious circle of poverty and high fertility, we may yet evade the doom which Malthus saw as inevitable. It is not inevitable that history will vindicate his dire prediction of human numbers outrunning global resources. We have a choice.

But that choice must be made now.
Opportunity is on our side.
But time is not.

Thank you.

END

John. Keith Dieter

David For.

Robert Linnion

Population * > any Guarantee

Economic Policies

Agriculture

Individual incentives
Higher taxation

Prerequisites
by IMF

Regional Mission in Eastern Africa

Reinsurance Plaza, Taifa Road, P.O. Box 30577, Nairobi, Kenya - Telephone 24391 - Cables: INTBAFRAD - Telex: 22022

July 11, 1984

PRESS RELEASE

CLAUSEN: SLOWER POPULATION GROWTH HELPS TO
SPEED UP ECONOMIC DEVELOPMENT

1. Today's very rapid rates of population growth in many developing countries represent a major barrier to the task of alleviating global poverty, noted A. W. Clausen, President of the World Bank. In a speech today in Nairobi, Kenya, he said that unless we confront this dilemma today, there will be poverty-stricken people in tomorrow's developing world in increasing numbers and indescribable misery.
2. At a meeting convened by the Kenyan Population Council, the World Bank's President stressed the critical connections between massive poverty and high rates of fertility. And he noted that religious and cultural characteristics cannot be ignored in designing effective policy to reduce fertility. But they do not rule out effective action.
3. Today's speech coincides with the publication of the 1984 World Development Report - the Annual Economic Survey published by the World Bank - which this year contains a major study of the population issue. The report shows that even with significant policy moves to reduce fertility rates it is likely that global population will rise from almost 4.8 billion today to almost 10 billion by the year 2050. The huge increase will be almost totally accounted for in the developing nations where population overall is seen as rising over the next 65 years by around 130 percent, while the population of the developed countries is expected to increase by about 17 percent in this period.
4. In his Nairobi speech, Mr. Clausen said for the poorest countries, development may not be possible at all unless slower population growth can be achieved soon. In the better-off developing countries, continuing high fertility, especially among poor people, could prolong indefinitely the long wait for development to improve measurably the quality of their lives.
5. The stark facts are that growth at three percent per year means that in seventy years population grows eightfold; at one percent a year it merely doubles. These are awe-inspiring projections, he noted. One might well ask whether population increases of this order would not put unbearable strain on the existing social fabric, and plunge countries into chaos.

6. Mr. Clausen warned that increases in population size are projected to mount for at least another two decades, as some countries triple in size between now and the year 2050. He pointed out. - Many developing countries have shown that quick effective measures can be taken to reduce fertility. - For developing countries as a group, population growth rates have slowed somewhat, from a peak of 2.4 percent in 1965 to about two percent today. But past momentum will carry population figures to new heights. - Experience shows that public policy can and does make a difference in reducing fertility, and that there are appropriate policies to slow population growth.

7. He explained how rapid population growth hampers development: - As population grows more rapidly, larger investments are needed just to maintain current capital per person, both physical investments and human capital -- that is to say, a person's education, health and skills. - In many countries, increases in population threaten what is already a precarious balance between natural resources and people. - Rapid population growth is creating urban economic and social problems that risk becoming wholly unmanageable.

8. The persistence of high fertility in today's developing countries, he said, is a symptom of lack of access to services that the industrial world more or less takes for granted: - to health services which reduce the need for many births to insure against infant and child mortality. - To education, which would raise parents' hopes for their children and would broaden a woman's outlook. - To social security and other forms of insurance for old age. - To consumer goods and social opportunities that compete with child-bearing. - To family planning services, which provide the means to limit birth.

9. Governments, Mr. Clausen said, need to provide tangible evidence that it really is in the best private interests of parents to have fewer children. The evidence is clear that two policies to reduce fertility are central. One is more widespread education, especially for women; the other is easier access to contraception, he asserted.

10. Spending on family planning programs in the developing countries each year is less than one dollar per capita, he noted, and relatively small increases in Government spending could make the difference between a total of 6.5 billion and 8.4 billion people in the developing world by the year 2050. Calling for more official aid, Mr. Clausen pointed out that only about one percent of official development aid now goes for population assistance.

11. The World Bank, Mr. Clausen stated, intends to double its population and related health lending, with major focus on Africa and Asia. Sustained progress, he asserted, requires a firm commitment on the part of the international community and the strongest commitment must be made by the Governments of the developing countries themselves.

Press Release

July 11, 1984

12. Mr. Clausen observed, the international community has no alternative but to cooperate, in an effort to slow population growth through policies and programs that are humane, non-coercive, and sensitive to the rights and dignity of individuals.

13. We have a choice, he concluded, but that choice must be made now. Opportunity is on our side, but time is not.

NATIONAL LEADERS' SEMINARONPOPULATION AND DEVELOPMENTAT

- K.I.C.C. NAIROBI - 11TH AND 12TH JULY, 1984

OBJECTIVES OF THE CONFERENCE

1. To examine the general population trends and their implications to Kenya's social and economic development and to explore possible solutions.
2. To provide a forum to Kenya leaders to all levels to share information and knowledge on Population and Development.
3. To discuss Kenya's Population Policy and to develop national strategies and a plan of action.

CONFERENCE OFFICERS

Chairman	H.E. Hon. Mwai Kibaki, B.G.P. M.P. The Vice-President of the Republic of Kenya.
Vice-Chairman	Hon. Prof. George Saitoti, M.P. Minister for Finance and Planning, Kenya.
Vice-Chairman	Hon. G.K. M'Mbijjiwe, M.P. Minister for Health
Deputy-Vice-Chairman	Prof. P.M Mbithi Chairman of the National Council for Population and Development.

Deputy Vice-Chairman Mr. Simon Nyachae
Permanent Secretary,
Development Co-ordination & Cabinet Office,
Office of the President.

Deputy Vice-Chairman Mr. H. Mule,
Permanent Secretary,
Ministry of Finance and Planning.

Deputy Vice-Chairman Mr. J. Kipsanai,
Permanent Secretary,
Ministry of Health.

RESOURCE PERSONS:

All Members of the NCPD

CONFERENCE MODERATORS:

Mrs. W.K. Onyando, MYWO
Mr. G.C. Irvine, PCMA
Dr. Kabiru Kinyanjui, IDS
Dr. Abdala, KMA.

CONFERENCE CO-ORDINATOR:

Mr. L.E. Ngugi - Director NCPD

CONFERENCE ASSISTANT CO-ORDINATORS:

Mr. D. Kaniaru
Mrs. Terry Kantai
Mr. L. ETTYANG - NCPD
Ms. A. Thairo
Mr. M. Kimani
Ms. L. Musyimi

PROGRAMME11TH AND 12TH JULY, 198411th July, 1984

- | | |
|----------------------|---|
| 7.00 A.M - 9.00 A.M | 1. Registration at Kenyatta International Conference Centre |
| 9.15 A.M. | All participants to be seated in Amph-Theatre KICC |
| 9.30 A.M | 2. H.E. The Vice-President, Hon. Mwai Kibaki, E.G.H., M.P. delivers the opening speech after which he invites |
| | 3. The President of the World Bank to delivers his statement. |
| | 4. Speech delivered by the President of the World Bank, Mr. A.W. Clausen. |
| | 5. Vote of Thanks by the Minister for Finance and Planning, Hon. G. Saitoti. |
| | 6. TEA/COFFEE BREAK |
| 11.00 A.M - 1.00 P.M | 7. Plenary Session. |
| 1.00 P.M - 2.00 P.M | 8. LUNCH BREAK |
| 2.30 P.M - 3.00 P.M | 9. "Implementation of Population Policy and Integration of Population Programmes in the development processes." |
| | Mr. D. Mwiraria, Permanent Secretary, Office of the Vice - President and Ministry of Home Affairs. |
| 3.00 P.M - 4.30 P.M | 10. Plenary Session. |
| 4.30 P.M - 5.00 P.M | 11. TEA/COFFEE BREAK |

12TH JULY, 1984

- | | |
|-----------------------|---|
| 8.00 A.M - 8.30A.M | 1. Arrival at Kenyatta International Conference Centre |
| 8.30 A.M - 9.00 A.M | 2. Summary of the previous proceedings by the Chairman. |
| 9.00 A.M - 9.20 A.M | 3. "Mobilization of Human Resources for Population Programmes."
Prof. P.M. Mbiti, Chairman of the NCPD and Deputy Vice-Chancellor, University of Nairobi. |
| 9.20 A.M - 9.40 A.M | 4. "The Delivery of Family Planning Services."
Dr. W.K. Koinange, Director of Medical Services, Ministry of Health |
| 9.40 A.M - 10.00 A.M | 5. " <u>Population Education and Prospects for its Inclusion in School Curriculum.</u> "
Mr. L.P. Odero, Permanent Secretary, Ministry of Education, Science and Technology. |
| 10.00 A.M - 10.30 A.M | 6. TEA/COFFEE BREAK |
| 10.30 A.M - 1.00 P.M | 7. Plenary Session. |
| 1.00 P.M - 3.00 P.M | 8. LUNCH BREAK |
| 3.00 P.M - 4.30 P.M | 9. Summary and Recommendations. |
| | 10. Closing Session. |

Alternate return schedules

From Rome to Washington

Daily

Lv. Rome	11:00 AM	TWA 851	change aircraft in JFK
Ar. Washington Nat'l	5:20 PM		
Lv. Rome	11:30 AM	Pan Am 111	change aircraft in JFK
Ar. Washington Nat'l	6:00 PM		
Lv. Rome	3:40 PM	Alitalia 340	
Ar. New York JFK	6:35 PM		
Lv. New York JFK	7:20 PM	Pan Am 800	later flight from JFK
Ar. Washington Nat'l	8:30 PM		Pan Am 595 8:30PM/9:40PM

From Rome to Los Angeles

Daily

Lv. Rome	1:10 PM	TWA 847	via Boston
Ar. Los Angeles	7:50 PM		
Lv. Rome	3:40 PM	Alitalia 340	
Ar. New York JFK	6:35 PM		
Lv. New York JFK	7:30 PM	American 29	later flight from JFK
Ar. Los Angeles	10:19 PM		TWA 701 7:55PM/10:53PM

From Nairobi to Washington

Daily

As booked, via London and New York

From Nairobi to Los Angeles

Daily

Lv. Nairobi	12:30 AM	British 54	
Ar. London Heathrow	7:00 AM		
Lv. London Heathrow	11:00 AM	TWA 761	later flight from London
Ar. Los Angeles	2:05 PM		British 283 11:55AM/2:55PM

June 4, 1984

Dear Mr. Vice President:

Thank you very much for your kind letter of May 28, 1984, inviting me to address the upcoming seminar on Family Planning and related population issues scheduled for July 11, 1984, in Nairobi. As you know, the Bank Group is committed to providing every assistance to family planning programs worldwide. We applaud the Kenya Government's initiative in organizing a seminar on a subject of such importance.

It is indeed an honor to be invited to address the seminar, and one which I accept with pleasure. I greatly look forward to meeting you again.

With best personal regards,

Sincerely,



A. W. Clausen

The Honorable Mwai Kibaki
Vice President and Minister
for Home Affairs
Jogoo House
P. O. Box 30478
Nairobi, Kenya

cc: Messrs. Stern, Southworth (2), Wapenhans, Kraske, Loos,
Dunn, Vogl.

fw
LWardle/DADunn:sdb

OFFICIAL FILE COPY



THE VICE-PRESIDENT AND MINISTER FOR HOME AFFAIRS
JOGOO HOUSE P.O. BOX 30478 NAIROBI · KENYA

MHA 18/01/(S)29

May 28th 1984

Mr. A.W. Clausen,
President,
International Bank for Reconstruction
and Development,
1818 H. Street,
WASHINGTON, D.C.

Dear Mr. Clausen,

The Government of Kenya is organising a seminar on Family Planning and related population issues to take place on 11th July, 1984 at the Kenyatta International Conference Centre. It will be attended by leaders from all walks of life including Members of the National Council for Population and Development, Members of Parliament; Senior Civil Servants, and representatives of all Non-Governmental Organisations working on population matters; and civic leaders.

During the seminar, it is intended to review progress on implementation of family planning programme and to examine ways and means of intensifying it.

Since the Bank is the major co-financier of the current Integrated Rural Health/Family Planning Programme, and given the Bank's interest in global population issues, I would like on behalf of the Kenya Government to invite you to make the opening address for the Seminar at 9.30 a.m. on 11th July, 1984. Your personal presence would be an honour to the Government and will serve to emphasize the importance the Kenya Government and the World Bank attach to the population problem.

It is my hope, Mr. President, that you will accept this invitation and honour us with your presence on this occasion.

Yours Sincerely
Mwai Kibaki

MWAI KIBAKI

OFFICE OF THE PRESIDENT

1984 MAY 30 AM 8:44

RECEIVED

OFFICE MEMORANDUM

R1.

DATE: May 17, 1984

TO: Mr. A.W. Clausen

Through: Mr. Warren Baum, Acting Senior Vice President, Operations
FROM: Willi A. Wapenhans, Vice President, EAN

EXTENSION: 74285

SUBJECT: Your Visit to Eastern Africa

As I mentioned to you yesterday, I am concerned that the proposed visit to Kenya in connection with the population speech may lead some of Kenya's neighbors to feel that they are neglected. This would be true especially for Uganda. The Ugandan Government has extended frequent and insistent invitations to you in the past and was disappointed that it was not possible to fit a visit into either of your two previous trips to Eastern Africa. Therefore if you could spare an extra day following your visit to Kenya on July 10 and 11, I would propose that you plan to visit Kampala, flying there from Nairobi in the afternoon of July 11 and returning to Nairobi in the evening of July 12. If this is acceptable, I will get in touch with the Ugandan authorities and work out a suitable program.

cc: Messrs. Benjenk, Vogl, Dunn

JKraske:es

OK
↓

We have it noted on
your calendar

Roy
5/17/84

MAY 17 1984

200

RECEIVED

1984 MAY 17 PM 4:07
OFFICE OF THE INSIDENT

TO: [Faint text]

FROM: [Faint text]

SUBJECT: [Faint text]

[Faint body text, mostly illegible]

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[Faint text]

[Faint text]

[Faint text]

OFFICE MEMORANDUM

OFFICE MEMORANDUM

~~Mr. Stern~~ E12275-21-84
A

DATE: May 11, 1984

TO: Mr. Frank Vogl, Director, IPA

FROM: Dinesh Bahl, Special Adviser, IPA *AB*

EXT: 72161

SUBJECT: Mission to Kenya, April 30-May 10: Back-to-Office Report

✓ Mr. Clausen
 I suppose wiser
 media heads than
 I have decided
 on this. It shows
 me as too
 transparent
 (everyone will soon find
 out the event was
 cooked up) and the
 foreign press corps
 in Kenya will do this
 as well as the Baltimore
 Sun. To be effective
 you need a real
 audience;
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 lobbyists
 here primed,
 and the
 major US,
 and European
 papers ready
 to follow-up
 with editorials
 etc. But
 I bow to
 the
 experts.
ES
 5/18

Mr. David Loos and I have discussed with Mr. Simeon Nyachae an outline of the proposed arrangements for Mr. Clausen to deliver a speech on population in Nairobi. Mr. Nyachae is Permanent Secretary for Development Coordination and the Cabinet Office in the Office of the President. As a close adviser to President Moi, he is known to hold a position of exceptional influence.

The main points that emerged from the discussion with Mr. Nyachae were as follows:

1. President Moi has accepted the idea that Mr. Clausen should make a speech on population in Nairobi. As Mr. Loos had already been informed before my arrival, the invitation to Mr. Clausen is in the process of being issued.
2. The invitation will be issued by Vice President Kibaki. Mr. Mwai Kibaki is also Minister for Home Affairs; in this capacity, he has major responsibility for Kenya's family planning programs.
3. Vice President Kibaki is expected to be host for the occasion where Mr. Clausen will deliver his speech. Mr. Kibaki will probably start by making a policy statement on Kenya's family planning programs.
4. Unlike his predecessor Jomo Kenyatta, who almost never spoke publicly about family planning, President Moi has been outspoken in his comments on the problem. Vice President Kibaki has also spoken frequently on the subject.
5. Mr. Nyachae pointed out that Kenya is one of the few countries in Africa where the need for family planning is discussed freely. In a large number of countries, the subject is still taboo for political or religious reasons.

6. Tentatively, the idea is that Mr. Clausen would arrive in Nairobi on Tuesday, July 10, and meet with President Moi and Vice President Kibaki around 11 a.m. This would be followed by a lunch at the State House to which a larger group of people would be invited.

7. The meeting at which Mr. Kibaki and Mr. Clausen would make their speeches is tentatively proposed for Wednesday, July 11, probably starting around 10 a.m. This sequence of engagements is suggested by the fact that it would be more appropriate for Mr. Clausen to speak after, rather than before, he has called on President Moi.

8. The tentative proposal is that the meeting would be held at the Kenyatta Conference Centre. Although Mr. Nyachae did not say specifically how many people would be invited, it appears that an audience of 200 to 400 people is likely. It would include Ministers, members of Parliament, members of the National Council for Population and Development, nongovernmental organizations, and others active in the population field, including representatives of foreign governments and agencies assisting Kenya's family planning programs. Members of the academic community would be invited; so would representatives of Catholic organizations, which are critical of family planning. The audience would thus include a wide variety of interests, both Kenyan and non-Kenyan.

9. To help ensure that the message "goes far and wide", the entire foreign press corps in Nairobi would be invited. The Kenyan information media would of course be mobilized to give the occasion full coverage.

10. Mr. Nyachae suggested that Mr. Clausen should avoid holding a press conference "as they will draw him into controversy". It would be better simply to distribute copies of the speeches by Mr. Clausen and Mr. Kibaki, said Mr. Nyachae.

11. For the present, the schedule of engagements proposed for Mr. Clausen's visit to Kenya is relatively light. But this can readily be changed to suit his preferences.

On the substance of the speeches about population problems, Mr. Nyachae made the following points:

1. Except on religious grounds, there is not much criticism of family planning in Kenya. The criticism that is heard comes mainly from Catholics; they concentrate on the point that abortion is equal to murder. But Kenya has no intention of encouraging abortions. The aim is to help parents to plan the number of children they will have-- whether two, or three, or four. No "murder" is involved, since the objective is to keep the numbers down by avoiding conception. Vice President Kibaki is likely to emphasize this point in an attempt to defuse Catholic criticism and make the issue less controversial.

2. Another point that may be emphasized is that there is no intention of interfering with people's traditions and beliefs. The aim is to help families and individuals to build a better life for

themselves. Many young people are beginning to realize from their own experience the difficulties that arise if they are part of a large family and a rapidly expanding population--how much harder, for instance, it is becoming to find places in schools and universities, or to get jobs. Even a Catholic group such as the Goans in Kenya, realizing this, have begun to limit the size of their families. The social implications of population growth need to be discussed more widely.

3. The main influence working towards a high birth rate in Kenya has been child mortality. Parents have tended to have seven, eight or ten children in the fear that, with the child mortality rates of the past, the parents might be left with no one to care for them in their old age. The realization has to spread that, with the fall in child mortality, the fear is no longer justified.

4. Kenya has so far concentrated its family planning programs on older married couples who, having had eight or ten children, "have already done the damage they could." The programs should be aimed at young married couples instead, since they are still in a position to limit the number of their children. It is also necessary to get more programs going in the rural areas. But "sex education programs" aimed at adolescents and school-age children would be socially unacceptable.

5. Family planning is likely to be accepted more readily if it is presented as one item in a package of facilities that includes such items as child care, rural health, and rural water supply.

6. Kenya's population growth rate of around 3.9% is about the highest in the world. As a result, there are more people below the age of 21 than above it.

Follow-up Action

As David Loos is in Washington for the next few days, we should review with him and the Regional Office very soon the arrangements planned and the further action that will be necessary. From IPA's standpoint, some of the issues that need to be considered are:

1. Despite Mr. Nyachae's caution, would Mr. Clausen wish to meet the press corps in Nairobi? Possibly an informal meeting over drinks could be considered.
2. Is the final version of Mr. Clausen's speech likely to be ready 10 or 15 days ahead of delivery so that worldwide coverage can be organized effectively?
3. Are there any groups of people we would like the Kenyan authorities to consider inviting for the occasion--in addition to those outlined earlier?

4. Should we request Mr. Loos to arrange commercially a videotaping of Mr. Clausen's speech?

5. It would be an appropriate gesture for Mr. Clausen to send President Moi and Vice President Kibaki advance copies of the 1984 World Development Report. Should we request Mr. Feather to explore the possibility of two or more copies being put in a high-quality binding suitable for presentation?

More generally, Mr. Clausen will need to be consulted on whether he wants a fuller program in Kenya, and, if so, what kinds of events should be added.

Originally, the Eastern Africa Regional Office thought that one option was for Mr. Clausen's speech to be delivered under the auspices of Kenya's National Council for Population and Development (NCPD)--a body established under an IDA-assisted family planning project run by the Ministry of Home Affairs. The arrangement now proposed by the Kenyan authorities is slightly different, in the sense that the meeting at which the speech would be delivered would be sponsored not by the NCPD but by Vice President Kibaki. This arrangement seems satisfactory to me; however, it is a point that needs to be confirmed when we meet Mr. Wapenhans and his colleagues.

The more important point we need to discuss is how the reasons for Mr. Clausen's being in Nairobi can be strengthened. We have to guard against a possible perception that he flew all the way to Nairobi just to make a speech, and then flew almost right back. It is in this context that we ought to consider organizing for Mr. Clausen a more substantial program in which the speech features as one, albeit the most important, of a number of items.

In my view, it might be possible to develop the program in such a way that Mr. Clausen's interest in population issues is underlined further. He could, for instance, visit family planning centers for first-hand discussions with those who implement population programs at the "grass roots level." Another possibility might be to organize an afternoon's meeting in Nairobi (or elsewhere) at which senior administrators of family planning programs from a number of East African countries would review their work for Mr. Clausen.

Finally, while the publication of the 1984 WDR is the obvious and excellent peg for Mr. Clausen's speech, we need to consider the relative timing of the two events.

As you know, David Loos has played a key role in discussing the invitation and arrangements for the Nairobi speech. This is the place to record the extremely valuable advice and assistance he and Mr. Baig provided during my visit to Nairobi.

cc: Messrs. Clausen, Stern, Wapenhans, Burki, Feather, Kraske, North,
Loos, Dunn, Baig, Southworth, Koelle, Blinkhorn, Grenfell,
Wai
Mrs. Krueger, Ms. Birdsall

OFFICE MEMORANDUM

DATE: April 24, 1984

TO: Mr. Dinesh Bahl, Special Adviser IPA

FROM: Frank Vogl, Director IPA



EXT: 72468

SUBJECT: Mission to Kenya: Terms of Reference

Following upon your recent discussions with Messrs. J. Kraske and J. North, you will:

1. Proceed to Kenya on April 29 or 30 on a public affairs mission.
2. While in Kenya, discuss in consultation with Mr. David Loos, Director of the Bank's Regional Mission in Eastern Africa, appropriate arrangements related to the possibility of an invitation being issued to the President of the Bank to make a major speech in Nairobi in July 1984.
3. Return to Washington on May 10, and report to me the results of your discussions.

DB:rgw

cc: Messrs. Burki, Kraske, North, Southworth, Koelle, Blinkhorn, Grenfell, and Wai

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DAVID LOOS, DIRECTOR, INTBAFRAD, NAIROBI, KENYA.
 BANK PRESIDENT'S SCHEDULING NOW INDICATES HE COULD LEAVE ROME ON
 MONDAY JULY NINE AND ARRIVE NAIROBI TUESDAY JULY TEN MORNING.
 THUS JULY TEN OR ELEVEN SEEM MOST SUITABLE DATES FOR ENGAGEMENT
 MENTIONED BY KRASKE. APOLOGIES FOR ANY INCONVENIENCE THIS MIGHT
 CAUSE. REGARDS DINESH BAHL

END
OF
TEXT

NOT TO BE TRANSMITTED

CLASS OF SERVICE: Telex TELEX NO.: 963--22022 DATE: April 20/84

SUBJECT: DRAFTED BY: DINESH BAHL

CLEARANCES AND COPY DISTRIBUTION: Messrs. Vogl, Kraske, North, Southworth, Koelle, Blinkhorn, and Wai AUTHORIZED BY (Name and Signature): DINESH BAHL *DBahl*

DEPARTMENT: INFORMATION & PUBLIC AFFAIRS

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CHECKED FOR DISPATCH

**THE POPULATION PROBLEM:
TIME BOMB OR MYTH**

by

Robert S. McNamara

Washington, D.C.

July 1, 1984

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A slightly condensed version of this article was printed in *Foreign Affairs*, Summer, 1984.

I. INTRODUCTION¹

The thesis which I present in this article, and which I hope will be debated by the representatives of the 160 countries scheduled to attend the World Population Conference in Mexico City in August 1984, is this:

- Population growth rates in most developing countries fell significantly in the 1970's. This has led many to believe that the world in general, and most countries in particular, no longer face serious population problems and that efforts to deal with such problems can therefore be relaxed.
- Such a view is totally in error. Unless action is taken to accelerate the reductions in the rates of growth, the population of the world (now 4.7 billion) will not stabilize below 11 billion, and certain regions and countries will grow far beyond the limits consistent with political stability and acceptable social and economic conditions. Africa, for example, now with less than half billion people, will expand six fold to almost 3 billion; India will have a larger population than China; Bangladesh, already one of the most densely populated areas of the world, will grow from less than one hundred million to over 400 million; Mexico from 69 million to 200 million; and El Salvador from 5 million to 16 million.
- Rates of population growth of this magnitude are so far out of balance with rates of social and economic advance that they will impose heavy penalties on both individual nations and individual families. Nations facing political instability of the kind already experienced in Kenya, Nigeria, and El Salvador—instability in part a result of high population growth rates—will more and more be tempted to impose coercive measures of fertility regulation. Individual families will move to higher levels of abortion, particularly of female fetuses, and higher rates of female infanticide.
- Developed and developing countries have a common interest in avoiding the consequences of current population trends. There is much they can do to change them, both through action to encourage couples to desire smaller families, and by moves to increase the knowledge and availability of contraceptive practices to families giving birth to more children than desired.

¹ I am indebted to the staff of the Population Council, and to members of the World Bank's Population Study Task Force for assisting me in collecting material for this article. They, of course, bear no responsibility for the judgements and conclusions which I have drawn from the data.

- Unless such action is initiated, the penalties to the poor of the world, individuals and nations alike, will be enormous. And the ripple effects—political, economic, and moral—will inevitably extend to the rich as well.

In developing this thesis I will start by examining recent and prospective population growth trends. This will be followed by an assessment of the consequences of rapid population growth for families and societies, and for the world community as a whole. I will conclude by discussing policies that nations can pursue to deal effectively with rapid population growth, and examine the ways in which international assistance and cooperation can contribute to the success of those policies.

II. WORLD POPULATION GROWTH

Recent Trends

The long stretch of early human history was characterized by a near-balance of births and deaths. This was not a matter of choice: it was imposed on mankind by precarious existence. High mortality mandated high fertility to assure survival. With the advent of agriculture—about 8000 BC, when the world's population approximated 8 million—the food supply became more dependable and periods when births exceeded deaths by at least a modest margin became more frequent. Still, slowly expanding populations were frequently decimated by recurring crises and average rates of growth remained very low. At the dawn of the modern era—by about the mid 18th century—the world's population had reached 800 million.

Increasing mastery over nature, associated in part with the Industrial Revolution, then led to a spectacular acceleration of the growth in human numbers. Mortality was gradually reduced and the gap between global birth rates and death rates widened. The differences between these two rates, the rate of population growth, increased steadily over the course of the next 200 years. In this period the Earth's population tripled, reaching 2.5 billion by the middle of the 20th century—and grew by an additional 80 percent, adding 2 billion more, in the next 30 years.

Whereas it had taken mankind more than a million years to reach a population of one billion, the second billion required only 120 years; the third billion 32 years; and the fourth billion 15 years.

These global totals obscure wide differences between what are known today as the “developed” countries—the industrial nations of Japan, Europe, and North America—and the “developing countries” of Africa, Asia, and Latin America. During the period from 1750 to 1850, the two groups of countries grew at similar average annual rates: .6 percent for the developed and .4 percent for the developing. From 1850 to 1950, the rates were .9 percent and

.6 percent. But between 1950 and 1970, both rates changed dramatically becoming respectively 1.1 percent and 2.2 percent. Those in the developing countries by 1970 were not only twice as great as in the developed nations, but exceeded by a full percentage point the most rapid growth ever experienced by them.

The experience of the industrial nations, during the last 200 years, reveals a most important lesson of modern demographic history. Higher rates of survival need not lead to ever-expanding populations, hence to the dire consequences envisaged by Malthus: lowered living standards and eventual re-establishment of high death rates. Humankind can also control its fertility. Low rates of growth can be the outcome of an equilibrium achieved through low death rates and low birth rates.

In many of these more economically advanced societies, even before the end of the last century, a spontaneous decline of fertility set in. Millions of individual couples decided to opt for smaller families, and we have since seen that the demographic transition can run its full course to population stability with low mortality. We also know that the behavioral response to the spread of industrialization and urbanization underlying that transition are not limited to Western populations but are much the same the world over.

Yet contemporary patterns of demographic change also demonstrate that the response to "modernization" is not automatic and may occur so slowly as to prevent an orderly approach to the end point of population stability. The process of transition initially generates greater population growth, with death rates falling faster than birth rates. The magnitude of that growth can affect the speed and characteristics of the transition itself. If population growth is very rapid, the socioeconomic transformations that could be counted on eventually to lower birth rates may be retarded. Thus in some cases the Malthusian scenario could, after all, prove to be relevant.

More typically, as I will argue in the next section, the scale of the population growth generated by the transition may be such as to postpone or permanently foreclose desirable patterns of development that could have been attainable with less rapid demographic expansion.

Population trends that have become clearly visible in the second half of this century exhibit characteristics without historical precedent. The global increase in numbers during the past three decades was greater than the world's total population at the beginning of the century. Over 80 percent of this increase took place in the developing countries. The increase in the low-income countries alone—countries with per capita Gross National Product (GNP) of less than US \$410—exceeded 1 billion.

The reasons for such explosive growth are well known and do not need repeating here. I would call attention, however, to two facts. First, the speed at which death rates declined in the developing countries following the end of World War II was much faster than was the case in the equivalent phase

of earlier demographic transitions. The massive application of imported medical and public health technology and improvement in food production largely explain this success. And second, in most developing countries the pre-transition levels of birth rates were higher than was typically the case in earlier Western experience. The birth rate of the developing world as a whole in the early 1950s exceeded 45 per 1000 population. This compares with birth rates of 30 to 35 per 1000 in Western Europe in the 19th century, prior to the onset of the secular decline of fertility.

Thus by the early 1950s many developing countries were experiencing annual growth rates of over 2 percent, some even 3 percent. Between 1955 and 1975, for example, the average annual rate of population growth in the Central American republics was 3.2 percent. Such a rate, if sustained for a century, would increase the population more than twenty-four fold. The growth rate for the developing world as a whole in 1965-69 was 2.6 percent, a rate that would double the population in less than 27 years or increase it more than thirteen fold in a century.

As in earlier demographic transitions, the beginning of an adjustment process eventually became visible. In the 1960s, in the developing world, the average number of children a woman would bear during her lifetime at prevailing levels of fertility was nearly 6.5. By the late 1970s, that figure had declined by almost 30 percent, to 4.6 children. Birth rate trends between 1950 and 1980, summarized in the table below, reflect that decline. Moreover, the decline, slow in the 1960s, accelerated in the 1970s. Estimated figures for 1980-85, shown in the last column of the table, indicate further decline, although at a more moderate pace.

Table I
Crude Birth Rates by Region: 1950-1985
(annual number of births per 1000 population)

<i>Region</i>	<i>1950-55</i>	<i>1960-65</i>	<i>1970-75</i>	<i>1975-80</i>	<i>1980-85</i>
Africa	48.1	48.3	47.0	46.9	46.4
Latin America	42.5	41.0	35.4	33.3	31.8
East Asia*	45.0	37.3	33.9	22.3	18.8
South Asia	45.6	45.8	40.6	37.7	34.9
Developing Countries	45.4	42.8	38.7	33.5	31.2
Developed Countries	22.7	20.3	17.0	15.9	15.5
Total World	38.0	35.9	32.7	28.9	27.3

*Excluding Japan

Source: United Nations 1982 assessment.

During the 1950s and 1960s with the decline of death rates on the whole faster than that of birth rates, rates of population growth continued to increase. But beginning with the early 1970s a slow deceleration of population growth has become evident. For the world as a whole, measured over five-year periods, the growth rate peaked at 2.1 percent in the second half of the 1960s. As Table II shows, the estimated annual rate for the early 1980s is 1.67 percent.

Table II
Annual Rates of Population Growth by Regions: 1950-1985
(percent)

<i>Region</i>	<i>1950-55</i>	<i>1960-65</i>	<i>1970-75</i>	<i>1975-80</i>	<i>1980-85</i>
Africa	2.11	2.44	2.74	3.00	3.01
Latin America	2.72	2.80	2.51	2.37	2.30
East Asia*	2.08	1.81	2.36	1.47	1.20
South Asia	2.00	2.51	2.44	2.30	2.20
Developing Countries	2.11	2.30	2.46	2.14	2.02
Developed Countries	1.28	1.19	0.89	0.74	0.64
Total World	1.84	1.96	2.03	1.77	1.67

*Excluding Japan

Source: United Nations 1982 assessment.

Thus an historic turn-around has occurred in world population growth: after centuries of steady acceleration, overall growth rates during the last decade and a half have turned downward.

This decline in the rate of population growth has led many observers to believe that the world in general, and most individual countries as well, no longer face serious population problems and, therefore, that efforts to deal with such problems can be relaxed. Editorial writers and commentators in the mass media have been quick to take up this theme, announcing the end of the population explosion or declaring rapid population growth to be "another non-crisis."

But this assessment is simply wrong.

The fertility change which has occurred during the last decade or two has been very uneven. In particular the statistical decline for the developing countries as a whole, and indeed for the world, is heavily skewed by the special experience of China. In many other parts of the developing world, including much of Africa, a large part of South Asia, and some countries of Latin

America, no measurable or significant drop in fertility has occurred. The combined current population size of countries and regions that have experienced no appreciable reduction of fertility exceeds 1.1 billion. And as we shall see in the next section, in many of the countries where growth rates have slowed the situation remains perilous.

The Outlook for the Future

What are population growth prospects for the next few decades and for the longer term?

Uncertainties affecting the future argue for some caution in answering. Demographic processes have a built-in momentum that permits relatively accurate forecasts for 15 to 20 years ahead. Beyond that time span, the possibility of error becomes much greater. The question, however, remains highly appropriate, and is answerable with a fair degree of accuracy. We know, for example, that a large majority of the children born in the 1980s will be still alive past the midpoint of the next century.

To answer the question for the longer term, we can spell out plausible assumptions as to the future course of fertility and mortality, and calculate the implications of these assumptions for future population size and other demographic characteristics. Those who wish to challenge the orders of magnitude resulting from such calculations can best do so by challenging the underlying assumptions, and by proposing and defending alternative assumptions that they consider more plausible.

The results of such a projection exercise covering the time span 1980 to 2100, undertaken by the World Bank, are presented in Table III below.

Table III
Population Projections: 1980 to 2100
(population in millions)

<i>Selected Countries</i>	<i>1950</i>	<i>1980</i>	<i>2000</i>	<i>2025</i>	<i>2050</i>	<i>2100</i>	<i>Total Fertility Rate-1982</i>	<i>Year in which NRR=1</i>
China	603	980	1,196	1,408	1,450	1,462	2.3	2000
India	362	687	994	1,309	1,513	1,632	4.8	2010
Indonesia	77	146	212	283	330	356	4.3	2010
Brazil	53	121	181	243	279	299	3.9	2010
Bangladesh	44	89	157	266	357	435	6.3	2035
Nigeria	41	85	169	329	471	594	6.9	2035
Pakistan	37	82	140	229	302	361	5.8	2035
Mexico	27	69	109	154	182	196	4.6	2010
Egypt	20	42	63	86	102	111	4.6	2015
Kenya	6	17	40	83	120	149	8.0	2030

Table III (Continued)
Population Projections: 1980 to 2100
(population in millions)

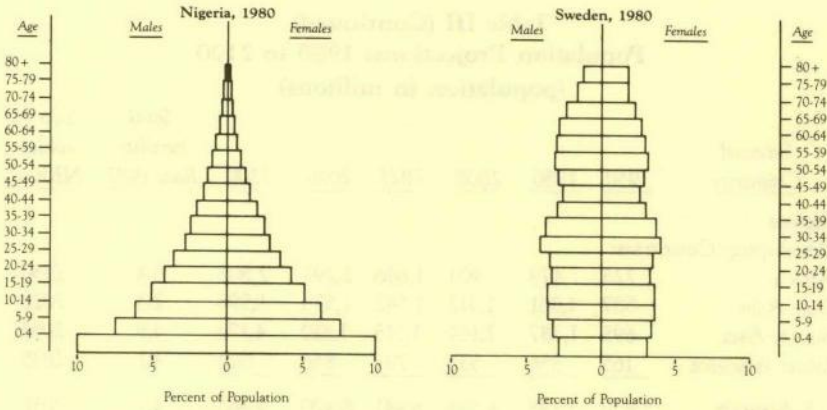
<i>Selected Countries</i>	<u>1950</u>	<u>1980</u>	<u>2000</u>	<u>2025</u>	<u>2050</u>	<u>2100</u>	<i>Total Fertility Rate-1982</i>	<i>Year in which NRR=1</i>
<i>Regions</i>								
<i>Developing Countries:</i>								
Africa	223	479	903	1,646	2,297	2,802	6.4	2050
East Asia	587	1,061	1,312	1,542	1,573	1,596	2.3	2020
South Asia	695	1,387	2,164	3,125	3,810	4,172	4.9	2045
Latin America	<u>165</u>	<u>356</u>	<u>535</u>	<u>732</u>	<u>856</u>	<u>921</u>	4.1	2035
Sub-total ^a	1,670	3,298	4,884	6,941	8,400	9,463	4.2	2050
<i>Developed</i>								
Countries	<u>834</u>	<u>1,137</u>	<u>1,263</u>	<u>1,357</u>	<u>1,380</u>	<u>1,407</u>	1.9	2005
Total World	<u>2,504</u>	<u>4,435</u>	<u>6,147</u>	<u>8,298</u>	<u>9,780</u>	<u>10,870</u>	3.6	

^aRegional figures do not add to "Developing Countries Sub-Total" due to rounding.
Source: 1950: UN Estimates; Other Years: 1984 World Bank estimates and projections.

The projections are based on the estimated population size in 1980 and its sex and age distribution. They incorporate the assumption that mortality improvements in the future will trace the historical experience of the more advanced countries in moving toward higher levels of life expectancy.

The nature of the more crucial fertility assumptions is summarized in the last two columns of the table. Starting with the estimated level of fertility in 1982 (expressed in terms of the Total Fertility Rate, that is, the number of children an average woman would have during her lifetime), the projections stipulate a decline to replacement level fertility (Net Reproduction Rate = 1) by a date that is specified for each country separately. Replacement level fertility means a level of childbearing in which each couple on average replaces itself in the next generation. If sustained over a substantial period, this would result in zero population growth.

But when replacement level fertility is reached in a society, it does not mean that the population immediately ceases to grow. It may continue increasing for decades, depending on the society's age structure. Compare, for example, the current age distribution in Nigeria (which is typical of that in most developing countries) and Sweden.



Source: Carl HAUB and Lindsey GRANT of "The Environmental Fund"

When replacement level fertility is first reached in a country with an age distribution similar to that of Nigeria, the population will still possess a strong growth momentum. It will continue to grow for decades until the very large numbers of females at the bottom of the age pyramid have passed through their reproductive years. Such a nation will not reach a stable population level until 50 or 70 years after it has achieved replacement level fertility. During that period its population will have increased by an additional 50 or 60 percent. The assumptions concerning the future tempo of fertility decline in the developing countries, incorporated in the projections, reflect the judgment—or the hope—that recent declines will not only continue at a rapid pace in the near future but will do so until replacement fertility is achieved. Where fertility is still high—for example in Africa and parts of South Asia—it is assumed that it will start to decline well before the century's end and then the downward trend will be precipitous and sustained.

These are, in fact, heroic assumptions. They require that the move from high fertility to replacement level fertility—which took about a century and a half in the United States—be completed within a drastically shorter time span in today's developing countries. The assumptions envisage no possibility of temporary reversals or pauses on the downward course of fertility. They allow for no "baby booms" such as the West experienced, once replacement fertility has been attained. Yet the populations that must conform to these demanding stipulations are largely poor and rural. They are populations where security in old age is still derived primarily from the support of one's children. Many are populations with religious and cultural values that place a high premium on fertility.

But let us take the assumptions at face value, despite their implicit optimistic bias. The projections in Table III are sobering. For the reasons I referred to,

rates of growth in the developing countries, although declining, will remain high for decades to come.

India will nearly double in the next 45 years, becoming one-third larger than China is today. Bangladesh by the same time will have tripled and will have 266 million people jammed into an area, alternately swept by flood and drought, the size of the state of Wisconsin. Mexico, which today has the most rapidly growing labor force of any large country in the world, will more than double in size. And Kenya, in which 17 million people are already putting heavy pressure on the limited supply of arable land, will have quintupled.

The total population of the developing countries as a group, 3.3 billion in 1980, will rise to nearly 7 billion by 2025, and to 8.4 billion by 2050. Of this total, Africa's population will be 2.3 billion, representing a ten-fold increase during the course of the preceding 100 years. A century from now the world's population will total about 11 billion. So much, then, for the supposed end of the population explosion.

III. THE CONSEQUENCES OF THE PROJECTED GROWTH FOR FAMILIES AND SOCIETIES

Now what do these projections mean for human society over the coming decades—say, over the lifetime of children born in the 1980s? To what extent will this expansion in numbers absorb the resources that could have improved the quality of life in impoverished nations: What human values are likely to be curtailed in order to sustain that expansion? And how will international relations, both political and economic, be affected in a world with two or three times its present population? Answers to such questions must, of course, involve speculation, but enough is known today about demographic effects to provide some general outlines.

One can begin by grouping the consequences of population growth into two broad categories. First, are the effects that bear on the pace of national economic development and on political stability in the developing countries. These lead to attenuation of human rights and for many in these societies, especially for the rural and urban poor, barely perceptible advancement in material terms. Such effects, seriously detrimental on both counts, loom increasingly large to the governments of most poor countries. And second are the effects on the international system: principally the perpetuation of the gap between rich and poor countries and all that implies for international economic and political relationships.²

² Supporting data for this analysis are drawn for the most part from World Bank materials.

Effects on National Economic Growth and Political Stability

At the national level, rapid population growth translates into a steadily worsening employment future; massive city growth; pressure on food supplies; degradation of the environment; an increase in the number of the "absolute poor"; a stimulus to authoritarian government; coercive national policies restricting the freedom of the individual; and brutal family practices. I will discuss each of these in turn.

Over the 20 years from 1960 to 1980, the working-age population (15-64 years) of the world's developing countries increased by 730 million, to reach a total size of 1,860 million. Over the 20 years, 1980-2000, this total will increase by 1,150 million. These are people already born. Their numbers up to the end of this century are not subject to the vagaries of forecasting trends in reproductive behavior. How will they secure economic support?

One way or another, most of them will find at least a foothold in the economy. Unemployment is an option few can afford in poor countries. It is equally apparent that even with optimistic assumptions of renewed vigor in the world economy, modern-sector jobs with high productivity will not be available in remotely sufficient numbers. Indeed the proportion of the labor force in such jobs, a sensitive indicator of development success, may well decline in some countries, reinforcing the dualistic nature of their economies.

Agriculture too cannot indefinitely expand its employment. The ratio between land area and population is already at very low levels. In India between 1953 and 1971, a 66 percent increase in the number of rural households was accompanied by only a 2 percent increase in the cultivated area. The number of holdings of one acre or less more than doubled to 35 million, and the average size fell to .14 acres. Land subdivision eventually yields plots too small for subsistence. The trend, therefore, over recent years has been for agricultural employment to decline in relative terms even in the poorest and economically most stagnant countries.

Under optimal conditions labor-intensive manufacturing would take up the slack, producing both for the domestic market and for export. But the reasons that in practice make for much slower than optimal employment growth in manufacturing are all too familiar.

What labor absorption possibilities are left? The short answer is the service sector. Once regarded as a manifestation of post-industrial affluence, the service economy is now increasingly evident even among the poorest nations of the Third World. Government itself, on both its civil and military sides, is a major employer: in Kenya, in the 1972-80 period, for example, the public sector accounted for two-thirds of the growth of wage employment. Small-scale trade and unorganized services of all kinds serve as a reservoir for the underemployed, yielding marginal private subsistence, but in many situations effectively zero productivity.

Much of this low-grade employment growth goes into urban areas, swelling cities far beyond their real economic base.

Up until the present decade the absolute increases of population in the developing countries have been greater in rural areas: in the decade 1970-80, for example, 340 million persons were added to rural areas, 321 million to urban areas. In the future, the balance is projected to shift. In 1980-90, UN forecasts show 320 million added in rural areas, 481 million in urban; in 1990-2000, the corresponding figures are 219 million and 662 million.³

Thus, despite the fact that the rural population of the developing countries will continue to grow well into the twenty-first century, the bulk of future population increases will be channelled into the cities. For several decades these cities have been growing at rates of 4 or 5 percent per year, rates that double their sizes in less than 20 years. In Africa and South Asia this growth is expected to continue unabated beyond the year 2000. In Latin America some slackening of pace may occur, as a result of both urban fertility decline and the drying up of potential rural-urban migrants in what are already predominantly urban societies. Only in East Asia, among developing regions, do aggregate figures suggest that urban growth has been comparatively restrained, but this is a result of China's largely successful efforts to regulate internal movement, and does not apply to other East Asian countries.

Over the last quarter of this century the number of Third World cities with populations above 10 million is projected to increase from 3 to 21. Huge urban agglomerations are, of course, known in the West: the New York-northeastern New Jersey metropolitan area, or Tokyo-Yokohama, both with populations close to 20 million, or Los Angeles and London. These are now, however, growing slowly if at all. They have built up housing stocks, physical infrastructure, and public amenities over many decades of heavy investment—yet their maintenance problems are acute. The giant Third World cities—Mexico City (31 million by 2000), San Paulo (26 million), Shanghai (23 million), Bombay and Jakarta (each 17 million), and so on—will have doubled or more in the last quarter of this century. 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.

These massive urban populations, however impoverished, must be fed. But food production in many parts of the world has not yet kept up with population growth.

It is not technically difficult to increase food production at rates sufficient to maintain per capita consumption, or even to keep up with rising demand as consumer incomes edge upwards. Even in extreme cases such as Bangladesh

³ Patterns of Urban and Rural Population Growth, New York: United Nations, 1980.

or the countries of the African Sahel, agronomists can identify ways to raise crop yields. Yet postwar experience has been one of recurrent food crises.

World Bank estimates of trends in per capita food output in the 1960s and 1970s are as follows (in percent per year):

	<u>1960-70</u>	<u>1970-80</u>
Low-income countries	0.2	- 0.3
Middle-income countries	0.7	0.9
All developing countries	0.4	0.4

Regionally, the worst performers were Africa where the 1970s saw per capita output decline by 1.1. percent annually, and South Asia, where there was zero growth. For the Low-income countries as a whole—with a population of 2.25 billion—over a twenty year period production failed to keep up with population.⁴

Part of the reason for this poor performance lies in the social organization of agriculture: regressive tenancy arrangements; inadequate credit, storage, and marketing systems; inordinate government regulations; and so on. In addition, however, and underlying many of these constraints, there is the basic conflict between pricing policies designed to enhance agricultural productivity and policies designed to cater to the immediately pressing demands of urban consumers. In this conflict, blunted farm-level incentives are the typical outcome.

Agronomy tends to take for granted the stability of ecological systems. Yet good agricultural practices are very evidently threatened by the inexorable build-up of rural populations. As agricultural land is expanded to its geographical limits, but still at bare subsistence levels of production, ecological vulnerabilities are exposed.

In particular, high rates of population growth have been a major factor increasing the demand for firewood, which has led to widespread deforestation in developing countries. In these countries, 1.3 billion people who depend on firewood for fuel are cutting firewood faster than it is being replaced, with resultant damage to flood control, arable lands, power production, and household economics. Silting up of dams, caused by clearing of waterlands, is reducing their useful life by 50 percent. In Tanzania, firewood has become so scarce that each household spends 250-300 working days per year simply gathering its wood supply. In China, 70 million of 170 million households—300 million people—suffer serious fuel shortages for up to 6 months a year. In much of West Africa, families that traditionally cooked two meals a day can now cook only one a day or one every other day.

⁴ World Development Report, Washington, D.C.: World Bank, 1982.

During my tenure as President of the World Bank I coined the term "absolute poverty" to refer to a condition of life so characterized by malnutrition, illiteracy, and disease as to be beneath any reasonable definition of human decency. It is a term that can be applied across countries, irrespective of differences in country-specific definition of the poverty level. In 1980 the Bank estimated that 780 million persons in the developing countries (excluding China) lived in absolute poverty. As a proportion of the total population this was estimated to have decreased over the preceding two decades (except in sub-Saharan Africa), but the absolute numbers had increased.

High population growth rates severely limit the progress that can be made in reducing the number of absolute poor. In sub-Saharan Africa, expected population growth would increase the absolute poor by two-thirds between now and 2000. But with a more rapid fertility decline the increase could be held to 20 percent.

A major concern raised by poverty of this magnitude lies in the possibility of physical and intellectual impairment of children. Parental investments of both money and time are critical in the early years of development if a child is to reach its full potential. The distribution of family size by family income in many countries is such that the great majority of children are born into poor families, and hence are disadvantaged in these respects. In Colombia and Malaysia, for example, the number of children in the poorest 20 percent of the households was 3 times as great as in the richest 20 percent.

Surveys have shown that millions of the children in these low-income families receive insufficient protein and calories to permit optimal development of their brains. Additional millions die each year, before the age of five, from debilitating disease directly attributable to nutritional deficiencies. The capacity to learn, of tens of millions of those who do live, is reduced for the same reason.

The penalizing effects at the family level are compounded by weak educational systems. High-fertility countries, such as Kenya, face a doubling or tripling of their school age population by the end of the century. This is bound to lead to a reduction in the quality of education. In Latin America, when the school age population expanded dramatically between 1970 and 1978, public spending per primary school student fell by 45 percent in real terms. And the resources available for education in most developing countries are already low: Bolivia, El Salvador, and the Ivory Coast, for example, spend less than \$2 a year on classroom materials for each primary school child compared to \$300 per student in Scandinavian countries. A culture of poverty is being transmitted down the generations, sacrificing human resources and impeding social mobility.

Rapid population growth, in sum, translates into rising numbers of labor force entrants, fast expanding urban populations, pressure on food supplies, ecological degradation, and increasing numbers of "absolute poor." All are rightly viewed by governments as threats to social stability and orderly change.

Even under vigorous economic growth, managing this demographic expansion is difficult; with a faltering economy it is all but impossible. Perceived political threats, actual or anticipated, elicit a strengthening of administrative control over the population. I am not asserting that population growth is the dominant force behind the trend towards authoritarian government in the contemporary world, but I do see it as a major contributor.

This contribution is especially evident where population growth is associated with ethnic or communal differences. Many communal tensions are rooted in expectations of adjustment in political representation as demographic change occurs. The politicization of census-taking in Nigeria is a relatively benign example. The recent killings of Bengali migrants in Assam shows the problem in its extreme form. In such cases an authoritarian response by government is to be expected.

In addition to the administrative consequences of rapid population growth, the absolute size of a population also has administrative implications. Today's most populous developing countries are ten times or more the size of the larger of the now developed countries at the beginning of their industrialization. France had a population of some 30 million around 1800; Japan was about the same size in 1850; Britain in 1800 had fewer than 10 million people; the United States in 1850 about 24 million. The legacy of administrative technology left by such countries may have little to offer even medium-size developing countries in the contemporary world. Simon Kuznets in his 1971 Nobel Prize acceptance speech pointed out that Third World countries face "a long period of experimentation and struggle toward a viable political framework," and that economic advance for them was contingent not only on adapting to their own needs the available stock of material technology but also, and even more, on "innovations in political and social structure."⁵ The political formats emerging from contemporary efforts to mobilize and govern vast national populations have long-range implications not only for the course of economic growth but also for the kinds of societies that result.

Authoritarian responses can be addressed to the causes of rapid population growth—continued high fertility—as well as to its consequences. China is the preeminent example here. Since 1970 it has devoted a part of its considerable administrative capacities to promoting a drastic decline in family size. It is currently endeavoring to institute one-child families. I shall say more about the costs of these policies below. For the present I would simply note that they represent the outcome of a deliberate assessment of the urgency of dealing with rapid population growth. In effect China's leaders have concluded that the political difficulties of undertaking those actions were outweighed by the anticipated adverse consequences of delay or by adoption of more gradualist voluntary measures.

⁵Simon Kuznets, "Modern Economic Growth: Findings and Reflections," *American Economic Review* Vol 63 (1973), p. 256-7.

There is accumulating evidence that rapid population growth is leading toward more all-pervasive regulation of social life in many societies. Curtailed freedom of movement⁶ within countries is one such constraint that may well be more widely practiced in the future, as governments gradually acquire the means to impose it. And restraints on reproductive freedom may similarly become more common in cases where governments through incapacity or unawareness have allowed demographic pressures to build to extremes. I am not speaking here of government measures aimed at creating greater social responsibility in the reproductive decisions made by families, but of coercive government intrusions into the decisions themselves—forced sterilization for example.

These will almost certainly lead to or be accompanied by increasingly harsh actions by families themselves: higher rates of abortion following the birth of the third or fourth child; use of pregnancy tests to determine the sex of an unborn child, followed by abortion of female fetuses; and rising rates of female infanticide. In November 1982, for example, the *China Youth News*, alluding to reports that under pressure from the birth-control program parents were once again killing their girl babies, stated: "Some of these unfortunate children are left by the roadside or abandoned on street corners while others are even drowned—If this phenomenon is not stopped quickly, then in twenty years a serious social problem may arise; namely that a large number of men will not be able to find wives." The paper went on to note that in certain rural areas three out of every five surviving babies were male.⁷ If such reports are correct they would indicate that one-third of the female infants had been killed.

With a continuation of present growth trends, I expect such coercive measures by governments and such brutal actions by families to be common by the end of the century.

Effects on the International System

The greater part of the adverse consequences of rapid population growth are the effects I have described, those felt by individuals, families, and national governments. These effects, of course, may be reason enough for concern by the broader international community, simply on humanitarian grounds. But the international order is also affected in more tangible ways. The continuing shift in the world's demographic center of gravity toward developing countries, and toward the poorer among them, has important implications for economic relations between states. Political instability within nations not infrequently spills over into the wider international arena. Just as certain desirable

⁶China has employed direct mobility controls, restricting movement from rural to urban areas, since 1950.

⁷Orville Schell "A Reporter at Large" *The New Yorker*, January 23, 1984, pp. 81-82.

development options that once were open to particular countries are ruled out as population numbers mount, so a similar narrowing of possibilities may confront the international system.

At the level of the international economy, differential demographic growth contributes significantly to maintaining and even widening the income gap between rich and poor countries. Between 1955 and 1980, for example, per capita income in the US, in constant 1980 dollars, grew from \$7,000 to \$11,500. In the same period in India, it grew from \$170 to \$260. What had been a gap of \$6830 in 1955 almost doubled in a quarter century to \$11,240 in 1980. In 1980 the developed countries, with 25 percent of the world's people, produced 77 percent of the world's output. Eighteen percent of the output was earned by the 28 percent of the people living in the middle-income developing countries (Brazil, Turkey, etc.). And only 5 percent of the world's output was shared by the 47 percent of the people living in the low-income countries (India, China, Sub-Saharan Africa, etc.).

To maintain income, capital per person must be maintained; a lesser rate of population growth releases resources for increasing capital per person. Here again, the contrasts between developed and developing countries are large. If all investment in Bangladesh, during 1980, had been allocated to new workers, each person would have had less than \$1700 invested on his behalf. The comparable figure for the US was \$190,000.

The prospective growth patterns I have described make virtually certain that the existing economic differentials will continue well into the next century.

Contrasting growth trends in the population of labor-force age accentuate the differences in employment opportunities and in the relative prices of the factors of production between developing and developed countries. During the rest of this century, the population in the critical young-adult age group (20-40 years) in the developing countries will be expanding at the rate of 2.6 percent per year, while the corresponding figure in the developed world will be one-tenth of that rate. The contrasts in absolute numbers are even more telling. Between 1980 and 2000, the developing countries will see the number of young adults increase by more than 630 million; the developed countries, by merely 20 million. The corresponding figures during the preceding two decades were 350 and 60 million.

These demographic trends in developing countries will exert a powerful force toward keeping real wages down. If political stability is maintained, they will tend to keep the labor force docile and pliable. In countries that succeed in combining such conditions with effective educational and health systems, the resultant abundant supply of labor will constitute a formidable asset in competing with the industrialized countries in international markets for mass-produced goods. Under conditions of relatively free trade and international mobility of capital and entrepreneurship, industry would tend to shift production to low-cost areas. The result could be massive and rapid structural

change in the world economy through the relocation of entire branches of industry from the developed to the developing countries, with far-reaching employment consequences.

The developed countries obviously would not permit such an outcome, however compelling the global economic logic that supports it. Instead it is likely that the principles of free trade and capital mobility, principles which have served the world economy well in the postwar years, would increasingly be called into question.

I discussed earlier the strains put on national development efforts by rapid population growth. Amplified by the rising expectations that result from increased exposure to the outside world, dissatisfaction of significant segments of the population with their status is now growing in many countries. The weakening and eventual breakdown of social institutions that have accommodated poverty, and mediated between conflicting interests in the traditional society, lead to sharpened class conflicts and regional antagonisms. The political turbulence that results is exacerbated by the demands on government made by the steadily growing numbers of those seeking access to the modern economy. Not infrequently this turbulence spills over into the international arena.

In any proper accounting of the forces making for international strife in the contemporary world there are always interwoven layers of causality: domestic political forces, economic interests, the intrusion of Great Power rivalries, and so on. Changing demographic configurations must similarly be factored in here. The current conflict in Central America is a prime example in which demographic pressures have played such a role—one explicitly recognized, for example, in the Kissinger Commission's report.

One highly visible international outcome of political instability is migration. I do not refer here to the international movement of labor or of permanent settlers, regulated by governments. Rather, I mean the large but sporadic refugee movements that have punctuated modern history, and that may well occur on an even larger scale in the future. Sheer numbers here overwhelm national borders and administrative capacities. As a striking case in point, approximately 10 million Bangladeshi refugees entered India in 1971 at the time of Bangladeshi's war of independence.

A final point on the international consequences of rapid population growth follows from these considerations. Popular writings often foresee a world future of general affluence, with modern communications joining all into a "global village." But the persistence of wide differences in national economic and social development, caused in turn partly by differential population growth, works strongly against any such trend. Convergence toward an integrated human society is not a realistic option under such circumstances. Development paths that would have been open to a world of, say 3 billion persons—the world's total in 1960—will not be open to a population four times that size.

IV. POLICIES TO REDUCE THE RATE OF POPULATION GROWTH

If the preceding analysis is anywhere near the mark, policies capable of reducing rapid population growth—effectively yet humanely—deserve the highest priority in the governments of those countries now confronted with that problem. Such policies largely come down to those aimed at reducing fertility.

What can a government do if it wishes to reduce fertility? Seven years ago, in an address at the Massachusetts Institute of Technology, I sought to answer that question.⁸ I pointed out that the range of possible interventions divides into two broad categories:

- Those designed to encourage couples to desire smaller families; and
- Those designed to provide parents with the means to implement that desire.

Both approaches are necessary. The first sets out to alter the economic and social environment that promotes high fertility, and by altering it to create among parents a new and smaller norm of family size. This generates a demand for birth control. The second endeavors to meet that demand, helping to make the new norm attainable. Family planning services are important, but in the end can be effective only to the extent that a demand for lower fertility exists.

I proceeded in my address to spell out a number of policy actions that governments can take to help stimulate demand for fertility control. My list, I believe, remains as valid today as it was seven years ago. Among other possible measures, I emphasized the reduction of infant and child mortality; the expansion of basic education; the more equitable distribution of income; and above all else, the raising of the status of women socially, economically, and politically.

Such measures, I argued, should be complemented by programs to promote a social consensus favoring small families; by the introduction of, or at least experimentation with, incentives and disincentives encouraging low fertility; and, last but not least, by vigorous government efforts aimed at improving access to modern means of fertility control.

My MIT address discussed in detail the rationale and the essential components of such a program. I need not repeat them here. Much of what I said was beginning to be reflected, even then, in the policy directions pursued by the leading international development agencies concerned with population

⁸"The McNamara Years at the World Bank: Major Policy Addresses of Robert S. McNamara 1968-1981" Johns Hopkins (1981) pp. 397-435.

matters. It had also been incorporated into the formal policy declarations of some of the major developing countries endeavoring to reduce population growth.

Has the policy worked? Can it be counted upon to deliver the result—the rapid and accelerated reduction of fertility, the urgency of which I have argued for in this essay?

The questions have no simple answer. During the last decade or two the developing countries have exhibited a great diversity of development policy approaches and demographic patterns. There is diversity too in their historical background, cultural and ethnic characteristics, and attained levels of development, all of which confound efforts to trace the causal relationship between policy and outcome. On the basis of recent experience, however, one can distinguish at least four types of situations:

First, in a number of countries in the middle income group—epitomized by Brazil—rapid fertility decline has begun and is proceeding apace, even though the policies pursued by the government have little resemblance to the policy package outlined here. One might be tempted to conclude that in such countries the classical mechanisms of the developed nations' demographic transition are at work, obviating the need for an activist population policy.

There are, on the other hand, a number of societies which have followed the policy prescriptions summarized above and in which fertility rates have fallen. South Korea, Taiwan, and Sri Lanka are perhaps the best examples. There is an element of circularity in interpreting their record in reducing fertility as validating the policy package in question, since to a significant extent the policy itself was fashioned from analyzing that record. Still, it can be persuasively argued that measures that worked there will yield similar success at least in those countries of the developing world that possess administrative capacities approaching those of Korea, Taiwan, or Sri Lanka.

A third example is the special case of China where reduction has been achieved through active government intervention that goes well beyond the kind of policy package I proposed at MIT. The Chinese policies have achieved notable progress in changing traditional social norms regarding large families, and in providing effective family planning services. Nevertheless, the spectacular reduction of fertility in China was greater than could reasonably be expected from the provision of family planning and the overall process of development. Such policies could hardly be expected to result in a spontaneous demand for and substantial achievement of the one-child family, the central objective of current Chinese policy. The compulsion and coercion added to the Chinese family planning program demonstrates that in the judgment of the Chinese government the standard policy package was simply not enough. Strong sanctions, the government concluded, were absolutely necessary if the demographic objectives it had formulated in the name of the collective interest were to be achieved.

In the preceding section, I suggested that the felt necessity of intrusive interference by government with parental decisions on childbearing is one of the deleterious consequences of population pressures inherited from the past. Whether or not the Chinese government has correctly assessed the nation's demographic predicament, Chinese policies do in fact underscore the limitations of the policy package I have proposed. Thus current Chinese policies may be a prototype of what is likely to be attempted in the future by other governments that conclude that the "normal" protracted process of stabilizing their population must be drastically shortened.

A fourth group of countries—and from the point of view of the world's demographic future the most important—is made up of those in which the onset of fertility decline has not yet occurred. I noted earlier that these countries, which include most of the world's poorest populations, comprise some 1.1 billion people in Africa, South Asia, and Latin America. What are the prospects that the policies I advocated at MIT will work in these nations?

The evidence of past performance seems discouraging. In some of the countries in this group—Pakistan, for example—the principal ingredients of the policy package have been avowed government policy for decades. Countless official declarations endorse the objectives of: achieving an equitable income distribution; the emancipation of women; child and maternal health; universal basic education; and free access to family planning services. Programs are presumed to be in place to give meaning to such words. Elsewhere—as in Kenya or Zaire, for example—the endorsements and programs are more recent but equally emphatic.

The words are in place, but on the evidence to date the programs are not working. Fertility is unaffected. Why is that so?

It is important to get a grip on the correct answer to this question. Otherwise, policies that have failed to bring results in three decades, say, in Bangladesh, may be recommended to, say, Nigeria, only to find, thirty years from now, that the transplant, too, was unsuccessful.

Part of the answer lies in lack of political will by governments to accord population policy the priority it deserves on the national agenda. What amounts to virtually the same thing, sensitivity to the gravity of the adverse consequences enumerated above may simply not have penetrated to the top echelons of government. Anyone with experience at these levels is familiar with the difficulty of focusing on medium- and long-term issues in the face of a host of more immediate problems clamoring for attention. The most tangible effects of this year's high fertility rate will not begin to show up for fifteen or twenty years—a lifetime away in the time-scale of political life.

Political will alone, of course, is not enough. An effective fertility reduction program clearly requires an appreciable degree of administrative capacity. Experience has shown that this can best be achieved by greater decentralization of responsibility for the management of the program.

Effective results in the promotion of a social consensus favoring a smaller family norm, and in the provision to families of the modern means of fertility regulation to achieve it, almost require, as a precondition, the development of a more coherent community voice at the local level. This clearly has been an important element in the striking successes in family planning in recent years in such societies as Indonesia and Thailand.

The administrative burden on national government can also be eased by placing greater emphasis on non-governmental efforts in distributing contraceptive supplies, both non-profit and commercial. It is too readily taken for granted that governments must necessarily assume the major operational responsibility for distribution of family-planning services—even in those settings where they have obviously been unable to deliver a wide variety of other basic services.

These observations suggest ways in which the obstacles in the way of progress toward low fertility might be overcome in countries which have yet to experience significant reduction or where early successes have faded.

But the most important single step that any nation can take to reduce its rate of population growth is to establish a frame or a plan within which all of these measures can be formulated and against which progress can be periodically evaluated.

Each nation experiencing a rapid rate of population growth should, therefore, examine past trends and future prospects and come to a judgment of whether projected population levels are optimal in terms of the social and economic welfare of its people. If they are not, what are acceptable quantitative goals and how can they be reached?

If nations had established such goals 10 years ago, no major developing country, with the possible exception of China, would now be satisfied with its demographic progress during the past decade. Even China, which has set a target of stabilizing its population at 1.2 billion people, would have to recognize that it is likely to grow to a total of at least 1.4 billion.

The problem today is not one of a failure of governments to agree that population growth rates must be limited if social and economic development is to be maximized. Instead, it is an unwillingness to recognize that insufficient progress is being made in reducing fertility and that if this failure is to be overcome, additional political and financial capital must be spent in pursuit of that objective.

As a foundation for such action, country fertility targets must be set for specific time periods. Realistic policies can then be introduced which will lead to desired family sizes consistent with those targets, and family planning services can be provided to permit couples to achieve them. Reports to the nation each year—analagous, in some ways, to the World Development Report published by the World Bank—on the degree to which the overall targets, and the necessary supporting actions, are being realized would provide an assessment of the progress achieved. Such reports would introduce a discipline

that would lead, over a reasonable period—say five years—to an effective fertility reduction program.

The reports would indicate where greater program efforts were needed, and would identify those signal successes—and most countries have them—that could be mined for program insights helpful elsewhere. The managerial value, at both local and national level, of comparing accomplishments of local government units against each other and against absolute standards, is hard to exaggerate.

A special word should be added about formulating national population plans in sub-Saharan Africa. This area has a unique set of problems. It has the highest population growth rate of any region in the world, the lowest capability for absorbing such growth, and the weakest programs for limiting it.

During the 1970s, population in the area increased at 2.7 percent per year compared to 2.5 percent in the 1960's. Growth rates are likely to accelerate even further in the 1980's. Excluding Nigeria, per capita income declined during the seventies and has declined by 2 percent per year in the eighties. Life expectancy at birth was only 49 years in 1979; fewer than four out of every ten adults are literate; and only one out of three children survive to adulthood in the poorest countries. Only 5 percent of married women of reproductive age are using modern contraception, and yet politicians have been reluctant to propose limiting family size because the demand for children is extremely high (desired family size is 6 to 9 children).

Sub-Saharan Africa's 1984 population of 440 million will double in the next 20 years. The important question is whether in the next half-century the population will merely triple, or whether it will swell to five or six times its present size. What the governments and people of these countries must face, in their consideration of national population goals, is that failure to act quickly to reduce fertility voluntarily is almost certain to lead to widespread coercive measures before the end of the century. And in the meantime, social and economic distress will increase and be widespread.

These then are the critical components of the role of national governments in this issue. These governments bear a heavy responsibility, and rightly so, in fashioning any effective and humane solution to the world's population problem.

There is also, of course, an important role for the international community. The most important help that community can give is to increase its support for high rates of economic and social advance throughout the developing world and, in particular, in the low-income countries.

This will require: far stronger resistance to the increasing pressure for protectionist barriers to the exports of the developing countries; a longer-term approach to the debt crisis and to the future financial requirements of the middle-income countries; and a much greater recognition of the need of the low-income countries for larger flows of concessional aid. The greatest obstacle

to the latter, at present, is the refusal of the United States government to join the thirty other contributors to the International Development Association—the largest single source of financial assistance to the poorest countries—in supporting a lending program for that institution for the next three years of \$12 billion instead of \$9 billion.

I have addressed all of these issues before and I will not expand on them now. Instead I want to suggest that the role of the international community, with specific reference to the population problems, is a three-fold one.

First, it is to help provide technical and material assistance to population programs in high-fertility countries. The assistance must be on a scale adequate to ensure that these programs, at least in their early years, are not constrained by lack of resources and can in fact operate with a reasonable degree of efficiency. Clearly, realism dictates that the limited volume of such assistance likely to be available for population issues not be spread thinly on peripheral programs that only indirectly influence fertility levels. Family planning and associated health and nutrition programs should be the major beneficiaries.

Second, the international community should continue to work toward easing the inconvenience and enhancing the safety of fertility regulation, through continued support of contraceptive research and development. Programs relying on coercion need pay little attention to either. But for the voluntary programs we are concerned with here, a wider choice among safer and more effective methods will surely enhance program results.

These two are the traditional areas of international assistance in population—the dominant concerns, for example, of the major donor agencies in the field such as the UN Fund for Population Activities, the US Agency for International Development, and the World Bank. However, there is also a third area, in its own way perhaps as important as these. It is the development and transmission of relevant research and analysis: interpretations of the accumulated lessons of historical and contemporary experience; proven techniques of demographic and policy analysis; and appreciation of the ways that particular institutional settings influence program performance. It is at least arguable that this area promises the highest returns for an international contribution to the resolution of the population problem in today's high-fertility countries.

V. CONCLUSION

Let me return in closing to the issue of urgency that I emphasized at the outset. The fuzziness of policy instruments and the delay in obtaining results have dulled the sense of urgency that the population problem generated twenty, or even ten years ago. Elsewhere, the evident signs of progress in many places have instilled a self-congratulatory mood, likely to be much in evidence at

the Mexico conference this August. If permitted to prevail, both these unrealistic attitudes will weaken national population efforts and undercut international support for them.

The demographic penalties for procrastination and delay are inexorable. For example, as is illustrated in the table below, if Nigeria were to begin to introduce now those policies which would permit it to achieve replacement level fertility by the year 2000—instead of the year 2035, as is projected in Table III—its population would level off at about 227 million instead of 594 million. Similarly, were Bangladesh and Kenya to reach replacement level fertility in 2000, these populations would ultimately stabilize at 200 million and 54 million respectively, instead of the 435 and 149 million projected in Table III.

Table IV
Effect on Ultimate Population Size of Reaching
Replacement Level Fertility (NRR=1) in the Year 2000
Instead of as Projected in Table III.
(population in millions)

Country	Pop. in 1980	Ultimate Pop. Size if NRR=1 in Yr 2000	Ultimate Pop. Size per Table III		Difference Due to Delay in Reaching NRR=1	
			Pop.	Yr.NRR=1	Pop.	% of 1980
India	675	1,316	1,632	2010	316	47%
Nigeria	85	227	594	2035	367	162
Bangladesh	89	200	435	2035	235	117
Kenya	17	54	149	2030	95	176
Central America	22	55	80	2030	25	114
Total-ALL LDC's	3,298	6,784	9,463	2050	2,679	81

It is clear that immediate and much more effective action to bring about declines in fertility levels—by encouraging the desire for smaller families and providing the means to implement that desire—would make an enormous and decisive difference. Policy decisions today must be seen in terms of a choice between a difficult but barely tolerable national and global population status and one that is intolerable in terms of human welfare and world peace.

In the end, population growth in most countries will surely be halted substantially below the levels shown in either Table III or Table IV. That will happen either because of humane and voluntary measures taken now, or because of the old Malthusian checks. Or perhaps even more likely, in tomorrow's world, it will occur as a result of coercive government sanctions and the recourse by desperate parents to both frequent abortion and clandestine infanticide.

For the great majority of mankind still experiencing high rates of population growth, action now to initiate, or to accelerate, fertility decline is imperative.

Annex I
Population Projections by
Country and Region: 1950-2100

	Population (millions)					TFR ^a		GNP/capita	
	1950	1980	2000	2025	2050	2100	1982	NRR=1 ^b	1982
<i>Low-income economies</i>									
Afghanistan	8	16	25	41	55	71	8.0	2045	..
Bangladesh	44	89	157	266	357	435	6.3	2035	140
Benin	2	4	7	12	18	22	6.5	2035	310
Bhutan	1	1	2	3	3	4	6.2	2035	..
Burma	18	33	53	79	99	111	5.3	2025	190
Burundi	3	4	7	14	20	26	6.5	2040	280
Central African									
Rep.	1	2	4	7	10	13	5.5	2040	310
Chad	3	5	7	12	17	21	5.5	2040	80
China	603	980	1,196	1,408	1,450	1,462	2.3	2000	310
Ethiopia	16	31	57	110	164	220	6.5	2045	140
Ghana	4	12	24	47	66	81	7.0	2030	360
Haiti	3	5	7	10	13	14	4.6	2025	300
India	362	687	994	1,309	1,513	1,632	4.8	2010	260
Kampuchea, Dem.									
Rep.	4	6	10	14	17	20
Kenya	6	17	40	83	120	149	8.0	2030	390
Lao, PDR	2	3	6	10	14	19	6.4	2040	..
Madagascar	5	9	16	30	42	52	6.5	2035	320
Malawi	3	6	12	23	35	46	7.8	2040	210
Mali	3	7	12	21	31	40	6.5	2040	180
Mozambique	6	12	24	45	63	80	6.5	2035	..
Nepal	8	15	24	40	55	67	6.3	2040	170
Niger	2	6	11	20	29	38	7.0	2040	310
Pakistan	37	82	140	229	302	361	5.8	2035	380
Rwanda	2	5	11	22	34	45	8.3	2040	260
Sierra Leone	2	3	5	8	11	15	6.5	2045	390
Somalia	2	4	7	12	16	21	6.5	2045	290
Sri Lanka	8	15	21	27	31	32	3.4	2005	320
Tanzania	8	19	36	67	93	113	6.5	2030	280
Togo	1	3	5	9	13	16	6.5	2035	340
Uganda	6	13	25	47	67	85	7.0	2035	230
Upper Volta	3	6	10	18	25	33	6.5	2040	210
Viet Nam	24	54	88	128	154	168	5.0	2015	..
Zaire	14	29	55	99	136	165	6.3	2030	190
Sub-total	<u>1,214</u>	<u>2,183</u>	<u>4,098</u>	<u>4,270</u>	<u>5,073</u>	<u>5,677</u>			

^aTotal fertility rate

^bThe year in which NRR (net reproduction rate) is projected to equal 1

..Data not available

	Population (millions)					TFR ^a		GNP/capita	
	1950	1980	2000	2025	2050	2100	1982	NRR=1	1982
<i>Lower middle-income</i>									
Angola	4	8	13	23	32	41	6.5	2040	—
Bolivia	3	6	9	14	18	21	6.3	2030	570
Cameroon	5	9	17	34	50	63	6.5	2035	890
Colombia	12	26	38	50	57	61	3.6	2010	1,460
Congo, People's Rep.	0.8	2	3	6	8	10	6.0	2025	1,180
Costa Rica	0.9	3	3	5	5	5	3.5	2005	1,430
Cuba	6	10	12	14	14	15	2.0	2010	—
Dominican Republic	2	5	8	12	14	15	4.2	2010	1,330
Ecuador	3	8	13	19	24	27	5.4	2020	1,350
Egypt	20	42	63	86	102	111	4.6	2015	690
El Salvador	2	5	8	12	15	16	5.6	2015	700
Guatemala	3	7	12	18	22	25	5.2	2020	1,130
Honduras	1	4	7	11	14	16	6.5	2025	660
Indonesia	77	146	212	283	330	356	4.3	2010	580
Ivory Coast	3	8	17	32	44	56	7.0	2035	950
Jamaica	1	2	3	4	4	5	3.4	2005	1,330
Korea, Dem. Rep.	10	18	27	37	42	45	4.0	2010	—
Lebanon	1	3	3	5	5	6	3.8	2005	—
Lesotho	0.8	1	2	4	5	7	5.8	2030	510
Liberia	0.7	2	4	7	10	12	6.9	2030	490
Mauritius	0.5	1	1	2	2	2	6.9	2040	1,240
Mongolia	0.8	2	3	4	5	5	4.8	2015	—
Morocco	9	19	31	47	59	68	5.8	2025	870
Nicaragua	1	3	5	8	10	12	6.3	2035	920
Nigeria	41	85	169	329	417	594	6.9	2035	860
Papua New Guinea	2	3	5	7	8	10	5.0	2030	820
Paraguay	1	3	5	7	8	8	4.2	2010	1,610
Peru	8	17	26	37	44	48	4.5	2020	1,310
Philippines	20	49	73	100	116	125	4.2	2010	820
Senegal	3	6	10	19	26	34	6.5	2040	490
Sudan	9	19	34	61	86	107	6.6	2035	440
Thailand	20	47	68	90	102	110	3.6	2010	790
Tunisia	4	6	10	14	17	19	4.9	2015	1,390
Turkey	21	45	65	88	101	109	4.1	2010	1,370
Yemen Arab Rep.	3	7	12	23	32	41	6.8	2040	500
Yemen, PDR	1	2	3	6	9	12	6.9	2040	470
Zambia	3	6	11	21	29	35	6.8	2030	640
Zimbabwe	2	7	16	34	49	61	8.0	2030	850
Sub-total	<u>306</u>	<u>642</u>	<u>1,021</u>	<u>1,573</u>	<u>1,989</u>	<u>2,313</u>			

	Population (millions)						TFR ^d		GNP/capita
	1950	1980	2000	2025	2050	2100	1982	NRR=1	1982
<i>Upper middle-income</i>									
Algeria	9	19	39	71	97	115	7.0	2025	2,350
Argentina	17	28	36	45	50	54	3.4	2010	2,520
Brazil	53	121	181	243	279	299	3.9	2010	2,240
Chile	6	11	15	18	20	21	2.7	2005	2,210
Greece	8	10	10	11	12	12	2.3	2000	4,290
Hong Kong	2	5	7	8	8	8	2.1	2000	5,340
Jordan	1	3	6	11	14	16	7.4	2040	1,690
Iran	14	39	70	109	139	158	5.6	2020	—
Iraq	5	13	26	43	57	67	6.7	2025	—
Israel	1	4	5	7	8	8	3.1	2005	5,090
Korea, Rep. of	20	38	51	62	67	70	2.7	2000	1,910
Malaysia	6	14	21	27	31	33	3.7	2005	1,860
Mexico	27	69	109	154	182	196	4.6	2010	2,270
Panama	0.8	2	3	4	4	4	3.5	2005	2,120
Portugal	8	10	11	12	13	14	2.3	2000	2,450
Singapore	1	2	3	3	3	4	1.7	2000	5,910
South Africa	14	29	52	82	106	121	5.1	2020	2,670
Syrian Arab Republic	4	9	17	28	37	42	7.2	2020	1,680
Trinidad & Tobago	0.6	1	2	2	2	2	3.3	2010	6,840
Uruguay	2	3	3	4	4	4	2.6	2005	2,650
Venezuela	5	15	26	37	43	46	4.3	2010	4,140
Yugoslavia	16	22	25	28	28	29	2.0	2010	2,800
Sub-total	<u>220</u>	<u>467</u>	<u>718</u>	<u>1,009</u>	<u>1,204</u>	<u>1,323</u>			
<i>High-income oil exporters</i>									
Oman	0.4	1	2	3	3	4	7.1	2020	6,090
Kuwait	0.2	1	2	4	5	5	5.7	2010	19,870
Libya	1	3	7	12	17	20	7.2	2025	8,510
Saudi Arabia	3	9	19	36	49	61	7.1	2030	16,010
United Arab Emirates	<u>0.07</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>4</u>	6.0	2015	23,770
Sub-total	<u>5</u>	<u>15</u>	<u>32</u>	<u>58</u>	<u>77</u>	<u>94</u>			

	Population (millions)						TFR ^a	NRR=1	GNP/capita
	1950	1980	2000	2025	2050	2100	1982		1982
<i>Industrial market economies</i>									
Australia	8	15	18	20	21	21	2.0	2010	11,140
Austria	7	8	8	8	8	8	1.6	2010	9,980
Belgium	9	10	10	10	10	10	1.6	2010	10,760
Canada	14	24	29	33	33	33	1.8	2010	11,320
Denmark	4	5	5	5	5	5	1.5	2010	12,470
Finland	4	5	5	5	5	5	1.6	2010	10,870
France	42	54	58	61	62	62	1.8	2010	11,680
Germany, Fed.									
Rep.	50	61	60	57	54	54	1.4	2010	12,460
Ireland	3	3	4	5	6	6	3.2	2000	5,150
Italy	47	56	58	58	58	58	1.6	2010	6,810
Japan	83	117	128	132	129	128	1.7	2010	10,080
Netherlands	10	14	15	16	15	15	1.4	2010	10,930
Norway	3	4	4	5	4	4	1.7	2010	14,280
Spain	28	37	43	48	50	51	2.2	2000	5,430
Sweden	7	8	9	9	8	8	1.7	2010	14,040
Switzerland	5	6	6	6	6	6	2.2	2010	17,010
United Kingdom	51	56	57	58	58	59	1.8	2010	9,660
United States	152	227	259	286	288	289	1.8	2010	13,160
Sub-total	<u>527</u>	<u>710</u>	<u>776</u>	<u>882</u>	<u>820</u>	<u>822</u>			
<i>East European nonmarket economies</i>									
Albania	1	3	4	5	6	6	2.2	2000	—
Bulgaria	7	9	10	10	10	11	2.1	2010	—
Czechoslovakia	12	15	17	18	19	20	2.2	2000	—
Germany, Dem. Rep.	18	17	17	18	18	18	1.9	2010	—
Hungary	9	11	11	11	11	12	2.0	2010	2,270
Poland	25	36	41	46	48	49	2.3	2000	—
Romania	16	22	25	28	30	31	2.4	2000	2,560
USSR	180	266	306	339	358	376	2.4	2000	—
Sub-total	<u>268</u>	<u>379</u>	<u>431</u>	<u>475</u>	<u>500</u>	<u>523</u>			
Total World	<u>2,504</u>	<u>4,435</u>	<u>6,147</u>	<u>8,298</u>	<u>9,780</u>	<u>10,870</u>			

SOURCE: 1950 UN estimates. Other Years: World Bank 1984 estimates and projections. The developing countries are grouped by average GNP per capita (1982 dollars).

