



**NEGATIVE
POPULATION
GROWTH**

THE NPG FORUM

A Population Focus For U.S. Aid

by **Lindsey Grant**

Lindsey Grant is a writer on population/resource/environment issues and a retired Foreign Service Officer. During his Foreign Service career, he was a China specialist, a National Security Council staffer, a member of the Department of State's Policy Planning Staff, and Deputy Assistant Secretary of State for Environment and Population Affairs.

At a time when AID, driven by the Kemp amendment, has just eliminated all support for the UN Fund for Population Activities (UNFPA), it may seem folly to propose that the nation make population programs a focus for its international economic development activities. Nevertheless, let me undertake to plant the seed of an idea.

U.S. developmental aid has diminished to practical irrelevance to the capital needs of the third world. Only by identifying a few key issues and concentrating on them can the nation hope for perceptible worldwide results from its assistance.

Population growth is such an issue. The United States has been a leader in developing worldwide approaches to human fertility control. It would be well advised to resume the role for the benefit, not just of others, but of ourselves and our future.

The United States could meet its share of present "unmet needs" for population assistance. It could go on to vitalize a World Bank plan to bring fertility in the third world close to replacement levels (the first step to stabilization) by 2000. This would require an annual expenditure rising 10 per cent per year until 2000. Even then, it would take only 7 per cent from all other U.S. foreign assistance programs — even if there is no growth in foreign aid.

The Vanishing Resource: U.S. Aid

In constant dollars, U.S. economic assistance has declined by about 50 per cent since 1966. As a proportion of our GNP — or as aid **per capita** in the third world — it has declined by about two-thirds.

(Please see charts on page 2)

Moreover, we have tended to concentrate the aid for immediate military or political purposes. In 1986, total U.S. economic and military assistance was \$15.9 billion. Of that, \$13.3 billion was bilateral assistance. Of that:

- * half (47.5 per cent) went to Israel, Egypt and Jordan — i.e. to foster friendly Arab governments and assure the survival of Israel.
- * one-quarter (27.6 per cent) helped to assure military base rights (Greece, Philippines, Spain, Turkey) or went to two foreign policy hot spots (Pakistan and Central America.)

That leaves one-quarter for the rest of the world — or \$3.3 billion.

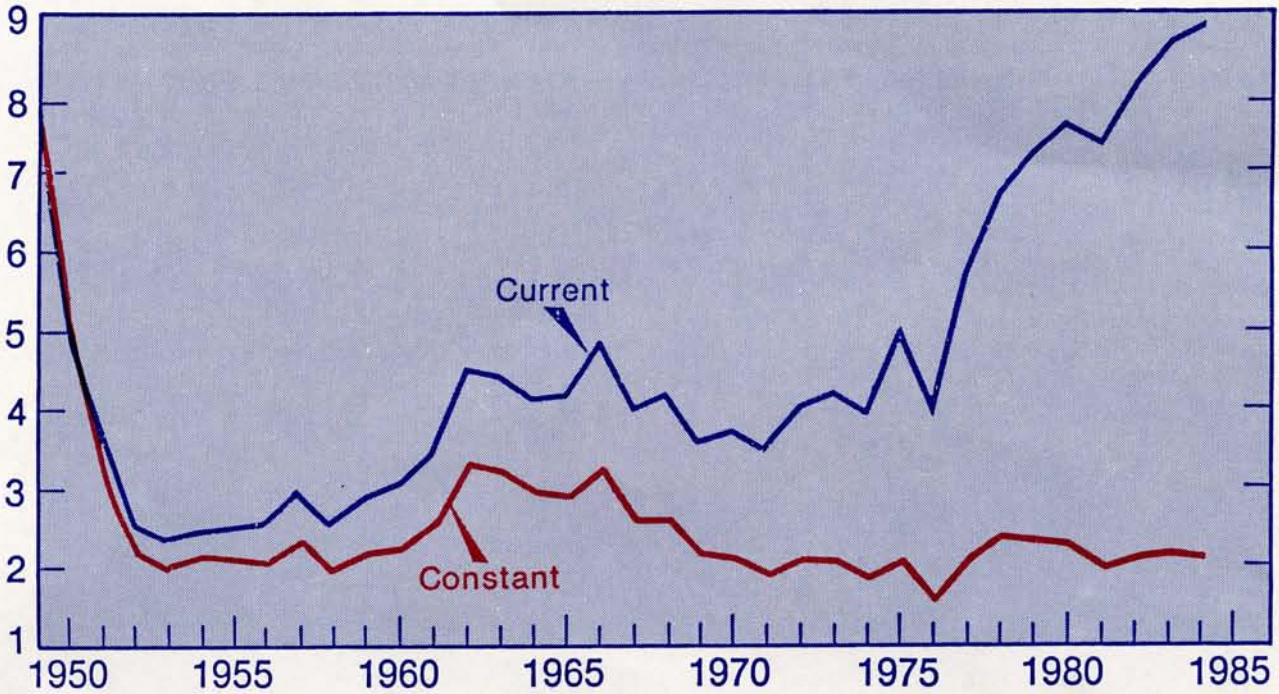
The Need for Better Focus

The aid to Israel approximates \$860 per Israeli. At that level, bilateral assistance can have considerable impact. Spread around the third world, the \$3.3 billion works out to 86¢ per person. The difference makes the point: we must select our places or select our issues if the aid is to have any serious function.

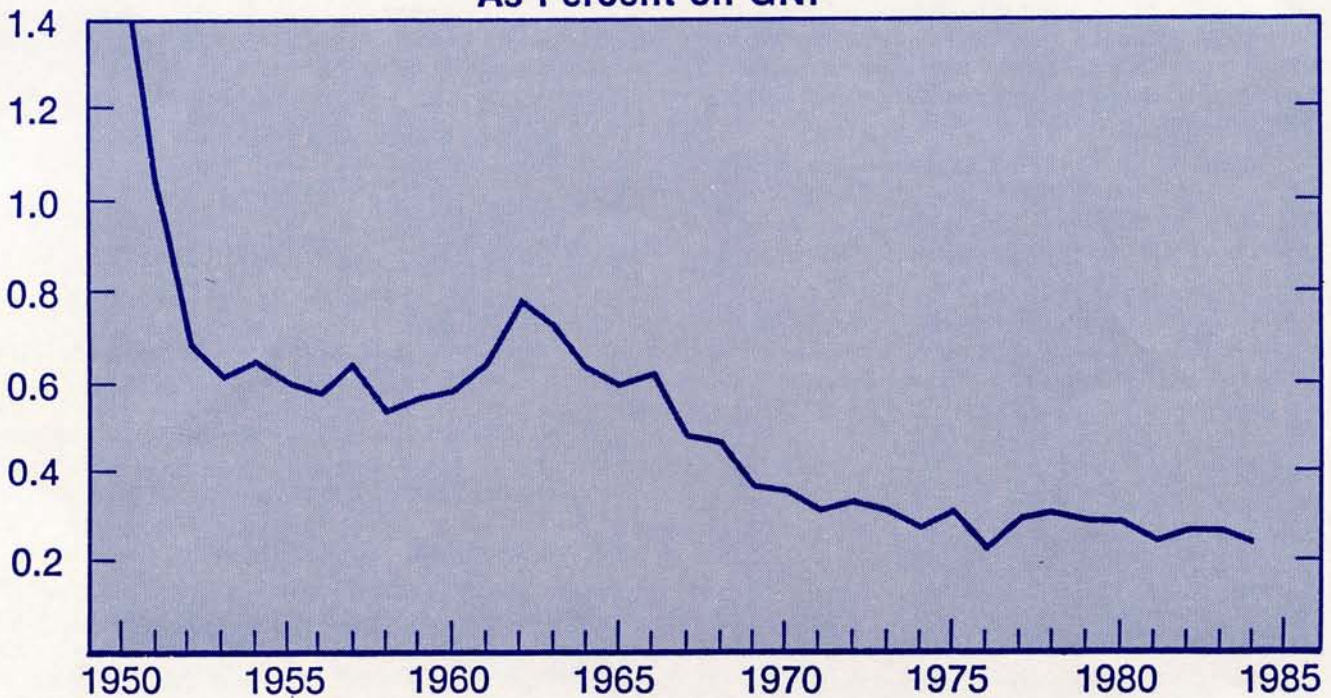
As a nation, we have more and more taken the route of concentrating on specific places. In government, there is always the danger that the urgent will freeze out the important. We started with a broader ideal. "Point Four" was President Truman's proposal for widely-distributed technical assistance to the third world. Perhaps it over-simplified the process of economic modernization, but it contained some fundamental wisdom. Truman believed that a world divided between a few rich nations and many poor ones would be inherently unstable, and that both sides would benefit if we helped the poor to find the way to prosperity. There was altruism in the idea, and self-interest.

U.S. Economic Assistance 1949-84

In Billions of Dollars



As Percent on GNP



SOURCE: A.I.D., U.S. Overseas Loans and Grants and Assistance from International Organizations. Price deflator and GNP figures from The Economic Report of the President, 1985. (Reprinted from U.S. International Development Cooperation Agency "Congressional Presentation FY1987," Washington, D.C., April 1986.)

The altruism has tended to erode, but we should at least look again at our self-interest. There are now more arguments than there were for seeing the world as an interconnected organism. Truman was thinking in terms of world politics and perhaps of trade. We now know that the world is interconnected in ways more visceral than that. Europe and the United States are just beginning to find out that, if people are hungry and jobless, it is very difficult to keep them from migrating to where the jobs are. Ecology was hardly a public issue in Truman's time, but we now realize that the climate — our climate — is affected as deserts advance and tropical forests are cut down. All of us are impoverished when species die off and genetic diversity is narrowed.

Such profound issues deserve more attention than they get.

The Pivotal Role of Population

Demographic change affects most issues. Its amelioration — the slowing and perhaps reversing of population growth in crowded lands — is not the only element in an effort to achieve our political, economic and environmental objectives, but it is probably (as the logician would say) the condition precedent. Without it, you may not be able to reach those other objectives.

Let us relate population change to just three major indicators that tell us a great deal about the way the world is heading.

First, income per capita

This is the argument most frequently heard, although it is the least important.

In this brief paper, perhaps the best argument is simply to document what has been happening. This graph is from the World Bank's **World Development Report 1984**.

In 1972 and again in 1982, a lower fertility rate correlated with a higher per capita income. Moreover, during that decade, most countries with declining fertility enjoyed increasing incomes.

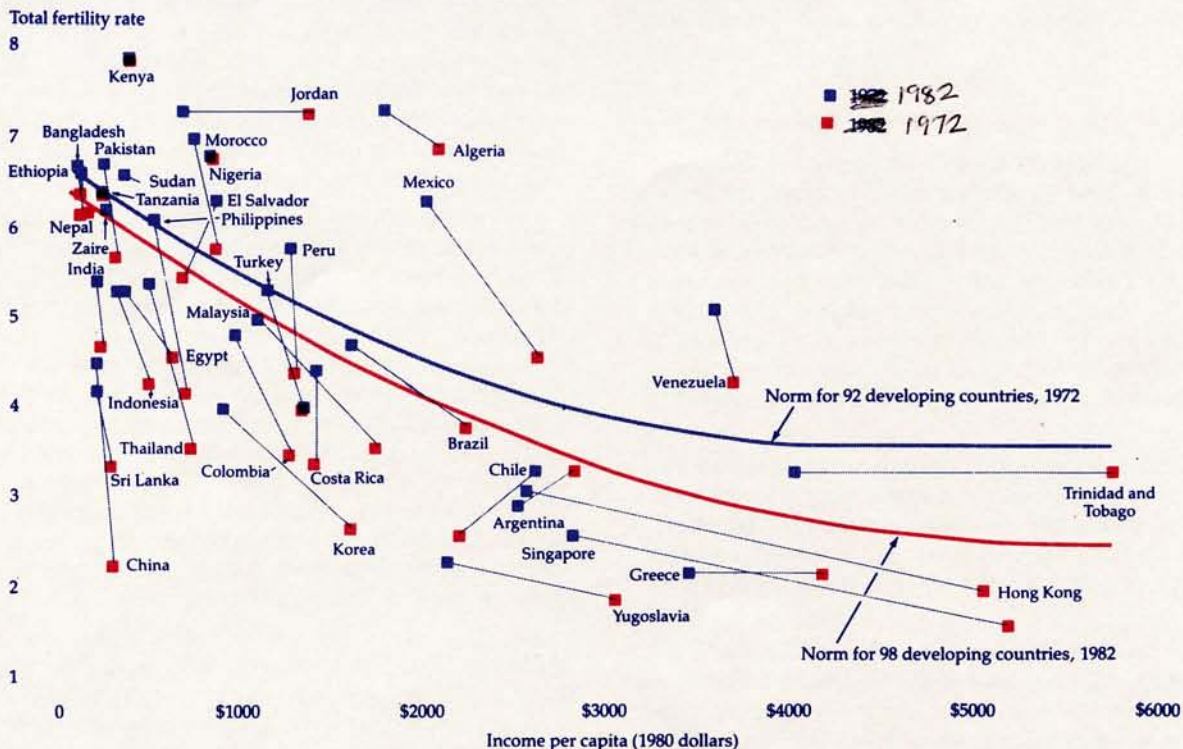
Like most macroeconomic analysis, this table reflects correlation, not rigorous causation. Perhaps, in part, prosperity leads to lower fertility. There are, however, causation studies documenting the tendency of rapid population growth to slow or imperil economic growth. There are various reasons: the diversion of capital from productive investment to maintaining infrastructure; the effect of driving the supply of labor to a point where labor productivity is declining markedly; the impaired performance when children are born too fast, without adequate nutrition and attention; the vicious spiral of population growth degrading the resource base, in turn leaving fewer resources to support more people.

At the UN Population Conference in Mexico City in 1984, the third world representatives generally argued the benefits of family planning for economic development. The U.S. delegation, influenced by a pro-natalist faction within the Reagan administration, found itself isolated. It argued that the effect of population growth on development was moot, and that the real need is for the third world to free its economies and allow the free market to work its miracles.

There was no need to set those ideas in opposition, and there is no reason for any administration to assume that fertility control is antithetic to a free economy. It might even help the move toward one. Couples with two children are more likely to have the wherewithal to go into business than those with eight.

If third world prosperity is an object of aid, then assistance in limiting human fertility is a good way of contributing to that goal.

Fertility in relation to income in developing countries, 1972 and 1982



Second, Unemployment and Migration

National income figures are complex abstractions, but unemployment is a wrenchingly important experience to the person suffering from it. Unemployment and underemployment are endemic in the third world. Rough estimates for Mexico, for instance, run at 40 to 50 per cent. To an existing problem is added the present burst of population growth. By conservative estimate, the third world labor force will expand by 850 million in this quarter century. Only the most dynamic economies (which as we have seen tend to have had lower fertility and consequently fewer entrants to the labor market) have any hope of generating the necessary jobs. Foreign aid is simply not of the scale to provide the capital to make much difference to the others.

Moreover, the problem is no longer even theoretically soluble simply by trying to provide jobs for more people. When does the point come at which finding the raw materials for so many workers, and dealing with the industrial effluents and pollutants they would generate, make the concept of solution by expansion untenable?

When agriculture is glutted with workers and there is nothing to be done in the village, the young men begin to migrate to the cities, or directly to countries with job opportunities if they are accessible (e.g. Mexicans to the U.S., Moroccans and Algerians to France, Turks to Germany, and so on). Europe and the U.S. are beginning to feel the pains of this process, but the numbers moving to third world cities are greater by orders of magnitude. We are living in an era of exploding cities with collapsing urban services (water, sewage, roads, power, education, police protection). Mexico City is the nearest example. Having trebled its population since 1960, it is — if the people can live through the process — on the way past 30 million by the turn of the century. Thirteen years away.

Limiting human fertility cannot do much for the existing problem. Those people are already born. It can, however, offer a long term hope by slowing the growth of the labor force. And, for the unemployed, it can make the immediate problem a little less desperate if it offers a way to limit the number of children he or she must feed.

Third, the Destruction of Natural Resources

When the farmland cannot be subdivided any more, those who don't leave for the cities go into the woods or climb the mountain to hack out some new land to plant. In the tropical forest, the slash-and-burn farmer plants lands on a shorter cycle, cutting the time for the land to revive. The herdsman runs more animals on a landscape already too heavily grazed. These things are happening now. Deserts are expanding at the expense of pasture and cropland, and tropical forests are being cut down. There are arguments as to exactly how fast, but it is happening very fast.

The immediate consequence is obvious: in each generation, more people must be supported on a diminishing resource base. The secondary result is that rivers become more erratic, affecting irrigation on the remaining lands. Local climate becomes harsher and crops suffer without the buffering effects of the forests.

The worldwide impact is becoming better understood. It is a Catch 22 situation. If the poor stay poor, they cut down the forests for fuel and to clear the land. In the process, they release carbon dioxide to the atmosphere, intensifying the "greenhouse effect." If the poor get rich, they use fossil fuels and release more carbon dioxide, and the industries and automobiles that support them contribute to acid precipitation.

The National Academy of Sciences (NAS) and the Smithsonian Institution recently sponsored a national forum on what was described as a global crisis: the possibility that perhaps one-half the world's species of animals and plants are threatened with destruction, mainly through deforestation. *Science* magazine, reporting the Conference, described the prospect as "A Mass Extinction without Asteroids." There are various programs to save tropical forests, to protect African wildlife, and so on. Most of the programs call for technical fixes, and most ignore the engine driving the problem: population growth. The central problem may not be the poacher but rather the farmer moving in and destroying the habitat. Man has been damaging Earth's ecology for centuries, but he simply did not have the numbers and the tools to do it on the present scale. Those interested in wildlife, or biological diversity, or the climate, or acid rain, should be making common cause to insist upon an attack on the common element in all their problems: population growth.

Tunnel vision is apparently an ingrained human weakness. All of us make our own plans without considering how we may be affected by others' plans. The UN Food and Agriculture Organization (FAO), for instance, conducted a study of the Earth's agricultural carrying capacity in which they assumed that all the land that could be farmed would be farmed, forgetting that some of that land is presently in forests. They did not project what would happen to timber and cellulose supplies, how the food would be cooked, or what would happen to rainfall and climate as the result of such an epochal shift.

We all seem to regard the Earth as though it consisted of so many yards of space, so many barrels of resources, to be manipulated at our will. In fact, it is an extraordinarily complex, interconnected set of systems that we as yet understand only imperfectly. As a race, we are undertaking to manage a machine that we do not understand.

At the NAS/Smithsonian conference, one ecologist estimated that humans, directly or indirectly, already consume about 40 per cent of the world's "net terrestrial primary productivity," which is roughly the total solar energy trapped on land by photosynthesis. Such a calculation is necessarily rough, but if one thinks in terms of a further doubling of world population (as shown in World Bank and UN projections), we are entering an era when we expect to engineer substantially all the Earth's production for our own uses. History and current performance offer no assurance that we can do it without wrecking the system.

Let me cite just one example. Some attention has been paid to scientists' reports that acid precipitation is beginning to cause substantial damage to northern hemisphere temperate forests. No attention has been paid to a 1983 warning by the President's Acid Rain Peer Review Panel as to possible effects of soil acidification on soil microorganisms: "... it is just this bottom part of the biological cycle that is responsible for the recycling of nitrogen and carbon in the food chain. The proper function of the denitrifying microbes is a fundamental requirement upon which the entire biosphere depends. The evidence that increased acidity is perturbing populations of microorganisms is scanty, but the prospect of such an occurrence is grave. It may take years... before measurable consequences would be observed. Such an effect is "long-term" or "irreversible..."

Here is a way in which human activities may be threatening the future of the Earth's biosphere. Including us. Will we have the political will to pay the costs, save the forests and perhaps head off the sterilization of that tiny layer of soil on which terrestrial life depends? Man's role on Earth has changed so swiftly — the modern industrial world with its population, energy output and chemicals is really just two or three generations old — that we have no experience.

One thing is certain: acid precipitation is intertwined with energy consumption. There are technical fixes, but — at any level of per capita use and technology employed — the size of the problem is proportional to the number of people being served. Population growth multiplies the problem. The successful third world countries are industrializing and joining the industrial world in its high energy consumption habits. In this situation, success could lead to destruction. Nobody, so far as I am aware, has dared to speculate on the size of the acid precipitation problem if world population were to double, and if the war on poverty were to be won.

That is just one example.

The issues come together here. Fertility control should help aid recipient nations to mobilize the capital for their own economic betterment. It will ease the crushing problem of unemployment, and it offers the prospect of a population stabilized at a level that can enjoy prosperity without endangering us all.

The Size of the Problem

The press periodically dismisses the "population bomb." In fact, it is live and ticking in the third world. The efforts to do something about it have been just successful enough to suggest that it can be influenced by deliberate human policy.

China apparently is having dramatic success in fertility limitation. Because it is one-quarter of the third world, its success tends to skew the apparent performance for the rest of the third world. With China not counted, annual population growth in the third world was about 2.4 per cent in the 1960s. A doubling time of 29 years. It is still 2.4 per cent. Fertility has been coming down in many countries, particularly where population programs are in place, but death rates have been declining, too.

Where will it lead?

The standard projections show another doubling of the world's population, stabilizing toward the close of the next century at around 10-12 billion.

Those projections are based upon current demographic trends, and on hope, rather than on any estimate of the Earth's ability to support so many people. They assume low mortality — i.e. that conditions in the third world will continue to improve.

They assume that fertility everywhere in the third world will decline to around 2.0 (i.e. replacement level in a low-mortality economy) within a generation or two. This is a highly optimistic estimate when only Barbados, Cuba, Hong Kong and Singapore had achieved that level by 1986 (with China coming very close). Most women in Africa are still having six to eight children, and much of Central America, Western and Southern Asia are close behind.

If fertility does not come down in time, it does not necessarily mean that population will reach or surpass those projections. More likely, mortality will rise. The countries that do not get their fertility down will encounter problems so serious as to push them back toward the pre-modern trap of high birth rates and high death rates. In the process, they will have substantially damaged their agricultural and forest resources. They will have lost the golden opportunity that technology has provided: a civilization where there is enough to eat for all, where disease is controlled and people do not die unnecessarily.

Voluntary family planning has brought this ideal very close to reality for the industrial countries. It is frequently proposed that we should let the same thing happen for the third world.

There are two answers to that argument: first, population growth itself is robbing the most prolific countries of the chance to escape their poverty; second, there is not enough time. There have never been population growth rates comparable to the present ones. There has never been a generation that could buy an entire new health technology "off the shelf" and thereby bring death rates down as they have come down in the past generation. There have never been so many little girls surviving to adulthood and having babies of their own. This has generated an extraordinary population momentum, and every year lost in bringing fertility down brings closer the specter that the imbalance will be addressed by rising mortality — that the little girls will start dying again.

By way of example: theoretically, according to UN projections, if Africa should reach replacement fertility by 2030, the population would eventually stabilize at about 1.4 billion — more than twice the present population. If it takes another forty years to reach replacement level fertility, the ultimate theoretical population would be 3.4 billion — the size of the world's population in 1965. Two billion people for a forty year delay.

Civilizations have made technological breakthroughs before, and then have eaten up the increased production through population growth. The principal difference this time is the speed, and the scale. There are no new frontiers when one's homeland is impoverished, and the activities associated with this particular technological revolution — the energy production, the introduction of chemicals — are themselves generating perturbances to the Earth's system that are in turn complicated by population growth. We may not have the luxury of ignoring a population boom and bust in Africa or Latin America.

What Can Be Done?

Given their importance, family planning and fertility programs are a low-cost investment. The World Bank, on the basis of rather dated information, estimates total annual governmental expenditures at about \$2 billion, half of it by China. In no case cited did population programs absorb more than 0.5 per cent of the country budget. Foreign assistance has provided about one-quarter of that \$2 billion, and the United States provides about one-half of that assistance, though the proportion has been diminishing. The U.S. AID Population Program totalled \$288 million in FY1985 and \$239 million in FY1986.

Except for China and India, most funding comes from external aid, though the proportion of self-help has tended to rise as programs are put in place.

The World Bank notes that only about 1 per cent of official aid now goes for population assistance. A 50 per cent increase in all population programs would take care of today's unmet needs (i.e. all requests for birth control assistance that cannot presently be met because of lack of funds). To meet an ambitious target of 2.4 total fertility by 2000, total public spending (donor and recipient) on population programs would have to rise to \$7.6 billion in constant dollars by 2000. That involves a rise of 7 per cent per year. The assumptions needed for such calculations are heroic, but they represent a ballpark figure based upon the experience so far. They demonstrate that, in this specific but limited sector, a relatively modest increase in expenditure could have a remarkable impact upon the future.

Let me make a proposal: the United States should

- increase its population program by 50 per cent over FY1985 in FY1988, to meet its share of the "unmet need" described by UNFPA and the World Bank. It should challenge other donors to do the same.

- propose to increase the program annually by 10 per cent per annum until 2000, soliciting a comparable effort from donor and recipient countries, and calling upon the World Bank to take the lead in the population program that it has envisaged.
- be prepared to raise our contribution and urge others to do the same, if third world population programs can effectively use more than this.

This would bring our annual population aid up to \$1.356 billion by 2000, which is 18 per cent of the world total needed for the World Bank's "rapid fertility reduction" program. That proportion is only slightly larger than the present U.S. role in worldwide programs.

Because population aid is so small relative to our other aid programs, this could be achieved with only a very slight redirection of the total U.S. effort. If the aid budget is projected to remain constant and the population aid increase were distributed equally among other programs, it would require only a 7 per cent reduction in those programs. Given the contribution that effective population control could make to many programs, this diversion is more bureaucratic than real. (If we dare to think of an aid budget increasing in step with real GNP growth, and if that growth is 2 per cent per annum, the increased population budget could be absorbed within the increase, and still leave most of the increase for other programs.)

We are presently putting 1.6 per cent of our foreign aid budget into population programs. We are putting more than twice that into El Salvador and Honduras, more than twice that into the Philippines and Spain, more than twice that into Pakistan, and thirty times that much into the eastern Mediterranean.

Isn't it time to do a bit of thinking about our priorities?

Let me leave the reader with one cautionary note. As

Americans, we enjoy providing moral instruction to the world, along with our aid. Perhaps we should relax a little and recognize that the recipient countries have to make their own decisions about the trade-offs between pressing demographic problems and the policies needed to deal with them. In the curve of human history, we have just arrived at the stage of recognizing that human success in affecting mortality imposes an obligation to regulate fertility. We are still learning how to do it with minimal interference with human freedom. We do not have time for leisurely experimentation. The most successful crash programs in the third world have involved the manipulation of group pressures and incentives and disincentives. We should not automatically turn against those programs simply because we have the luxury of not sharing their problem, here at home.

And finally, to those in the "right to life" movement who would scuttle U.S. population aid programs: you may be caught in a dangerous confusion. Making contraception less accessible is more likely to increase abortions than to decrease them. Desperate people who have not practiced contraception will turn to abortion.

Note: For a detailed discussion of world population trends and programs, and for the World Bank proposal to accelerate the programs, see the World Bank **World Development Report 1984**, Oxford University Press, New York, 1984.

The description of the current U.S. aid program is taken from Agency for International Development, **FY1988 Summary Tables**, Washington, January 1987.

The estimate as to mankind's monopolization of terrestrial productivity is derived from a study reported in **BioScience**, Vol. 36, No. 6, June 1986: "Human Appropriation of the Products of Photosynthesis", by P.M. Vitousek, P.R. & A.H. Ehrlich and P.A. Matson.

NPG COMMENTS

NPG, Inc., publishes from time to time in the **NPG Forum** articles of exceptional merit in the population/resources/environment field. Our own views on the subject of Mr. Grant's excellent paper are summarized as follows:

1. The projected increase in the population of third-world countries is mind boggling (828 million between 1990 and 2000 alone). Such an increase represents a grave threat to the already abysmally low living standards of most citizens of third-world countries, as well as to the global environment and resource base. It represents also a very real threat to the national security of the United States, and to our vital strategic interests around the world, since such population growth cannot fail to bring in its wake economic chaos and political instability.
2. Faced with this unprecedented situation, the United States must realize that a "business as usual" approach is hopelessly inadequate. We must adopt extraordinary, although entirely reasonable, measures to help third-world countries prevent their populations from reaching projected levels.
3. The goal of our international population assistance programs should be, not replacement level fertility, but sub-replacement fertility by the year 2000, with a view toward halting, and eventually reversing, population growth just as soon as it is humanely possible to do so. Replacement level fertility is an inadequate goal, since, once this level is reached, the populations of most developing nations would still double in size because of the momentum of their past growth.
4. Our population assistance programs should be increased now to more than ten times current levels, to at least \$3 billion a year. This amount would still be only about 25 percent of our total foreign aid program.
5. In addition, the basic thrust of our program should be changed from an emphasis on family planning to family limitation. We should encourage recipient nations to make the small family goal (not more than one child per couple, but not more than two at most) the central focus of their national population policies. We should further encourage them to promote non-coercive social and economic incentives in pursuit of that goal.
6. With loans to third-world countries of about \$16 billion a year, The World Bank is in a position to have a tremendous influence on the population policies of those countries. The United States should do all in its power to change The World Bank policy so that no loans would be made to countries that do not have effective population policies with the goal of sub-replacement fertility within the next decade or so.

Negative Population Growth, Inc.

16 East 42nd Street, Suite 1042, New York, N.Y. 10017
Telephone: (212) 599-2020

June 1987