**ADDRESS to the
BOARD OF GOVERNORS**

BY

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The year that has passed since we last met has been a pivotal one. It marked the beginning of the second quarter-century of the Bank's existence, and prefaced the opening of the Second Development Decade. In our meeting twelve months ago I sketched out our plans for maintaining the momentum of the Bank Group's accelerated activity, stressed the need for fashioning a more comprehensive strategy for development, and welcomed the publication of the Pearson Commission Report.

Today, I would like to:

- Report to you on the Bank Group's operation in the fiscal year 1970.
- Review progress toward meeting the projected goals of our Five-Year Program.
- Discuss the responses to the key recommendations of the Pearson Commission.
- And comment upon the objectives of development in the Seventies.

I. THE BANK GROUP'S OPERATIONS IN FY '70

Let me begin by touching upon our operations during the past fiscal year. For that period, new loans, credits, and investments totalled \$2.3 billion. This compares with \$1.88 billion in 1969 and \$1.0 billion in 1968.

The Bank's cash and liquid security balances continued to rise and on June 30 of this year totalled \$2.1 billion, up \$250 million from June 30, 1969 and \$700 million from June 30, 1968.

As I indicated to you at our last meeting, we believe that our plans for expanded operations—particularly at a time of uncertainty in the world's capital markets—ought to be backed by a high level of liquidity. This provides greater flexibility in our financing, and enables us to ride out market fluctuations over which we have no control. We propose to continue that policy.

The Bank's administrative expenses are, of course, rising as operations expand and as price inflation continues. But despite increases in operating costs, profits in FY 1970 amounted to \$213 million: the highest in the Bank's history, and up 25% over 1969. Approximately one-half of the net income is to be retained in the Bank to support future concessionary lending and \$100 million is recommended for transfer to the International Development Association.

II. THE FIVE-YEAR PROGRAM

The Bank Group's performance in 1970 was that of a vigorous and growing organization. But as I stressed last year, I believe the organization should shape its strategy to a longer time frame than year-to-year planning can provide. For that purpose, we have developed a Five-Year Program and in measuring any given year's performance, we should look to the larger framework of that Plan to assess our progress.

One objective is to double the Bank Group's operations in the five-year period 1969-1973, as compared with the period 1964-1968. Should we succeed, it will mean that we will have approved loans, credits, and investments during these five years that aggregate \$12 billion for high-priority development projects—projects whose total cost will approximate \$30 billion.

We have now completed the first two years of that Five-Year Program, and I can report to you that we are on schedule, and that I remain confident that we can reach our goals, formidable as they are.

They are formidable not merely, or even mainly, because of their quantitative magnitude, but because of their qualitative character. The Bank Group over the past two years has not

simply been trying to do "more"—but to do more of what will best contribute to the optimal development of the developing nations.

Over the past 24 months we have made specific and significant shifts in that direction:

- We have intensified our efforts in the agricultural sector—to guarantee more food for expanding populations, to promote agricultural exports, and to provide a necessary stimulant to industrial growth. Our agricultural projects in 1969 and 1970 alone totalled half as many as in the entire previous history of the Bank.
- We have substantially increased our financing of education projects—projects designed to reduce the drag of functional illiteracy on development. Lending for education in these past two years was more than the total of all prior years put together.
- We have broadened our geographical scope considerably so that we could be of service to more developing countries and in particular to more small and very poor countries. In each of the years 1969 and 1970 we lent to a total of 60 countries, 75% more countries in each year than in the average year 1964-1968. Further, in the same two-year period, we have served 14 countries (including such very poor countries as Indonesia, Rwanda, Chad, Dahomey, Democratic Republic of the Congo, and Nepal) which had received no loans or credits in the previous five years.
- We have begun work in the field of population planning—admittedly more modestly than the urgency of the problem demands—at the specific request of countries such as India, Indonesia, Jamaica, and Tunisia.
- We have made a start at broadening the concept of development beyond the simple limits of economic growth. The emerging nations need, and are determined to achieve, greater economic advance. But as I will state more fully later, we believe economic progress remains precarious and sterile without corresponding social improvement. Fully

human development demands attention to both. We intend, in the Bank, to give attention to both.

- We have initiated a new and expanded program of Country Economic Missions in order better to assist the developing nations in their formulation of overall development strategies, and at the same time to provide a foundation for the donor nations and international agencies to channel their technical and financial assistance in as productive a manner as possible. Practical planning in the development field calls for current and comprehensive socio-economic data. The World Bank Group will gather, correlate, and make available this information to the appropriate authorities. As this program gains momentum we will schedule regular annual reports on the 30 largest of our developing member countries—we recently issued the first in this new series—and biennial or triennial reports on another 60 countries.

III. THE PEARSON COMMISSION RECOMMENDATIONS

I want to turn now to the attention given to the recommendations of the Pearson Commission. As you know, the Commission's work was financed by the Bank, but with the stringent safeguard that it should be completely independent in its investigations, and that its conclusions should represent the candid consensus of the Commissioners themselves, speaking their minds frankly. The Report was addressed not to the Bank itself, but to the world at large, and its purpose was to take a fresh and impartial look at every significant factor in the global development scene.

A. Recommendations Relating Specifically to the Bank

At our last annual meeting, which coincided with the publication of the Report, I indicated that we in the Bank would undertake a thorough analysis of each of the Commission's recommendations that touched upon our own activities. There were 33 such recommendations. After giving the most careful consideration to these proposals, I have so far submitted to the Executive Directors detailed memoranda on 31 of them for dis-

cussion and review. In the great majority of instances, I expressed agreement with the Commission's recommendations.

The Commission, for example, recommended that the policies of the International Finance Corporation should be re-oriented to give greater emphasis to the development implications of its investments, and should not simply stress their profitability. I fully agreed with that viewpoint, and, after review by the Executive Directors, the IFC issued in January a new Statement of Policies which reflects the recommended shift in emphasis.

The Commission was concerned, as well, over the danger of the excessive use of export credits—a practice that has led a number of countries to assume external debt of unmanageable proportions. To guard against this hazard the Commission recommended that the Organization for Economic Cooperation and Development and the Bank develop what it termed “a strong early warning system” which can help developing countries avert sudden debt crises. We agree that there is a role here for the Bank: we are working, therefore, with the OECD to improve the scope and quality of information on external debt and with the International Monetary Fund to identify debt problems and help developing countries work out solutions.

Another recommendation dealt with the issue of establishing new multilateral groupings which could provide for annual reviews of the development performance of recipients and help to assure that external aid is closely linked to their economic objectives. I concur, and with the approval of the governments concerned, we are currently organizing new groups for the Republic of the Congo, Ethiopia, and the Philippines, and re-activating the groups for Thailand and Nigeria.

The Commission felt that the Bank should participate in discussions of debt-servicing problems, with a view to searching out new solutions to that increasingly complicated question. We agree and have initiated a series of studies of the debt-servicing difficulties facing a number of our member nations. The external public debt of developing countries has increased fivefold since the mid-1950s, and debt-service payments have grown at a rate of 17% annually while foreign exchange receipts

from exports have risen only 6% per year. Obviously such trends cannot be allowed to continue indefinitely.

The Commissioners, in another proposal, suggested that international centers should be established within developing countries for essential scientific and technological research that could be practically applied to urgent problems. The case of agriculture is particularly important, since the work on new wheat and rice strains, for use on irrigated land, has dramatically demonstrated what can be achieved. But as encouraging as these discoveries have been, it is clear that a food crisis in the 1980s and 90s is unlikely to be avoided unless additional research is devoted now—in the 70s—to the improvement of rain-fed cultivation of rice and wheat, as well as to other essential food resources such as sorghum, maize, oilseeds, grain legumes, and livestock.

What we require is not simply incremental improvements in agriculture, but whole new technologies adaptable to the conditions of the developing countries. The Bank is seeking to find ways in which it can assist in stimulating and supporting such a program.

Among the very few recommendations of the Commission with which I disagreed, there is one on which I should comment. This was the suggestion that the International Development Association may require reorganization. By implication, the Commission appeared to be saying the Bank would operate as a bank and not as a development agency, and therefore IDA should be set up independently to go its separate way.

Such a conclusion appears to reflect the view that because the Bank obtains its funds by borrowing in the world's capital markets whereas IDA is financed by appropriations from governments, the two will of necessity follow different lending policies. But this is not the case. Subject only to creditworthiness considerations, I believe the two organizations should lend on the basis of identical criteria. The source of the funds to be lent is irrelevant to the economic case for their investment. *What contributes most to the development of the borrowing country should be the decisive factor in both Bank and IDA operations.*

If the Bank were in fact subordinating the development interest of its borrowers to other considerations, the proper solution, in my opinion, would be to change the Bank's policies—not to reorganize IDA. Any policy which can be justified for IDA as consistent with its development function can, I believe, be equally justified for the Bank, and the Bank should adopt it.

There is occasional criticism of both our Bank loans and IDA credits because of the stringent conditions on which they are negotiated. But those very conditions are specifically designed to assist the borrowing country. Their purpose is to insure that the Bank Group's resources are used for the optimum development of our borrowers. Economic losses and financial waste are, after all, of no benefit to any country's development. Our standards of prudence and performance should be just as strict for IDA credits as they are for Bank loans. Indeed, it is the poorest countries, those who benefit most from IDA, who can least afford losses or waste.

B. Recommendations to Others

As I have noted, the Pearson Commission Report was addressed not specifically to the Bank, but to the world at large. And it is clear that three of its most far-reaching recommendations dealt with:

- Establishing and meeting a realistic target for the flow of external assistance to the developing countries.
- The design of better criteria and the creation of new machinery to measure and assess the performance of both donor and recipient nations in the development field.
- And the urgent need to find acceptable and effective measures to reduce excessive rates of population growth in those countries where the promise of a better future is being swept away by a tidal wave of unwanted births.

The first of these recommendations—the formulation and achievement of a realistic target of development assistance—is making encouraging progress. Action by the development community on the other two issues is far from satisfactory.

Let me discuss for a moment the first.

C. The Aid Target

Not only is the Pearson Commission's proposal on this matter one of its most important recommendations for the 1970s, but the whole background of the question is worth recalling.

In 1960 the UN General Assembly adopted a resolution to the effect that "the flow of international assistance and capital should be increased substantially so as to reach as soon as possible approximately 1% of the combined national incomes of the economically advanced countries." This concept was elaborated by the United Nations Conference on Trade and Development in 1964, and was endorsed as well by the Development Assistance Committee of the Organization for Economic Cooperation and Development. At the second meeting of UNCTAD in 1968 the target was reformulated to call for 1% of Gross National Product, and was adopted again by resolution.

As the Pearson Commission points out, the irony is that although the 1% target was in fact exceeded during the five years prior to its formal adoption by the DAC in 1964, it has not been fully met in any year since.

What is perhaps not fully understood by the public is that the target of 1% of GNP has not, in the strict sense, been an aid target at all. In practice, it has described the total flow of financial resources from the richer nations to the poorer nations, and has not distinguished between conventional commercial transactions, and concessional, development-oriented aid as such. Commercial transactions can contribute to the development process. But private capital flows are simply not available on the terms required for many of the priority projects—schools, for example, or roads, or irrigation—which the developing countries need so badly. The Commission concluded, therefore, that the flow of official development aid was indispensable. And yet in relation to GNP in the developed world, official development aid fell by a third during the 1960s.

It was for these reasons that the Commission strongly recommended that a separate target be established for official development assistance—a target equivalent to 0.7% of GNP—and urged that this target be reached by approximately the middle of the decade, but in no case later than 1980.

This is a target calling for a very substantial effort. Since the total official development aid of the member governments of DAC amounted in 1969 to 0.36% of their combined GNPs, the Commission was in effect recommending that government aid, in relation to GNP, be doubled in the Seventies.

What has been the response to this recommendation?

To the surprise, perhaps, of the skeptics, it has on the whole been very positive. With but a single exception, no member government of DAC has rejected the target, and several—including Belgium, the Netherlands, Norway and Sweden—have fully accepted it. Canada and the United Kingdom have agreed in principle on the size of the commitment, but have not set a firm date for its achievement. France is already meeting the target, and both the Federal Republic of Germany and Japan have stated they will move toward it.

Among the first consequences of the decisions of governments to increase their official development aid, and reflecting their concern over the growing burden of debt, was their agreement to support a Third Replenishment of IDA, for the years 1972, 1973, and 1974 at a rate of \$800 million per year, as compared to \$400 million per year in the previous period.

Though it is true that the United States has noted that it cannot commit itself to specific quantitative aid targets, the U.S. Administration provided strong support to the substantial increase in the replenishment of IDA and has stated it intends to propose expanding the flow of U.S. aid from the present low levels.

In 1949, at the beginning of the Marshall Plan, American economic aid amounted to 2.79% of GNP and 11.5% of its federal budget. In 1970, the AID programs constitute less than 0.3% of GNP, and less than 1% of the budget. The United States now ranks eleventh, among the 16 DAC members, in the proportion of GNP devoted to aid.

No one can question that American domestic problems—particularly in the social and economic fields—require increased attention and financial support. But it is wholly unrealistic to suppose that this can only be achieved by cutting off aid to desperately poor nations abroad. Economists have pointed

out that in the next ten years the U.S. will increase its income by 50% and that the GNP in 1979, at constant prices, will be \$500 billion greater than in 1969. It would appear that the country is wealthy enough to support a just and reasonable foreign aid program, and at the same time deal effectively with domestic needs. And to me it is inconceivable that the American people will accept for long a situation in which they—forming 6% of the world's population but consuming almost 40% of the world's resources—contribute less than their fair share to the development of the emerging nations.

As I have noted elsewhere, the decision to respond both to the pressure of domestic problems, and the urgency of essential foreign assistance, will in the end be dependent upon the response to a far more basic and searching question—a question that must be faced not in the U.S. alone, but in every wealthy, industrialized country of the world. And that question is this. Which is ultimately more in a nation's interest: to funnel national resources into an endlessly spiraling consumer economy—with its by-products of waste and pollution—or to dedicate a more reasonable share of these same resources to improving the fundamental quality of life both at home and abroad?

Following the end of World War II, the world witnessed a massive transfer of resources from the wealthy nations to both the war-torn and the less-developed countries. This began as an unprecedented act of statesmanship. Over the years, however, this capital flow was increasingly influenced by narrow concepts of national self-interest. Some nations saw it as a weapon in the cold war; others looked upon it mainly as a means to promote their own commercial gain.

Today these narrow views are waning. More and more, the concept of economic assistance is being accepted as a necessary consequence of a new philosophy of international responsibility. It is a philosophy which recognizes that just as within an individual nation the community has a responsibility to assist its less advantaged citizens, so within the world community as a whole the rich nations have a responsibility to assist the less advantaged nations. It is not a sentimental question of philanthropy. It is a straightforward issue of social justice.

A growing number of governments are accepting this conclusion and there are, therefore, solid grounds for concluding that the decade of the Seventies will witness a substantial increase—both in absolute amounts, and in proportion to the GNP—of the critical flow of official development aid from the wealthier nations to the poorer nations.

D. Better Coordination and Assessment of Effort

But as the Commission points out, the global development effort is currently fragmented into an almost bewildering number of overlapping and uncoordinated activities. This leads inevitably to duplication of effort, inefficient planning, and a scattering of scarce resources. What is required is organizational machinery that can effectively and authoritatively monitor and assess the performance of donor and recipient countries alike, reduce the proliferation of unstandardized reporting, and effect more coherent, cooperative and purposeful partnership throughout the entire development community.

This is particularly important if we are to rally the necessary public understanding and support in the industrialized countries for the critical tasks of global development that lie before us.

The Commission recommended that the President of the World Bank call an international conference on this matter this year. However, within the United Nations system, of which the Bank is a part, these functions are the responsibility of the Economic and Social Council. That body is presently considering proposals for new machinery for review and appraisal of development programs at the national, regional, and international levels. Under the circumstances it would be premature for the Bank to take action at this time. The problem itself, however, remains and we must find ways—and find them soon—to secure a far greater measure of coordinated management of the combined capabilities of the national and international agencies participating in the development process. Such an objective is, in itself, one of the most productive goals we could pursue as the new decade begins.

But if the issues of an official development aid target, and improved management within the development community, are

among the most important recommendations of the Pearson Commission for the short-term, the most imperative issue for the long-term is population planning.

E. Population Planning

The Commission faced this problem squarely, without hedging its views. "No other phenomenon," it stated flatly, "casts a darker shadow over the prospects for international development than the staggering growth of population. . . . It is clear that there can be no serious social and economic planning unless the ominous implications of uncontrolled population growth are understood and acted upon."

Are the "ominous implications of uncontrolled population growth" being acted upon effectively? If one is to be candid, the answer would have to be *no*. With the exception of Singapore and Hong Kong, which are special cases, in only two developing countries, Taiwan^a and Korea, is there clear evidence that the rate of population growth has been significantly reduced by family planning programs.

It is worth asking why^b.

One prominent authority in the population field has pointed out that the prospects for the success of family planning throughout the world are at one and the same time promising, and dubious: promising if we do what in fact can be done; dubious if in fact we continue as we are.

The task is difficult for many reasons, but primarily because of its sheer overwhelming size. Consider the magnitude of the factors involved: there are dozens of countries plagued with the problem—each of them different, each of them possessing their own particular set of social and cultural traditions. There are thousands of clinical facilities to be established; hundreds of

^aEven Taiwan, which through a most effective population planning program has reduced its growth rate from 2.8% in 1965 to 2.3% in 1969, will—if it succeeds by 1985 in reaching a point where couples only replace themselves—see its present population of 14 million rise to 35 million before it becomes stationary.

^bI am indebted to Bernard Berelson, President of the Population Council, for a number of the points in this section.

thousands of staff workers to be recruited, trained and organized in the administration of the vast national programs; hundreds of millions of families to be informed and served; and well over one billion births to be averted in the developing world alone, if, for example, by the year 2000 the present birth rate of 40 per 1000 population were to be reduced to 20 per 1000. What we must understand is that even if an average family size of two children per couple is achieved, the population will continue to grow for an additional 65 or 70 years and the ultimate stabilized level will be far greater than at the time the two-per-couple rate is achieved.^a

Thus, even with gigantic efforts, the problem is going to be with us for decades to come. But this fact, rather than being an excuse for delay, is all the more an imperative for action—and for action now. Every day we fail to act makes the task more formidable the following day.

What must we do?

First, we must have a feasible goal. I suggest that goal should be to gain a few decades on what would occur to fertility in the absence of population planning. The achievement of this goal would mean a substantial increase in the quality of life for both the parents and the children of the developing countries—in better health, better education, better nutrition, and in many other ways—as a direct result of populations totalling some 6 billion less than would otherwise be the case.

And what must be done to achieve this goal? Five ingredients are needed:

1. The political will to support the effort.
2. The required understanding and the willingness to act on the part of the people.
3. The availability of effective, acceptable birth control methods.

^aIf, for instance, by the year 2000, the developed countries were to reach the point at which couples only replace themselves, and the developing countries were to reach that point by the year 2050—and both these achievements appear unlikely—the world's present population of 3.5 billion would not become stationary before the year 2120, and would then stand at fifteen billion.

4. An efficient organization to administer the program.
5. Demographic data and analyses to evaluate results and point to program weaknesses requiring correction.

Where do we stand on each of these?

To begin with, there has recently been a dramatic increase in political support for population planning. The latest example is the Philippines, a country with a severe population problem, but a country in which it has been understandably difficult to take the open, public decisions that are required. President Marcos faced the delicate issue frankly in his State of the Nation message to his Congress a few months ago:

"With a soaring birth rate, the prospects for a continued economic development are considerably diminished. Indeed, there is a strong possibility that the gains which we have carefully built up over the years may be cancelled by a continuing population explosion. . . . After a careful weighing of factors, I have decided to propose legislation making family planning an official policy of my Administration."

His Minister of Foreign Affairs put the matter with equal candor:

"The control of population is essentially an economic, cultural, and political problem. One of the most hopeful means of bringing the birth rate down to near replacement level is the Department of Education's plan to introduce this entire subject into the curricula of schools and colleges. . . . Underlying this approach is a clear recognition that education has the twofold obligation to reinforce, and where necessary, to help change public mores. Educational institutions, from the elementary to the postgraduate years, can perform no more useful service in the seventies than to illuminate the principles of human survival and to dedicate themselves to preserving and enhancing the quality and diversity of life."

In 1960 only three countries had population planning policies, only one government was actually offering assistance, and no international development agency was working in the field of family planning.

In 1970 (as indicated in the attached table) 22 countries in Asia, Africa, and Latin America—countries representing 70% of the population of those continents—have official population programs. More than a dozen other countries, representing a further 10% of the population, provide some assistance to family planning, though they as yet have no officially formulated policy. And among the international agencies, the UN Population Division, UNDP, Unesco, WHO, FAO, ILO, UNICEF, OECD, and the World Bank have all stated a willingness to participate in population planning activities.

There are geographical differences (in Asia, some 87% of the people live in countries with "favorable family planning policies," while in Latin America and Africa the figure is only 20%), but political acceptance of family planning programs is widespread. Even where the political support is currently more apparent than real, it is becoming stronger with each passing year.

If, then, the first requirement for the success of family planning is political support at the top—and that is improving—where are the roadblocks?

The first is that the citizenry lacks access to the information and assistance required. Surveys indicate that the interest in family planning among people everywhere is high, but that their understanding is often tenuous at best and tragically erroneous at worst. Millions of parents, even in remote areas of the world, want fewer children, but they simply lack the knowledge to achieve this. Programs must be developed to provide them with the information they seek.^a

But political support and widespread knowledge are still not enough. The techniques of family planning must, themselves, be adequate, appropriate, and available. The means we currently have at hand are much better than those of a decade ago, but are still imperfect. They can be used to accomplish much more than has been already achieved, but concurrently a massive program to improve them must be initiated. Our knowledge in this field is so incomplete that though we know

^aIn only a handful of developing countries is there a significant percentage of women of reproductive age following fertility control practices. The percentage of women in developed countries who are doing so is six times as great.

that certain techniques do work, we still do not completely understand how or why they work. The fact is that compared to what we need to know, our knowledge remains elementary, even primitive.

The clear consequence of this is that there must be a greatly expanded research effort in basic reproductive biology. At present, I know of only seven locations in the world in which as many as five full-time senior researchers are working in this field. Some \$275 million a year is spent on cancer research. But less than \$50 million a year is spent on reproductive biology research, and this includes all the funds allocated, worldwide, by public and private institutions alike. The estimate is that an optimal program of research and development in this field would require \$150 million a year for a decade. That is an insignificant price to pay in the face of a problem that—if left unsolved—will in the end exact social and economic costs beyond calculation.

Finally, a population planning program to be successful requires a strong administrative organization and a comprehensive data analysis and evaluation service. With but one or two exceptions, none of the developing countries has established adequate support in either of these areas. I know, for example, of only one location in the world where as many as three senior researchers are working full-time on the evaluation aspects of population planning. A number of governments have made a start at strengthening the organizational structure of family planning, but progress is thwarted by bureaucratic difficulties, lack of technical assistance, and inadequate financial support. It is in these areas that the international institutions can be most effective. Additional effort is required from all of us, including the Bank. Many of our members are appealing for greater support. They want our advice as well as our financial help, and I propose to organize our capability to provide them with more of both.

The additional funds required to attack the population problem on all fronts—for reproductive biological research, for social science research, and for better organization and administration—are relatively small, less than 50¢ per capita per year. But the time that will be required to achieve results will

be greater than many have realized. This is all the more reason for accelerating our pace. An OECD study concluded that in 1968 family planning programs in developing countries accounted for only 2½ million averted births, compared to the total of over one billion that must be averted in the next three decades if the rate of growth is to be reduced to 1% by the year 2000. If we are to achieve an average fifteenfold increase in the effectiveness of the program over the next 30 years, we must accelerate our efforts now.

The Pearson Commission emphasized that the population problem will not go away. It will be resolved in one way or another: either by sensible solutions or senseless suffering. If we want a sensible solution, with the corresponding enhancement of the quality of life for hundreds of millions of children, as well as for their parents—all of whom clearly have the intrinsic right to something more than a degrading subsistence—then we must get on with it.

IV. THE OBJECTIVES OF DEVELOPMENT IN THE SEVENTIES

I want to emphasize the last point and relate it to the objectives of development in the Seventies. The profound concern we must feel for the rapid growth of population stems precisely from the menace it brings to any morally acceptable standard of existence. We do not want fewer children born into the world because—to quote the more extreme critics of population policy—we do not like their color, or fear their future enmity, or suspect that they will in some unspecified way encroach upon the high consumption standards of already industrialized lands. This is not, as is sometimes claimed, an exercise in concealed genocide, perpetrated by the already rich on the aspiring poor. It has one source and one only—the belief that without a slowing down and control of the population explosion, the life awaiting millions upon millions of this planet's future inhabitants will be stunted, miserable, and tragic or, if you prefer the hackneyed but fitting phrase of the philosopher Hobbes, "nasty, brutish and short."

This fact takes us far beyond the population explosion. We have to see population as part—a vital, critical part but still

only a part—of a much wider social and political crisis which grows deeper with each decade and threatens to round off this century with years of unrest and turbulence: a “time of troubles” during which the forces of historical change threaten to disintegrate our frail twentieth-century society.

We cannot divert these forces. They are an essential part of the process by which mankind is adapting the whole of its life to the advances in science and technology. About one-third of humanity has moved far in the transfer toward modernization and relative affluence. Now the rest of the human species jostle behind. They certainly have no intention of renouncing or missing the wealth and prosperity, above all, the power locked up in modern technology.

“Modernization” is a central thrust throughout the still-developing lands, but they are seeking to modernize under quite unprecedented conditions. Technological and scientific modernization is now more complicated, more hazardous than it was for the industrial nations a century ago. This is in fact the real root of the crisis.

Mr. Lester Pearson in a speech at the Columbia University Conference in February this year, gave a cogent and relevant resume of the historical differences between nineteenth- and twentieth-century development. He emphasized the contrast between the balanced and fundamentally progressive character of economic, social, and technological change in the nineteenth century, and the growing evidence of fundamental imbalance and hence regressive forces at work in the unfolding of the same processes of modernization today.

In the nineteenth century, population—held down by epidemics and poor public health—caused the work force to grow by less than 1% per year. This was just about the amount which the technology of the times could usefully absorb and employ. Agricultural productivity rose and temperate land was opened up for European use all around the globe. The cities grew as centers of manufacturing, and by the time technology demanded fewer and more sophisticated workers, and public health had lowered the death rate, education and city-living

had produced a more stable population. In addition, the vast migration of Europeans to new lands was a further safety valve.

Today, every one of the nineteenth-century conditions is reversed.

Just as the censuses of the 1950s first alerted the world to the scale of the population explosion, so today surveys made in the 1960s of unemployment, of internal migration, of city growth, begin to lay bare for us a new world topography of vast social imbalance and deepening misery.

Advances in public health have resulted in a growth of population which increases the work force by at least 2% per year. At the same time technology becomes steadily more capital-intensive and absorbs steadily fewer men. Although agricultural productivity is now on the rise, the new techniques are destabilizing in the sense that they widen income inequities and release still more workers from the overcrowded land. And where today can the rural migrants go? The world is already allotted, the land occupied by the nineteenth-century modernizers.

So the cities fill up and urban unemployment steadily grows. Very probably there is an equal measure of worklessness in the countryside. The poorest quarter of the population in developing lands risks being left almost entirely behind in the vast transformation of the modern technological society. The "marginal" men, the wretched strugglers for survival on the fringes of farm and city, may already number more than half a billion. By 1980 they will surpass a billion, by 1990 two billion. Can we imagine any human order surviving with so gross a mass of misery piling up at its base?

Let us for a moment look at this misery in the developing world in the realities of human suffering and deprivation:

- Malnutrition is common.

The FAO estimates that at least a third to a half of the world's people suffer from hunger or nutritional deprivation. The average person in a high-standard area consumes four pounds of food a day as compared with an average pound and a quarter in a low-standard area.

- Infant mortality is high.
Infant deaths per 1000 live births are four times as high in the developing countries as in the developed countries (110 compared with 27).
- Life expectancy is low.
A man in the West can expect to live 40% longer than the average man in the developing countries and twice as long as the average man in some of the African countries.
- Illiteracy is widespread.
There are 100 million more illiterates today than there were 20 years ago, bringing the total number to some 800 million.
- Unemployment is endemic and growing.
The equivalent of approximately 20% of the entire male labor force is unemployed, and in many areas the urban population is growing twice as fast as the number of urban jobs.
- The distribution of income and wealth is severely skewed, and in some countries becoming more so.
In India, 12% of the rural families control more than half of the cultivated land. In Brazil, less than 10% of the families control 75% of the land. In Pakistan, the disparity in per capita income between East and West, which amounted to 18% in 1950, became 25% in 1960, 31% in 1965, and 38% in 1970.
- The gap between the per capita incomes of the rich nations and the poor nations is widening rather than narrowing, both relatively and absolutely.
At the extremes that gap is already more than \$3,000. Present projections indicate it may well widen to \$9,000 by the end of the century. In the year 2000, per capita income in the United States in terms of today's prices is expected to be approximately \$10,000; in Brazil, \$500; and in India, \$200.

At least a quarter of the human race faces the prospect of entering the twenty-first century in poverty more unacceptable by contrast than that of any previous epoch. Frankly I do not see this as a situation in which any of our shared hopes for a long peace and steady material progress are likely to be achieved. On the contrary, I agree with Lester Pearson's somber

belief that "a planet cannot, any more than a country, survive, half-slave, half-free, half-engulfed in misery, half-careening along towards the supposed joys of almost unlimited consumption." In that direction lies disaster, yet that is our direction today unless we are prepared to change course—and to do so in time.

How then should we react to these deepening risks? I must assume that we will react, for to carry on any of our activities as political leaders, government officials, business and labor leaders or responsible citizens, we must take for granted a certain minimum rationality in human affairs. And it is not rational to confront historical pressures on a far greater scale than those of the revolutionary periods of the eighteenth and nineteenth centuries without accepting the consequences.

So I would like to end my report to you with four possible points for your agenda.

The first is that we accept the full scale of the world crisis. Over the last decade the developing nations have achieved the historically unprecedented rate of growth of 5% a year. This has been made possible in part by a reasonably sustained level of external assistance. Yet as the 1970s open, the evidence accumulates that economic growth alone cannot bring about that steady social transformation of a people without which further advances cannot occur. In short, we have to admit that economic growth—even if pushed to the 6% annual rate proposed as a target for the '70s both by the Pearson Commission and by the United Nations Committee on the Second Development Decade—will not, of itself, be enough to accomplish our development objectives. Growth is a necessary but not a sufficient cause of successful modernization. We must secure a 6% growth rate. We must deploy the resources necessary for it. But we must do more. We must ensure that in such critical fields as population planning, rural renewal, fuller employment, and decent urbanism, positive policies support and hasten the social transformation without which economic growth itself becomes obstructed and its results impaired.

This brings me to my second point. I have already discussed at some length the difficulties attendant upon any strategy for

family planning. I think we have to admit that in other equally critical fields as well we still lack the necessary understanding and expertise. It must be our prime purpose in research and analysis to close these gaps.

We do not want simply to say that rising unemployment is a "bad thing" and something must be done about it. We want to know its scale, its causes, its impact and the range of policies and options which are open to governments, international agencies and the private sector to deal with it.

We do not want simply to sense that the "green revolution" requires a comparable social revolution in the organization and education of the small farmer. We want to know what evidence or working models are available on methods of co-operative enterprise, of decentralized credit systems, of smaller-scale technology, and of price and market guarantees.

We do not want simply to deplore over-rapid urbanization in the primary cities. We want the most accurate and careful studies of internal migration, town-formation, decentralized urbanism and regional balance.

These issues are fully as urgent as the proper exchange rates or optimal mixes of the factors of production. The trouble is that we do not know enough about them. As we enter the '70s we have in field after field more questions than answers. But this only adds to the urgency and determination with which we must intensify our intellectual attack.

This urgency in turn is related to my third point. I need not belabor it. It is simply that we cannot allow the fundamental task of developing the undeveloped nations of this planet to fail for lack of resources—both the resources needed for research and experiment, and the much larger resources needed to back the policies which we already feel to be successful.

Let us look for a moment at this question of resources. For the so-called security of an ever spiraling arms race, the world is spending \$180 billion annually and the figure steadily goes up.

Four years ago in a speech in Montreal, I tried to point out that more and more military hardware does not provide more

and more security. There is a point of diminishing returns beyond which further financial expenditure on military power does not yield increased returns and does not provide greater strength. I believed then, and I believe today, that most of the nations of both the developed and the developing world are beyond that point of diminishing returns.

If that is true, it is tragic that for the fundamental security of societies progressive enough not to explode into lethal revolution, the developed nations hesitate to maintain even the present \$7 billion of public aid expenditure. That twenty times more should be spent on military power than on constructive progress appears to me to be the mark of an ultimate, and I sometimes fear, incurable folly. If there were only a 5% shift from arms to development we would be within sight of the Pearson target for official development assistance. And who among us, familiar with the methods and audits of arms planning, would not admit that such a margin could be provided from convertible waste alone?

This brings me to my last point. There are really no material obstacles to a sane, manageable, and progressive response to the world's development needs. The obstacles lie in the minds of men. We have simply not thought long enough and hard enough about the fundamental problems of the planet. Too many millennia of tribal suspicion and hostility are still at work in our subconscious minds. But what human society can ultimately survive without a sense of community? Today we are in fact an inescapable community, united by the forces of communication and interdependence in our new technological order. The conclusion is inevitable: we must apply at the world level that same moral responsibility, that same sharing of wealth, that same standard of justice and compassion, without which our own national societies would surely fall apart.

Thus the challenge of the scientific revolution is not a tremendous technological conundrum like putting a man on the moon. It is much more a straightforward moral obligation, like getting him out of a ghetto, out of a favella, out of illiteracy and hunger and despair. We can meet this challenge if we have the wisdom and moral energy to do so. But if we lack these qualities, then I fear, we lack the means of survival on this planet.

CLASSIFICATION OF DEVELOPING COUNTRIES IN RELATION TO GOVERNMENTAL POPULATION PLANNING POLICIES^a

Population size (millions)	Governments With Official Population Policy	Governments Providing Assistance to Family Planning but Without An Official Population Policy	Governments With No Population Planning Policy and No Assistance to Family Planning	
400 and more	India (27) Mainland China (35)			
100-400	Pakistan (21) Indonesia (24)			
50-100		Nigeria (27)	Brazil (25)	
25-50	Philippines (21) Thailand (21) Iran (24) UAR (25) Turkey (26) South Korea (28)		Mexico (21) Burma (31)	
15-25	Morocco (21)	Colombia (21)	Sudan (22) Afghan. (28) Congo (DR) (32)	Ethiopia (33) N. Viet-Nam (33) S. Viet-Nam (33)
10-15	Kenya (23) Malaysia (25) Ceylon (29) Rep. of China (31) Nepal (32)	Venezuela (21)	Algeria (22) Peru (23)	N. Korea (25) Tanzania (27)
Less than 10	Dom. Rep. (21) Ghana (24) Tunisia (24) Mauritius (28) Singapore (29) Jamaica (33)	Costa Rica (19) Ecuador (21) El Salvador (21) Honduras (21) Panama (21) Nicaragua (24) Dahomey (27) Hong Kong (28) Chile (31) Botswana (32)	Kuwait (9) Iraq (21) Jordan (21) Paraguay (21) Syria (21) Libya (23) Cambodia (24) Guatemala (24) Guyana (24) Lebanon (24) Niger (24) Rwanda (24) Zambia (24) Saudi Ar. (25) Yemen (25) Madagascar (26) Togo (27) Uganda (27)	Haiti (28) Laos (28) Malawi (28) Bolivia (29) Chad (29) Ivory Coast (29) Mali (29) Senegal (29) Somalia (29) Burundi (31) Guinea (31) Sierra Le. (31) Cameroon (32) CAR (32) Congo (B) (32) Mauritania (32) Upper Volta (33)

^aOnly developing countries with population growth rates in excess of 2.0% are listed on this table. The number of years in which their population will double, at current growth rates, is indicated in parentheses after each country. Since the growth rates for most of these countries are not known with great precision, the "doubling times" are necessarily approximations.

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