



A Negative Population Growth

— Position Paper —

Why We Need A Smaller U.S. Population And How We Can Achieve It

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We need a smaller U.S. population in order to halt the destruction of our environment, and to make possible the creation of an economy that will be **sustainable** indefinitely.

All efforts to save our environment will ultimately prove futile unless we not only halt, but eventually reverse, our population growth so that our population -- after an interim period of decrease -- can be stabilized at a sustainable level, far below what it is today.

We are trying to address our steadily worsening environmental problems with purely technological solutions, while refusing to come to grips with their root cause -- overpopulation. Population size -- not just population growth -- is important because it multiplies and intensifies our overwhelming environmental problems. Sheer numbers of people can prevent the achievement of such vital national goals as a healthy environment and a sustainable economy.

At any given level of technology and conservation, our impact on the environment is proportional to the size of our population. There is an indisputable correlation between population size and environmental degradation. Regardless of new technologies and heroic conservation efforts, we must recognize that population size is the central, core issue and address it as such.

By any measure, the United States is already vastly overpopulated. We have long since exceeded the long range carrying capacity of our resources and environment, yet we continue to grow rapidly, by about 25 million each decade.

If present rates of immigration and fertility continue, our population, now in excess of 256 million, will pass 400 million by the year 2055, with no end to growth in sight!

Could any rational person believe that U.S. population growth on such a scale could be anything other than catastrophic for our environment, and our standard of living? Already, with our present numbers, we are poisoning our air and water, destroying croplands and forests, and triggering fundamental climate changes.

Asking ourselves the right questions is supremely important, because failure to do so can prove fatal. As a nation we have failed to ask ourselves the essential question regarding

a national population policy: AT WHAT SIZE SHOULD WE SEEK TO STABILIZE U.S. POPULATION? Surely that is the central issue.

As a direct result of our failure to ask that question -- and find an answer to it -- we are doing absolutely nothing to first halt, and then reverse, our explosive population growth.

The question of an optimum population size for the U.S. is a public policy issue of crucial importance. It is, however, an issue that is completely ignored not only by our policy makers in all branches of the Federal government, but also by the mass media who could, and should, bring it forcefully to the attention of the American public.

We at NPG believe that the optimum size for U.S. population lies in the range of 125 to 150 million, or about the size it was in the 1940s. With a slow and gradual decrease in our numbers, that size could be reached in about a century (see Fig. 2 below).

To progress toward a smaller population we would need to lower substantially our present rates of immigration and fertility. Those two factors, together with increases in life expectancy, are responsible for our population growth. Our detailed recommendations will be presented later in this paper.

For the moment, however, let us examine the concept of optimum population size.

Optimum Population Size

Some years ago, when world population was perhaps half its present size, famed British scientist Sir Julian Huxley wrote: "The recognition of an optimum population size (of course relative to technological and social conditions) is an indispensable first step towards that planned control of population which is necessary if man's blind reproductive urges are not to wreck his ideals, and his plans for material and spiritual betterment."

Optimum population size should not, of course, be confused with maximum population size, or the number of people our country could possibly be made to feed, with a low standard of living for everyone, accompanied by the rapid destruction of our ecosystem.

If bare levels of subsistence, and the perhaps irreversible destruction of our environment were acceptable, then maximum U.S. population size might exceed optimum size by a factor of five, ten, or even more.

Various experts are forever trying to estimate how many people our nation, and the world, could possibly be made to support. Their focus, for some odd reason, seems to be on the possible rather than the desirable.

Critics often claim that the concept of optimum population size is so value-laden that it will be forever impossible to develop a broad consensus on a specific number, or range. We need not be deterred by such objections.

Judgments on public policy issues can never be completely value free, nor need they be. For example, is there some magic number for the size of our defense budget, foreign aid, or the Federal discount rate? Of course not. **The essential point is that, after all the evidence is carefully weighed, a final figure must be determined as a matter of policy so that the process of government can proceed.**

The same holds true for optimum population size. We must decide on a figure, or range, for optimum population size, or at least decide whether it is smaller or larger than present numbers. Failure to do so condemns us to continued inaction, and makes it virtually impossible to progress beyond vague calls to stabilize population at some unspecified level, at some indefinite date.

What someone has said about the greenhouse effect is fully applicable to optimum population size: "In the face of threats of irreversible environmental damage, lack of full scientific certainty is no excuse for postponing action."

What we must try to define are the criteria that will guide our search for an answer to the question: What is the optimum size at which we should seek to stabilize U.S. population?

Proposed Criteria

We submit that the concept of optimum population size should be based on the following criteria:

1. The primacy of environmental considerations, because our economy, and our very lives, depend on the proper functioning of the earth's natural systems.
2. The idea of time, duration, and sustainability. An optimum population size would allow the creation of a society, and an economy, that would be sustainable indefinitely.
3. The idea of an adequate standard of living for everyone.
4. Ample room for open space and wilderness, and for other creatures and forms of life.
5. Prudence. Given our incomplete knowledge of the world's natural systems, and given that the damage we inflict on the ecosystem may be irreversible before we are even aware of it, a large margin of safety should be built into the goal, just as engineers build a large margin of safety into the design of a bridge.

If, for example, it appeared that the optimum U.S. population could reasonably be set at 200 million, then prudence would dictate reducing the goal by at least 25 percent, in order to ensure an adequate margin of safety.

If the above criteria are accepted, would anyone maintain that our present population of over 256 million is optimal, given the impact of those numbers on our environment and resources?

Could anyone possibly believe that a U.S. population of 400 or 500 million -- numbers we seem determined to reach -- would be optimal?

Any goal set for a smaller U.S. population should, of course, allow for mid-course corrections based on increased knowledge with the passage of time. Since any substantial decrease in numbers would be difficult to achieve in much less than a century, there would be ample time for periodic revisions of the initial goal, either up or down.

Finally, we must recognize that to determine an optimum population size with scientific precision down to the last person, or down to the last ten million persons, will be forever beyond our grasp. The goal eventually decided upon will be a "best estimate" based on our present knowledge. This will always be the case.

NPG Study

Over the last two years Negative Population Growth, Inc. has conducted the most significant study ever made of optimum population size. Under the able leadership of editor Lindsey Grant, NPG published a series of 15 papers on optimum population size, written by experts in various fields.

Many of these experts believe that optimum U.S. population size is far below present numbers.

For example, David and Marcia Pimentel, of Cornell University, believe that, "With a population of 40 to 100 million, the United States could become self-sustaining on solar energy while maintaining a quality environment, provided that sound energy conservation and environmental policies were in effect to preserve soil, water, air and biological resources that sustain life."

Dr. Robert Costanza, Associate Professor at the University of Maryland's Chesapeake Biological Laboratory places optimal U.S. population between 85 and 170 million, depending on the level of per capita consumption.

In their paper, Paul and Anne Ehrlich estimate the optimum U.S. population to be around 75 million -- about the size it was in 1900. They believe that "for our own sakes, and that of humanity as a whole, a rapid move to NPG is essential."

Editor Lindsey Grant, a retired Foreign Service Officer, and a former Deputy Assistant Secretary of State for Environment and Population Affairs, estimates that optimum U.S. population is between 125 and 150 million, a goal that NPG, Inc. has adopted as its own.

This series of 15 papers was published in the spring of 1992 by W.H. Freeman and Co. The book is available at book stores or from the W.H. Freeman Order Dept. at 800/877-5351 (\$13.95 paperback, \$22.95 hard cover).

A final thought about defining a specific number or range for the optimum population size of the United States. We might try and proceed by a process of elimination, rejecting those numbers that clearly exceed an optimum population.

Thus, we might ask not what optimum population size is, but what it is not. It is certainly not our present 256 million, and even more certainly not the 400 to 500 million we will reach in the next century if present rates of immigration and fertility continue.

A Compromise Position

A specific goal, or range, for optimal U.S. population size is desirable. If, however, this were finally deemed to be impossible to define, there is an alternate goal that could still set us on the path toward a smaller U.S. population.

A substantial body of opinion, while agreeing that a negative rate of population growth is necessary, holds that we simply do not know enough at present to set a precise goal. It believes that the essential question we must ask is not the exact size at which our population should be stabilized, but simply: Should we be striving to achieve a smaller or a larger population?

If smaller, as we believe, then it follows that we should take immediate measures to achieve A NEGATIVE RATE OF POPULATION GROWTH as soon as possible.

How To Get There

We could start now on the path toward a smaller U.S. population by substantially reducing the present rates of immigration and fertility, the two factors chiefly responsible for our population growth.

Our immigration policy should be an integral part of a national population policy aimed at reducing our numbers. If immigration remains at or near current levels it would be virtually impossible to lower our fertility sufficiently to achieve a negative rate of population growth.

We need to reduce annual immigration to an overall ceiling of about 200,000 (including all relatives and refugees) so that it roughly balances with emigration (out-migration). Then, immigration will no longer contribute significantly to our population growth, as it does now.

At present, immigration accounts for 40 to 50 percent of our annual population increase.

In addition to reducing immigration, we must also lower our total fertility rate (the average number of children per woman) to about 1.5 and stabilize it there for roughly 50 years. Our fertility rate hovered around 1.8 from 1973 to 1987, but has risen steeply since then to 2.1 in 1991.

If almost all women had no more than two children, the U.S. fertility rate would drop to 1.5, since many women remain childless by choice, and many others choose to have only one child. **We promote the ideal of the two-child maximum family as the social norm, because that is the key to lowering our fertility.**

We must recognize that, in an already overpopulated nation, no parent has the "right" to have more than two children.

At the heart of the problem is how to help the poor and less educated of all races lower their fertility rate to the level that now prevails among the educated and more prosperous sectors of all races.

To do so, society must make an all-out effort to improve the status of women, with vastly improved opportunities for higher education and good jobs. But this fundamental and long-term effort must be complemented by specific non-coercive incentives that act directly to lower fertility.

Incentives To Lower Fertility

NPG proposes these incentives to motivate parents to have no more than two children:

- Eliminate the present Federal income tax exemption for dependent children born after a specified date.
- Give a Federal income tax credit **only** to those parents who have no more than two children. Those with three or more would lose the credit entirely.
- Give an annual cash grant to low income parents who pay little or no income tax, and who have no more than two children. Those with three or more would lose the cash grant entirely.

Incentives to encourage parents to stop at two will be necessary because a substantial number of births at present are what demographers term third order births, or higher, meaning births to women who already have two or more children.

For example, of the roughly four million live births in 1989, slightly over 1 million (27 percent) were third order or higher.

It would help to achieve a fertility rate of 1.5 if all unwanted pregnancies could be prevented by family planning. But even if they were, incentives would still be necessary, however, because a substantial number of women expect to have more than two children, by design rather than by accident.

According to a recent report by the Census Bureau, 29.9 percent of women interviewed, married or single, ages 18 to 34, expect to have three or more children during their lifetimes. An even larger percentage -- 34.4 percent -- of women in that age group who are currently married expect to have three or more children.

Regarding our proposal to limit a tax credit only to parents with one or two children, we are often asked why we do not propose that the credit be given as well to individuals and couples with no children.

The reason is that we are not trying to promote the no-child family, because the goal of a smaller U.S. population could be reached if maximum family size were limited to two children.

The fundamental purpose of a tax exemption or credit for dependent children is to benefit the children and help compensate the parent or parents for the expense of raising them. In our view, that purpose should now be broadened in order to encourage the two-child maximum family.

But a tax credit extended to non-parents would be tremendously costly, and an added burden to the American taxpayer. How could a financial subsidy to non-parents be justified?

The Path To A Smaller Population

NPG calls for the U.S. total fertility rate to be reduced to 1.5 and maintained at that level for fifty years, before rising gradually to the long term replacement rate of 2.1. (Line A in Figure 1 below. Line B is a projection of U.S. fertility in 1991.)

Together with zero net migration, this reduction in fertility would result in a slow and gradual decrease in our numbers over a period of about 100 to 125 years, at which time we would reach a stationary population size of 140 million, with a stable age structure.

Our recommended path to a smaller population (Line A) is shown in Figure 2 below. It is contrasted with the course we are now following (Line B).

The assumptions for Line A are: zero net migration, and a total fertility rate reduced from 2.1 to 1.5 and maintained at that level for 50 years before rising to the long term replacement rate of 2.1.

The assumptions for Line B are: net annual immigration of one million (about the current level), and our 1991 fertility rate of 2.1.

The difference between the two paths is enormous.

It would be 100 million by 2030, less than 40 years from now (351 million minus 251 million). At that time, the population

size of Line B would be 40 percent larger than that of Line A. Other things being equal, our impact on the environment and resources would be 40 percent greater as well.

In another 25 years, by the year 2055, (only 63 years away), the difference between the two paths would be almost 200 million. The population of Line B (401 million) would be almost double that of Line A (205 million), or about U.S. population size in 1970.

Line A shows a U.S. population size of 157 million by the year 2090. That would mean a reduction of nearly 100 million from our present numbers in about a century, or roughly 10 million per decade.

This would represent a relatively gradual change in population size. For example, for the last several decades we have been growing by about 25 million per decade.

For projections in Figures 1-5, life expectancy was assumed to climb gradually, as follows:

Female: From 78.4 to 82.3 by the year 2100.

Male: From 71.2 to 76.6 by the year 2100.

All projections in this section were made for NPG by Decision Demographics, a division of the Population Reference Bureau in Washington, D.C.

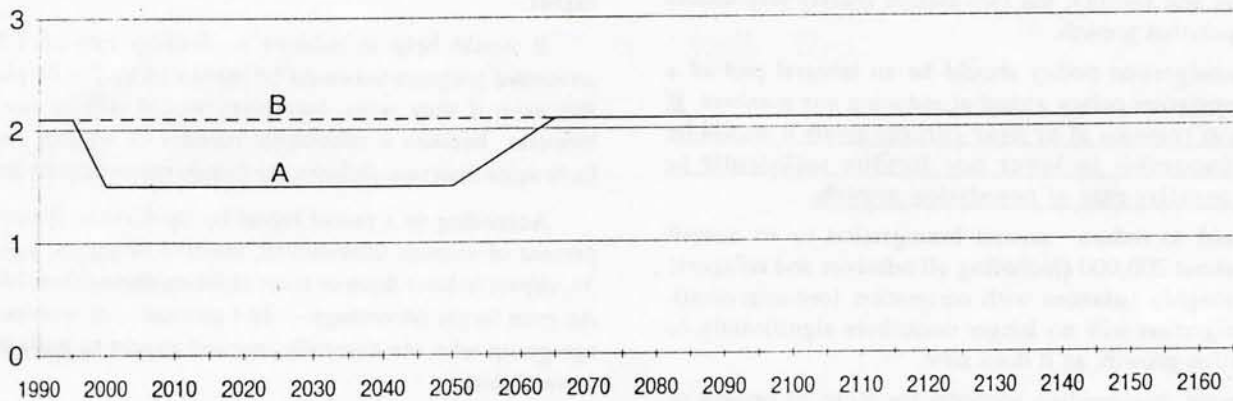


Figure 1. TOTAL FERTILITY RATE

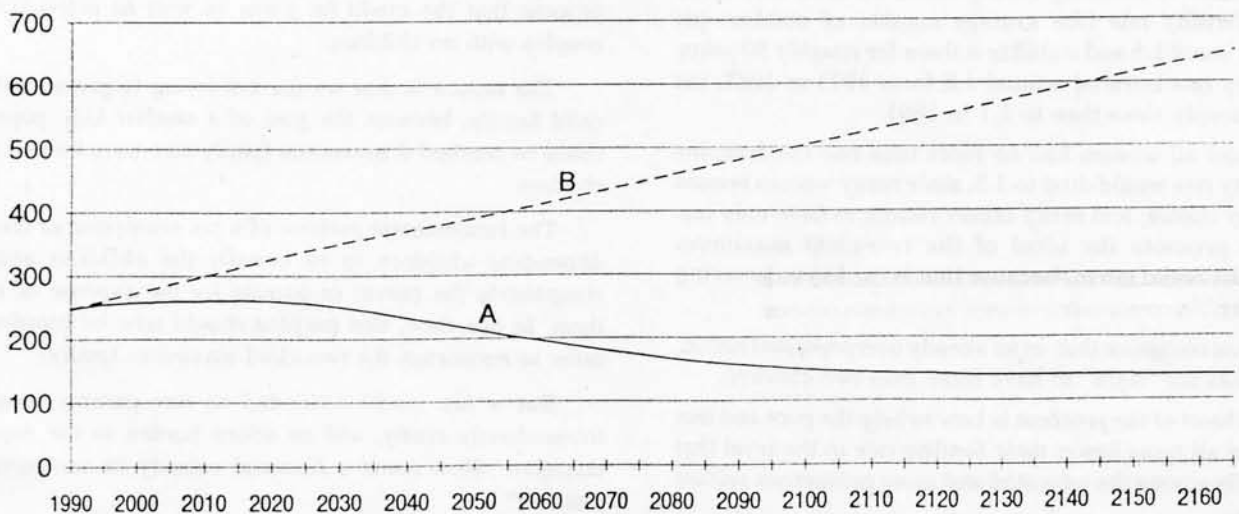


Figure 2. U.S. POPULATION SIZE (Millions)

Age Structure

In Figures 3-5 below, we see the age structure that would result from the above projections.

Age of immigrants was based on data from the U.S. Immigration and Naturalization Service, *Statistical Yearbook of the Immigration and Naturalization Service, 1989*.

Some have expressed fears that either reversing or merely halting our population growth would result in an unacceptable ratio of the elderly (65 and over) to the working age population, commonly defined as those 15-64.

While the age structure of a decreasing population would be different from that of our present rapidly growing population, the differences would not be great enough to cause any severe problems during the transition period to a smaller, stationary, non-growing population.

For example, there would be no significant difference in the size of the working age population, as a percent of the total population. For most of the transition period to a smaller population, however, the older segment would represent a greater proportion of the total population than it does now.

This increase in the older segment would be roughly

balanced by a decrease in the younger (0-14) segment of the population. The young, of course, are dependents just as are the old (plus the unemployed of all ages), and the cost to society to support them may be as great, or greater, than the cost to support the old.

In any event, since we cannot grow forever in a finite world, we must accept the fact that sooner or later our age structure will be that of a non-growing population. Whatever the eventual size, whether 140 or 500 million, the age structure of any stationary, non-growing population with replacement level fertility, low mortality, and no net immigration would be identical.

This would be true whether or not the population was stabilized following a period of increase or decrease.

Further, we must recognize that, because of the impact of sheer numbers of people on our resources and environment, the size at which our population is eventually stabilized will have far greater social and economic consequences than any that could conceivably result from changes in the age structure itself.

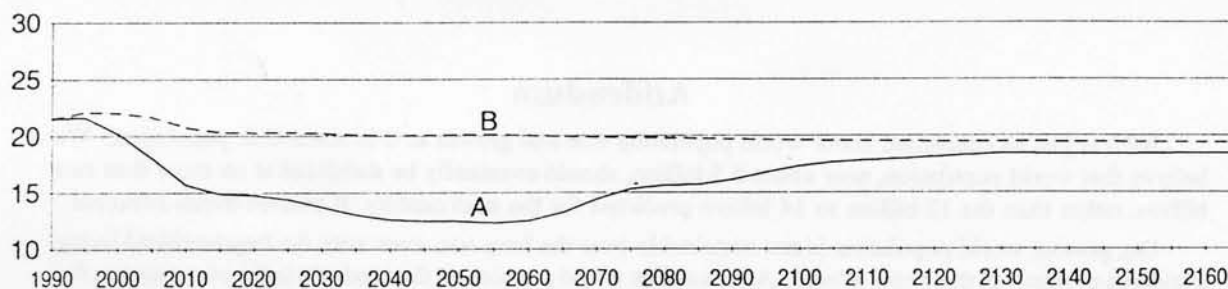


Figure 3. AGE 0-14 AS A PERCENT OF TOTAL U.S. POPULATION

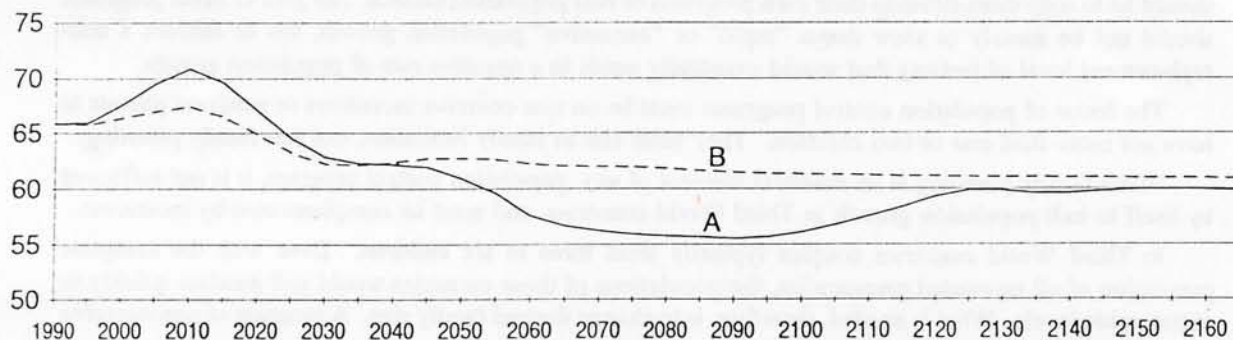


Figure 4. AGE 15-64 AS A PERCENT OF TOTAL U.S. POPULATION

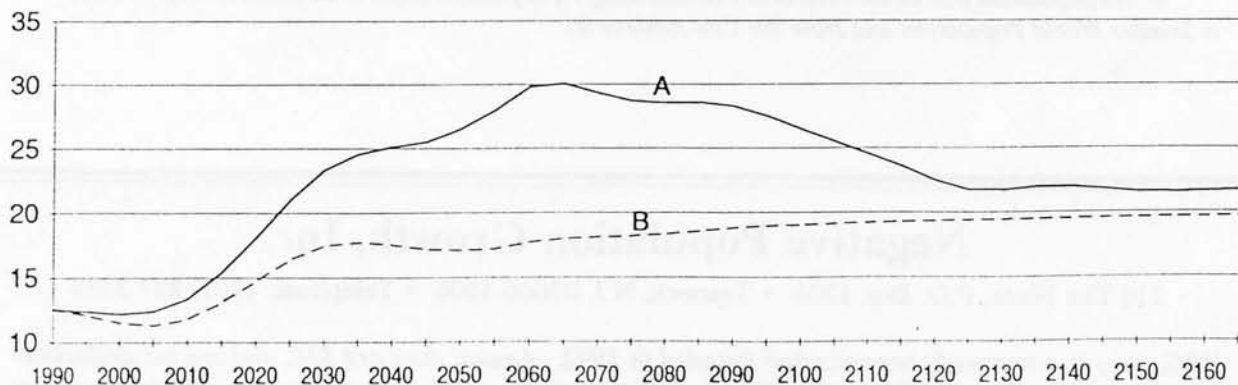


Figure 5. AGE 65 AND OVER AS A PERCENT OF TOTAL U.S. POPULATION

Two Vastly Different Paths Lie Before Us

We have tried to make the case for an optimum U.S. population size of 125 to 150 million. Since merely setting a goal is not sufficient, we have also tried to present a coherent, reasonable plan to reach that goal.

The hallmark of our recommended program is moderation. The rates of immigration and fertility we advocate are not far from those that actually existed in the fairly recent past.

We would not be alone if we succeed in reducing our fertility to 1.5. A number of countries already have a fertility rate of 1.5 or below. These include Austria, Italy, Germany, Greece, Portugal, Spain, and Japan.

As for immigration, our proposed overall ceiling of 200,000 annually would still be generous compared to that allowed by any other country. Of the over 160 nations comprising the United Nations only two, besides the United States, allow any sizable immigration: Canada and Australia.

Small differences in immigration and fertility rates can, if maintained over a considerable length of time, mean the difference of hundreds of millions in the size at which U.S. population is eventually stabilized.

With the reductions in immigration and fertility we advocate, our nation could start now on the path toward a sustainable, and prosperous, population of 125 to 150 million.

Without such a program, we are almost certain to continue our mindless, headlong rush down our current path. That path is leading us straight toward catastrophic population levels that can only devastate our environment, and produce universal poverty in a crowded, polluted nation.

Can there be any doubt which of the two directions would best serve the broad public interest, and the welfare of present and future generations of Americans?

Addendum

NPG is just as concerned about world population size and growth as it is about U.S. population. We believe that world population, now about 5.5 billion, should eventually be stabilized at no more than two billion, rather than the 12 billion to 14 billion predicted for the next century, if present trends continue.

Our present world population is not sustainable over the long run, even with the impoverished living standards of much of the Third World. A far smaller world population than today's is the *sine qua non* for sustainable development, and for a healthy global environment.

For the benefit of both the Third World nations and ourselves, the first priority for our aid to them should be to help them develop their own programs of real population control. The goal of those programs should not be merely to slow down "rapid" or "excessive" population growth, but to achieve a sub-replacement level of fertility that would eventually result in a negative rate of population growth.

The focus of population control programs must be on non-coercive incentives to motivate parents to have not more than one or two children. They must aim at family limitation, not just family planning.

While family planning is an essential element of any population control program, it is not sufficient by itself to halt population growth in Third World countries, and must be complemented by incentives.

In Third World countries couples typically want three to six children. Even with the complete prevention of all unwanted pregnancies, the populations of those countries would still escalate quickly to catastrophic levels. What is needed, therefore, is to change desired family size. A program of non-coercive incentives is the key to achieving this.

World population will be the subject of a forthcoming NPG position paper to be entitled, *Why We Need A Smaller World Population and How We Can Achieve It*.

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NPG, Inc., is a nonprofit organization founded in 1972. Annual dues are \$30, and are tax deductible to the extent the law allows. NPG is the only population/environmental organization that calls for a smaller U.S. and world population, and for specific, realistic measures to achieve those goals.