

POPULATION CONTROL: PAST DECISIONS AND FUTURE POLICY *

I. DELIMITATION OF THE PROBLEM

The Features and Effects of Population Growth

Population growth has in recent years been labelled as a threat to human survival, a cause of world disorder, a hindrance to human progress and a stumbling block to the fulfilment of human dignity.

However exaggerated the effects of population growth may be, the facts of population growth and their projection justify the attention given. No one knows exactly how many people have lived throughout the ages, but it is estimated that it took the world all history to about the year 1830 to reach 1000 million people. At the beginning of this century the world population was around 1500 million; by 1950 it was 2500 million. By 1970 it was 3500 million. The latest projections, based on the 1963 United Nations study, "World Population Prospects, as assessed in 1963," predict that by 2000, there will be somewhere between 6000 to 7500 million people on earth, unless some drastic calamity should intervene, or the present birth rates should go down dramatically. At the moment the world population is growing at the rate of 2% per annum—the highest in history.

Population growth on the world scale depends on two variables: the birth rate and the death rate. In national territories, of course, the rate of immigration and emigration must also be taken into account. Scientists of all disciplines who have written on the subject agree that the "world population explosion" of recent years has been caused by falling death rates, not by rising birth rates. There is no indication that people, wherever they are, want more children than their ancestors did. In fact, married couples in the more developed countries are having fewer children than their ancestors. But the World's death rates have fallen dramatically since the advance of modern medical and sanitary knowledge. As Dr. Durand put it, "Formerly, a 35-year expectation of life at birth represented an enviable condition among human societies," but at present "life expectation at birth typically exceeds seventy years in the economically more developed countries and ranges down possibly as low as 35 years in areas where conditions of health and survival are least favourable."¹ Also, more babies grow to adulthood.

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1. John D. Durand, "A Long-Range View of World Population Growth," *The Annals of the American Academy of Political and Social Science: World Population*, Jan. 1967, p. 5.

The main reasons why the death rates in countries which became industrialised in the last century declined are:²

(a) The opening up of new continents which provided additional sources of food, precious metals and raw materials as well as outlets for increasing population.

(b) The expansion of commerce which made possible the transportation of food and capital goods over long distances.

(c) Technological changes in agriculture, together with the development of modern industry.

(d) Increased control of disease by means of improved housing, better food and water supplies, adoption of sanitary measures, growth of knowledge of preventive medicine, and discoveries in pharmacology and chemotherapy, particularly antibiotics and insecticides.

Famines, diseases and wars had been the main checks on population growth throughout the ages. The Roman historian Tertullian wrote that "[t]he scourges of pestilence, famine, wars and earthquakes have come to be regarded as a blessing to overcrowded nations, since they serve to prune away the luxuriant growth of the human race."³ The Irish famine of 120 years ago, for example, killed one out of every four Irish living at the beginning of the calamity. The Great Plague of 1664-65 is estimated to have killed one-sixth of London's population. The Black Death which ravaged Europe around the mid-fourteenth century is thought to have killed one-quarter of the continent's population. The Taiping Rebellion of China (1850-65) is estimated to have killed some 10 to 15 million of China's people. The last major pandemic, the influenza epidemic of 1919, caused 25 million deaths around the world.

Another method of population control was infanticide. A Harvard historian, William L. Langer, has shown that infanticide was an important means of keeping down family size in Europe all through the 19th century, extending even into the 20th.⁴ The practice was common in China and other Eastern countries well into this century. Contraception, too, was an ancient practice, although its effectiveness has increased immeasurably with modern scientific knowledge.⁵

The relatively recent population surge caused by decreasing death rates has one disquieting feature: the countries least equipped to cope with the demands of an increasing population are also those with the highest rates of population growth. In 1970, for example, the rate

2. See Harold F. Dorn, "World Population Growth," in Philip M. Hauser, ed., *The Population Dilemma*, 2nd ed. (1969), at p. 7.

3. Tertullian, *De Anima*.

4. William L. Langer, "Europe's Initial Population Explosion," 69 *American Historical Review*, pp. 1-17.

5. Norman E. Himes, *Medical History of Contraception* (1936); John T. Noonan, Jr., *Contraception* (1965).

of population growth was 2% for the world as a whole, but the rates for Latin America and Africa were 2.9% and 2.6% respectively. Europe, on the other hand, has a growth rate of 0.8%, and North America one of 1.2%.

The explanation of this phenomenon in terms of birth and death rates is simple. The more developed countries have undergone the so-called "demographic transition": they have shifted from a pattern of high birth rates and high death rates to a pattern of low birth rates and low death rates. In these countries the rapid increase in population that followed the lowering of death rates was checked by the development of an effective substitute restraint upon uncontrolled fertility, namely, contraception. By the late 1920's, fertility had fallen so low that many demographers feared that the population of European origin might begin to decrease in number.⁶

The same thing has not occurred in the less developed countries of Asia, Africa and Latin America. Since the second World War, the death rates in these countries have fallen sharply due to the benefits of advanced scientific, medical and sanitary knowledge from the more developed countries. Yet the birth rates of these less developed countries continued at their past high levels. No satisfactory explanation of this situation has been offered by scholars of various discipline who have studied population growth. Some have pointed out that industrialization and reduction in birth rate go hand in hand;⁷ but none has demonstrated the exact relationship between the two.

This more rapid population growth in the less developed countries also means that they carry a very heavy load of youth dependency. In 1960, for example, 40% of the total population of the less developed countries was under 15 years of age; whereas only 29% of the population of the more developed countries was under the same age.⁸

What are the effects of population growth — especially an uneven population growth varying from country to country — on the world community?

Population Growth and Food Supply

Most writers on population growth have emphasised the food supply aspect of it. Malthus' famous essay on "the Principle of Population" put forward in 1798 the controversial proposition that food production cannot keep pace with population growth, so that if the latter goes on unchecked, famine would result. Today there is strong disagreement between two schools of thought. One school thinks that very soon the world will suffer from famine on a large scale. This line of thought

6. Dorn, *op. cit.* at p. 15.

7. See, e.g. Irene Taeuber, "Population Increase and Manpower Utilization in Imperial Japan" in J.J. Spengler and Otis D. Duncan, ed., *Demographic Analysis* (1956).

8. Frank W. Notestein, "Population Growth and Its Control," in The American Assembly, *Overcoming World Hunger* (1969), at p. 18.

is represented by such scientists as William and Paul Paddock⁹ and Paul Ehrlich.¹⁰ On the other hand, scholars such as Colin Clark emphasise the potentiality of the earth and human ingenuity, predict that science can erase the threat of famine in the near future, and that “[i]n the very distant future, if our descendants outrun the food-producing capacity of the Earth and of the sea, they will by that time be sufficiently skilled and wealthy to build themselves artificial satellites to live on.”¹¹

In the short run, the alarmist position certainly cannot be justified. The United States Department of Agriculture reported in 1967 that the world viewed as a whole could continue to have excess grain producing capacity to 1980.¹² But I think that to talk about the population that the world can support is to emphasize the wrong thing. The world is not a single unit in which each person gets what he needs. People are often unable to pay even the producer's cost for goods needed to sustain a decent standard of living.¹³ The United States government at present rents over 50 million acres from farmers (out of 350 million acres of cropland) so that there will be no undisposible surplus.¹⁴ Wheat rots in Australian storehouses. And yet millions in less developed countries are undernourished, if not starving. Even within national boundaries there is no guarantee of distribution according to need. At the height of the Indian food crisis of 1965-66, some provinces had their excess food supply untouched.

The FAO studies of 1957 and 1961 suggest that between 350 million and 550 million of the (then) 3000 million people of the world were not getting enough to eat; and that possibly half the world's population were malnourished, i.e., they did not get food of a quality to enable healthy living to take place. The overwhelming majority of these undernourished and malnourished people live in the less developed regions of the world. The average daily calorie intake of the American people is 3200 calories; that of the Asian peoples (excluding Japan) is less than 2000 calories. The Indian worker consumes 1.23 pounds of food a day, the American city dweller 4.66 pounds.¹⁵ Lacking an adequate diet of proteins and vitamins, the Indian worker is subject to many diseases due to malnutrition, is lower in stamina and has a shorter life expectancy. This condition reduces his energy and ability to work and to contribute to his country's economic development.

9. William and Paul Paddock, *Famine—1975!* (1967.).
10. Paul R. Ehrlich, *The Population Bomb* (1968).
11. Colin Clark, “World Population,” 181 *Nature*, p. 1236.
12. Martin E. Abel and Anthony S. Rojko, *World Food Situation*, Foreign Agricultural Economic Report No. 35, United States Department of Agriculture.
13. This happens even in the most developed countries such as the U.S.A., Australia and New Zealand.
14. Robert G. Lewis, “False Focus on Food,” Book Review in *The Progressive*, Vol. 33, No. 4 (April 1969).
15. Arthur McCormack, *The Population Problem* (1970), p. 28.

The increase in food production in the less developed countries is predictable—but this increase has to be spread among their increasing population. Agricultural experts consider it feasible within achievable limits of capital investment to double Indian agricultural output within the next 20 or 25 years; but with its present birth rate, India's population will also double in the next generation. Right now almost all the less developed countries import food from the developed countries. The only conclusion we can draw is that the less developed countries' efforts to feed their people adequately will be made much easier if their population growth is reduced. But this is not all. These countries must also improve their internal system of food distribution, and must strive to produce more food.

Population Growth and Natural Resources other than Food

In contrast to the pessimistic scholars of the nineteenth century who thought that increasing human per capita demands together with a continuous expansion of population would lead to an exhaustion of the finite supply of the world's nonrenewable resources, modern scientists believe that technological advances will supply the world community with adequate amounts of such resources. The predictions, however, are not simple and clear cut, owing to the inadequacy of information. Two leading experts wrote that

Limiting our forward look to the year 2000, we find no general increase in scarcity in the more developed areas; the opposite trend is likely to continue. In the less developed areas severe problems will be encountered, but the situation is not hopeless. Much will depend on policies both in the aid-receiving and the aid-giving countries, and on the international economic and political climate generally. Most important will be the effort put forth and the competence of people in those countries in dealing with their resource problems and potentialities.¹⁷

Another expert wrote that techniques of recycling, substitution and other devices for manipulating the flow and utilization of materials efficiently to match demand with supply, now seem to have a sound scientific backing; and that they are adequate to meet the challenges presented by a severalfold increase in world population.¹⁸ He warned, however, that the capacity of resources (including space) to support people must eventually come to an end.

But information on the resource stocks of developing countries is very poor,¹⁹ and pessimistic voices have been raised by some experts. More important is the issue of economic development in poorer countries. A large portion of the raw materials needed by industrialized nations

16. Ansley J. Coale, "Population and Economic Development," in Hauser, *op. cit.*

17. Joseph L. Fisher and Neal Potter, "Resources in the United States and the World," in Hauser, *op. cit.*

18. Edward A. Ackerman, "Population, Natural Resources and Technology" in *The Annals of the American Academy of Political and Social Science: World Population*, Jan. 1967, at p. 96.

19. See Joseph L. Fisher and Neal Potter, *op. cit.*, at p. 120.

is obtainable only from less developed countries.²⁰ The raw-material purchasers enjoy, in general, much higher standards of living than raw-material suppliers. The reason seems to be that the entire structure of the world economy, including emerging patterns of trade and investment, is designed to perpetuate the existing disparities between rich and poor countries. The latter depend on foreign exchange earnings from raw material sales in order to import finished product. The vicious circle can be broken only if these poorer countries can build up their domestic industries. As will be pointed out later, a rapid population growth makes the task of these countries even harder than it already is.

Population and Economic Development

The gap between the richer and the poorer countries is substantial. The average per capita income for the peoples of Asia, Africa and Latin America is around \$100 a year, as compared to \$2350 in the U.S.A., \$2000 in Australia and New Zealand and \$850 in Western Europe. About 27% of the world's population in the developed countries enjoy about 79% of the world's gross national product. Some 73% of the world's population in the less developed countries enjoy the rest — 21%.²¹ The gap is widening, because the developed countries are increasing their per capita income at a faster rate than the less developed countries.

Economists agree that there is a correlation between economic and population growth. A minority view states that population pressures stimulate development. But even this view concedes that such pressures are the least attractive and least reliable of all inducement mechanisms, and that such a means of stimulating development is clumsy and cruel. The majority view states that a slower population growth rate is beneficial to economic development in less developed countries. An underdeveloped country must save enough of its national income to bring about enough new investment in agriculture to increase production and productivity on the farms and enough new investment in industry to increase production and relieve population on the land. At the same time this country must spend more on education, health and other public services, and on more efficient government administration. Increased investment can be made from the voluntary domestic savings of the people, from savings collected by governments through taxation, and from imported foreign capital. Increased expenditures on education and other public services must be financed mostly through local taxation.²²

Seen in these terms, a high birth rate (with a low infant mortality rate) produces more dependent children who are a burden on productivity and increases the burden of education and other public services expenses. Less money will be available for raising the general standard of living.

20. Charles F. Park, Jr., *Affluence in Jeopardy: Minerals and the Political Economy* (1968), at p. 334.
21. Philander P. Claxton Jr., "Population and Law", in *The International Lawyer*, Vol. 5 No. 1 (Jan. 1971) at p. 4.
22. Arthur McCormack, *op. cit.* (fn. 15), pp. 140-41.

It also increases the labour force as well as the number of consumers. This means more national output to be allocated to current consumption and less resources for economic growth. Less private savings will be available for economic development.²³

I am aware of arguments that some countries will benefit from greater population growth. This sort of argument is raised especially in relation to Latin America. That the continent can support much larger populations, few would disagree.²⁴ But it seems to be a sound view that even in these countries, the population density that would result from a 50% reduction in fertility in the next 25 years would be at least adequate for the exploitation of the resources available.

The issue of the economic gap between richer and poorer countries is an important one. The existence of a perception of relative deprivation has long been a main cause of internal strife. It may become a main cause of future international strife unless we can narrow the gap between the developed nations and the "Third World."

Population Growth and Ecology

In developed countries which are enjoying sufficient food supplies and a high degree of industrialization, the population growth rate is also much lower. Nevertheless their populations are growing. The United States, for example, according to a recent projection, will have a population of around 300 million by the year 2000.²⁵

In recent years, population experts in these countries have pointed out that the danger of a growing population in these countries lies not in food supplies, but in the deterioration of the environment. Seen in this light, these experts argue, the population growth becomes a more serious matter in the richer countries than in the poorer ones. "Rich people," Professor Jean Mayer wrote, "occupy more space, consume more of each natural resource, disturb the ecology more, and create more land, air, water, chemical, thermal and radioactive pollution than poor people."²⁶ The same theme was expounded by two demographers, Lincoln and Alice Day, when they pointed out that it is the quality and not the quantity of American life that is threatened by ever growing numbers of people: outdoor recreational areas are destroyed, air and water pollution spreads, traffic jams and urban congestion become more common. Professor Wayne H. Davis estimated that, in terms of garbage production, pollution, land use and resource depletion each additional person to the United States is equivalent in ecological terms to the addition of at least 25 people to India.²⁷

23. Ansley J. Coale, *op. cit.* (fn. 16), at p. 61.

24. See Frank W. Notestein, *op. cit.* (fn. 8), at p. 26.

25. 1969 World Population Data Sheet; Population Reference Bureau.

26. Jean Mayer, "Toward a Non-Malthusian Population Policy," *Columbia Forum*, Vol. XII, No. 2 (Summer 1969), at p. 5.

27. Wayne H. Davis, "Overpopulated America," *New Republic* (Jan. 10, 1970) at p. 15.

Population Growth, Liberty and Peace

A remarkable feature of population growth is the much more rapid growth of cities than of rural areas in recent times. The prospects are for the rural sector to increase at the rate of 1.6%; whereas the urban sector is likely to increase at the rate of 6.8%.²⁸ Kingsley Davis stated that on the present trends the whole population of the world would be living in cities of a million and over within 76 years, and there would be cities of 1300 million people.²⁹ Such projections will probably never come true, but they do indicate the strong trend towards urbanization.

But the implications of a growing population, in terms of social structure, go deeper than the urbanization trend.³⁰ The maximum economic well-being of a people requires a social organization adequate to the population's size and density, an authority structure and a distribution of the social advantage (social status, political position and economic power) which is sufficiently accepted, to ensure political stability in the light of the prevailing culture.

As a population grows, its organizational requirements change. Since any change in social organization is likely to affect the existing authority and privilege structure, it will meet resistance from those who prefer the status quo. This containment of demands for change may lead to deterioration in the social well-being of the masses, and so build up opposing pressure. In time this pressure must lead to either peaceful accommodation or explosive action. The internal peace of nation states, especially those with a less stable political system (and most less developed countries fall under this category), may be shattered in the process.

One way in which this situation may come about is as follows: an increasing population will create new opportunities in a free enterprise society, opportunities which a relatively small number of ambitious and aggressive individuals would seize. Meanwhile the section of the population who are disproportionately disadvantaged would also increase in number. They press on physical and social resources such as housing, recreational areas and job opportunities. Political scientists have long warned that a perception of relative deprivation often leads to civil strife. A better way of expressing the idea is to say that those dissatisfied with the existing authority and privilege structure will seek to change it—by force, if necessary.

On the international level, the same process as that within a national society operates similarly. Nation states will seek changes in the international structure of authority and distribution of social advantage. The so-called expansionist wars of history should be seen in this light. This state of affairs seems probable in view of the widening gap between developed and developing nations. A nation state

28. Richard A. Falk, *This Endangered Planet* (1971), at p. 145.

29. Cited in Falk, *ibid.*.

30. Neil W. Chamberlain, *Beyond Malthus: Population and Power* (1970).

can induce changes in the international structure of authority and distribution of social advantage (e.g. by claiming a stretch of the continental shelf beyond what is permitted by International Law) either by engaging in direct action (e.g. military) or by failing to maintain internal political stability.

This international threat will be made more dangerous by greater regimentation of people within nation states. This will come as a result of demands created by an expanding population: these demands include more governmental regulation of individual and organizational activity and the provision of a greater range of governmental services. There will be more restrictions on personal freedom, imposed in the name of accommodating the freedom of others. With the growth in the size of the population, in the size of cities and in the scope of organization, a trend would develop toward the centralization of governmental powers. This will probably take two forms: stronger co-ordinating and controlling powers over subordinate units, and the acquisition of greater powers of initiative by the executive authority in relation to the legislature, because of the need for prompt action in complex situations.

Given the greater degree of urbanization of the future, the greater degree of governmental power, the modern technology of mass communication, nation states will be even more easily mobilized for political action than they are now. Indoctrination along fascist lines looms as a possible prelude to aggression. When a regimented nation state claims changes in the international structure of authority and distribution of social advantage, the world power process will be confronted with the same choice as that presented to the national power process by a determined minority. Either it must resist the claims with force, or it must make concessions. In either event, changes in the existing authority structure will occur — perhaps after bloodshed and devastation.

II. THE PROCESS OF CLAIMS CONCERNING POPULATION GROWTH

Ever since the issue of population growth got into the world limelight, a wide range of claims concerning population growth has been lodged by almost every participant in the world community process. These claims are made to authoritative decision makers, and usually demand an interference with the population growth process in order to achieve a wider or narrower sharing of some scope values. In general, the claimants are aware that:

(1) the sizes and growth rates of populations effect the shaping and sharing of values through their influence on resources, ecology, economic development, social organization and national power;

(2) the authoritative decision process whether on a national, international or family level can intervene in the population growth process to bring about a change in its rate of growth;

(3) different techniques — ranging from deliberate massacre to abstention from sexual intercourse — may be used for intervention in the population growth process.

I shall examine the most significant claimants, their demands, identifications and expectations. And then I shall attempt to set out some of the more important claims according to the values they seek to affect.

The Private Individual

Claims of private individuals reflect the large variety of claims made by pressure groups and other claimants. It is clear that in most of the developed countries, private individuals are demanding that they be free to limit the sizes of their families. They identify more or less with liberal—democratic ideals which strive to give the citizen as wide a scope of freedom as possible. They expect that they will have to clothe, feed and educate their children, and that they cannot do their job properly if they have too many children. Even in these countries, however, there are individuals who demand that they be free to produce as many children as they like. They regard children as a source of affection and well-being. Some believe that procreation is the sole purpose of marriage.

In the political sphere, these conflicting demands take the following main forms:—

- (1) demand to liberalize abortion laws,
- (2) demand to have the state provide family planning services,
- (3) demand to have the state subsidize the rearing and education of children (e.g. by way of tax exemptions, free schooling etc.) and
- (4) demands opposed to the above.

The claimants, as can be seen, have a wide range of identifications based on different convictions. These will be discussed more fully in the next sections. I shall first try to deal with the individuals in developing countries where the population growth rates are generally higher than those of developed countries. The reason is that the average number of children per family is higher in the former than in the latter. According to the current figures of the Population Council,³¹ the average number of children per family is as follows:

Africa	6.1
Asia (without U.S.S.R.)	5.1-5.5
Latin America	5.7
U.S.A. & Canada	3.7
Europe	2.7
U.S.S.R.	2.9

The Indian family-planning programme has failed to induce any significant reduction in birth rates. The reason given is that the villagers (nearly 80% of the country's 550 million people) have not

31. Cited in Falk, *op. cit.* at p. 147.

been reached by the programme.³² It has been pointed out that among poorer people everywhere, the experience of child-bearing is one of the few genuine pleasures that alleviate an otherwise miserable existence.³³ Moreover, these people are undoubtedly still influenced by expectations in earlier generations of much higher infant mortality—such expectations may take several generations to change.³⁴ It must not be forgotten that in a relatively backward agricultural community, children means help in the fields, comfort at home and support in old age. The demands an Indian peasant makes when he claims freedom to have as many children as he can produce are demands for his share of well-being, wealth, respect and affection.

The National Elites

The identifications of the national elites are with their national entities. They want more power, well-being, wealth, respect, skill and enlightenment for their national communities. These people make two main types of claims in relation to population growth:—

- (1) increasing the population growth rates of their nations;
- (2) slowing down the population growth rates of their nations.

The first type of demand is made usually by the governing elites of countries which need more people. They believe, with good reasons, that a large population is a strong potential base for power—they are aware that none of the “great powers” nations has a population of less than 100 million. Of course they realize that numbers alone are not sufficient—but numbers help.³⁵

The case of Portugal illustrates this point. The preliminary results of their 1970 census show an overall decrease of about 13% in the population of eight of Portugal’s twenty-two metropolitan districts, and the incomplete results for the other districts are not encouraging.³⁶ Disappointment was expressed by the country’s newspapers. Under normal circumstances a population of nearly nine million, Portugal’s population in 1960, would be adequate for Portugal, a country of modest resources; but she has colonies overseas, and admittedly would like to increase the number of white Portuguese settlers in her troubled African territories of Angola, Mozambique and Portuguese Guinea. Not only the governing elite, but newspapermen and individuals demand an increase in population, as shown by newspaper demands that the government review its demographic policy to take account of emigration.

32. As observed by Dean Mukhojee of the Calcutta Law School in a talk to Yale Law students (12th May, 1971).
33. Falk, *op. cit.* at p. 151.
34. See Harold Frederiksen, “Feedbacks in Economic and Demographic Transition” *Science*, Vol. 166 (Nov. 14, 1969), pp. 837-37.
35. For an analysis of population and power, see Katherine and A.F.K. Organski, *Population and World Power*. (1961.)
36. *New York Times*, 16th May, 1971.

Going back in time, we find national elites occasionally urging their people to procreate more children. Nazi Germany, Fascist Italy and Japan before the Second World War, have all tried to encourage larger families. France today still has a pronatalist population policy.

Sometimes the demand for more children is made by elites of groups within national territories. This is the case of the U.S.S.R. The Soviet census of 1970 showed that Russians have increased by 13% since 1959, while Moslem Central Asian minorities had risen by as much as 52%.³⁷ The Soviet newspaper *Literaturnaya Gazeta* promptly appealed to Russian bachelors to wed younger. Claimants of this kind are identified not with the whole nation state but with particular racial or other groups within it. Their expectations, however, do not differ significantly from those of elites identified with whole nation states. Both expect large populations to be a determinant of the amount of power a group—whether a race or a nation—can muster.

The other type of demand—for a slowing down of population growth rates—is made usually by national elites who expect their countries to fare better in economic development if saddled with a smaller population than present growth rates would promise. Again these elites identify themselves with the well-being, wealth, skill and enlightenment of their states. India is the prime example of such a case. In December 1968, when it became clear that the Indian government's family-planning programme has failed to slow down the population growth, the minister in charge of the programme appealed to Indian couples to observe 1969 (Gandhi year) by abstaining from making love.

It seems that many national elites in developing countries are making conflicting demands as to population growth without being aware of it. 70% of the peoples living in less developed regions have governments which have adopted some form of family-planning programme with the avowed purpose of reducing the birth rate. But at the same time tax exemptions are given according to the number of children in a family.

The United Nations

The United Nations is identified with mankind as a whole; but it is made up of nation states. The process of claims concerning population growth operates in two ways within the U.N.:—

- (1) member states make claims on the U.N., and on one another;
- (2) the U.N., in return, makes certain claims on the member states.

The first debate on the population issue in the U.N. occurred in 1962 (17th session of the U.N. General Assembly).³⁸ Twelve countries sponsored a resolution urging the U.N. to play a major part in the

37. *New York Times*, 25th April 1971.

38. See Richard N. Gardner, "United States and U.N. Population Policy," in William E. Moran, Jr., ed., *Population Growth—Threat to Peace?* (1965.)

population field — including technical assistance in the field of family planning. These countries argued that population growth posed grave problems for economic and social development, and that urgent action must be taken to cope with it. Three other principal viewpoints were put forward, showing the serious disagreement among national states, at that time, on the population issue.

First, Argentina and Ireland, with support from some other countries (mainly in Latin America), challenged the right of the U.N. to discuss the topic, questioned the existence of a population problem, and opposed any U.N. Family Planning Programme.

France together with other countries of continental Europe, some Latin-American states and some French-African states, conceded the existence of population problems in some areas but urged that action by the U.N. should be deferred pending further study.

The U.S.S.R. and some of the Eastern European states expounded the traditional communist position that Western discussions of the population problem were based on what they called “neo-Malthusian fallacies.” They claimed that population problems ceased to exist under communism.

The United States position also represents the demands of some nation states — especially less developed countries. This position stresses the importance of the population problem, the need for more knowledge about it, and the necessity for each country to determine its own population policy in accordance with its economic, social, cultural and religious circumstances.

These differing views reflect the widely differing expectations of the claimants. On December 10, 1966 (U.N. Human Rights Day), twelve nation states signed a Declaration on Population and presented it to U.N. Secretary-General U Thant. One year later, eighteen more signatories added their names. Essentially, the Declaration claims that the population problem should be taken into account when governments are planning their economic goals, that the opportunity to decide the number and spacing of children is a basic human right, and that family planning, by assuring greater opportunity to each person, frees man to attain his individual dignity and reach his full potential. The signatories urged the other national leaders to recognize that family planning is in the vital interest of both the nation and the family.

The Roman Catholic Church

The Roman Catholic Church is well-known for its stand against abortion and artificial means of contraception. It claims that the only means of birth control permitted by natural law is the rhythm method; and condemns as sinful any other method of contraception. But many dissenting voices have been raised within this body, and there is fair indication that many individual Roman Catholics claim the right to use artificial contraceptive devices as a right of private conscience.

The Communist Ideology

The governing elites of communist states and disciples of communism never believed in overpopulation. Karl Marx once called Malthus' theory a "libel on the human race" and "the great destroyer of all hankerings after human development."³⁹ The orthodox communist stand is that communism is an economic system that can provide for any given population. But there are signs that the perspectives of some communist elites may be changing. An American reporter recently allowed into mainland China reported that the Chinese government is encouraging birth control without making an intensive publicized campaign out of it; that constant pressure is applied on the young not to marry before 28 (for men) and 26 (for women). Birth control pills and other contraceptives, the same report stated, are available free, and sterilization can be had at nominal cost in hospital.⁴⁰ Russia, on the other hand, still adopts a laissez-faire policy regarding population growth. Although abortion there has been legalized and costs little, those who like large families receive lump-sum and monthly payments after the birth of a fourth child, and mothers of 10 children or more are declared mother-heroes.

Conflicting Claims of the Experts

So far, the most vociferous, best articulated and most coherent claims are being made by experts on various aspects of population growth — biologists, demographers, economists, sociologists and others. These experts are of course individuals and as such their claims may be viewed as claims by the individuals for themselves. But their focus as experts has been on the most influential decision makers. At one extreme are the alarmists who foresee the world running out of food, air and resources soon if the present population growth rate is not drastically and quickly reduced. They press their claims on national governments, on international bodies, and on private citizens. Paul R. Ehrlich, for example, predicted that sometime between 1970 and 1985 the world will undergo vast famines and hundreds of millions of people will starve to death, unless plague or thermo-nuclear war kills them first. He claimed that the United States, as the only world power with a prospect⁴¹ of food surpluses, should take immediate action in two areas :

(1) It must set an example for the world by establishing a crash programme to limit its own serious "population explosion." Ehrlich recommended that the crash programme consist of a big propaganda campaign on the connection between rising population and lowering quality of life; a change in the tax law so as to discourage rather than encourage reproduction; new laws making instruction in birth control methods compulsory in all public schools, and making abortion legal in all states (subject to a physician's approval); and channelling federal

39. Ronald L. Meek, *Marx and Engels on Malthus* (1953), p. 24.

40. *New York Times*, 25th April 1971.

41. Paul R. Ehrlich, "Paying the Piper," 36 *New Scientist*, 652-655.

support of biomedical research into the areas of population regulation, environmental sciences, behavioural sciences and related areas, rather than into "short sighted programmes on death control."

(2) It should:-

(a) announce that it will no longer ship food to countries such as India where "dispassionate analysis" indicates that the unbalance between food and population is hopeless;

(b) refuse all foreign aid to any country with an increasing population which the U.S.A. believe is not making a maximum effort to limit its population;

(c) make available to all countries extensive aid in the technology of population control;

(d) make available to all interested countries massive aid for increasing the yield on land already under cultivation;

(e) use its power and prestige to bring extreme diplomatic and/or economic pressure on any country or organization impeding a solution to the world's most pressing problem.

Other experts, in much the same vein, have argued that the "freedom to breed" should be regulated by the state.⁴² Some claim that family planning programmes cannot achieve the goal of zero, or even slight, population growth — a goal which, they argue, the world must strive toward — because one of the aims of family planning is that of helping sterile couples to *have* children.⁴³ Professor Kingsley Davis has argued, on this basis, that in countries where contraception is used, a realistic proposal for a government policy of lowering the birth rates should include: squeezing consumers through inflation and taxation; making housing very scarce by limiting construction; forcing wives and mothers to work outside the home to offset the inadequacy of male wages, yet providing few child care facilities; encouraging migration to the city by paying low wages in the country and providing few rural jobs; increasing congestion in cities by starving the transit system; increasing personal insecurity by encouraging conditions that produce unemployment and by haphazard political arrests — in short, by making conditions as unattractive as possible for having children. Professor Davis admitted his list read like a "catalogue of horrors",⁴⁴ and that no government will institute such hardships simply for the purpose of controlling population growth. He implied, however, that this "catalogue of horrors" may have to be employed someday in the future if nothing can be worked out in the meantime to induce people to limit their number of children.

42. Garrett Hardin, "Parenthood: Right or Privilege?" 169 *Science*, July 1970; "The Right to Breed: Freedom to Procreate Equals Freedom to Starve Children", *New York Times*, 6th May 1971.

43. Kingsley Davis, "Population Policy: Will Current Programs Succeed?" 158 *Science*, 730-739.

44. *Ibid.*, at p. 739.

The President's Committee on Population and Family Planning, reporting to President Johnson in 1968, made the following proposals for the U.S. government's immediate consideration:—⁴⁵

(1) That the Federal Government rapidly expand family planning programmes to make information and services available by 1973 on a voluntary basis to all American women who want but cannot afford them.

(2) That the Department of Health, Education and Welfare and the Office of Economic Opportunity develop specific 5-year plans for their population and family planning programmes.

(3) That the Office of Education provide significant assistance to appropriate education agencies in the development of materials on population and family life.

(4) That the USA continue to expand its programme of international assistance in population and family planning as rapidly as funds can be properly allocated by the U.S.A. and effectively utilized by recipient countries and agencies.

(5) That experienced specialists from other countries be invited to serve on advisory groups for both the U.S.A.'s domestic and international programmes.

(6) That the newly established Centre for Population Research accelerate the Federal Government's research and training programmes in both the biological and social sciences and that within two years the Centre be expanded into a National Institute for Population Research, established by Act of Congress.

(7) That the Federal Government provide basic support for population studies centres.

(8) That Congress authorize and the President appoint a Population Commission to make the American public aware of the economic, educational and social impact of population trends, to analyse the consequences of alternative U.S.A. policies in the light of its determination to enhance the quality of American life.

The proposals of the President's Committee, though less radical than those of Ehrlich, discussed earlier, are founded on the same expectations, namely, that further population growth will cause serious problems in terms of the quality of life; and that family planning will slow down the growth rate either to a zero or a very slight level. The latter assumption was defended by Larry Bumpass and Charles F. Westoff⁴⁶ on the ground that the elimination of unwanted births would lead to a reduced birth rate, and hence a reduced growth rate.

45. *Population and Family Planning: The Transition from Concern to Action*. Report of the President's Committee on Population and Family Planning, pp. 10-12. The Committee included leading population experts such as Ronald Freedman and Philip M. Hauser.

46. Bumpass and Westoff, "The Perfect Contraceptive Population," 169 *Science* 1177 (18 Sept. 1970).

There are experts who assert that the real problem is not population growth, but economic and social development. These claimants usually expect technology to allow greater exploitation of resources in the future; and hence to overcome any food and resources problem that may arise.⁴⁷ In developing countries, there are widely held suspicions that Western scholars advocate population control as a means of keeping the numbers of the poor or the coloured down, or alternatively, so that the Western, developed countries would not have to give too much by way of help to the less developed countries.

The expectation of claimants who think that population control, through family planning or otherwise is unnecessary, is that what has happened in developed countries will happen in developing countries. They point out that industrialisation, urbanization, the spread of education and better health services have led to a lowering of population growth rates in more developed countries.⁴⁸ They claim that the most important immediate task is to bring all these to the developing countries — and the lowering of their population growth rates will follow.

In between the claim that population control is the world's most urgent problem, and the claim that it is the wrong problem, lies a whole spectrum of claims varying in their degrees of emphasis on population growth. Some claimants emphasise the present inadequacy of demographic information and analysis, particularly on the connection between population growth and economic and social development,⁴⁹ and on the motivation behind the desire for children.⁵⁰ These claimants call for greater national and international efforts of research in these areas. They also point to the need for more knowledge about the basic life processes governing child bearing, the need for even better contraceptive devices and the lack in developing countries of a network of health and social services to help village people plan their families. They demand intensified efforts by governments and private institutions as well as by the U.N. agencies in these areas.⁵¹

The calls to the United Nations for action, by all claimants, vary in their magnitude. Some see the U.N. as a convenient rallying point for research efforts; others demand that, as a world organization dedicated to humanitarian aims, it should play an active part in moulding population policies in all nation states.

47. See, e.g., Colin Clark, *Population Growth and Land Use*. (1967.)

48. Yusuf Ali Eraj, "Control of Population Growth and Family Planning," Paper presented to the International Joint Conference of the American Geographical Society and the American Division of the World Academy of Art and Science, New York 1970.

49. Richard N. Gardner, "The Politics of Population: A Blueprint for International Cooperation," in Larry K. Y. Ng and Stuart Mudd, ed., *The Population Crisis*. (1965.)

50. Kingsley Davis, "Population Policy: Will Current Programs Succeed?" in *158 Science*, pp. 730-739, at 733-34.

51. Richard N. Gardner, *op. cit.*, at p. 296.

The Overlapping of Claimants

For convenience's sake I have discussed the more significant claims in the population area by reference to the people who make them most often. But that does not mean that other categories of claimants never make these claims. Individuals, for example, have often made claims to a larger population for their countries so as to increase their power in the international arena. National elites are sometimes aware of the lack of information concerning the physiology of reproduction and motivation for having children—and they appeal to international organizations, or other national elites, to help remedy the inadequacies.⁵² The Declaration on Population, sponsored by U.N. Secretary-General U Thant, affirmed the “basic human right” to decide the number and spacing of children—a right claimed by millions of individuals the whole world over.

Summary of Claims concerning the Population Growth Process

To enable greater depth in analysis, I shall set out the specific claims, mentioned directly or indirectly, in the foregoing pages, according to the values sought to be promoted.

(a) **Claims Relating to Power**

Claims for individual freedom to decide the size of families.

Claims to a greater national or other groupal power base by increasing the population and population growth rate of the nation or other group.

Claims to a stronger national or other groupal power base by decreasing the population or population growth rate of the nation or other group.

Claims to greater national power through greater control and exploitation of the other values, by increasing, decreasing or stabilizing population and/or population growth rate.

(b) **Claims Relating to Respect**

Claims for respect of individual freedom to decide the size of family.

Claims for respect of individual liberty by minimizing the need for governmental regulation through decreasing, stopping or stabilizing population growth, or reducing population size.

Claims for respect through having more children.

52. The Indian Ambassador to the U.S.A. has appealed strongly to the USA for the benefit of its scientific and technical knowledge in relation to population control. See *Around the World News of Population and Birth Control*, No. 87 (Sept. 1960).

Claims on behalf of nation states, for respect from other nation states, through the possession of a large and fast growing population.

Claims on behalf of groups other than nation states, for respect from nation states and other groups, through the possession of a large and fast growing population.

Claims for respect of individual needs through greater shaping and sharing of values by increasing, decreasing or stabilizing population and/or population growth rate on a global or national scale.

(c) **Claims Relating to Enlightenment**

Claims for greater sharing of enlightenment among the people of the earth, nation states or other groups, by stabilizing, reducing or stopping population growth, or by reducing population size.

Claims for the wider dissemination of information concerning birth control techniques to allow individuals full freedom in the regulation of the size of their families.

Claims for greater sharing of enlightenment through economic and social development, leaving population alone.

(d) **Claims Relating to Well-Being**

Claims to increase the well-being of a nation state's people through increasing, decreasing or stabilizing its population and/or population growth rate.

Claims to increase the well-being of all individuals through a greater shaping and sharing of values, by increasing, stabilizing or decreasing the world population and/or population growth rate.

Claims to promote greater well-being of the people of nation states or of the world as a whole, through economic and social development, and leaving population alone.

(e) **Claims Relating to Wealth**

Claims to greater exploitation and sharing of national or global wealth through increasing, stabilizing or decreasing the population and/or population growth rate.

Claims to secure greater shaping and sharing of national or global wealth through economic and social development, and leaving population alone.

Claims to the freedom of having as many children as possible to help in accumulating wealth.

Claims similar to the first two, but made on behalf of groups other than nation states.

(f) Claims Relating to Skill

Claims for greater shaping and sharing of skill through increasing, stabilizing or decreasing the population and/or population growth rate of a nation state or of the world.

Claims for greater shaping and sharing of skill through greater efforts at economic and social development, and leaving population alone.

(g) Claims Relating to Affection

Claims to secure affection for the individual through permitting him to have as many children as he wishes.

(h) Claims Relating to Religion and Ideology

Claims that decision makers should refrain from interfering with the process of human reproduction as a divinely-ordained process.

Claims that all other decision makers should refrain from interfering with the size of families, and leave the decision to the individual.

Claims that birth control should not be done through means not permitted by religious laws.

Claims that the communist social order, and not population control, provides the answer to the problem of overpopulation.

III. THE PROCESS OF DECISION MAKING CONCERNING POPULATION GROWTH*The Authoritative Decision Makers to which the Claimants present their Demands*

Almost every entity or individual who can make decisions affecting the rate of population growth is turned to by the claimants. The different claimants, therefore, are making demands of one another. The appeal of the Indian minister in charge of family planning to Indian couples to abstain from love making for a year is a striking example of a national elite appealing to individuals for decision. And in making decisions, each claimant of course holds on to the same perspectives which underlie his claims on the other claimants.

The Arenas of the Authoritative Decision Process

The arenas in which the claimants present their claims are in the main also the arenas in which the decision makers interact. The only exception, I think, is what I would call the writers' arena — the sphere in which books and pamphlets circulate, in which experts and other people present their claims and their reasons for their claims. I shall attempt to single out the most significant arenas for discussion:

a) *Parliamentary*: On the national level, individuals and pressure groups bring their claims before their national legislatures. These claims usually relate to the legalisation or outlawing of abortion, the setting up of family planning programmes, the setting up of pronatalist

programmes, tax exemptions for children or vice versa, the regulation, lax or strict, of the sale of contraceptives, and a large range of related matters. Even individuals (e.g. scholars) and organizations outside the national entity often make demands to national legislatures for some kind of action concerning population growth.

On the international level, the United Nations, (especially the General Assembly and the Economic and Social Council) has been the chief arena to which claims are brought for resolution. The main claimants are the very participants in the U.N. decision making process — the member states. But individuals and organizations, private or governmental, have ample opportunity for presenting their claims through the various international conferences on population, social and economic development, etc., sponsored by the U.N. and other organisations.⁵³

b) *Diplomatic.* Decision making on different aspects of population growth goes on in discussions between nation states, either bilaterally or in conferences attended by a substantial number of nation states. This arena, therefore, overlaps partly with the international parliamentary arena.

c) *Adjudicative.* The main adjudicative arenas before which claims are brought for resolution have been the national courts. This is especially true of countries like the U.S.A., in which claimants can appeal to a fundamental constitution in relation to their claims about abortion and other matters affecting population growth.

d) *Executive.* This arena partly overlaps with the diplomatic and the international parliamentary arenas. The main decision makers in this arena are national elites in control of governments, various agencies of the United Nations—FAO, UNESCO, ILO, WHO, UNICEF etc. Under this arena we may also locate the individuals of the world whose decisions as to their family sizes are just as authoritative, controlling and effective as those of any other decision making. Private organizations, national or international, may also be placed under this arena. These include the International Planned Parenthood Federation, the Population Council, and various private foundations.

Base Values Used

The claimants as well as the decision makers have at their disposal all the base values — power, respect, enlightenment, well-being, wealth, skill, affection and rectitude — for the achievement of their objectives.

53. The Twenty-Third American Assembly, for example, called on the U.N. and its Specialized Agencies to expand their activities in the field of population, to develop more effective programmes for the dissemination of their findings, to expand and strengthen their population staff, to provide direct aid to countries wanting assistance in family planning programmes, to encourage and support biological and medical research in human reproduction, and to add information on population growth to educational materials prepared for world distribution by UNESCO. The demands of such an influential national gathering will no doubt help to mould the expectations of national elites, whatever their arenas of interaction.

The essence of the process of authoritative decision is that of the participants (decision makers) marshalling all other base values to create power in support of their demands and objectives. The base values most used thus far are enlightenment, in the form of giving out information about the effects of population growth on the world and national communities; respect, well-being, wealth and skill; — these last four in the form of emphasis on the quality of human life in both developed and developing countries.

Strategies employed by Decision Makers

The main strategies used by decision makers today may be summed up by the words “persuasion”, “aid” and “debate.” Few attempts are being made to resort to military and other coercive measures in relation to population growth. But in the past, such means have been employed. Nazi Germany’s policy towards the Jews, Russia’s early policy towards its middle class farmers and the British massacres of Australian Aborigines are but three instances.⁵⁴ On the individual level, infanticide was practised widely in the past in widely diverse countries such as China and the European countries. Nor is the strategy of killing strictly a thing of the past. The Biafran affair of recent years was an example of one communal group within a national territory destroying the power of another group by direct and indirect killing.

The main strategy used in recent years had been persuasion. In the 30 odd nation states which have adopted some form of population control, the usual strategy is to advertise to their people the desirability of limiting their number of children, and to establish family planning clinics to help them should they want to do so. Nation states convinced of the desirability of limiting population growth also attempt to persuade other states to adopt measures to that end. The former also give out aid in the form of money, technical assistance and advice to the latter. The U.S.A. Agency for International Development, for example, has been expanding its population aid programme to developing countries in recent years.

So far no economic pressure has been brought to bear on countries with fast rates of growth to slow them down. Economic aid, on the other hand, has been given, not only by some developed countries, but also by U.N. agencies and private organizations, to developing countries in the process of instituting or expanding family planning programmes. This is an extremely subtle form of persuasion.

As many population scholars have pointed out, widely differing strategies which can be used to reduce population size have not been used, whereas many incentives are employed to induce people to have children — tax exemption for dependent children is a common example. Abortion, a very effective means of controlling population growth, is

54. These are, of course, instances of deliberate attempts to reduce the numbers of particular groups within national communities in order to achieve a desired power relation within those communities.

still outlawed in many nation states. The bulk of the individuals who decide to limit their family size resort to contraceptives, including the rhythm method.

There are indications that new strategies aside from propaganda are coming into use as means of limiting birth rates. India recently has taken away the tax exemption for dependent children.

Strategies for increasing birth rates are just as varied. Tax exemption is one of them. Marriage loans, free education, better housing for large families, honour for mother of large families, penalizing bachelorhood through special taxes — all these have been employed one time or another.

Clarification of the Fundamental Community Goals re Population Growth

The relevant observational standpoint is that of the scholar who is identified with the future of mankind as a whole rather than with the primacy of any particular group. I advocate, therefore, the goals which promote human dignity. My ultimate concern is with the individual human being; consequently I advocate the maximum shaping and sharing of basic values — of respect (recognition and honour); of well-being (safety, health and comfort), of wealth (control of resources), of skill (opportunity to acquire and exercise capability in vocations, professions and the arts), of affection (intimacy, friendship and loyalty) and rectitude (participation in forming and applying norms of responsible conduct). Article 55 of the United Nations Charter has translated these goals into more concrete terms:—

- a. higher standards of living, full employment, and conditions of economic and social progress and development;
- b. solutions of international economic, social health, and related problems; and international cultural and educational cooperation; and
- c. universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

The application of these abstract, inclusive, postulates to the area of world population growth means that we must have sufficient information on what is the optimum population for each nation state, taking into account the interdependence between nation states, and seek to arrive at this optimum population through means consistent with democratic ideals and human dignity. By optimum population I mean one that will permit efficient exploitation of the resources of the earth, and at the same time that does not place undue strain on those resources.

Other goals have also been propounded throughout history. If we examine the so-called leading nations of the world today, we find three major determinants of national power: the size of a nation's population, the level of its economic development, and the skill and efficiency of its government. No nation can attain first rank without all three. It is not coincidental that the great powers of the world all have popula-

tions of over 100 million. Taking a purely nationalistic view, some national elites have as one of their fundamental goals the increase of their existing population.

Ethnic and other groupings within national boundaries have in many instances vied for power and control over the national governments. The fundamental policies of these groups emphasise fast rates of reproduction, among other things, in order to increase its basis of power.

On the other hand, throughout history, national and racial groups have pursued the policy of decreasing the population of other groups by massacre, expulsion and economic pressures.

I reject all policies which are not directed towards the improvement of the quality of human life. I would propound a policy that would give the world a population most conducive to the maximum shaping and sharing of all basic values, and I advocate means towards the fulfilment of this policy which are consistent with the democratic ideal and human dignity. A policy directed solely at increasing national power through boosting of numbers ignores the basic human right of decent living conditions and adequate educational and career opportunities. Moreover, such a policy, and similar policies, directed at increasing the power of ethnic, religious and other groups, can only add more suspicion, ill-will and tension to an already strained world situation.

The policy I propound does not ignore national power, for a greater shaping and sharing of wealth, enlightenment and well-being, for example, will lead to the greater shaping of national power. And given our present sovereign-states system, one cannot doubt that national power is an important base value for bringing about greater shaping and sharing of values on a global scale—and this is the ultimate aim of my preferred policy: that human beings, whatever their nationality, race or creed, should be free from hunger and the threat of hunger, should have adequate opportunity in education and individual development.

My preferred policy naturally leads to the conclusion that regulation of population growth (where necessary) through means consistent with human dignity is but one of the things that need to be done. Equal emphasis must be placed on economic and social development to raise the standard of living, for population growth regulation is no panacea for poverty, hunger and misery, even though it is a step in the right direction.

Trends of Past Decision concerning Population Growth

The claims set out earlier by reference to the scope values may be classified under the following broad categories by reference to the type of intervention into the population growth process advocated:—

- (1) Claims that the population growth process should be left alone;
- (2) Claims that population growth should be slowed down;

- (3) Claims that population growth should be hastened;
- (4) Claims that the population growth rate should be kept at zero, over a defined period of time.

I shall survey the trend of past decisions concerning two categories of claims: those relating to slowing down population growth, and those relating to hastening population growth. The first category of claims are made in relation to both world and national population. The second category are, however, made mostly with regard to national populations.

It has been said again and again that until this century, the idea of responsible parenthood stressed responsibility for seeing that the family, the clan, the nation, the human race, should continue. The high mortality rate which prevailed meant that people in general strived to produce more children. This simple proposition does not, I think, explain the complicated motivation behind people's desire for children. But it does point out that the decision as to the number of births is made, in a very real sense, by the individuals. The death rate, however, has more often been the direct result of decision on a group level — massacres, prosecutions and starvation policies have been frequently directed by one nation, state or group against the other. Even here, individual decisions in the form of infanticide practices play a significant part.

I shall outline the past trends of decision concerning the two conflicting claims that I have singled out, on four levels: individual, national, international and private organisation. But it should be noted that the four levels do not represent four different processes of decision: all levels of participants interact in one decisional process. My categories are meant only as convenient ways of looking at the end results.

The Individuals

Little is known about the motivations and other factors behind individual decisions as to family size; but there is abundant information on the end results. The birth rates in the more developed countries have declined in recent years and have remained on relatively low levels. In the less developed countries, however, birth rates have remained on a relatively high level. The current figures of the Population Council indicate that the average number of children per family is higher in Africa, Asia and Latin America, than in the U.S.A., Canada, Europe and the U.S.S.R. (see p. 228, above). This shows that individuals in less developed countries generally decide on having more children than their counterparts in the more developed countries.

The average age of marriage in most of the less developed countries is generally lower than that in more developed countries. The early marriage age of Indian peasants is well-known. Ireland, on the other hand, has kept its population growth down to almost negligible proportions, mainly through having a relatively high average age of marriage.

Several developing countries, however, have successfully induced their citizens to reduce their number of children, through intensive propaganda and family-planning programmes. Taiwan, Korea and Singapore are striking examples. Indians and many Latin Americans, as well as Africans, on the other hand, continue to have relatively large families despite official encouragement of family planning, in many instances.

The Conditioning factors affecting past Individual decision

The big question “why do people want more — or less — children?” has never been satisfactorily answered. Incentives provided by the government in the form of tax exemption for children and free education have been thought to induce higher birth rates. Yet these sorts of incentives exist in many more developed as well as less developed countries. Sweden, with one of the best social welfare systems in the world, also has one of its lowest birth rates.

Contrary hypotheses have been advanced to the effect that it is precisely because social welfare is insufficient that people want more children, for children, especially sons, are an insurance for security in one’s old age in countries with no old age pension. This sort of hypothesis receives support from recent reports from mainland China.⁵⁵ It seems that the birth rate in that country has fallen drastically owing to a change in people’s attitudes induced by, among other things, the fact that the elderly in China today rely not on their offspring for support in their old age but on the organisation to which they belong.

Studies of this sort are more useful than wide assertions about the relationship between birth rate and social and economic conditions. Irene Taeuler, for example, wrote that

experience within the East corroborates the hypothesis deducible from western experience: substantial increase in the size of the total population is a correlate of industrialization, but the social and psychological transformations implicit in industrialization result eventually in a lessened rate of reproduction and a slowing growth. Given the technologies and the basic values of the 20th century, both population growth and the ultimate slowing of that growth are predictable consequences of the industrial and urban transformation of agrarian cultures.⁵⁶

But assertions such as these ignore the fact that “industrialization” covers a wide spectrum of societies and attitudes. Moreover, the context in which the shift to lower birth rates occurs differs in some countries. In Europe, the shift took place in an atmosphere of overt and covert institutional hostility toward birth control. The European population learned to limit family size through private decisions made in spite of restrictive legislation (e.g. banning of abortion), religious opposition, and public denunciation of birth control practices in what was generally

55. *New York Times*, 21st April, 1971.

56. Irene Taeuber, “Population Increase and Manpower Utilization in Imperial Japan,” in J. J. Spengler and Otis D. Duncan, ed., *Demographic Analysis* (1956), at p. 737.

a "conspiracy of silence" on sexual matters and human reproduction.⁵⁷ In Japan, on the other hand, the birth rate went down as a result of a very intensive campaign and various legislative aids such as the liberalization of abortion laws.

It seems to me that field studies on extensive scales should be carried out both in countries where the birth rates are high and in countries where the birth rates are low to find out the precise reasons why people have large or small families. Such studies should aid decision makers in assessing the factors conditioning private decisions as to family sizes. Pioneer researches have been done,⁵⁸ but more efforts are needed to enable confident assessments to be made.

The main area for research as to factors which condition individual decisions on family size should be in the social practices and customary norms of the people of different localities. For example, it would seem that in Indian villages, the lack of state-provided security in old age, the need for help in working the fields, the strong desire for sons since only they can perform rituals for the benefit of their deceased parents and since daughters constitute economically more a burden than a help, all tend to encourage large families. Researches into these areas and into industrialized and urbanized societies will give us a better idea of the factors behind different trends of past decision on the individual level.

The National Governments

Throughout history population growth has been identified with national strength and glory, and hence encouraged by national elites. In recent years, however, more and more governments have joined in the call for curbing rapid population growth. Even communist countries which have preached the Marxist doctrine that population growth poses no problem to a communist state have carried out policies aimed at reducing family sizes. China, for example, is encouraging birth control without making an intensive public campaign out of it.⁵⁹ Constant pressure is applied on the young not to marry before 28 for men and 26 for women. Birth control pills and other contraceptives are made available free. Vasectomies for men and sterilization for women can be had at nominal cost in hospitals. Even Russia's laissez-faire policy in population matters includes cheap abortion services.

France and U.S.S.R. are the only nation states with coherent and comprehensive pronatalist population policies today. But going back to recent history, we find a large number of nation states actively encouraging large families. Nazi Germany, for example, propagated

57. Dudley Kirk, "Prospects for Reducing Natality in the Underdeveloped World," in *The Annals of the American Academy of Political and Social Science: World Population*, Jan. 1967.

58. See, e.g., Helene Bergues and Jean Sutter, "Social and psychological factors influencing the control of fertility in Europe" in United Nations, *World Population Conference, 1965*, Vol. II, p. 186.

59. *New York Times*, 21st April 1971.

the glory of motherhood, suppressed abortion, closed down birth-control centres, and restricted the advertisement of contraceptives. Marriage loans were made to induce wives to give up working. Income, property and inheritance taxes were revised to benefit large families and to penalize small ones, while a special tax was imposed on unmarried men and women.⁶⁰

French policy relies on cash allowances of all sorts to large families and the banning of abortion except in cases where it is necessary to save the life of the mother. Sweden has resorted to cash allowances and general social welfare policies to improve economic conditions for those wishing to have more children. Yet at the same time, Sweden has very liberal abortion, sterilization and birth control laws. In this country, it would seem that a pronatalist policy is tempered by regard for the individual's freedom of choice concerning family size.

Most of the other developed countries have no population policies in the strict sense of the word. There are, however policies which conflict with one another with regard to population growth. Tax exemptions, for example, are usually granted for dependent children, but abortion (probably the most effective means of birth control) is banned in many countries, except where the mother's life is endangered. The only coherent population policy in these countries seems to be that pursued by the bulk of their individual citizens—the policy of having small families. The governments in most cases support and encourage this policy by providing advice and services on birth control. In short, the general governmental policies in most developed countries may be summed up as “laissez-faire.”

Leaders of developed countries have in recent years recognized that rapid population growth hinders the social and economic growth of their countries. Their panacea is family planning through contraceptives. Since India is the first developing country to instal an official family planning programme, I shall outline it as an example which has been followed by many developing countries.⁶¹ A Cabinet Committee is set up to decide general policies. A Department of Family Planning deals with planning and policy matters, issue of sanctions and grants, development, budget and co-ordination with state governments, as well as keeping track of progress and implementation of the various aspects of the programme. Regional Health Directors watch and help in the progress of family planning work in the states. The states have their own family planning Cabinet Committees and family planning bureaus. Each of the 335 districts (population 1-3 million) in the states has its own family planning bureau. Under the district bureau are urban and rural family planning centres and sub-centres.

60. Katherine and A. F. K. Organski, *Population and World Power* (1961), pp. 200-203.

61. The following summary relies on K. S. Sundara Rajan, “Family Planning in India: Recent Developments,” in Robert J. Wechman and Albert C. Ovedovitz, ed., *The Crisis in Population*.

Expert committees consisting mainly of doctors, surgeons and gynaecologists are set up to advise the Indian Government on research and evaluation, and technical committees are set up to advise the Government on the Intrauterine contraceptive device (IUD) and sterilization. Universities and research institutions are fully associated with these committees. Training centres are set up to train workers for all aspects of the family planning programme.

All available mass communications media are used to persuade people to resort to family planning. Films are made for exhibition in commercial theatres as well as in mobile publicity vans. The press is carrying stories, commentaries and advertisements, concerning family planning. Hoardings and bus boards are erected all over the country; but not all rural areas have been effectively covered as yet.

The strategy used by the Indian programme is persuasion. Effort is made by the government to enlist the help of voluntary organizations, and full financial assistance is given to them. And yet, at the same time, the government has left unchanged some laws and custom which tend to encourage child-bearing. Paid maternity leave is granted to women government employees. Abortion is illegal unless the life of the mother is endangered by her pregnancy. And inheritance laws incorporating local custom prescribe division of property so as to encourage more children.

Well over half the governments of developing countries (covering nearly half the world's population) now have family planning policies and programmes of varied effectiveness and at various stages. Mostly relying on persuasion, these programmes leave the choice of contraceptive and the decision whether or not to limit family size to the individual. There are suggestions of more coercive strategies—in India it is alleged that undue pressure is used on the very poor.⁶²

But in a number of more or less primitive societies, even today, less humane methods of population control are still practised.⁶³ The Pelly Bay Eskimos, for example, regularly kill off a proportion of their female babies. The Rendile, camel herders in the Kenya highlands, kill off boys born on Wednesdays or born after the eldest son is old enough to be circumcized. The Tikopia of the Pacific used, among other things, infanticide and suicide migration to keep their numbers down.

The Conditioning Factors affecting Past Trends in National decision

Two main conditioning factors moulded past trends in national decision: the desire for greater national power, and the realization of the benefits of slower population growth in national development. So long as the nation state remains the basic unit of value sharing in the

62. Arthur McCormack, *The Population Problem* (1970), p. 176.

63. Mary Douglas, "Population Control in Primitive Groups," in Kenneth C. W. Kammeyer, ed., *Population Studies: Selected Essays and Research*. (1969.)

international community process, and population remains a basis of national power, there will always be national elites who will adopt policies aimed at increasing the population of their territories.

On the other hand, national elites in the less developed countries are realizing gradually that their efforts at promoting economic development are being nullified to some extent by rampant population growth. They seek to slow down population growth through family planning, but at the same time they subsidize child-bearing through tax benefits and other policies such as free schooling and cheap housing for families. They have also, in the main, refrained from employing strategies which may prove more effective than family planning through the prevention of pregnancy. Abortion, for example, is still outlawed in many developing countries. Compulsory sterilization for women who have borne large number of children has not been prescribed.

The explanation of this trend in decision is obvious: only certain methods of population control will be accepted by individuals. The more drastic, and hence more effective methods involve infringement of claims to integrity of the human person, claims firmly rooted in human dignity. The notion that society should play a part in the decent upbringing of children is so firmly rooted in modern morality that governments run the risk of losing popular support if they refuse to follow policies that conform to this notion or claim. Voluntary family planning, together with propaganda campaigns to persuade people to resort to it, avoids controversy arising from conflict of ideals firmly rooted in most societies: the ideal of individual autonomy in the family sphere and the ideal of limiting population growth to promote better living conditions.

The International Arena

In recent years the claim to restricting population growth has gained wide recognition in the international arena. Again the emphasis is on voluntary family planning. Several developed countries are giving assistance to developing countries in the latter's population regulation through voluntary family planning programmes. The U.S. Congress in 1967 amended its Foreign Assistance Act to give the broadest possible authority to the President to provide technical and material assistance, directly and indirectly, to governments or private organizations, bilaterally or through the United Nations agencies, for programmes relating to population growth in friendly developing countries. Foreign aid was earmarked for this purpose. The sum so marked was \$75 million for 1970, and \$100 million in 1971. The Agency for International Development bears the main responsibility for administering this Population Assistance Programme.

As a rule, the developed countries giving financial and technical assistance to developing countries in family planning do not attach any explicit conditions to the assistance. West Germany, however, has made it a condition of her aid that the recipient countries' birth control programmes have a built-in education element stressing sex, love, marriage and family life.

The United Nations General Assembly adopted a resolution on Population growth and economic development (18 December 1962), recognizing that "economic and social development and population policies are closely interrelated," that population growth has recently been especially high in low-income countries and that "it is the responsibility of each government to decide its own policies and to devise its own programmes of action for dealing with the problems of population and economic and social progress." Two World Population Conferences had been held under U.N. auspices, to discuss the problems of population growth and its social and economic repercussions. During the past few years all major U.N. agencies have adopted resolutions giving them authority to undertake action programmes in family planning.

In 1967, the then Secretary-General U Thant instituted a U.N. Fund for Population Activities to support the U.N. programme in population. The United Nations Development Programme (UNDP) now administers this fund. The bulk of this fund has been spent on projects, including the setting up of a field staff of 10 population officers to help developing countries on request to identify and prepare action projects for submission to the Population Fund and other external sources for financing. A number of advisory missions have been sent by the U.N. to help developing countries in their population growth control programmes. These countries are the U.A.R., Algeria, Malaysia and India. The Population Fund has financed these missions, as well as two meetings on population held in Addis Ababa in 1969. UNESCO, WHO and UNICEF have been actively involved in the U.N. missions and meetings.

The WHO has prepared a 3-year programme to introduce family planning services as a component of maternal, maternal-child and general health services in member countries and to train the necessary staff for these purposes. UNESCO has started a number of small projects, and is now developing programmes of studies regarding the effects of population pressures on education systems, and the communication of education and family planning knowledge. Twelve fellowships in demography and in social economic aspects of family planning were established at the U.N. Demographic Training and Research Centre in Bombay. Two other such centres — in Chile and the U.A.R. — are providing basic training facilities. The U.N. is also providing, from regular budgetary sources, for ad hoc training and inservice programmes at the Cairo Centre to help the evaluation and assessment of basic demographic data and characteristics of the populations of a number of countries.

The U.N.'s main obstacle in its effort to help poorer member states in their population growth reduction programmes is money. The Population Fund set up by U Thant began with \$3.7 million (the U.S.A. giving \$3 million). Subsequent appeals to member states have not brought enthusiastic responses.

The World Bank has entered the population and family planning field following the pledge of commitment by its President in 1968. It set up a Population Projects Department late in 1968 to consider future

World Bank financing of specific population control programmes submitted to it by member countries. On 30th Sept. 1968, Bank President Robert McNamara said that "the rapid growth of population is one of the greatest barriers to the economic growth and social well-being of our member states." He proposed three courses of action for the World Bank, as a Development Agency:

First, to let the developing nations know the extent to which rapid population growth slows down their potential development, and that, in consequence, the optimum employment of the world's scarce development funds requires attention to this problem.

Second, to seek opportunities to finance facilities required by member countries to carry out family planning programmes.

Third, to join with others in programmes of research to determine the most effective methods of family planning and of national administration of population control programmes.

There is no doubt that the trend of past decisions in the international arena has been increasing recognition of the effect of population growth on economic and social development. Japan in 1968 joined the U.S.A., the U.K., Canada, Denmark, Norway, Sweden, the Netherlands and West Germany as countries giving aid to family planning programmes in the developing countries. The Development Assistance Committee of the Organization for Economic Cooperation and Development for Economic Assistance by the Developed Nations (OECD) in 1968 set up a Population Unit following recognition by the OECD that population dynamics is an integral part of economic development. The Unit's function is to facilitate the coordination and exchange of information on population and family planning programmes, policies and needs, to organize conferences and seminars and to develop research on special problems of population growth. The Population Commission of the U.N. had long been active in collecting demographic information and designing programmes for aiding population and family planning.

On 10th December, 1966, Heads of Governments of 12 nations presented a signed statement to U.N. Secretary-General U Thant, declaring that too rapid and unplanned population growth threatens the world, seriously hampers efforts to raise living standards and frustrates and jeopardizes the human aspiration to live a better life. This statement (later joined by eighteen other heads of governments) declared four convictions: (1) that the population problem must be recognized as a principal element in long-range national planning; (2) that the great majority of parents desire to have knowledge and the means to plan their families; and that the opportunity to decide the number and spacing of children is a basic human right; (3) that lasting and meaningful peace will depend to a considerable measure upon how the challenge of population growth is met; (4) that the objective of family planning, is the enrichment of human life, not its restriction; that family planning, by assuring greater opportunity to each person, free man to attain his individual dignity and reach his full potential.

The Economic and Social Council had, back in 1965, adopted un-animously a major resolution endorsing a long-range programme prepared by the U.N. Population Commission, and requesting the Secretary-General to provide "advisory services and training on action programmes in the field of population at the request of governments desiring assistance in this field."

The U.N. General Assembly in 1966, soon after the Heads of Governments Declaration on Population, unanimously adopted a second resolution on Population Growth and Economic Development. It approved the resolutions of the ECOSOC, the WHO and UNESCO, and requested the U.N. Secretary-General to pursue the work programme covering training, research, information and advisory services in the field of population, and called on the ECOSOC, the Population Commission, the regional economic commissions and the specialized agencies "to assist, when requested, in further developing and strengthening national and regional facilities for training, research, information and advisory services in the field of population." As noted earlier, the several U.N. bodies responded to this requests with their own resolutions authorizing new or increased action in this field. The UNICEF Executive Board, for example, decided that UNICEF may assist governments, on their requests, to develop family planning programmes as part of a maternal and child-health service by providing vehicles, supplies, equipment and training personnel. It also supplies contraceptives (except between 1967 and April 30, 1970, when it excluded this service).

Factors Conditioning Past Decision on the International Level

As we have seen, the trend of past decision on the international level is towards recognition of the population problem and granting of aid to developing countries by U.N. agencies and some developed countries. All is done on a voluntary basis, and family planning is the focus of aid, whether in the form of information, money or technical assistance. The claims to decreasing or stabilizing population growth have thus received increasing attention, while the claims to hastening population growth have been ostensibly ignored. The most important conditioning factor is, I think, the realization by the developed countries that the gap between them and the less developed countries is widening. Coupled with the realization of the less developed countries themselves that rapid population growth hampers their economic development, this factor leads to a trend of increasing assistance to the less developed from the more developed countries.

No coercive attempt has been used, or even suggested, by national elites, in inducing reduction of population growth in other countries. The reason, I think, is obvious: traditionally, population is an important basis of national power. Any suggestion by one state that the other states should limit or reduce their population sizes is bound to be construed as a malicious strategy to increase that state's power. Developed countries have so far given aid in population programmes only on the request of less developed countries. The U.N. agencies have adopted the same approach since it is the general policy of the U.N. to help only those who ask for help.

Private Organizations

A brief note must be made here of the efforts of private organizations in the field of population control. Most of these organizations are claiming reduction or stabilization of population growth, and they have given financial and technical aid to family planning programmes. The Ford Foundation, for example, has contributed more funds than any other private or governmental agency to population work. Its main areas of activity are: research and training in reproductive biology, establishment and expansion of community population centres in the U.S., and assistance to family planning programmes in developing countries. The International Planned Parenthood Federation operating on grants from the U.S.A., Britain, Sweden, Denmark, Norway and Japan, is assisting the formation and effective operation of family planning associations in all countries, encouraging the training of medical workers and research in biology, demography, sociology and methods of contraception, and promoting and organizing international and regional meetings and conferences on population.

The Roman Catholic Church stands firm in her official condemnation of all means of contraception except the rhythm method, and of abortion and sterilization, both very effective means of reducing population growth rates. The Catholic Church dogma still has considerable influence at government level in the Latin American countries, but recent surveys indicate that even practising Catholics in these countries are using "artificial" means of contraception.⁶⁴

IV. PROJECTION OF PROBABLE FUTURE DEVELOPMENT ON ALL LEVELS OF DECISION MAKING

In developed countries, there may well be greater awareness of the effect of population growth on the ecology and living conditions. There will be increased governmental involvement in family planning. The U.S. Senate for example, adopted a bill on July 14, 1970, establishing centralized responsibility in the Department of Health, Education and Welfare for population/family planning programmes, and authorizing appropriations totalling nearly a billion dollars over five years for research and the delivery of contraceptive services.

Family planning will continue to be the main strategy employed in population control. I do not foresee, in the next ten or twenty years, compulsory measures for sterilization or the like being promulgated in even the developing countries. Voluntary limitation of family sizes — urged on by intensive propaganda campaigns — will be relied on by national elites to slow down their states' population growth rates. In the most underdeveloped parts of the world, however, infanticide, deliberate killing and the like will continue as means of population control.

It is by no means clear that every developing country will accept the limitation of population growth as one aspect of its economic development programme. There have been assertions that Africa and Latin

64. See CELADE (The Latin American Demographic Centre of Santiago de Chile), 1964, reproduced in Goran Ohlin, *Population Control*, (1967), p. 75.

America are too sparsely populated for efficient population growth. And even in developed countries — such as France — pronatalist policies may be continued or instigated, Portugal, for example, is complaining of too slow a population growth rate.

But the widespread recognition of population growth as a factor to be taken into account in national development programmes, and as a legitimate concern of the United Nations as an international organization dedicated, among other things, to the betterment of human living conditions, will continue and become even more widespread. In the Latin American countries, many national elites have long refused to touch the population issue. But in 1967, the OAS sponsored the meeting on Population Policies in Relation to Development in Latin America. The final report of the conference, attended by ministers and other high officials from family-planning, health education, labour and urban and rural development agencies in the member states of the OAS, stated that

Though it cannot be said that the lack of success of many of the plans and programs for economic and social development is due to the magnitude and characteristics of the demographic trends, there is no doubt that much of each country's effort to raise its levels of productivity and employment and improve social conditions is eaten up by being extended to a growing population

This sort of widespread recognition will go on. Already, it seems that China has overcome her early Marxist bias towards population control. Russia's so-called pronatalist policy actually leaves the decision to the individual.

The success of family planning programmes in most developing countries is hard to predict. So far, Singapore, Taiwan, Korea and Hong Kong have had reasonable results with their family planning policies. In the space of five years (1966-70), for example, Singapore has reduced her birth rate from 30 per 1000 to about 21 per 1000. India on the other hand has made little progress, even though it began its family planning programme in 1951. One of the reasons for India's slow progress is that the official propaganda has a hard time getting through to illiterate villagers.

The one issue which will cause some concern in the future is whether coercive means should be used to control population. The old morality which opposed legalizing abortion is now gradually giving way. India will probably liberalize its abortion law soon. The United Kingdom did so in 1967. Singapore did much the same thing in 1969. The old demand for tax exemption for dependent children has been rejected in the recent Indian tax reforms — a uniform exemption is granted, instead, "irrespective of whether the taxpayer is married or has any children." But will any developing country take the next logical step, namely, compulsory sterilization for a woman after her *n*th child? It seems that such a step will not be taken in the near future. Despite the alarmist predictions, the world will probably tide over her food problems for another 25 years or so. More important, as Robert McNamara said in his May 1, 1969 speech at Notre Dame University,

What we must comprehend is this: the population problem will be solved one way or the other. Our only fundamental option is whether it is to be solved rationally and humanely—or irrationally and inhumanely. Are we

to solve it by famines? Are we to solve it by riot, by insurrection, by the violence that desperately starving men can be driven to? Are we to solve it by wars of expansion or aggression? Or are we to solve it rationally, humanely—in accord with man's dignity?

The individual will solve the problem, as his ancestors have done so—by infanticide and all other means which today we in our comfort tend to forget as being things past.

On the international level, once again, I do not foresee developed nations coercing less developed nations into specific population control measures by, for example, attaching conditions relating to population policy to foreign aid. But assistance by developed nations and U.N. agencies will no doubt intensify. The U.N. Population Commission in its 1970 report to the Economic and Social Council recommended that the U.N. implement large-scale technical co-operation programmes in the next five years through (a) expansion of assistance in developing economic, social and other measures in the population field, including family planning; (b) assistance in developing national projects and research needed for policy formulation; (c) the launching of a series of well-balanced and mutually supporting projects at the country and regional levels; (d) increased emphasis on the training of national personnel needed for national population programmes; (e) further strengthening of the U.N. infrastructure to enable it to meet the needs for an expanding programme of technical cooperation.

Appraisal of Past Trends of Decision in the Light of Future Projections and Preferred Goals

The past trends of decision in relation to population growth may be summed up as “voluntary family planning” and “non-compulsory assistance.” I have concentrated on two of the most significant and comprehensive claims: that for increasing population growth and that for reducing population growth.

In appraising the past trends of decision in terms of my preferred goals, several questions need to be answered: in what ways does population growth hamper the efforts towards wider sharing and sharing of values among the world's people? In what ways does it pose a danger to the attainment of human dignity? And, finally, how effective have the past decisions been in dealing with the problem?

In setting out the features of the population growth I have related them to natural resources, economic development, ecology, liberty and peace. It seems to me that we cannot look beyond this century without indulging in fascinating but wild guesses. But confining ourselves to the next quarter of a century or so, we can see that too rapid population growth does hinder the economic development of underdeveloped countries. Given our present world situation, the one chance these countries have of feeding, clothing and educating their people adequately is to develop their human and economic resources. In this sense, population growth does affect the ability of these countries to feed their people.

In the more crowded countries, the problem of popular government is serious. The sort of social organization and governmental inter-

ference demanded by a crowded, complex and urbanized society lends itself to abuses of mass indoctrination and deprivation of a substantial degree of individual liberty. In these countries—especially if they are highly industrialized—air, water and environmental pollution also threatens the quality of human life.

I think that, in terms of my preferred goals, a good case can be made out for some limitation of population growth, without having to go into the alarmist prediction of widespread disasters should the present growth rates continue. But here is where the real problem begins. Information available does not enable us to estimate what sort of growth rate is desirable for the world as a whole, and for the nation states separately. The alarmists have argued that this is as good a reason as any for having a zero population growth rate. Roughly, this means limiting every couple to around 2.14 children.

If that is our goal in population control, then family planning, the most widely used strategy in the decision process concerning population growth, is doomed to failure.⁶⁵ Apart from the inadequacy, from the medical and technical point of view, of many family planning programmes and apart from the failure of some of these programmes to reach large portions of the rural population, these programmes cannot produce a zero population growth rate simply because they are not aimed at such a growth rate. Though mustering whatever persuasion and propaganda technique available, the strategy of family planning leaves the final decision to the individual. It is as much a strategy of the individual decision maker as it is of the national decision maker (the national elite). One of the explicit aims of many of these programmes is to help childless couples to produce children. No matter how cheap the contraceptives, how convenient they are and how liberal the abortion and sterilization laws, family planning programmes as we know them may reduce the population growth rate (since surveys indicate that even the bulk of the people in developing countries want less children than they have), but they will not stop population growth.

Recommendations

Since I find it impossible on existing information to decide what population growth rate will best contribute towards my goal of maximizing the sharing of values and human dignity, my first recommendation, obviously, is for more intensive research to be done in this area. The United Nations should be made the coordinating centre of all research efforts; it should be given sufficient funds—from all member states, but particularly from the richer countries—for the purpose. Once we have sufficient information on what the optimum world population is, the next step is to decide what the optimum population for separate nation states are.

Overpopulation in one area and underpopulation in another can be adjusted partly by migration. This will necessitate a drastic change

65. See Kingsley Davis, "Population Policy: Will Current Programs Succeed?" *158 Science*, pp. 730-39.

of perspectives on the part of most nation elites. Should this be impossible within the next 25 years or so, the only alternative is for as many nation states as possible to pool their resources into intensive development of the overpopulated area to make life there as tolerable as possible.

Population programmes should be devised for specific cultural areas of the world aimed at a population growth rate most conducive to the exploitation and sharing of those areas' resources; and the attainment of human dignity. The world being an overall interacting process, such programmes cannot be devised in isolation. They should be devised in the context of the global community process.

Population control, however, is not, and cannot be, the answer to the quest for my preferred goals. The quality of human life is not raised by limiting its quantity alone. Social and economic development, especially of underdeveloped areas, must go on at an ever-increasing pace side by side with population programmes, so that values may be shaped and shared to the maximum possible extent.

So far I have suspended judgment on voluntary family planning as a strategy towards the achievement of a desired population growth rate. Ultimately, I suppose I shall have to face the question: "What if the world one day needs a zero population growth rate to survive, and voluntary family planning cannot achieve that rate?" The alternative strategy would be to adopt the catalogue of horrors referred to by Kingsley Davis, or simply by killing every child born on Wednesday, or Thursday. Or, if the historical process repeats itself, man will find a way through wars, infant killing and other less savoury means of limiting population, should the world reach its resources limit.

I cannot look as far as that. I can only affirm my faith in human dignity, and voluntary family planning using contraceptives, or even sterilization, as the individual chooses, seems to me the strategy that is most consistent with this goal of mine. At the moment we do not know exactly why people want large or small families. With more information on this point, family planning programmes may be so designed as to attract more people to limit their number of children. For example, the lack of a safe, cheap, reliable, simple and acceptable contraceptive hindered India's programme in its early years. This sort of defect can, however, be remedied. But what if it is the lack of social security that leads people to have more children? Countries in which social welfare systems are inadequate are as a rule countries in which people still have relatively large families.

This brings me on to the recent proposals of Professor Richard A. Falk.⁶⁶

He argued — convincingly, I think — that the earth is threatened by first, the war system, "a set of social and political relationships in which the members of a social group expect that violence is likely to be used to settle conflicts with other, foreign groups and with hostile

66. See Richard A. Falk, *This Endangered Planet*. (1971.)

factions within their own midst," second, overpopulation, third, the depletion through frivolous overuse and waste of natural resources and, fourth, the deterioration of the entire environment. He stated that a system of sovereign states cannot solve the problems created by this fourfold threat, for "the problems of an endangered planet... call for central planning and coordination, for the sort of effective implementation that both signals and enables a real shift in patterns of behaviour. Neither by disposition, habit, nor organization is a world of sovereign states constituted to deal successfully with the agenda of the endangered planet." He thought that we need a strategy that will transform human attitudes and institutions so as to make it politically possible to bring a new system of world order into being. Perhaps here lies the answer to the question of what should be done should the earth reach the point where it cannot support any but a zero rate of population growth. For the present, however, it seems that we can only intensify efforts at limiting the number of births through voluntary family planning, while at the same time cut down as many of the existing incentives (such as tax exemption for children) for fertility as our moral convictions would permit.

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