Naval War College Review

Volume 21 Number 1 *January*

Article 5

1968

The Place of Population Control in U.S. Foreign Policy

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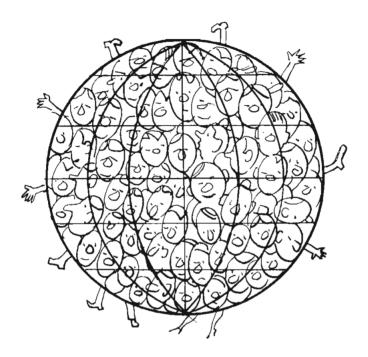
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Somers, David W. Jr. (1968) "The Place of Population Control in U.S. Foreign Policy," Naval War College Review: Vol. 21: No. 1, Article 5.

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THE PLACE OF POPULATION CONTROL IN U.S. FOREIGN POLICY

A thesis prepared by Lieutenant Commander David W. Somers, Jr., U.S. Navy School of Naval Command and Staff Class of 1967

INTRODUCTION

The purpose of this paper is to determine the propriety of incorporating an active program of birth control into U.S. foreign policy toward friendly, neutral, or uncommitted nations receiving U.S. aid for economic development. Application of such a policy is only under question in regard to those less developed nations whose rate of

population growth is an obstacle to their development. The nature of such a program is outside the scope of this paper.

The investigation will begin with a review of what the world population state and trends are and the causes thereof. Next, the impact of the situation will be evaluated specifically in relationship to world food production

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prospects and effect on economic development. The meaning of the trends vis-a-vis the aims and interests of the United States will come under consideration. A chapter will be devoted to ascertaining the feasibility of controlling population size and growth through birth control. This will be followed by a determination of the position of the U.S. Government on federal support of family planning and how accurately that position reflects the voters' feelings.

The final chapter will express the conclusions reached and will offer recommendations considered appropriate.

I — TRENDS IN WORLD POPULATION

Summary of Total World Growth. Although demographers, economists, and laymen may be divided on the impact of the present world population trends, there can be little disagreement on what these trends are. World population growth since the advent of the industiral age has assumed such proportion as to incur the term "explosion" rather than "growth" to be used in describing what has taken place. To illustrate rate of growth, as well as to show absolute levels at a given point in time, let us look at world population, past and projected, in terms of the varying time spans required for each increase of one billion people.

1st billion	several hundred	
	thousand years	(1810)
2nd billion	115 years	(1925)
3rd billion	35 years	(1960)
4th billion	20 years	(1980)
5th billion	13 years	(1993)

Projecting the rate illustrated ahead 250 years results in a population figure of 135 billion — or one person for each square meter of land. Attaining https://digital-commons.usnwc.edu/nwc-review/vol21/iss1/5

this situation is, of course, unlikely, but the projection does serve to emphasize the dramatic increase in man's rate of growth.

The broad reason for the above situation is simple - the birth rate is exceeding the death rate. While some changes in birth rates were also involved, the predominant factor in the great acceleration of population growth, first evident in Europe and European settlement areas about 1800, was the decline in the death rate. This upset in the birth rate/death rate equilibrium has been attributed to three factors. The first was the general increase in living standards resulting from technological advances, increased productivity, and the emergence of relatively powerful and stable central governments permitting longer periods of peace and tranquillity. The United States is an example of those nations which in the 19th and 20th centuries experienced this improvement. comparison between standard of living, using per capita income as a measure, and survivorship, using life expectancy as a measure, is shown in Table I.

BIOGRAPHIC SUMMARY



Lieutenant Commander David W. Somers, Jr., U.S. Navy, holds a B.S. in Marketing/Economics from the University of Maryland. He has served aboard U.S.S. Henrico (APA.45), U.S.S. Spoonbill (MSC-202), U.S.S.

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TABLE I

PER CAPITA INCOME AND LIFE EXPECTANCY, UNITED STATES, 1799-1945

Per Capita Income ^a	Life Expectancy
\$ 439	36.0
244	40.9
501	49.0
1,439	65.8
	\$ 439 244 501

^aAdjusted to cost of living (1929=100)

Source: W.S. and E.S. Woytinsky, World Population and Production (Baltimore: Lord Baltimore Press, 1953), p. 189, 383.

The second major factor was great progress in environmental sanitation and improved personal hygiene contributing to reduction of parasitic, infectious, and contagious diseases. The third was, of course, the great contribution of modern medicine enhanced by recent progress in chemotherapy and insecticides.2 The impact of the drop in the death rate prevailed over the onset of fertility declines which saw birth rates diminish in the United States, Northern and Western Europe beginning in the late 18th century and then, in the beginning of the present century, fall in Southern and Eastern Europe.3

Comparisons: Developed vs.
Less-Developed Countries. Prior to
World War II the spectacular decrease
in the death rate of economically advanced nations had not been shared
fully by most of the population of the
world. Since then a variety of factors,
including the advent of the United Nations and the specialized agencies with
dissemination of chemotherapy and insecticides, has brought about mortality
declines more dramatic in less develPublished by U.S. Naval War College Digital Commons, 1968

oped areas than those experienced in the industrialized regions.⁴

Two significant distinctions have made the impact of the relatively recent death rate drop an altogether different matter for the less-developed areas than for the United States. Europe, and other technologically advanced lands. First, when the death rate diminished in the (now) developed regions it did so gradually, permitting fertility declines to in part offset it. Not so in the developing nations where the change came rapidly. Second, at the time the death rate decline began in Europe and European settlements, there existed sufficient space and resources to prevent the resulting population growth from becoming a great problem. In addition, the rate of economic expansion in those areas accommodated population growth while simultaneously allowing an improvement in living standards. Conversely, for the underdeveloped countries the death rate decline came relatively abruptly and, for many nations, at a time when an overpopulation problem was already in existence. As for the standard of living, many underdeveloped lands experiencing severe population growth have been strained to hold their own. The pattern of world population growth that has resulted can be seen in Table II.

Of more concern than the pattern of growth to date is its projection ahead which shows the continued trend toward a significant change in proportion of population in the developed and underdeveloped developing nations. By continent, the 20th century world population breakdown is as shown in Table III.

It can be seen that the greatest increase in numbers and percentage is expected to occur in the areas with the lesser economic capability to support it.

Urbanization. Another important characteristic of world population dynamics is urbanization - the movement from the country to the city. Since the beginnings of civilization the

rule has been that for urbanization to advance beyond a rudimentary level certain conditions had to exist. Firstly, an increase in food production, substantial enough to permit the release of sizable and increasing numbers of people to engage in nonagricultural industries, was required. Also, trade in services as well as goods had to expand and diversify, since trade is the means of providing an urban population with sustenance. Finally, a centralization of political power was required to establish standards of weights and measures. dependable currency, etc. All of this had been in the making in 17th and 18th-century Europe, and during the hundred years beginning at about 1750 the urban population in Europe doubled and tripled.5 Today the trend continues, and using the community size level of 20,000 as the dividing criterion, Table IV expresses the recent urbanization movements.

TABLE II

CHANGES IN WORLD POPULATION FROM 1800 TO 2000

Millions

Year	1800	1850	1900	1960	2000
Developed Countries ^a	210(22%)	295(24%)	510(31%)	854(29%)	1,266(21%)
Developing Countries ^b	750(78%)	945(76%)	1,140(69%)	2,136(71%)	4,699(79%)
Total (100%)	960	1,240	1,650	2,990	5,965

^aEurope, Occania, United States and Canada, and U.S.S.R.

Source: "World Population Estimates, 1750-2000," U.N. Doc. WCP/WP/289, Table 5.

bAfrica, Asia (excluding U.S.S.R.), and Latin America.

TABLE III

ESTIMATED POPULATION AND POPULATION PROJECTED (IN MILLIONS) OF CONTINENTS AND THE WORLD

Year	World	Africa	North America	Latin America	Asia	Europe (incl. U.S.S.R.)	Oceania
1900	1,550	120	81	63	857	423	6
1925	1,907	147	126	99	1,020	505	10
1950	2,497	199	168	163	1,380	574	13
1975	3,828	303	240	303	2,210	751	21
2000	6,267	517	312	592	3,870	947	29

Source: "The Future Growth of World Population," U.N. Doc. ST/SOA/SER.A/28, 1958, Table 5.

As Table IV illustrates, the shift to urban areas is substantially greater in the developing regions. The question arises as to whether this phenomenon is a repeat of what occurred in Europe over a century ago. This is difficult to determine, but it can be safely said that no consistent relationship can be seen with measures of economic change such as gains in agricultural productivity, capital accumulation, and development of manufacturing industry. It would appear, rather, that urbanization has begun in a great many, if not all, developing countries well before any appreciable economic growth has occurred.6

Age Distribution. Another facet of population which is sometimes not given sufficient emphasis is its age distribution, i.e., how many persons there are at each age. A "young" population is one that contains a large proportion of young persons and has a low average age. Conversely, an "old" population has a high average age and a large proportion of old people. The manner in which the age distribution of a population is determined contains some

surprising aspects. It is not difficult to understand that a birth rate of 25 per 1,000 and a death rate of 15 per 1,000 yields the same growth as does a birth rate of 20 per 1,000 and a death rate of 10 per 1,000. The important difference between the two is the effect on age distribution. It would seem that when the death rate is reduced and people live longer, on the average, an older population results. Paradoxically. this is not the effect. The reduction of the death rate actually serves to lower the average age. The reason that the reduced death rates, which prolong man's life, make the population younger is that typical improvements in health and medicine produce the greatest increases in survivorship among the young rather than the old.7

While the effect of mortality rate reduction is surprising, the tendency for persons at all ages to share some of the increased chances of survival has made this effect small, and the fertility rate far outweighs it. Whether a national population is young or old is mainly determined by the number of children women bear. When they bear many, the population is young; when

TABLE IV

THE PROCESS OF URBANIZATION IN THE WORLD FROM 1950 to 1960

Region	Level of Urbanization Region (percent of total population		
	1950	1960	
World Total	21	25	17
Developed Regions	37	41	10
North America	43	46	6
Europe	37	40	8
North-Western	52	54	3
Central	37	40	9
Southern	23	27	16
U.S.S.R.	31	36	17
Occania	46	53	15
Australia & N. Z.	58	65	12
Developing Regions	14	18	28
Africa	10	13	37
Asia (exc. China)	14	18	26
China	10	15	50
Latin America	25	32	28
Argentina, Chile, Urugua	ay 47	56	19
Remainder of Latin Am	•	28	33

Source: "World Survey of Urban and Rural Population Growth," U.N. Doc. E/CN.9/187, 8 Mar. 1965, Table 3.

they bear few, the population is old.⁸ Hence, for areas having identical growth rates (same differential between births and deaths per 1,000) the one with the higher birth rate will have a larger proportion of young people. This is illustrated in Table V.

II — IMPACT OF WORLD POPULATION TRENDS

World Population and the United States. What is taking place in world population has been illustrated with only a hint of its implications. Since population trends are only im-

portant in terms of their impact on the world and its people, a hard look must be taken at what the recent unprecedented demographic and ecologie phenomena mean. Technology has compressed our world to the point that while population trends may vary in form and degree within national and area boundaries their impact will not likely be completely contained by these boundaries. Admittedly, the ehief concern for the American about population dynamies is its effect on his country, but even the most nationalistic observer must appreciate the interdependency of nations. The direction

TABLE V

AGE COMPOSITION OF SELECTED POPULATIONS (PERCENT OF TOTAL POPULATION)

Age Groups	Birth Rate Type				
(years)	Very High	Moderately High	Moderately Low	Very Low	
0-14	43.1	38.2	30.9	24.0	
15-64	54.0	58.0	61.2	64.8	
65 and over	2.9	3.8	7.9	11.2	

Source: "Provisional Report on World Population Prospects, as Assessed in 1963," U.N. Doc. ST/SOA/SER.R/17, Appendix B, Table 1.

toward increasing politico-cconomic ties among governments is irreversible, and when population trends become severely problematical in any area the United States cannot hope to remain completely unaffected. Further, it is obvious that the American public is not purely nationalistic, just like it is not purely altruistic in its concern over world problems, whatever they may be. Post-World War II U.S. foreign aid policies, by their character and endurance, are a clear indication that the voting public is willing to devote a portion of the world's largest gross national product (GNP) to help the rest of the world with its social and economic problems. From fiscal years 1956 through 1965 appropriations for economic assistance totaled nearly \$20 billion, not including military assistance or Food for Peace shipments under Public Law 480 which exceeded \$5 billion in value for the same period.2 The trend for both is generally upward, and the annual cost of both to each man, woman, and child has been approximately \$15. This willingness to assist is likely to continue and even assume a character of eagerness should

the severity of the problems be great enough. Therefore, if world population trends are presently, or are likely to become, a world problem, it follows that they are of concern to the American citizenry and that their solution may properly have a place in U.S. foreign policy.

World Population as a Problem.

The point at which numbers of people become a problem varies with the viewpoint; it is largely influenced by the effect of a given population situation on the viewer. Even assuming identical knowledge on population and its trends, two persons will differ widely in what it portends as a problem and wider still on what, if auything, should be done about it. We are not concerned here with the view of the manufacturer of children's clothing who daily gives thanks for the baby boom and fails to understand why everyone does not wish to reside in Manhattan. Nor do we particularly give weight to the opinion of the panicked recluse who envisions millions of Chinese spilling into his front yard momentarily. The objective view of the qualified cosmopolite based

on accurate data and extensive study is what is needed to help see exactly what the present 2.1 percent annual increase really means.

Food Supply. That the individual requires certain minimums of income, leisure time, recreation space, and social development may be subject to controversy, but that certain biological needs must be fulfilled cannot be refuted. To survive, man must have Thomas Malthus, over a nutrition. century ago, feared that the world's population would exceed its food supply. Technological advances with agricultural application appeared to make a mockery of his gloomy forecast as world food production soared along with population growth. Where, then, is the problem? Is it not correct that "science will find a way?" What about placing more land under cultivation, and what about more intensive utilization of land presently in use, thereby increasing total yield? What about the vast feeding potential of unconventional sources? All of the above guestions have relevance, and doubtless such avenues will be utilized in varying degrees in feeding future larger populations, but great care must be taken that in analyzing the world's food production capability we ask the right questions, for it is difficult enough to get the right answers when the right questions are asked. When the wrong questions are asked it is next to impossible to get the right answers. For example, the question of how much land can be brought under cultivation may give a falsely encouraging answer. This question is only relevant when we add, "At what cost?" Similarly, it is unrealistic to ask, "What is the potential for expanding food output?" The question, "What are the prospects for increasing food output?" is the only one that could receive an answer of real value.

Problem of the Less-Developed Regions. Perhaps any question that concerns itself with world production of food as a whole is a poor one, for there is a sharp division in food production trends between the two economic regions of the world, and transfer of excesses from developed to less-developed areas is not without limit. Table VI illustrates this division in the production of grain, which accounts for 53 percent of man's supply of food energy when consumed directly and a large part of the remainder through indirect consumption.

To those who see a solution to the "poor" world's feeding problem in the belief that the less-developed regions have yet to undergo a development agriculturally like that experienced by the now developed countries at comparable stages of development, let there be a word of caution. The situations are not nearly parallel for the following reasons:

- (1) The area of cropland per capita does not nearly approach what the now advanced countries had, and it is shrinking more rapidly because of the population growth.
- (2) The rate of population growth in these areas is far greater than that which existed in the developed countries at a comparable development stage, and the emigration opportunity which served to relieve the pressure of population excesses in the last century is no longer there.⁸

Failure to appreciate the above reasons tends to obscure the magnitude of the problem. That the developing nations are not, in fact, experiencing a repeat of the rich world's success story agriculturally is supported by the findings of the Food and Agricultural Organization of the United Nations (FAO) which reports an actual decline over the last 7 years in per capita food products production for Latin America,

TABLE VI

INDEXES OF GRAIN PRODUCTION, AREA AND YIELD, POPULATION, AND OUTPUT PER PERSON BY ECONOMIC REGIONS OF THE WORLD, 1934-38, 1948-52, AND 1960

Region	Quantity	1934-38	1948-52	1960
Developed	Grain production	100	112	151
	Area in grain	100	96	100
	Yield per acre	100	116	151
	Population Population	100	106	120
	Output per person	100	106	126
Less-Developed	Grain production	100	106	142
	Area in grain	100	118	132
	Yield per acre	100	90	108
	Population	100	123	146
	Output per person	100	86	97

Source: Lester R. Brown, "World Population and Food Supplies, 1980," American Society of Agronomy, February 1965, p. 5.

the Far East, Middle East, and Africa.⁴ For most of the countries involved the foreign exchange with which to purchase food imports is scarce, and "at least the major part of the increased food consumption needed in these countries must come from the development of their own production."⁵

Because the opportunity to achieve a situation of more cropland per person is limited simply because the divisor increases as fast as the dividend. it would appear that effort to increase food production per capita in lessdeveloped areas would take the form of attempts at increasing yields per acre. Table VI illustrated that for grain the difference between developed and less developed lay essentially in yield per acre. Further, it would seem that since there exists such a great backlog of agricultural technology accumulated in the developed regions, near immediate gains in yield per acre

would be forthcoming in the lessdeveloped lands and thereby reduce or even remove the latter's feeding prob-The answer to this apparent paradox attests to the complexity of the problem. Less-developed economies, almost by definition, are not well prepared to utilize this technology which is theirs for the asking. Their agricultural takeoff is blocked by low literacy levels inhibiting dissemination of knowledge and research results, by low income levels which limit capital available, by absence of market orientation, and frequently by absence of a value orientation compatible with the required progress. In short, the whole process of modernization and economic development is missing, and there is no apparent substitute for it. Figure 1 shows the relationship between literacy levels and yield per acre change performance.

Figure 1 would indicate that sharp

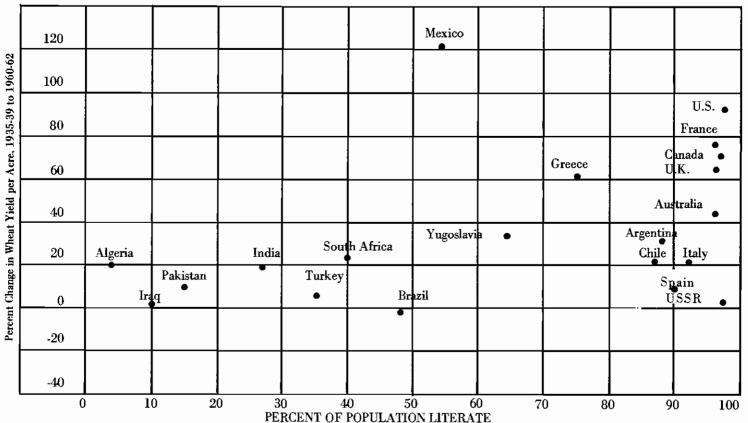
yield increases are difficult to achieve in a low literacy region. Similarly, Figure 2 indicates that the higher per capita income associated with economic development is related to large yield jumps.

Help from the Developed Regions. Until World War II the lessdeveloped regions of Asia, Africa, and Latin America were all net exporters of grain. The reverse of this flow. which began in the mid-1940's, only amounted to four million tons per year between 1948 and 1952 but grew steadily to an estimated 25 million tons in 1964.⁶ As the population of the lessdeveloped world began to exceed the capacity to feed itself, the sharply increased yields per acre in the technologically advanced world took up the slack, largely through concessionary shipments, to the point that for many nations, such as India, a state of dependence on imported grain exists. Currently, however, there have been indications of limits not only in the willingness to provide more food to such insatiable, but pauper, consumers as India, but also of limit in continued ability to provide. The attitude in regard to the former is perhaps best revealed by the response, or lack of it, to the efforts of the Johnson Administration to enlist other nations to share the burden of India's food deficit. In April 1966 Secretary of State Rusk informed Congress that 113 nations had been requested to help India with grain, fertilizer, or finances with which to buy grain on the world market. As the year drew to a close only 23 nations had promised some such form of help.⁷ Concerning capability limits, President Johnson expressed concern at the signing of the Food for Freedom program in saying, "Even the food-producing capability of U.S. farmers - unmatched in history - cannot suffice indefinitely in a world that must feed a million new human beings each week." Doubtless he was concerned over the dwindling of the 1.4 billion bushel U.S. wheat stockpile of 1961 to less than one-half that amount a short 5 years later. 9

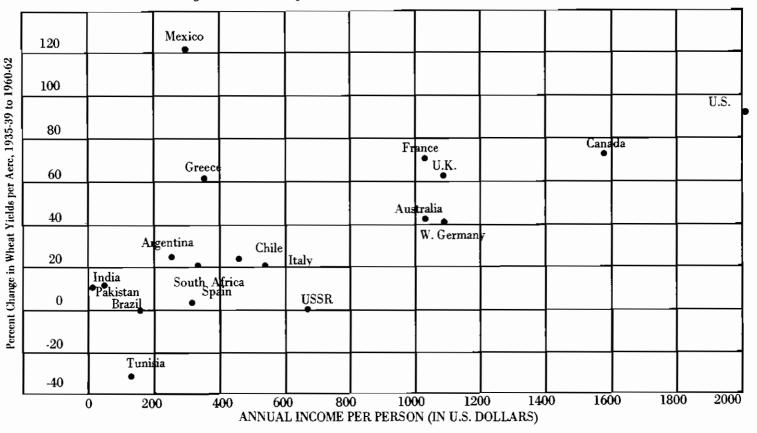
Realistic Prospects. There is wide and expert opinion that no serious technological obstacles prevent feeding world population as it grows. One study has concluded that it is theoretically possible to feed seven to eight billion people by wider application of present technology without resorting to unconventional methods (which are prohibitively expensive in most cases). Unfortunately, the time required to reach this state of agricultural productivity is estimated by this 1957 study to be 75 to 100 years. U.N. population projections depict a world of 8 billion a minimum of 25-50 years before the passage of that time frame. The point, however, is that present food production effort, even on a world-wide basis, falls so far short of near-future requirements. Even to feed 4-5 million people on an adequate diet would require a world agricultural productivity level almost double the 1956 average. To do this, an investment of \$500 billion and 30 to 50 years' time were estimated required.10 In a more recent study, after pointing out that of the present world population up to half already suffer from hunger and that 10 to 15 percent are clearly undernourished, the FAO stated that the total food supplies required by developing countries must be increased fourfold by the end of this century simply to provide a nntritionally adequate hut simple diet for all their increased millions of that time.11

As for meeting food needs through unconventional sources, the situation is one of promise mixed with obstacles.

Somers: The Place of Population Control in U.S. Foreign Policy
Figure 1—Relationship Between Literacy Levels and Yield-raising Capabilities



Source: U.S. Department of Agriculture, Economic Research Service, NEG. ERS 3288-64(10) as illustrated in Brown, p. 18.



Source: U.S. Department of Agriculture, Economic Research Service, NEG. ERS 3287-64(10) as reproduced in Brown, p. 21.

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For example, fishmeal, the result of processing the whole fish into a protein concentrate, has been produced and sold for animal feed for as little as 5 cents per pound. However, for human consumption the handling of fish and maintenance of sanitary measures and precautions required adds greatly to the cost. The resulting product passes the present price of existing protein foods such as powdered skim milk. Attempts to use algae, green leaves, grass, and hacteria as protein sources for human consumption have met with limited success because of poor palatability. Wholly synthetic diets are prohibitively expensive and impalatable for ordinary use. Only oilseed meals (well-processed cotton. soybean, or other oilseed flour mixed with ground corn, wheat, sorghum, or other cereal) have experienced significant success but, by themselves, are not nearly the full solution to the increasing food necd.12

Conclusions About Food vs. Population Prospects. An examination has revealed sharp differences hetween developed and less-developed regions in capacity to feed their respective peoples. While the total food production in post-World War II years has risen for both areas, the developed regions continue to produce beyond their own needs because of application of advanced technology and limited population growth. Meanwhile, the lessdeveloped regions, poorly prepared to implement the technology which could give them greater yield per acre, have witnessed their food requirement in the form of population growth outstrip their producing capacity. The result has been increasing transfer of food to the less-developed regions which, by definition, have limited capacity to cover its cost. Studies indicate that the world theoretically has the capability to feed the doubled population projected for the end of the century, but a degree of coordination and shift of resources heretofore unprecedented is required to do it. With the United States and other surplus food producers already feeling the burden of the hunger of the growing "poor" world more each year. the question between now and A.D. 2000 is will the need be met and after A.D. 2000 can the need be met? In the words of Binay R. Sen, head of the Food and Agriculture Organization of the United Nations: "The next 35 years, until the end of the century, will be, as I have said, a most critical period in man's history. Either we take the fullest measures both to raise productivity and to stabilize population growth, or we will face disaster of unprecedented magnitude." 13

Economic Development. mately related to the agricultural productivity of a nation is its general economic development. That the inferiority of the less-developed regions in agricultural yields is paralleled by poor performance in most other sectors of the economy is no coincidence. The key to the productivity so sorely needed is technology. This technology and the ability to exploit it require capital investment, that is, using what is left over after the primary necessities of the population have been attended to for equipment, health, and advanced education. What, then, is the connection between population size and trend and savings available for capital investment? Large population size or high density may have undesirable attributes as a subway trip in New York at rush hour will attest to, but crowding is not necessarily synonymous with poverty. Were this the case, the coastal megalopolis between Boston and Washington, D.C., with its 2,000 persons per mile density, could not enjoy a high

median family income. Neither could the highly populated countries of Western Europe boast the generally high standard of living that exists there. Rather, it is the rate of population growth that is the major impediment to higher per capita income and the accompanying higher marginal propensity to save resulting in more capital investment. This must be explained in the light of capital/output ratio which means that for an investment of, for example, three units of capital, an annual addition of one unit would be made to the national income. This would represent a 3 to 1 marginal capital/output ratio which is a reasonable figure for a developing nation.14 In such a situation a developing coonomy with great effort, because so much of its production is used up in primary necessities, may be able to save 9 percent of this income for capital investment. This should result in an increase of 3 percent in the following year's national income. But if this economy's population is also growing at 3 percent, then there is no improvement in per capita income. On the other hand, could this same nation suddenly reduce its birth rate so that it equalled the death rate, i.e., achieve population stability, the entire 3 percent increase would be felt on a per capita basis and continued growth at this rate could double the national income and per capita income in 23 years.

Age Distribution Effect. Table V of the previous chapter clearly illustrated that the higher the birth rate of a country the greater that portion of its population in the young dependents category, often exceeding 40 percent of the total. The greater the number of children the greater the demands on the economy for their feeding, clothing, health, and schools. As quantity requirements of these social and eco-

nomic needs increase, their quality is generally sacrificed in some degree, further injuring national development. It is emphasized that this dependent sector of the population is a "consuming only" group. Not only is it too young to make substantial contribution to the economy as labor, but it draws on the female labor source in the form of childbirth and childcare requirements.

Conclusions about Economic Development/Population Relationship. As with agricultural development the key to general economic development is technology and the ability to exploit it. Many developing nations have been able to eke out savings from their national incomes for the capital investment required to create and use technology. However, the resulting gains have not been felt in per capita income growth because population increases have approached, equalled, and sometimes exceeded the national income gains. A reduction of the high birth rate common to most developing regions would reduce the dependency load without influencing the size of the labor force for years, giving more investment capital per laborer and in toto. It is reasonable to presume a resulting higher per capita income — the prerequisite to the greater savings required for economic takeoff.

Effect on World Unrest. That tranquillity and political stability can long exist in a region where a significant degree of starvation exists or looms imminent is unlikely. Food riots threatening the Government in India bear this out as they occur with greater frequency. The influence of poverty, chronic but not severe enough to deny maintenance of minimum nutritional levels, may, however, not be fully

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agreed upon. There are those who would argue that poverty is only relative to the age and is judged within a man's own community hy the standards of his own time. They conclude that the Asian peasant, therefore, is not discontented with spending all his waking hours in the struggle for food and shelter. If this argument ever had validity it has lost it in recent times. The placidity of the poor was permitted by isolation and absence of exposure to the larger world. Modern communication has broadened the awareness of rich and poor alike, and they can no longer ignore each other. Radio, television, and contact with teachers of more cosmopolitan backgrounds expose millions for the first time to a world in which conditions once considered unalterable can clearly be changed.15 The term "rising expectations" has been much used but is difficult to improve upon in describing the resulting effect on the peasant who may still be poor, but is no longer blind. The situation is one that favors the germination of communism in the rural area where insurgency is most difficult to counter.

As mentioned previously, unlike economically advanced nations wherein urbanization follows a rise in the level of living, less-developed countries see urbanization begin before appreciable economic growth. Often urban unemployment is the counterpart of the rural unemployment that drives men who are often unskilled and illiterate to the city. This general movement is often premature and results in an excessive number of urban unemployed living in squalor. Such areas become breeding grounds for crime, violence, and political unrest as people who previously knew nothing but poverty now become aware of their relatively deprived situation. Their level of sophistication is just high enough to permit them to develop the conviction that

something immediate can be done to effect rapid improvement. Democracy is difficult to maintain in such circumstances as no government can come into office without promising realization of these rising expectations, and none can remain in power without fulfilling them. When old aristocracy resists change, violent overthrow is the path often taken. Meanwhile, the U.S.S.R. and/or the Chinese People's Republic is ever attempting to capitalize on such unrest. Soviet Russia points up her impressive economic gains without mention of the terrible human costs involved or the fact that she does not share the problems of population pressure. Communist China, on the other hand, would have other nations believe that her "superior" system allows maintenance of the world's largest population with little problem. Marxist ideological contradictions make an overt birth control program awkward for the CPR, but definite, if disguised, natality control effort has been underway ever since it became apparent that her population continued to outleap her meager economic progress.16 The present uprisings do not support the position that her political stability is not adversely affected by her population pressures.

The overpopulation pressures of the less developed world would constitute a less direct problem for the developed world if the political unrest they create caused only intranational violence. Unfortunately, it is not uncommon for a government with economic problems aggravated by population pressures to employ militant nationalism and take its people's minds off internal problems by action against other nations. Such foreign adventures may result in a war in which participation does not remain limited to a pair of poor nations.

Summary. The current population trends in the less-developed regions of

the world are generally having the following adverse effects:

- 1. These areas are losing the ability to feed themselves because population increases have more than offset increases in total domestic food production. Moreover, these regions are not productive enough to create the wealth with which to pay for imported food. As a result, the quantity of food grants required from surplus producers, principally the United States. approaches the limits of willingness and eventually, capability to provide. Even the most optimistic studies of future world food producing prospects warn that a further widening of the food gap, to the point of mass starvation, is likely unless a sharp drop in birth rates is achieved quickly.
- 2. The general economic development of these regions is being stalled because population growth allows no improvement in per capita incomes. The large percentage of dependent children that accompanies high birth rates is compounding the problem of capital accumulation.
- 3. Urbanization and the breakdown of rural isolation through modern communication has given the poor an awareness of their poverty. The failure of these developing economics to meet the resulting unrealistic "rising expectations" has made for political unrest which has the capability of growing into a world peace threat.

The United States provides foreign aid in all forms (grants; hard and soft loans, in kind; technical assistance) in amounts greater by a wide margin than those provided by any other nation. The objective of this aid, by definition, is to promote economic development of the recipients, both West-oriented and neutral or uncommitted. This objective, obviously shared by the recipient nations themselves, is being foiled in no small part by the excessive rate of

population growth in almost all of these nations. Continuation of the present population trends can be expected to deny the less-developed countries the growth needed in per capita income to escape the poverty and hunger that means unrest, threat of war, and increased demands on the U.S. ceonomy.

III — THE PROSPECTS FOR CONTROL

General. Any discussion, however convincing, illustrating the desirability or necessity of reducing population growth is only academic unless a course of action to accomplish the reduction is possible. Since achieving population stability by adjustment of the death rate is obviously an unacceptable approach, whether by direct death control or indirect (famine, war, disease), the only remaining avenue, i.e., birth control, must be examined for feasibility.

Methods Available. For most of time fertility rates remained at near natural levels in most of the world. Any adjustment came through factors affecting physiological capacity to reproduce. For example, the low fertility rates of certain areas of Africa and Mongolia, which stand out as exceptions to the rest of the less-developed world, are believed due to venereal diseases, malaria, and other debilitating illnesses.1 However, as industrialization touched North America and Western Europe in the 19th and 20th centuries, fertility control in the form of delayed marriage, celibacy, and, in recent times, the use of contraceptives became more prevalent, especially in Europe. These methods, while not the only ones used, account for most of the difference between high-fertility and lowfertility countries.2 Applied in the same

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degree they will give the same results, therefore it has been suggested that the efforts to reduce fertility in less-developed regions should be concentrated on implementing these proven methods. Because established patterns in age at marriage and in celibacy (or the lack of it) in a particular culture would be, at the very least, difficult to change, contraception by climination remains as the most promising avenue, especially where the need to reduce birth rates is urgent, as is the case in so many areas.

Until recently (1960), available methods of contraception were more suited to highly motivated and somewhat intellectual couples rather than to those whose lives were relatively unplanned because "all methods previously were contemporancous with the act of intercourse."3 This is to say that they had great shortcomings for use in less-developed regions where a requirement for conscientious recordkeeping or deliberate, repeated preventive measures are not acceptable in a contraception method for unsophisticated people having only borderline motivation. With the advent of the oral contraceptive, birth control procedure for the uneducated became simple enough to manage, but a significant amount of motivation is still required and the cost, if it has to be borne by the user, is often prohibitive to the very poor who frequently have the greatest need for contraception.

The contraceptive which probably holds the greatest potential for successful use in the less-developed regions is the recently developed intrauterine device (IUD) known in some of its forms as the "loop," the "bow," and the "spiral." These devices are highly effective, safe, cheap, and can be rapidly installed by paramedical workers. When they are removed the former wearer is restored to her original state

of fertility potential.4

At this writing other contraceptives under development include injections and pills with long-term (up to 20 years) effects. It is clear that the level of contraceptive technology is not the obstacle to reduction of excessive growth.

Results of Family Planning Efforts. While practical means of fertility control are available and successful for individual couples, the important question in the face of the near universality of the population growth problem is whether birth control can be successfully implemented on a large scale in the developing areas. Family planning has been attempted in many areas with varying degrees of success. An investigation of these attempts serves to indicate what degree of influence on fertility a planned program can have and may reveal the characteristics most important to future successful campaigns.

Taiwan

In 1962 the island of Taiwan, off the coast of Mainland China, had a population of 12 million in an area of 14,000 square miles. Its high increase rate of almost 3 percent a year had been brought about by a death rate drop from 32 per 1,000 to 8 per 1,000 in just 40 years. Taiwan is a developing country, and the rapid population increase is a decided threat to further improvement in living standards. Recognizing this, the Provincial Health Department with the support of the Population Council, a private American foundation that advances scientific training and study in population matters, conducted an claborate and extensive experiment in the large (population 300,000) city of Taichung. The object was to determine the need for motivation toward family planning and, if such motivation already existed, to

determine how best to aid the people in accomplishing their aim. Interviews of nearly 2,500 married women in the prime reproductive age group revealed that these women, as a group, wanted to have a moderate number of children. were having more children than they wanted, approved of the idea of family limitation, and were trying, but ineffectively, to limit the size of their families. The value of such limitation in terms of its economic welfare to their families was apparent, and these women were aware that they no longer had to have five to seven children in order to sec three or four survive. These factors plus the absence of objections to birth control in principle accounted for the favorable motivation revealed.

The difference between attitude and behavior, i.e., desiring fewer children than they were having, was mainly due to lack of knowledge about family planning methods and the physiology of reproduction. Responding to this need the Provincial Realth Department established a family planning program designed to reach the approximately 36,000 married women of childbearing age in the city and induce them to practice contraception. Of those women truly eligible, about 40 percent took up contraception in the first 13 months of the program. The cost of each acceptance was between \$4 and \$8, a small fraction of the eventual economic value of each prevented birth. It will be a few years before statistics can be generated to tell the full story, but enough is apparent already to show that fertility control can be substantially spread in a relatively short time and economically in an environment where motivation exists and limited means is removed as an obstacle.5

India

The Government of India has enuntil dorsed birth control for 36 years and the chttps://digital-commons.usnwc.edu/nwc-review/vol21/iss1/5

has taken active measures since the advent of the 5-year plans in 1951. As far as can be ascertained the national program has not yet had significant effect on the birth rate. In view of the discouraging results in the face of seemingly large expenditures, it would be easy to conclude that in certain circumstances family planning on a national scale is not feasible. However, efforts in certain specific areas have had positive results and quickly. In Singur the birth rate declined from 42 to 37 per 1,000 in 4 years. The contrast in results between Singur and comparable regions is matched by the contrast in intensity of the respective programs. In the Singur case personal contacts by field workers, group discussions in the village, emphasis on husbands as well as wives, and continued contact were more characteristic than in the average village covered by the national program, 6

Further prying into the efforts of the Indian Government tends to reveal how limited the Government's total effort actually is. For example, India's boast of 4,000 urban and rural clinics (1961)7 appears impressive until it is matched with her population revealing an approximate ratio of 1 clinic for every 100,000 people. Further, these undersized efforts have frequently been reduced in effectiveness by miscalculation and naivete as exemplified by an attempt by the Indian Government to control birth through the rhythm method when it was well known that peasant women engaged in exhausting chores and generally lacking nourishment usually have irregular menstrual periods. To add to the folly, the Government issued colored beads to women to assist them in keeping track of the days. This failed for the simple reason that many women never looked at them until the lights were out at which time the colors were indistinguishable.8

Just as the case of Taichung, Taiwan does not prove that reasonable attempts at family planning always meet with immediate success, the discouraging results of India's Government-supported efforts do not prove that large-scale attempts at birth control always yield only negligible results. What is shown, were a dozen more large family planning attempts cited, is that the situation is never the same; it varies greatly in response with the degree of quality and quantity in the effort. It is clear that programs to effect a decline in high birth rates are not impossible, and if they are limited in effectiveness it has not been because they have met with active opposition on the part of governments or cultural groups at whom they were aimed. Japan, India. Pakistan. Puerto Rico, Turkey, Egypt, and several other countries all have governmentsponsored programs but have not been equally successful in them. This illustrates that while government approval and subsidy may be a contributing factor, it is no guarantee of success. Very often it fails because the simple provision of facilities is not enough. Birth control requires an attitude that for most less-developed countries does not exist in the required degree. The urgency of the population problem being what it is, these lands cannot afford to wait for the cultural change required to permit embracing the idea of birth control. Planned change must be implemented utilizing adult education. community development, mass communications, applied sociology, and anthropology.9 This is an arduous task for a government that is already overburdened with problems. Many of these governments recognize in general sense the need for family planning but lack the economic strength and often the technique to carry out the comprehensive plan required. Perhaps the best expression of this is found in the

statement of Pakistan President Ayub Khan, "We look to you (United States), a country like yours, to be able to combat this problem. If we continue to increase at the present rate, it will ultimately lead to a standard of living little better than that of animals." 10

IV — PRESENT U.S. POLICY AND ITS BASIS

The Policy. The details of the unfavorable effects of rapid population growth on the economic development of recipients of U.S. foreign aid have been brought to the attention of various administrations at least as early as 1959.1 President Eisenhower, in a December 1959 press conference, evidenced the response the Draper Committee received when it recommended the United States assist foreign countries - on request - in the formulation of plans designed to deal with the problem of rapid population growth. He stated that he could not "imagine anything more emphatically a subject that is not a proper political or governmental activity or function or responsibility."2

Signs of change in U.S. policy were clearly revealed at the United Nations General Assembly discussion on population problems in December 1962 when its statement indicated the United States wanted to know more and help others to know more about population trends and believed there was definite need for additional knowledge in the field of dealing with population problems. In addition, the United States offered to help other countries, upon request, to find potential sources of information and help them find ways and means of dealing with their specific population problems. It was made clear, however, that the United States would oppose any effort to dictate to another country its population policies.4

By 1965 it was apparent that the attitudes of the Executive Branch of the U.S. Government had changed substantially since 1959. In his State of the Union message President Johnson said he would "seek new ways to use our knowledge to help deal with the explosion in world population and growing scarcity in world resources,"4 Perhaps the gain in world population of 385 million in that short 5 years and the growing awareness of the significance of such growth changed attitudes in many influential places, for former President Eisenhower has since reversed his 1959 opinion. At the present, however, the Government's position regarding foreign assistance remains extremely conscrvative cautious. Effort is focused on research rather than actual provision of contraceptive materials and information. In the words of Dr. Philip Lee, Director of Health in the Office of Technical Cooperation and Research Agency for International Development, the AID "does not advocate family planning or any method of family planning The AID will not consider requests for contraceptive devices or equipment for manufacturing contraceptives."5 The prospect of change was covered by AID Administrator David E. Bell who said, "The population field, as distinct from the food field is not a field in which AID has any major activities. I foresce no big change in the future."6

The Basis. A prerequisite for any U.S. foreign policy is that it have the support of, or at the very least the acceptance of, the American voting public. Further, a practice that is in any way less than appropriate for home consumption may be subject and vulnerable to criticism when programmed for implementation abroad. Thus, despite the awareness of the need for

family planning in the less-developed countries the AID is held to conservative and passive measures, not because of the feeling abroad, but because of feeling at home. Government involvement in family planning is limited by: (1) Catholic opposition to artificial means of birth control and (2) a belief that birth control could lead to "national moral degeneration." It is offered that the second obstacle may be at least partially a manifestation of more traditional Protestant and other non-Catholic views whether or not these views match the current stated positions of their respective churches, for every Christian denomination has at one time or another in the past opposed birth control. Nevertheless, the Catholic Church is the only major religious body whose official position is an obstacle to the more active measures by the Government required for an effective program. Any other obstacle does not nearly approach it in formidability.

It must be made clear that the Vatican is not arbitrarily against all forms of control on birth. The following statement by Pope Pius XII seems to indicate a greater concern with methods of family planning rather than the concept itself: "We affirm the legitimacy and at the same time, the limits -in truth very wide — of a regulation of offspring which, unlike so-called birth control, is compatible with the law of God. One may even hope that science will succeed in providing this licit rhythm method with a sufficiently secure basis."8 Only sexual continence and the rhythm method, which requires a scheduled degree of it, are justified in the Church's eyes. While the former is obviously a 100 percent effective contraceptive, the latter depends on adherence to schedule, which is anathema to the sex urge. This, plus the lack of precision of the menstrual cycle (23-

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34 percent of women are irregular),0 makes the rhythm method far inferior to other available methods of contraception even for motivated couples, let alone the poor and ignorant of the lessdeveloped areas. In short, an effective family planning program must incorporate artificial contraception which is forbidden by Church rules. In the numerous state-sponsored clinics which receive Federal support, artificial hirth control instruction and supplies are offered irrespective of religious affiliation of the recipient since a Government agency cannot properly compel persons to conform to the precepts of any church. Bound by its faith to guide its communicants in accordance with the tradition it has received, the Catholic Church is naturally sensitive to Government involvement. The situation has led to sharp statements from authoritative sources. In the recent (October 1966) meeting of the Catholic bishops in Washington, denunciation in no uncertain terms was made of the Johnson Administration's efforts in the area of domestic family planning. "Far from merely seeking to provide information in response to requests from the needy," the bishops charged, "government activities increasingly seek to persuade and even coerce the underprivileged to practice birth control." The bishops further argued that this trend threatens the free choice of spouses to determine the size of their families and endangers the right of human privacy. The thesis of the statement appeared to be that "government far exceeds its proper role." This and a similar statement by Bishop John Wright of Pittsburgh and an associated concerted campaign by the Catholic bishops of Pennsylvania in response to that state's recent effort to institute broadscale family planning aid have bad no small effect on Administration officials. 10 But there is serious question

as to how much heed in administrative circles should be given these strongly stated positions. First, do they accurately reflect the true feelings of American Catholics, and second, how much accommodation of religious interests is appropriate in a pluralistic society such as ours?

The Fallacy. Perhaps more than any other major religious body in the United States, the familial attitudes and behavior of Catholics are strongly influenced by the teachings of their chureh. This is not to say that conformity is perfect, but adherence until recently to the Church teaching regarding contraception is exemplified by the results of a 1955 survey conducted by the University of Michigan Program for Research in Population and Human Ecology. This study revealed that among a national sample of Catholics, Protestants, and Jews, who felt little different on the average as to the number of children considered ideal for Americans, there was great distinction on the part of Catholies as to use of contraceptive methods not specifically approved by the Catholic Church. Only 29 percent reported such usage as opposed to 69 and 84 percent for Protestants and Jews, respectively.11 However, according to Princeton University's Dr. Charles Westoff, a 1966 nationwide survey reveals that 53 percent of married Catholic women aged 18 to 39 use contraceptives in defiance of church doctrine, Since Dr. Westoff, in his report to the Notre Dame conference on population in November 1966, stated that this represents an increase of 22 percent in 11 years, 12 his figures appear in consonance with the 1955 survey. Assuming this survey correctly reflects the majority practice of American Catholics, then it is not surprising that on the subject of the position of the Roman Catholic Church on the use of presently unauthorized birth control methods, such as pills, a 1965 survey by Dr. George Gallup revealed that most Catholics would like to see their church's stance changed. More important, this same survey revealed the majority of Catholics to favor Federal Government aid to both states and other countries upon request. It would appear that those Catholic prelates who have vigorously opposed the Federal Government's activity in family planning, domestic and foreign, are not truly representative of American Catholics.

Disregarding religious affiliation, contraception is practiced and approved by the overwhelming majority of American citizens. Similarly, Gallup Poll reports since 1939 have indicated a majority (81 percent in 1965) favor Federal Covernment assistance in family planning, and the trend of approval is upward.15 This must be respected over the pressure of any religious The right of the Catbolic Church to persuade all men to act in accordance with its principles must be honored and protected by government, but any attempt to exert undue pressure on political processes in an effort to bring legislation and other public affairs into conformity with its teachings is neither acceptable by the Nation or required by the doctrine of the Catholic Church.16

V — CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this paper is that in many areas of the less-developed world the population problem is rapidly assuming proportions that will not only render aid ineffective for economic development, but will eventually make it inadequate to prevent mass starvation. The ensuing unrest will constitute a threat to world peace and is therefore a danger to the interests of the United States.

Implementing large-scale birth control in areas needing it is difficult but not impossible, as is revealed by the generally undersized efforts of the governments of many less-developed nations whose family planning attempts are limited by the unfavorable ratio of problems to resources. Meanwhile, the nation with the greatest resources and the demonstrated willingness to employ them in other forms of assistance limits itself to a passive program that falls infinitely short of what is required. Such a policy is not dictated by hostility on the part of prospective recipients toward family planning or by the failure of the Johnson Administration to appreciate the nature and magnitude of the problem. Rather, it is the result of an exaggerated concern over opposition from prelates of the Catholic Church, who do not accurately reflect the attitude of American Catholies, and who by no means speak for the view of U.S. voters as a whole. A more active effort is entirely acceptable to Americans as part of foreign policy toward nations suffering from the problem of excessive population growth.

It is therefore recommended that the United States incorporate a policy of advocating and materially and directly supporting family planning in its dealings with foreign nations receiving U.S. aid. Acceptance of hirth control implementation as a prerequisite to eligibility to receive other forms of help is not suggested. However, if a nation receiving U.S. economic aid for development is clearly being blocked from achieving progress toward such development by excessive population growth, the U.S. Ambassador, AID representatives, and country team members must be authorized and even directed to influence such governments

toward appropriate family planning measures.

The details of the nature of suitable programs for this form of aid are beyond the scope of this paper, but it can be safely stated that to be effective they must entail an effort as comprehensive as economic development itself. The cost of such an effort may be high, but the price of inaction may be intolerable.

FOOTNOTES

I — TRENDS IN WORLD POPULATION

- Jean Bourgeois-Piehat, "Population Growth and Development," International Conciliation, January 1966, p. 8.
- Philip M. Hanser, World Population Problems (New York: Foreign Policy Association, 1965), p. 6.
- 3. Ibid., p. 7.
- 4. Ibid., p. 9.
- Ronald Freedman, ed., Population: the Vital Revolution (Garden City, N.Y.: Anchor Books, 1964), p. 74-76.
- 6. Ibid., p. 78.
- 7. Ibid., p. 50.
- 8. Ibid.

II --- IMPACT OF WORLD POPULATION TRENDS

- U.S. Congress, House, Committee on Appropriations, Foreign Assistance and Related Agencies Appropriations for 1966, Hearings (Washington: U.S. Govt. Print. Off., 1965), p. 540-541.
- Karel Holbik, An Evaluation of Major Foreign Aid Programs (Padua: Cedam, 1966), p. 547.
- Lester R. Brown, "World Population and Food Supplies, 1980," American Society of Agronomy, February 1965, p. 4.
- Food and Agricultural Organization of the United Nations, The State of Food and Agriculture, 1965 (Rome: 1965), p. 3.
- 5. Ibid., p. 198.
- 6. Brown, p. 6.
- Max Frankel, "Johnson Hails Others' Aid," The New York Times, 24 December 1966, p. 4:6.
- Lyndon B. Johnson quoted in "Food for Peace Act of 1966 Signed Into Law," The Department of State Hulletin, 5 December 1966, p. 866.
- U.S. Dept. of Agriculture, Agriculture Statistics, 1966 (Washington: U.S. Govt. Print. Off., 1966), p. 12.
- 10. Harrison S. Brown, et al., The Next Hundred Years (New York: Viking, 1957), p. 67.
- 11. Food and Agriculture Organization of the United Nations, p. 6.
- Nevin S. Scrimshaw, "World Population and Food Supplies, 1980," American Society of Agronomy, February 1965, p. 34-36.
- Dr. Binay R. Sen, quoted in "U.N. Told World Faces Food Crisis," The New York Times, 25 March 1965, p. 1:3.
- 14. Walt W. Rostow, "The Take-off into Self-sustained Growth," Amar N. Agarwala and Sampat P. Singh, eds., The Economics of Underdevelopment (New York: Oxford University Press, 1963), p. 167, 171.
- Ben H. Bagdikian, In the Midst of Plenty: the Poor in America (Boston: Beacon Press, 1964), p. 173.
- Alan R. Plotnick, "Malthus, Marx, and Mao Red China's Population and Ideology," Challenge, June 1964, p. 11.

III — THE PROSPECTS FOR CONTROL

- United Nations, Dept. of Economic and Social Affairs, Population Bulletin of the United Nations, No. 7-1963 (New York: 1965), p. 8.
- 2. Ibid.
- Dr. Alan F. Guttmacher, quoted in "Four Experts' Views What Should the United States Do about Birth Control?" U.S. Congress, Senate, Committee on Government Operations, The Population Crisis, 1966, Hearings (Washington: U.S. Govt. Print. Off., 1966), pt. 1, exhibit 42, p. 264.
- 4. Ibid., exhibit 22, p. 140.
- Bernard Berelson and Ronald Freedman, "A Study in Fertility Control," Scientific American, May 1964, p. 29-37.
- J. Mayone Stycos, "Population and Family Planning Programs in Newly Developing Countries," Ronald Freedman, ed., Population: the Vital Revolution (Garden City N.Y.: Anchor Books, 1964), p. 172.
- 7. Ibid.
- Political and Economic Planning, World Population and Resources (London: Allen & Unwin Ltd., 1955), p. 218-220.
- 9. Stycos, p. 175.
- Ayub Khan, quoted in Morris K. Udall, "A Time Bomb Called Population," Congressional Record, 1 April 1965, p. 6751.

IV -- PRESENT U.S. POLICY AND ITS BASIS

- U.S. Dept. of State, Policy Planning Council, Foreign Policy Implications of the World Population Explosion PPC 61-3 (Washington: 1961), p. 42.
- 2. Ibid., p. 44.
- 3. Dr. Philip R. Lee, "The Role of Health Programs in Development," Senate, Government Operations Committee, *Population Crisis*, 1965, pt. 1, exhibit 22a, p. 91.
- "Federal Stand on Population Control May Be Nearing," Congressional Quarterly, 18 June 1965, p. 1181.
- 5. Ibid., p. 1183.
- 6. Ibid.
- 7. Ibid.
- Senate, Government Operations Committee, Population Crisis, 1965, pt. 2-A, exhibit 89, p. 791.
- Andre J. deBethune, "Natural Oligospermia and Rhythm," Senate, Government Operations Committee, Population Crisis, 1966, pt. 2, exhibit 66, p. 443.
- William V. D'Antonio, "Birth Control and Coercion," The Commonweal, 2 December 1966, p. 247.
- Ronald Freedman, et al., "Socioeconomic Factors in Religious Differentials in Fertility," Scnate, Government Operations Committee, Population Crisis, 1966, pt. 1, exhibit 12, p. 62.
- Donald Janson, "Study Finds Birth Control Used by Most Catholic Wives 18-39," The New York Times, 3 December 1966, 1:6, 42:2.
- 13. Senate, Government Operations Committee, Population Crisis, 1966, pt. 1, exhibit 8, p. 30.
- 14, Ibid., p. 28.
- Leonard Gross, "America's Mood Today," Senate, Government Operations Committee, Population Crisis, 1965, pt. 1, exhibit 40, p. 415.
- Frank Lorimer, "Issues of Population Policy," American Assembly, The Population Dilemma (Englewood Cliffs, N.J.: Prentice-Hall, 1963), p. 160.

BIBLIOGRAPHY

- Agarwala, Amar N. and Singh, Sampat P., eds. The Economics of Underdevelopment. New York: Oxford University Press, 1963.
- American Assembly. The Population Dilemma. Englewood Cliffs, N.J.: Prentice Hall, 1963.
- Bagdikian, Ben H. In the Midst of Plenty; the Poor in America. Boston: Beaeon Press, 1964.
 Berelson, Bernard and Freedman, Ropald, "A Study in Fertility Control." Scientific American.
- Berelson, Bernard and Freedman, Ronald. "A Study in Fertility Control." Scientific American, May 1964, p. 29-37.
- Bourgeois-Pichat, Jean. "Population Growth and Development." International Conciliation, January 1966, p. 1-79.
- Brown, Harrison S., et al. The Next Hundred Years. New York: Viking, 1957.
- Brown, Lester R. "World Population and Food Supplies, 1980." American Society of Agronomy, February 1965, p. 3-32.
- D'Antonio, William V. "Birth Control and Coercion." The Commonweal, 2 December 1966, p. 247-249.
- Dow, Thomas E., Jr. "Overpopulation: Dilemma for U.S. Aid." Gurrent History, August 1966, p. 65-71.
- "Federal Stand on Population Control May Be Nearing." Congressional Quarterly, 18 June 1965, p. 1181-1185.
- Fersh, Seymour, ed. India and South Asia. New York: Macmillan, 1965.
- Food and Agriculture Organization of the United Nations. The State of Food and Agriculture 1965: Review of the Second Postwar Decade. Rome: 1966.
- "Food for Peace Act of 1966 Signed into Law." The Department of State Bulletin, 5 December 1966, p. 866.
- Frankel, Max. "Johnson Hails Others' Aid." The New York Times, 24 December 1966, p. 4:6.
 Freedman, Ronald, ed. Population: the Vital Revolution. Garden City, N.Y.: Anchor Books, 1964.
- Goss, Hilton P. 1970: a Challenge to Planners. TEMPO R58-TMP-100. Santa Barbara, Calif.: General Electric Co., 1958.
- Hauser, Philip M. World Population Problems. New York: Foreign Policy Association, 1965. Holbik, Karel. An Evaluation of Major Foreign Aid Programs. Padua: Cedam, 1966.
- Janson, Donald. "Study Finds Birth Control Used by Most Catholic Wives 18-39." The New York Times, 3 December 1966, p. 1:6, 42:2.
- Ng, Larry K. Y. and Mudd, Stuart, eds. The Population Crisis. Bloomington: Indiana University Press, 1965.
- Organski, Katherine F. and Organski, Abramo F. K. Population and World Power. New York: Knopf, 1961.
- Plotnick, Alan R. "Malthus, Marx, and Mao Red China's Population and Ideology." Challenge, June 1964, p. 11.
- Political and Economic Planning. World Population and Resources. London: Allen & Unwin Ltd., 1955.
- Udall, Morris K. "A Time Bomb Called Population." Congressional Record, 1 April 1965, p. 6750-6751.
- United Nations, Bureau of Social Affairs, The Future Growth of World Population. ST/SOA/Series A/28. New York: 1958,
- ----- Dept. of Economic and Social Affairs. Population Bulletin of the United Nations, No. 7-1963. New York: 1965.
- "U.N. Told World Faces Food Crisis." The New York Times, 25 March 1965, p. 1:3.
- U.S. Congress. House. Committee on Appropriations. Foreign Assistance and Related Agencies Appropriations for 1966. Hearings. Washington: U.S. Govt. Print. Off., 1965.
- ———. Senate, Committee on Government Operations, Coordination in the Administration of Public Law 480. Hearings. Washington: U.S. Govt. Print. Off., 1966.
- Covt. Print. Off., 1965-1966. Population Crisis, 1965-1966. Hearings. Washington: U.S.