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The World Bank
1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
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P. P. KUCZYNSKI

Annual Meeting Speech
April 30 - May 18, 1973



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Pedro-Pablo Kuczynski Subject Files: Annual Meetings Speech [McNamara] -
Correspondence and drafts 02

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OFFICE MEMORANDUM

TO: Mr. Hollis B. Chenery

FROM: Mahbub ul Haq *ju*

SUBJECT: Annual Speech

DATE: May 18, 1973

Attached is a revised draft of the Annual Speech. It attempts to incorporate the ideas expressed in your and Mr. Yudelman's memos as well as makes a number of other substantive changes in the earlier draft. The main changes are in the diagnosis of the problem and in institutional arrangements proposed to help the small farmer.

We have not seen the draft that Mr. Maddux is preparing simultaneously. We have supplied him all the inputs that he desired for his write-up but have not sent him this revised draft. Perhaps it would be best to wait for his rewrite, which he is proposing to complete by the end of today, before we proceed any further with our redraft.

MHaq:pa

cc: Mr. Stern
Mr. Kuczynski ✓

POVERTY IN THE DEVELOPING WORLD

1. Profile of Poverty

1. A year ago in Washington, I discussed with you some of the problems of the lowest income groups in the developing countries. This year, I would like to advance this dialogue a little further and talk to you about some initiatives of the Bank Group which, I hope, will help to support new approaches in the attack on this enormous and complex problem.

2. Let me first emphasize that no successful attack on the problem of poverty can effectively take place without an environment of economic growth. Growth will not only increase the total economic benefits to be shared but will also make it easier to ensure that these benefits are widely distributed. In the poorest countries in the developing world, rapid growth is obviously a pre-requisite for distribution. In developing countries which are relatively better off, policies for redistribution of existing income can accompany policies for continued growth. While it may be necessary to redistribute incomes, and even assets, the concept of redistributing the benefits of growth is likely to be found in many cases to be a more acceptable and operationally meaningful target.

3. The urgency of the problem is obvious:

- The gap between incomes in the industrialized countries and in the developing world is enormous; allowing for purchasing power differences, the average income per person in the former is about ten times larger than in the latter. However, in the last few years, compared to the increasing disparity in rates of growth in most of the sixties between the rich and the poor countries,

the economies of the developing world have been expanding at a faster pace, so that average per capita incomes have been increasing at percent compared to percent in the industrial countries.

- However, within the developing world itself, a small group of semi-industrial countries accounts for much of the dynamism as it embarks upon rapid economic growth, drawing away from the poorer countries. These industrializing economies - including Brazil, Korea, Mexico, Singapore, Taiwan, Turkey and Yugoslavia, with less than 10 percent of the population of the developing world - have expanded at an annual average rate of percent in the last five years compared to percent for the remainder of the developing countries. An important sign of modernization in these countries has been the increasing importance of manufacturing as a source of employment and of export expansion.
- Finally, and most important, within developing countries themselves, economic expansion has been accompanied by increasing income disparities in the majority of cases. National economic growth has done little for the lowest income groups. Although the available evidence demonstrates that the process of development can eventually lead to a more even distribution of the benefits of growth, the time required is too long and the likelihood of the trend too uncertain in relation to the aspirations created by development itself.

The Lowest Forty Percent

4. Let us focus our attention on the lowest income group. Of the 2 billion people who live in the developing world outside China, at least 800 million, or 40 percent, live on less than \$75 annually. Translated into effective purchasing power terms, this means that 800 million people subsist on less than 30 U.S. cents a day. The bulk of this low-end poverty is concentrated in South Asia and parts of Africa, with important groups elsewhere, such as Haiti and Northeast Brazil. The lowest income groups have a number of common features:

- They have shared little in the benefits of growth. Estimates for five major developing countries in the 1960's show that less than 10 percent of income growth went to the poorest 40 percent of the population. For example, consumption surveys taken in India in 1961 and 1968 showed that the per capita income of this income group in rural areas stayed at about \$30 for the period. In Brazil, between 1960 and 1970, the lowest 40 percent received 2 percent of the increase in income. In general, the income of the lowest 40 percent grew at less than half the rate of GNP in many of the developing countries.
- They are largely in rural areas. Since over 60 percent of the population of the developing world is in the countryside, poverty tends to be concentrated there. Invariably, urban incomes are higher, although the difference is generally less in the poorest countries. Recent research in the Bank indicates that in the last decade the average per capita urban income compared to that in rural areas was four times larger in Brazil, five times in Honduras, double in Tunisia and fifty percent higher in Pakistan. A large proportion of the lower income groups in rural areas are landless.

Expenditure on Urban vs.
Rural

- They receive a very small proportion of public services. Public services are concentrated in the larger metropolitan areas. This applies not only in essential services such as health and education, but also in the provision of credit and extension for small farmers. In the Philippines, where the relative amount of institutional credit is among the highest in Asia, small farmers in 1970/71 received only 2 percent of total institutional credit for agriculture. In Zaire, the Kinshasa metropolitan area, with 7 percent of the total population, has over half the primary school teachers in the country.

The Setting for Change

5. While there is thus evidence that growth of output has in many, if not most, developing countries been accompanied by a worsening in the relative distribution of income, it is equally clear that little can be accomplished in redistributing income unless there is growth. The question is not whether growth is desirable, but how it can best be distributed so that lower income groups will receive a fair share. There is nothing inevitable about the patterns of development which have been followed by many developing countries; however, if a different pattern of development is to emerge, a basic change in attitudes is necessary:

- We need to measure not only the increase in output, but who is obtaining the benefit of that output. Recent studies carried out by our Development Research Center on income distribution estimates for 44 developing countries show that, on average, the top quintile of the population receive 55 percent of disposable income; with the income of the next quintile -

another 20 percent of total income - the top 40 percent of the population account for three-quarters of national income. The GNP index thus measures essentially what is happening to only a part of the population. It follows that we should evaluate the performance of countries differently than we do now. The GNP index must be modified to reflect what has been happening to income distribution. One way to do this would be to weight the percentage income growth of each group by its percentage in the total population. There are of course other possible types of weights, but a proportionate percentage weight is sufficient to illustrate the main point. For 13 developing countries for which comparable estimates on income distribution exist at two points of time in the last twenty years, the comparison shows that the modified growth index was substantially below actual GNP growth in five cases, indicating that the growth of output had been accompanied by a declining share of lower income groups in the benefits of growth. On the other hand, some countries managed to achieve high growth rates without a deteriorating pattern of income distribution. In these countries, the income of the lowest 40 percent increased at the same pace as the national average, compared to annual increases of only 1-2 percent in some of the other major countries studied.

- We need to look at investment possibilities in the light of their broad impact on major income groups. The income stream from a project should be given different weights depending on who the real beneficiaries are. This does not mean that we can

afford to disregard the output benefits of particular investment decisions - to do so would run the risk of promoting inefficiency - but that we must temper this requirement with other considerations. To do this by redistributing consumption in the form of "welfare" payments is not only costly and inefficient - as the experience of industrialized countries has demonstrated - but also does not attack the basic problem of the poor, namely their lack of capital to increase their earning ability. Both skills and assets are essential in order to make a dent in the problem. A significant redistribution of the increase in the stock of capital in favor of the poor is not only feasible, but could be achieved within a generation in a rapidly developing economy. Typically, the lowest 40 percent of the population of many developing countries receive in the neighborhood of 10 percent of income and possesses probably 5 percent or less of the total capital stock. Since the largest part of this population is in rural areas, the major part of the effort has to be to raise productivity on the land. If 2 percent of GNP annually were devoted to increasing the capital stock of the lowest 40 percent,^{1/} their income would double in 25 years. The target is feasible, but its achievement requires a fundamental change in attitudes, and in the direction of public investment.

^{1/} If investment and GNP are growing at 5 percent annually, the assumption here, this means that the lowest 40 percent would be getting 40 percent of total investment. In order to achieve this, of course, a larger proportion of public investment will have to be devoted to the lowest 40 percent.

- Even before whatever resources are available can be put to use, far-reaching decisions are needed on the priority of the effort. Today, the bulk of professional and managerial talent in the developing world, and indeed in most countries, is directed to the areas of government and business in the modern industrial sector. The contact with the poor is left to the lower echelons or to charitable organizations with minimal funds. If the efforts in the industrial countries have something to teach us on the merits of a war on poverty, it is that such efforts will fail unless the best available talent is involved in these programs, the active participation of the poor is sought, and unless appropriate incentives are established so that careers in rural areas can begin to compete with those in the cities. No rural development effort, no low-cost housing program, no literacy campaign can succeed if it is controlled from afar by functionaries who feel, or for whom the incentive structure makes them feel, that such activities are of secondary importance in the structure of power. No program can be viable if the most talented are drawn to the urban areas and to schools which prepare them in very large numbers, to join the ranks of the "educated unemployed", while the poor lack the technological and administrative skills to increase their productivity. A drastic shift in attitudes and incentives is thus essential for the success of any significant action program.

II. A Program of Action

6. Although we do not have very precise data, it is rather easy to define the broad dimensions of poverty. The data that do exist bear out the frequent visual impressions and fragmentary analysis which show all too clearly the very large numbers of the unemployed, the undernourished, the ill-housed and the illiterates in every country. We can, and we must, improve our data and analytical understanding of the problem, we must learn more about the effects of various policies on the principal elements of poverty, and we must learn what the relationships are between accelerated growth and more equal distribution of benefits. But our ignorance should not stand in the way of action. While we do not know its exact dimensions, we do know the problem is large - involving more than a billion people; while we do not know the precise remedies, we do have some inklings about what appropriate policies might be.

7. Because poverty is so closely interwoven with the social and political structure of each country, the responsibility for the alleviation of mass poverty is an indigenous responsibility. Indeed, it will be a great disservice on the part of the industrialized countries if they were to convince the developing world, or themselves, that policies for employment and distribution can be fashioned and delivered from abroad. The problem must be perceived and dealt with in the developing countries. And it will require nothing less than a major intellectual revolution. It is not enough to collect some data and indices on the profiles of poverty. It is necessary to go beyond these statistics to see who the really poor are, what the causes of their relative poverty are, what their bargaining position in the political and social life is, and whether powerful forces within the system can be persuaded and motivated

to change their condition of miserable existence. Unless the best intellectual and managerial resources of the system are devoted to this task, the task will never get done - best-laid plans will not get implemented, well-conceived legislations will become largely ineffective, new institutions will be created only to be discarded again. Let us be clear that what we are talking about is a fundamental change in these societies. The solutions are political, not technocratic.

8. I have, therefore, no set solutions to offer. But let me explore with you, in a spirit of enquiry, some of the elements we may all have to consider in formulating an actionable program for mass poverty.

Rural Poverty

9. The bulk of the poor live in rural areas - 1.6 billion out of a total population of 2.5 billion in the developing world. They all suffer certain common characteristics:

- The income of the rural inhabitants is significantly lower than in the urban areas. For instance, the difference between urban and rural incomes is 2:1 in Malaysia. In Guatemala, where the average per capita income is \$400, about half of the population has an average income of only \$75 and it is all living in the rural areas.
- The income in the rural areas has generally been growing at a much slower pace than the rest of the economy because of the low rates of agricultural growth. Per capita agricultural production in the developing world rose by only one percent during 1960-70 compared to a 26 percent rise in the average

per capita income. Even in South Asia, with the dramatic increases in yields due to the Green Revolution, per capita agricultural incomes have barely risen since the mid-sixties.

- Agricultural holdings are generally small. At present, 700 million workers in the developing world - including Mainland China - farm about 600 million hectares of cropland, with each agricultural worker having an average slightly less than one hectare.
- The rural poor who have land are among the fortunate since many have no land at all. In Latin America, less than 5 percent of the farms occupy more than 75 percent of the farmland. In Asia, where land-man ratios are extremely low, the distribution of ownership leaves the vast majority of the rural population either landless or with uneconomic size farms. In India, the ownership of 40 percent of the total cropland is held by only 8 percent of the land-owning farmers. About 46 million rural households (or over 200 million people) in India are landless today.
- The rural poor are generally an exploited class, both economically and socially. In many countries, the tenants pay 50 to 60 percent of their gross product as rent, do not enjoy any security of tenure and constantly face eviction at the will of their landlords.
- The rural poor are generally underemployed or unemployed and receive a very inadequate share in the distribution of public services.

10. To reach the bulk of the rural poor, we must find some means of transforming subsistence agriculture, some way of reaching and motivating the small farmer. This is not only a social imperative but is fast becoming an economic imperative as well because of the widening food gap in most parts of the developing world.

The Growing Food Gap

11. If past trends in agricultural production continue, the gap between demand and supply of food and livestock products will widen, and, according to an earlier FAO estimate, this will oblige the developing countries to spend \$43 billion on imports by 1985 compared to \$6 billion today. Obviously, food imports at this level will squeeze out development imports and greatly restrict the choices of the developing world.

12. Vastly increased production of foodgrains and livestock products is, therefore, a must. And much of this has to come from the present subsistence sectors and the existing small farms as the possibilities for any large scale colonization of additional arable land are both limited and costly.

13. It is estimated that the developing world as a whole could bring a total of 1.15 billion hectares of cropland under cultivation; of the increase of 550 million hectares, 400 million would be in Latin America (largely in South America, particularly in the Amazon basin), slightly over 100 million in Africa, and only 30 million in Asia. The average minimum capital cost to bring one additional hectare under controlled cultivation is estimated at \$1,000 so that the total cost of cultivating all potential arable land would be nearly \$600 billion. And it would still add only 0.7 hectares to the present availability of a little less than one hectare per agricultural worker.

Small Farmer

14. We must, therefore, accept the fact that the real challenge in the developing world is to increase agricultural productivity on the small farms which are their dominant production unit. In Asia (excluding mainland China and Japan), the average size of holding of crop land is 2.3 hectares and 78% of all farms have less than 5 hectares; in Africa the average size is 5.3 hectares and 72% of all farms have less than 5 hectares, while in South America the average size is 7.9 hectares and 36% of all farms have less than 5 hectares. If small holdings are considered to be less than 5 hectares in size, there are probably more than 175 million such holdings in the three major regions that form most of the developing countries, with more than 60% in Asia and between 15% and 20% in Latin America and Africa respectively. There are probably close to 70 million holdings that are between one and two hectares in size. The incomes of between 850 million and 1 billion or so persons are directly linked to the output of holdings of less than 5 hectares in size; and in much of the world, these incomes are less than US\$100 per capita, because of the low output per acre. Making these relatively small farms more productive will raise rural incomes - so alleviating rural poverty - as well as bringing the benefits of increasing national agricultural production to the bulk of population.

15. It is sometimes argued that small farmers cannot become very productive because of their small holdings, limited savings, poor education and resistance to modern technology. This is simply not true. A recent study shows that output per hectare on the smallest farm size groups was 37 percent higher than that on the largest farm size groups in the case of India, 33 percent higher in Brazil, 67 percent in Taiwan and 92 percent in Guatemala. And it is output

per hectare which is the relevant measure in land-scarce, labor-surplus economies, not output per worker.

16. There is ample evidence that small scale farmers can exploit the natural potential for abundance. Scale of operation need be no technological barrier to raising yields. On a national basis, farmers in Japan and Taiwan, where average size of holding is less than 2 hectares, have increased output between 3% and 5% a year over recent years; similarly in those areas of Asia where the green revolution has occurred, small scale farmers, often with holdings of less than two hectares, have raised output of rice and wheat by anything from 30 to 100% in less than five years. In other regions, such as Mexico, and more recently Malawi, small scale farmers growing corn have increased output by more than 5% a year in recent years. Elsewhere, in dryland areas such as in Mali, small scale producers have raised cotton yields substantially with yields rising fourfold in six year.

17. The dominant factor behind low productivity is not the size of farms but the tenancy system and the absence of institutional support, particularly credit, for the small farmers. On average, an Indian farmer obtains \$4 in the form of institutional credit for every ton of wheat he produces compared to \$42 in Japan. Only a small fraction of the institutional credit is generally available to rural areas - less than 10% in Iran, Nigeria and Tunisia, 15% in Bangladesh, Sri Lanka and Thailand, 20% in Mexico and El Salvador, 28% in India. Of this small amount, generally less than one-tenth is available to the small farmers.

18. Perhaps the greatest institutional obstacle hindering successful agricultural development is the prevailing agrarian structure in many countries. As pointed out earlier, the ownership of land is often concentrated in the hands of a small minority. Furthermore, these

agrarian structures are frequently characterized by tenancy arrangements based on the worst forms of crop-sharing and insecurity of tenure. Without security in a minimum-size farm, there are no incentives for increased production and the way is blocked to improving standards of living of millions of agricultural workers. This does not always mean land redistribution, though this may often be necessary; it may require land consolidation, new tenancy legislation and organized services for the small farmer.

19. Another essential step is to increase the resources which are saved in the rural areas and to channel them to investments which benefit the rural poor. Even if aggregate savings are high as a percent of GNP - and often they are not in the low income countries - the distribution of investible funds favors the modern industrial and agriculture sectors. Efforts to help the poor take the perverse form of low interest rates for agricultural credit which means low rates on deposits and little rural savings. The inadequate supply of credit then becomes available to the rural rich and powerful while the rural poor have to rely heavily on the money lenders. There is no reason to suppose that the small farmers will not react rationally to adequate incentives by increasing their savings which will increase investible funds in rural areas.

Measures to Increase Productivity

20. Increased productivity and better distribution have to be planned together. Particularly in those countries where the problem is that of absolute poverty, the income of the small farmer cannot be increased significantly without a major improvement in the productivity of the subsistence sector. In the last analysis, more production has to be obtained out of every hectare of land that an agricultural worker cultivates.

21. The problem is that a hectare is, economically, not a homogeneous unit. With very few exceptions, one hectare in developing countries produces an agricultural output estimated in 1960 to range from \$50 to \$150. In India, one hectare produces \$91 while in Japan it produces close to \$1,000. In a sample study of the agricultural output of 19 countries in 1960, the average output per hectare for the top four countries was estimated at \$660, compared with \$83 for the lowest four where the majority of the developing world population lives and \$160 for the other countries.

22. The global survey of agricultural yields published by the FAO, shows that for cereal production which occupies more than half of the total arable lands of Africa, Asia and South America, the variations are equally striking. In 1970, the cereal yields per hectare amounted to 6,720 kgm in Japan. But on average it amounted to only 1,270 kgm in Africa, 1,750 kgm in Asia and 2,060 kgm in South America.

23. Taking these magnitudes as indicators of the potential which can be tapped from existing lands, it will not be unrealistic to think in terms of a target of doubling agricultural yields in developing countries by 1985, that is to reach an overall level of productivity per hectare equal, on average, to one-fifth of that achieved by Japan. Such a target would certainly require a tremendous effort. But in terms of economic growth, fulfilling such a target would amount to as much as a 50 percent increase in the combined national incomes of the developing countries. To achieve equivalent growth through industrialization, industrial output, which at present contributes some 15 percent of GDP on average, would have to increase by over 350 percent. Neither the absorptive capacity nor resource

availability would make such an industrial target worth discussing.

This does not mean that industrial development is not necessary.

It is, in fact, a must but industrial development alone will not alleviate mass poverty. The major attack on poverty must be through rural development.

24. To double agricultural yields by 1985 will require a massive and multifaceted effort which must include:

A. Credit

25. New varieties of wheat and rice recently introduced in Asian countries have greatly increased crop yields on irrigated lands provided that a combination of inputs (fertilizers and insecticides) are applied. The cost of these purchased inputs is around \$22 per hectare. It would be naive to advise developing countries to achieve a more wide-spread application of the Green Revolution formula unless funds are available to provide credit at reasonable terms for farmers to finance the purchase of these inputs. Today, the average farmer purchases less than \$6 worth of inputs per hectare. Of this insufficient amount, a very minor portion is provided for through institutional credit. At least a four-fold increase in the present volume of agricultural credit will be required by 1985. The global bill for that purpose would have to rise from about \$3 billion at present to \$12 billion by 1985. Not all of this needs to be additional. A reorientation of investment priorities is both feasible and necessary.

B. Fertilizer

26. Agricultural output per hectare is closely related to fertilizer application. Today, the developing countries of Asia, Africa and Latin America, with 46 percent of the world total land under cultivation, use only 15 percent of the world total consumption of commercial fertilizer.

In 1970, the developing regions applied 8.7 million tons of fertilizers on a cropped area of 600 million hectares, an average of 14 kgm per hectare, compared with an average of over 70 kgm per hectare in the developed regions. It would require an annual rate of increase to about 12 percent in fertilizer application if the developing countries are to reach by 1985 the level of use in the developed countries today. In terms of quantity, this would mean that the global supply of fertilizers would have to increase by 35 million tons, a 60 percent expansion over present levels of fertilizer production. Efforts of similar magnitudes are required to expand the availability and use of other inputs and farm equipments.

C. Extension

27. Because of the low literacy rates in rural areas, a sizable extension corps is needed to help the small farmer reap the benefits of the Green Revolution. In the developed countries today, the number of professional and technical workers in agriculture is around 5 percent of the agricultural labor force. In developing countries, the comparable percentage is an insignificant decimal. Realistically, the FAO World Indicative Plan aims for developing countries to achieve a ratio of 0.4 percent of the agricultural labor force by 1985 - less than one-tenth of that already achieved in developed countries. Even then, a major expansion of agricultural education programs would be necessary to provide additional trained agricultural personnel - some 100,000 senior workers and 500,000 field workers. The global bill for that purpose would be around \$_____ billion annually, but much can be accomplished by reorienting the present output of the educational system. Simultaneously, basic education will need to be improved in rural areas to spread the adoption of better farming practices.

D. Infrastructure

28. Rural areas are not adequately served with feeder roads and other transport infrastructure and equipment. Rural electrification does not cover but a handful of villages in most developing countries; the standard of medical services is abominably low; piped water supply flows only to a few; education facilities do not exist in most villages, and where they do, the educational content is in most cases irrelevant to the needs of modern agriculture and a catalyst for urban migration.

29. No exact figure of the cost of providing or improving all the necessary ingredients for a fuller human life and endeavour in the rural sectors of the developing regions of the world is possible but approximate orders of magnitude can be estimated.

The FAO estimated the global capital costs needed for land improvement, farm equipments and machinery, livestock and building in the region of \$10 billion annually. For the expansion of land and water resources development, some \$8 billion are required per annum. A \$5 billion annual program for the establishment of social and economic infrastructures could have a visible impact. For improved seeds, fertilizers and crop protection, the annual working capital requirements would be around \$10 billion.

30. \$33 billion, while a large sum, is 1/3 less than the total cost of importing food by the developing regions in 1985, if performance of their agricultural sectors does not improve dramatically. Investment allocations for agricultural and rural development in national plans will have to

increase substantially, from an average of some 10 percent of total resources to some 20 percent. Needless to say, these percentages vary widely for individual countries. But, for a global point of reference, overall annual investment in agriculture in developing countries, which was in the range of \$10-12 billion in the early 1970's, will have to increase substantially before the end of the decade. But not only must investments increase, they must be directed specifically to the smallholder and to the poor. The aim is not only increased output, but increased output equitably distributed.

Urban Migration

31. If such an increase in agricultural yields is not achieved there is likely to be a growing food deficit and, what is even more important, there may be a greater drift of population from rural areas to urban cities, creating major problems for urban infrastructure and leading to political and social unrest. It is presently estimated that of the 800 million increase in population during 1970-85, about 500 million will either be in, or migrate to, urban areas. But the estimate of urbanization could well be larger depending on what is happening in the countryside. Unless rural areas can provide an environment which is economically viable, an explosive problem may be created for many cities in the developing world.

32. The problem is aggravated by the tendency of the urban drift to be attracted to one major city. Of the total urban population of Argentina, 56 percent live in Buenos Aires; in Egypt 38 percent live in Cairo; in Sri Lanka 60 percent live in Colombo; in the Philippines and Thailand 45 percent live in Manila and Bangkok respectively; in the Sudan 34 percent live in Khartoum and 50 percent

of the urban population of Kenya live in Nairobi. On the basis of a UN sample survey, already over 30 percent of the urban population of Africa and Asia live in slums and uncontrolled settlements; the ratio is even higher in most of Latin American countries.

33. The economic cost of improving the present situation, of accommodating natural growth and of receiving the additional urban immigrants is almost prohibitive. Comparative information on costs of urban infrastructure is scarce. Available data indicate that the incremental capital cost per urban family is \$1,000 for water supply and sewage, \$500 for electricity, a minimum of \$1,000 for housing and \$450 per student place for primary schooling. Further investments would be required in transport infrastructure and equipment, health and other urban facilities. For the additional 500 million urban population expected between 1975 and 1985, the total bill is colossal.

The Bank Program

34. Although Bank Group lending for agriculture has tripled since 1968, this is not enough. It is our intention to earmark about \$5 billion in the next five years to support the agricultural and rural development programs of our member countries. Such an allocation would imply a 250 percent increase over our 1971 commitments for agriculture and would far exceed the current external assistance to agriculture from all sources which averaged \$630 million a year for the period 1966 through 1970. Moreover, we propose that a large portion of these funds should be directed to programs of integrated rural development which benefit the small farmer, both directly and indirectly. To help develop new approaches and to accelerate the preparation of these programs, we have established a unit in the

Bank to provide expert assistance to member countries upon request.

Institutional Arrangements

35. The developing countries face the formidable task of devising new institutions which will work for the small farmer: which will provide him credit at reasonable terms for more fertilizer, new seeds and additional irrigation; which will offer him adequate incentives to produce and facilities for his marketing; which will give him a reasonable return on his saving and his investment; which will protect him against exploitation; which will extend to him an equitable share of public services - including education, health, water supply and roads - which are so far the privilege of only a few urban areas; which will overcome the handicap of his smallness by bringing him together in cooperative arrangements to pool his political and economic power; and, above all, which will motivate him to increase his productivity and to give back to him the rewards of his effort.

36. It is not possible to involve the small farmer in meaningful economic activity unless an appropriate institutional framework is created first. Let us candidly recognize that it is not easy to help the small farmer under prevailing institutional constraints in many developing countries.

37. Firstly, most developing countries do not have sufficient funds available to extend adequate credit to the small farmer. Even when these funds are augmented, they must be supplemented by the savings of the farmers themselves.

38. Secondly, past experience shows that the cost of making credit available to the small farmer is likely to be fairly high, probably in the region of 20-30% of the value of the loans, in view of the small size of the loans and the high risk of default.

39. Thirdly, even if sufficient credit can be extended to the small farmer, there is no assurance that it would be used productively and not wasted on inessentials. With only one trained extension worker available to service 30,000 farmers, it is difficult to assure the best utilization of credit.

40. Finally, the small farmer faces all the difficulties, mentioned previously, regarding his uncertain marketing outlets, his uneasy control over his supplies and his inadequate access to essential inputs.

41. Many of the inputs used in agriculture are divisible so that most new technologies are neutral with regard to the scale of operations. It is clear though, that, institutions responsible for developing agriculture are not neutral to size but are biased toward assisting larger producers. If governments wish to alleviate rural poverty and increase output, then special efforts have to be undertaken to create conditions which give small farmers the opportunity to be more productive.

42. Small scale farmers should be given the opportunity to replicate the advances that have been made in agriculture in various parts of the world. This will necessitate millions of farmers having access to modern technology and this will have to be accomplished at low cost and with a minimum of skilled persons. The achievement of these ends may well require a departure from some of the more traditional approaches.

43. In the first instance, it will become increasingly important that in some countries there be greater emphasis on group activity and group responsibility at the farm level. The numbers of farmers involved are too great for all small scale producers to be handled on an individual basis. For example, it is inconceivable that lending institutions can provide millions of individual loans at low cost - these may well be handled at a low cost by dealing with groups.

44. There will have to be other departures from traditional approaches that may have succeeded in various parts of the world in the past. Clearly the prospects are remote for expanding extension services to reach more than 100 million small farmers on an individual basis. There will have to be increasing resort to relying on farm leaders - who have been trained for the tasks - being the purveyors of changes in their own communities. This in turn will call for much greater reliance in developing low cost methods of mass training of these leaders. There will have to be systems whereby supporting technical skills can be made available to these leaders through mobile teams - a practice which is not commonly followed - but which is essential to bring a wide spread of change at low cost. In general, there will have to be greater reliance on creating institutions that will operate on a decentralised basis, that will be controlled by farm groups to provide inputs and services to their members.

45. We also need intermediary institutions through which national governments and donors abroad, including the World Bank Group, can channel much-needed resources for the small farmers, without substituting their local decisions and indigenous values. We have already seen over the course of the last two decades a remarkable growth in the development finance companies (DFCs) through which resources are being channelled to

the organized, commercial sector in industry and, to a lesser extent, in agriculture. What we need to develop now are development finance companies for the poor, to extend credit and services to the unorganized sectors, particularly to the small farmer. These DFCs for the poor will naturally have a different character altogether, with much greater participation of the local leadership from all walks of life. They will have to be fashioned in the context of the needs of each country and must be socially responsive. But it is time that some thought be given to the setting up of intermediary institutions along these lines.

46. What is important, of course, is not so much the setting up of any formal institutions but the commitment of the scarce managerial and intellectual resources of society to the task of mass poverty. Today, these resources are often pre-empted by urban bureaucracies and glamorous projects in industry and public utilities. If adequate institutional responses are to be fashioned for the urgent and complex task of alleviating mass poverty, then the developing countries will have to begin by a major redirection of their national effort.

5/12/73
cc Mr. Haddad
Mr. Cheney
File Special

INTRODUCTION

1. A year ago in Washington, I discussed with you some of the problems of the lowest income groups in the developing countries. This year, I would like to advance this dialogue further and talk to you about some initiatives of the Bank Group which, I hope, will help to support new approaches in the attack on this enormous and complex problem.

2. Let me first emphasize that no successful attack on the problem of poverty can effectively take place without an environment of economic growth. Growth will not only increase the total economic benefits to be shared but will also make it easier to ensure that these benefits are widely distributed. The urgency of the problem is obvious:

- The gap between incomes in the industrialized countries and in the developing world is enormous; allowing for purchasing power differences, the average income per person in the former is about ten times larger than in the latter. However, in the last ^{five} few years, (compared to the increasing disparity in rates of growth in most of the sixties between the rich and the poor countries, the economies of the developing world have been expanding at a faster pace, so that average per capita incomes have been increasing at 3.8 percent compared to 3.5 percent in the industrial countries.
- However, within the developing world itself, a small group of semi-industrial countries accounts for much of the dynamism as it embarks upon rapid economic growth, drawing away from the poorer countries. These industrializing economies - including Brazil, Korea, Mexico, Singapore, Taiwan, Turkey and Yugoslavia, with less than 10 percent of the population of the developing

Mr. Haddad / Mr. / Mr. Cheney

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world - have expanded at an annual average rate of 7.9 percent in the last five years compared to 4.4 percent for the remainder of developing countries. An important sign of modernization in these countries has been the increasing importance of manufacturing as a source of employment and of export expansion.

- Finally, and most important, within developing countries themselves economic expansion has in the majority of cases been accompanied by increasing income disparities. National economic growth has done little for the lowest income groups. Although the available evidence demonstrates that the process of development can eventually lead to a more even distribution of the benefits of growth, the time required is too long and the likelihood of the trend too uncertain in relation to the aspirations created by development itself.

The Lowest Forty Percent

3. Let me focus our attention on the lowest income group. Of the 2 billion people who live in the developing world outside China, at least \$800 million, or 40 percent, live on less than \$75 annually. Translated into effective purchasing power terms, this means that 800 million people subsist on less than 30 U.S. cents a day. The bulk of this low-end poverty is concentrated in South Asia and parts of Africa, with important groups elsewhere, such as Haiti and Northeast Brazil. The lowest income groups have a number of common features:

- They have shared little in the benefits of growth. Estimates for five major developing countries in the 1960's show that less than 10 percent of income growth went to the poorest 40

percent of the population. For example, consumption surveys taken in India in 1961 and 1968 showed that the per capita income of this income group in rural areas stayed at about \$30 for the period. In Brazil between 1960 and 1970 the lowest 40 percent received 2 percent of the increase in income.

- They are largely in rural areas. Since over 60 percent of the population of the developing world is in the countryside, poverty tends to be concentrated there. Invariably, urban incomes are higher, although the difference is generally less in the poorest countries. Recent research in the Bank indicates that in the last decade the average per capita urban income compared to that in rural areas was four times larger in Brazil, five times in Honduras, double in Tunisia and fifty percent higher in Pakistan. A large proportion of the lower income groups in rural areas are landless.
- They receive a very small proportion of public services. Public services are concentrated in the larger metropolitan areas. This applies not only in essential services such as health and education, but also in the provision of credit and extension for small farmers. In the Philippines, where the relative amount of institutional credit is among the highest in Asia, small farmers in 1970/71 received only 2 percent of total institutional credit for agriculture. In Zaire, the Kinshasa metropolitan area, with 7 percent of the total population, has over half the primary school teachers in the country.

The Setting for Change

1. While there is thus evidence that growth of output has in many if not most developing countries been accompanied by a worsening in the relative distribution of income, it is equally clear that little can be accomplished in redistributing income unless there is growth. The question is not whether growth is desirable, but how it can best be distributed so that lower income groups will receive a fair share. There is nothing inevitable about the patterns of development which have been followed by many developing countries; however, if a different pattern of development is to emerge, a basic change in attitudes is necessary:

- We need to measure not only the increase in output, but who is obtaining the benefit of that growth. Recent studies carried out by our Development Research Center of income distribution estimates for 44 developing countries show that on average the top quintile of the population receive 55 percent of disposable income; with the income of the next quintile - another 20 percent of income - the top 40 percent of the population account for three-quarters of income. The GNP index thus measures essentially what is happening to only a part of the population. For the purpose of evaluating the type of growth which is taking place, we can weight the percentage income growth of each group by its percentage in the total population. There are of course other possible types of weights, but a proportionate percentage weight is sufficient to illustrate the main point. For 13 developing countries for which comparable estimates on income distribution exist at two points in

the last twenty years, the comparison shows that in five cases the weighted growth index was substantially below actual GNP growth, indicating that the growth of output had been accompanied by a declining share of lower income groups in the benefits of growth. On the other hand, other countries managed to achieve high growth rates without a deteriorating pattern of income distribution. In these countries, the income of the lowest 40 percent increased at the same pace as the national average, compared to annual increases of only 1-2 percent in some of the other major countries studied.

- We need to look at investment possibilities in the light of their broad impact on major groups. This does not mean that we can afford to disregard the output benefits of particular investment decisions - to do so would run the risk of promoting inefficiency - but that we must temper this requirement with other considerations. To do this by redistributing consumption in the form of "welfare" payments is not only costly and inefficient - as the experience of industrialized countries has demonstrated - but also does not attack the basic problem of the poor, namely their lack of capital to increase their earning ability. Both skills and assets are essential in order to make a dent in the problem. A significant redistribution of the increase in the stock of capital in favor of the poor is not only feasible, but could be achieved within a generation in a rapidly developing economy.

Typically, the lowest 40 percent of the population of many developing countries receive in the neighborhood of 10 percent of income and possesses probably 5 percent or less of the total capital stock. Since the largest part of this population is in rural areas, the major part of the effort has to be to raise productivity on the land. If 2 percent of GNP annually were devoted to increasing the capital stock of the lowest 40 percent,^{1/} their income would double in 25 years. The target is feasible, but its achievement requires a fundamental change in attitudes, and in the direction of public investment.

- Even before whatever resources are available can be put to use, far-reaching decisions are needed on the priority of the effort. Today, the bulk of professional and managerial talent in the developing world, and indeed in most countries, is directed to the areas of government and business in the modern industrial sector. The contact with the poor is left to the lower echelons or to charitable organizations with minimal funds. If the efforts in the industrial countries have something to teach us on the merits of a war on poverty, it is that such efforts will fail unless the best available talent is involved in these programs, the active participation of the poor is sought, and unless appropriate incentives are established so that careers in rural areas can begin to compete with those in the cities. No rural development effort, no low-cost housing program, no literacy campaign can succeed if it is controlled from afar by functionaries who feel, or for whom the incentive structure makes them feel, that such activities are of secondary importance in the structure of power.

^{1/} If investment and GNP are growing at 5 percent annually, the assumption here, this means that the lowest 40 percent would be getting 40 percent of total investment. In order to achieve this, of course, a larger proportion of public investment will have to be devoted to the lowest 40 percent.

No program can be viable if the most talented are drawn to the urban areas and to schools which prepare them in very large numbers, to join the ranks of the "educated unemployed", while the poor lack the technological and administrative skills to increase their productivity. A drastic shift in attitudes and incentives is thus essential for the success of any significant action program.

DRAFT
AMeguid:hk
May 15, 1973

TO: Mr. J. Maddux
FROM: M. Haq
SUBJECT: Annual Speech

1. The following is some preliminary material on the cost of administering agricultural credit to small farmers - as you requested.

Agricultural Credit:

2. In general, lending to small farmers carries a higher average administrative cost per \$ lent than the provision of larger loans to large farmers. There are various components to the cost of providing credit, namely; (a) the opportunity cost of funds (some 5-10%), (b) the technical assistance cost of ensuring efficient use of credit by small farmers (some 7-11%), (c) the administrative cost of the program (some 8-12%), and (d) the costs due to losses by default (some 5-10%). These percentages are based on a number of surveys (cited in this and in previous related memoranda) and indicate that the total cost of small loans to farmers is in the region of 20-30% of the value of the loan - excluding the costs associated with delinquency. It should be noted, however, that in many surveys the conclusion reached was that this high cost is still a fraction of the additional agricultural output resulting from the enhanced capacity of the farmers who benefited from credit availability.

3. Regarding the opportunity cost of capital, which is high in less developed countries, credit institutions established for the purpose of helping small farmers seldom account for it. They usually receive funds at a subsidized rate either through rediscounting facilities at the Central Bank, from the Government or international agencies. A typical example is that of the Philippines Agricultural Loan Fund which makes available 3-year time deposits - to rural branches of commercial banks - bearing 3% interest instead of the usual 6%. A rebate of one half of this 3% is given to those banks who hire their own technicians. The Government further guarantees 85% of a production loan when granted under supervised credit.^{1/}

In Brazil, the rate of interest for institutional rural credit ranges from 6-8% with a legal ceiling of 12%. The latter is lower than the average increase in the general price index and therefore constitutes a significant subsidy.^{2/}

4. In most cases because of the weakness of the national extension services, a large number of agronomists have to be hired by the credit institution to assist small farmers. Again a typical case is that of Nicaragua where the rural credit division of the National Bank had 120 experts in 1971, as well as 9 USAID-financed expatriates for that purpose. Its branch offices rose to 14 in 1960 and to 28 in 1971 in order to serve some 24,000 small borrowers. Because of high staff turnover, 15 training and orientation courses for these experts

^{1/} USAID, Credit and Small Farmer Development in the Philippines, October 1972, p. 31.

^{2/} C. R. Wharton, Jr., "Subsistence Agriculture and Economic Development", Chicago 1969, p. 432.

were conducted in the period 1959-71 with a total of 404 personnel attending.^{1/} The USAID which provided some \$425 million in farm credit program to various countries during the period 1950-72, backed that program with 387 man years of technical assistance in the field - slightly less than one expatriate per \$1 million per year. The range is from \$400,000 per expert in Asian and African programs to \$1.2 million in Latin American programs. At the prevailing international salary standards, this item alone would amount to 5-10% of the value of the loans disbursed.^{2/}

5. In assessing the total administrative cost of providing rural credit, the extent of delinquency should also be considered. Delinquency tends to increase as the coverage of institutional credit expands. In Nicaragua, delinquency which was moderate until 1966 (7.5%) rose considerably to 32% in 1971 mainly because of a wider coverage of small farmers and organizational deficiencies.^{3/} In Morocco, the average expenditure per loan is about 10.2% of the amount of credit given/- including delinquency but excluding the cost of the extension assistance provided to borrowers.^{4/}

6. In Korea, administrative costs amount to 15% of total agricultural loans (1971) including farm guidance expenses but excluding the discounted values of delinquent loans (10%).^{5/}

^{1/} R. Ramirez, "Report on Credit to the Small Farmer in Nicaragua", National Bank of Nicaragua, September 1972, p. 12.

^{2/} E. B. Rice, "History of AID Programs in Agricultural Credit", Spring Conference, 1972, p. 11.

^{3/} Ramirez, op. cit. pp. 10, 18, 19, 49.

^{4/} N. Ulsaker, "Small Farmer Credit Programs in Morocco", 1972.

^{5/} R. B. Morrow & Paul White, "Farm Credit in Korea", USAID 1972, pp. 52, 55.

In Thailand the ratio is 12.6% for the same year.^{1/} In Bolivia the administrative cost for small loans is prohibitively high. The average size of loan which the Banco Agricola de Bolivia must give, in order to cover the costs of granting and securing the loan, was calculated at \$6,000 - the average size of all loans made to individual campesinos between 1964-71 was \$523.^{2/} The delinquency ratio in Bolivia amounted to some 19% of all agricultural loans during 1964-71. The range, however, was from 6% for loans to small farmers to 27% for large farmers.^{3/}

7. A detailed cost analysis of administering the ACAR credit program in Brazil revealed that the supervision costs represented between 7% and 11% of the value of the loan and the cost of loan administration and collection about 8%. However, the same study showed that in comparison with the value of increase in annual output per farm, the rate of return is 6.5 times the supervision and administrative cost.^{4/}

8. To a large extent the high administrative cost is due to the treatment of small loans (in terms of enquiries by the lender, guarantees and other formalities) as in the case of large loans.

^{1/} USAID, "Sprin Review of Small Farmer Credit", 1972, p. 78.

^{2/} T. Rayden, "A Review of Small Farmer Credit in Bolivia", la Paz 1972, p. 55.

^{3/} Ibid, p. 50.

^{4/} Wharton, op. cit. p. 433.

The procedures followed by government banks to extend credit to small farmers are usually very complex. These procedures are long, and time consuming - some 31 operations are necessary to approve a loan and approval involves 26 days in Jordan and 21 days in Turkey. Even for a small loan from the Lebanese Bank for Agricultural and Industrial Development, it takes a minimum of 36 days to obtain the loan; against a few hours in the case of money lenders.^{1/}

9. Because of the largely fixed nature of the administrative costs, there are three possibilities for their minimization:

- (a) Increasing the number of loans per borrower per annum.
- (b) Increasing the number of borrowers.
- (c) Increasing the size of the loans.

The first alternative is closely related to multiple cropping within overall agricultural development programs (based on controlled irrigation systems) - a longer term solution. The second is seriously hampered by the collateral and guarantees problems in almost all countries surveyed. The third alternative is what appears to be taking place in most countries - larger loans for the larger farmers.

^{1/} T. Stickley (et al), "Agricultural Credit for Small Farmers in the Middle East", American University of Beirut, 1972, pp. 6, 7.

Pedro

File Speech

HB Chenery, May 12

Suggested Reorganization of Part I of Speech

Carl Corzill - Balena

I. RECONCILING DISTRIBUTION AND GROWTH

Introd.--link to last year's speech

A. Disequilibrating effects of Growth

1. Continuing research confirms tendency of growth to be concentrated in certain countries, regions, groups. Uneven spread of modernization, reinforced by ~~rapid~~ accumulation of assets and lack of government action to offset it.

2. Three manifestations of this general trend:

--gap between industrialized and LDCs. Was widening until recently, probably not now

-- new group of ~~d~~industrializing (or transitional) countries-- Brazil, Yugoslavia, Korea, Taiwan, Mexico, Turkey (perhaps 200 million population)--growing at 6-10% and drawing away from poor countries. Produces greater inequality within LDCs, ~~it~~

--within developing countries. Tendency to increased inequality in majority of countries studied (but not all). Main area for policy action.

3. ~~Policy~~ Changes in policy needed to deal with these tendencies

--objective is not to curtail growth, but to distribute benefits more equally.

--adaptation in internal policies most important--can see some encouraging examples of countries that have ~~not~~ stopped or reversed trend.

--adaptation of external policies--both to reinforce internal actions (in distribution of public facilities, etc.) and to support poorest countries with most difficult problems (IDA distribution etc.)

B. Measurement of Benefits of Growth (sec II of "Framework")

C. Types of Policies

1. General list

2. Public investment (sec. III of Framework)

Mr. Kuczmarski

DRAFT
AMeguid:hk
May 11, 1973

TO: Mr. J. Maddux
FROM: M. Haq
SUBJECT: Annual Speech

1. Here are some further material on agricultural credit, extension, nutrition and education as pertaining to poverty.

Agricultural Credit:

2. Institutional credit remains a minor proportion of the total rural credit availabilities, institutional funds represent some 10% in Iran (1963), 15% in Ceylon (1968), 28% in India (1965) and less than 40% in Pakistan and Korea (1969). The rest is provided through money lenders and other private and trade sources often at exorbitant rates of interest amounting to 3-5 times that which is charged by credit institutions. In Chile, where 85% of agricultural credit is obtained from institutional sources, still only 40% of the small landowners (less than 5 ha) have access to these sources.^{1/} Similarly, in Costa Rica where institutional credit is highly organized less than 15% of the disbursed agricultural credits in 1969 were for the small farmers.^{2/} In the Philippines, where next to Japan and Taiwan the amount of institutional credit supplied to agriculture on a per hectare basis is the highest in Asia,^{3/} only 27%

^{1/} C.T. Nisbet, "Informal Lenders as Suppliers of Development Credits to Small Farmers", January 1972.

^{2/} Claudio Gonzalez-Vega, "Small Farmer Credit in Costa Rica", Stanford, 1973, -. 26.

^{3/} Shigeru/Shikawa, "Agricultural Development Strategies in Asia", Asian Development Bank, 1970, p. 43.

of the small landowners obtained credit from institutional sources^{1/} and the amounts borrowed represent less than 2% of total credits to agriculture.^{2/}

3. In Bangladesh^{3/} and Thailand^{4/}, institutional sources meet less than 15% of the agricultural credit needs. In Tunis, the coverage is less than 10% - almost all of which is lent to large and medium farmers.^{5/} In Morocco, 90% of farmers are considered "low

subsistence lacking physical and technical resources and cannot benefit from credit."^{6/} Agricultural credit expanded rapidly in Taiwan in past two decades from T\$1.3 billion in 1956 to T\$17 billion^{in 1970}/. Nevertheless, the average farmer still holds one-third as much non-institutional loans as he holds in institutional credit.^{7/} Over the period 1960 to 1970, the real value of institutional agricultural credit in Brazil increased more than four fold. But the percent of loans and of the total loan value lent to small farmers actually declined from 68% (1961) to 31% (1971).^{8/} In Bolivia, the number and amount of loans

^{1/} Institute of Philippines Culture, "Socio-Economic Study of Nueva Ecija Rice Farmers", 1970.

^{2/} USAID, "Small Farmer Credit in the Philippines", 1972, p.8 and Table 10.

^{3/} Mujibur Rahman, "Farm Credit Situation in Bangladesh - A Survey", 1973, p.5.

^{4/} "Thailand Third National Economic Plan", 1971, quoted in USAID, Spring Review of Small Farmer Credit, 1972, p. 15.

^{5/} W. Johnson "Agricultural credit in Tunisia", USAID, Dec. 1972, p.15.

^{6/} N. Ulsaker "Small Farm Credit Program in Morocco", USAID, 1972, p.5.

^{7/} D. Adams, H.Y. Chen and C.Y. Hsu, "Rural Capital Market and Small Farmers in Taiwan", 1952-72, Ohio, 1972, P.35.

^{8/} R. Meyer, D. Adams and N. Razk, "Rural Capital Markets and Small Farmers in Brazil 1960-72", Ohio, 1972, p.39.

to small farmers have been declining sharply while loans to large farmer associations have doubled; small loans amounted on average to only 3.5% of the total credit during the period 1964-71.^{1/}

Extension

4. Without a major upgrading of the agricultural extension personnel, it is doubtful that a major increase in food production, or a stimulation of the growth of rural incomes can be achieved. Developed economies today have about one trained agricultural worker for each 20 persons in the agricultural labor force. The current averages for the developing countries run as low as one trained worker to 30,000 agricultural workers. While the optimum ratio is around 1:500, the FAO considers a reasonable target for the developing countries of about 1 to 1,000. For areas which are cropped intensely, or which may be undergoing rapid change, a considerably higher ratio of trained agricultural personnel would be required.

5. The projected annual output of trained personnel from existing institutions can only satisfy ^{4/3} (less than half) of the total needs. The gap in the projected supply and demand for trained agricultural personnel vary; Asia will need 10% more senior level staff and 66% more field level staff; Africa 75% at the senior level and 70% at the field level; the Near East 10% and 17% respectively, and Latin America will need approximately 60% more field level staff than will graduate from currently projected training programs.^{2/} The annual cost of

^{1/} T. Rayden, "A Review of Small Farmer Credit in Bolivia", La Paz Bolivia, 1972, p. 47.

^{2/} FAO Provisional Indicative World Plan, p. 469-473.

training the needed junior and senior level staff is estimated by the FAO to be quite low in relation to the total GDP of developing economies; on average less than one half of one percent.^{1/}

Education

6. It is difficult to conceive an effective program to ameliorate poverty conditions in developing countries without a substantial improvement in educational levels. In 1968, between 30-35% of the children of secondary school age in Latin America, Africa and Asia attended schools of any level. In Africa the ratio is 15%, while in North America, it is 92%.^{2/} The UNESCO estimates world total adult illiterates at 780 million people in 1970; all but 50 million resided in the developing countries.^{3/} While the rate of increase in public educational expenditures during the sixties has been over 10% annually in these countries,^{4/} only 30 percent of the young people aged 5 to 19 were enrolled in formal education.^{5/} Moreover, improvement in the quality of education is hardly discernible and the educational systems in many countries are feeding the reservoir of educated unemployed. Such unemployment (in 1970) is two to three times greater among this group of young people than among adults over the age of 25.^{6/}

^{1/} Ibid, p. 478-479.

^{2/} Edgar Faure (and others) - "The World of Education Today and Tomorrow", UNESCO, 1972, p. 33.

^{3/} Ibid, p. 29.

^{4/} Ibid, p. 45.

^{5/} UNESCO, Statistical Yearbook 1971, pp. 27, 89.

^{6/} Faure, op. cit.

Curricula are outdated and many school programs are irrelevant and ill-adapted to provide the skills to tackle the development problems facing their societies.^{1/}

Nutrition

7. Even with the projected growth in world food production, the calorie/protein imbalance between rich and poor countries is expected to become more pronounced in many areas because the present protein characteristics of diets are not expected to change to any significant degree. Calorie intake of people in developed countries averages 15% above minimum requirements and their protein intake averages about 20-25% above minimum standards. In the less developed countries, diets provide, on average, about 94% of caloric requirements and only 93% of the minimum needed protein supply. These averages do not sufficiently convey the magnitude of the nutritional problems facing many millions, specially those in equatorial countries where roots and tubers are the staple food; their daily caloric intake may average 70% or less of requirements and their daily protein intake is even lower.

8. The situation for a large number of people in some developing countries could become even more serious. The FAO estimates that in 1975 the supply gap could amount to about 30 calories and 2 grams of animal protein per person. Unless the application of modern technology in food production accelerates appreciably, the gap could widen significantly to reach some 3.5 billion tons of protein in the 1980's -

^{1/} Ibid, p. 64.

appreciably more than the amount of animal protein consumed today by the Common Market countries, or by all of the countries in Africa, Latin America and the Near East combined.

TO: Mr. John L. Maddux
FROM: Mahbub ul Haq
SUBJECT: Annual Speech

1. Here are some additional material on the distribution of development benefits and unemployment as further indicators of the growing poverty. Additional data on agricultural credit and extension are being processed and will be sent before noon tomorrow.

Distribution of Development Benefits

2. The modest 4 - 6 percent average economic growth in the developing regions harbours a great deal of inequity in the distribution of development benefits. Analysis of the data obtained for 5 major countries in Asia and Latin America (Korea, the Philippines, Mexico, Brazil and India) with a combined population of some 750 million, is revealing. Incomes of the lowest 40 percent grew during the 1960's at a significantly lower pace than those of the upper 20 percent, the allocation of development benefits seems to have worsened the pattern of income distribution seriously; over 70 percent of the increase in national incomes went to the upper 20% of the population and less than 10% of the increase in incomes was shared by the poorest 40 percent.^{1/}

3. Even in those countries where per capita income of the lowest 40% increased at a faster rate than that of national income, as in Iran, Costa Rica, Colombia, El Salvador and Ceylon, the pattern of distribution benefits is still contribution to the widening of the absolute gap

^{1/} H. B. Chenery and M. Ahluwalia, "A Conceptual Framework for the Analysis of Poverty"- First Draft, May 8, 1973, Table 3.

between rich and poor - on average some 50 percent of the increase in incomes during the Sixties was enjoyed by the upper 20 percent.^{1/}

4. In Colombia the poorest 40 percent of the rural population receive 12 percent of national income. The upper 15 percent share 60 percent of the national income with the top 5 percent enjoying over two-third of that share.^{1/} Perhaps of greater significance is that the share of agricultural income going to land and capital has risen substantially from some 25 - 35 percent in the 1930's to some 60 - 65 percent in the Sixties. In contrast, over the same period, the share of landlords and money lenders in Taiwan declined from 26 percent to 6 percent.^{2/}

5. In Thailand, the position of the poorest 50 percent of the rural families have worsened considerably during the Sixties. In the Northeast region their average income declined from about half to less than 20% of the region's average. Indeed the average income of 50% of the rural households suffered a negative growth rate both in the Northeast and the South. In the North the rate of growth was some 1.4% ⁱⁿ and/the Central Region some 6.5%.^{3/}

^{1/} Albert Berry "The distribution of agriculturally based income in Colombia 1960."

^{2/} P. Dorner, "Land Reform and Economic Development", p. 89.

^{3/} U. S. State Department, "The Employment Problem in Thailand, September 1972."

6. In the Northeast region of Brazil, the real income of the poorest 50 percent of the population increased by only ¹/_{1.6} percent annually during the 1960's. By contrast incomes of the richest 10 percent grew by 5.1 percent. As a measure of rural poverty in that region of the world, the rural household income in 1970 amounted to \$132 shared by 3.4 dependents - a per capita income of around \$40 - less than one-tenth of the national average. ¹/

7. Between 1950 and 1960, 80 percent of the increase in agricultural production in Mexico came from only 3 percent of the farms. The number of landless rural laborers increased from 2.3 million to 3.3 million. Because of the labor-displacing style of mechanization, the number of days worked by each laborer declined by virtually one-half, from 194 to 100. The extremely low incomes of these workers actually declined from \$68 to \$56 per year during the decade at the same time that per capita income for Mexico as a whole increased from \$308 to \$405. ²/

Unemployment

8. The pattern of development in the sixties not only led to more inequitable income distribution in many countries but had also squashed the hopes for accelerated employment. Using the narrow Western definition of unemployment, a study by the Organization of American States estimated that the total number of unemployed in Latin

¹/ IBRD, Economic and Social Development in Brazil, Volume IV, March 1973, p. 14.

²/ Roger D. Hansen, The Policies of Mexican Development (Baltimore: Johns Hopkins Press, 1971), pp. 81, 210.

America rose from 2.9 million in 1950 to 8.8 million in 1965, or from 5.6 percent of the labor force to over 11 percent. If the definition is expanded to encompass the underemployed, the percentage rises significantly to some 25 percent of the labor force or more than double the official estimate.^{1/}

9. In Pakistan while domestic sale price of wheat has been maintained at double the world price, the larger farmers who are the main beneficiary of the Green Revolution, have been paying comparatively half what a farmer in the United States pays for a tractor.^{2/} With the price of tractors subsidized in this fashion, it is paying the large farmer to displace his farm work force with tractors.

10. Before the political change in Cuba the average unemployment rate was 16 percent, with a further fifth of labor force reported as partially unemployed.^{3/} Peru and Chile are today facing similar problems. Recent troubles in the Caribbean have been blamed heavily on high rates of unemployment, especially among the young. The subsequent failure of implementing employment-generating programs helped to spark the insurgency in Ceylon in April 1971.

^{1/} Eric Thorbecke, "Unemployment and Underemployment in the Developing World" in Barbara Ward (ed.) *The Widening Gap: Development in the 1970s* (New York: Columbia University Press, 1971), pp. 116-118.

^{2/} The price distortions in the Asian Green Revolution countries are discussed in Falcon, "The Green Revolution: Generations of Problems," (Paper presented to the Summer Meeting of the American Agricultural Economics Association, Columbia, Missouri, August 1970), pp. 13-15; Kaneda, *Green Revolution*, pp. 28-31.

^{3/} B. H. Pollitt, "Employment Plans, Performance, and Future Prospects in Cuba," Ronald Robinson, and Peter Johnston, (eds.), "Prospects for Employment Opportunities in the Nineteen Seventies" (London HMSO, 1971), p. 60.

11. Under political pressures from the groups that support them, governments have encouraged large-scale, capital-intensive industries and large-farm, mechanized agriculture. Interest rates have been kept low, so that politically powerful entrepreneurs are favored with subsidized credit to expand their agricultural and industrial operations. Foreign exchange had been undervalued so that they can import at artificially low prices. Because of scarcity of skilled manpower wages in the modern sector of the economy have been forced upward, encouraging the use of capital instead of labor. This artificial system of pricing has benefited the elites at the expense of creating new jobs and accelerating economic growth.

ROUTING SLIP		Date May 10, 1973	
NAME		ROOM NO.	
Mr. Stern			
Mr. Haq			
Mr. Kuczynski ✓		D-448	
Miss Elkington			
	To Handle		Note and File
	Appropriate Disposition		Note and Return
	Approval		Prepare Reply
	Comment		Per Our Conversation
	Full Report		Recommendation
	Information		Signature
	Initial		Send On
<p>REMARKS</p> <p style="text-align: center;"><u>1973 Annual Meeting Speech</u></p> <p>New Table 1 to replace present able 1 in attachment to Mr. Chenery's emorandum to Mr. McNamara dated May 8.</p>			
<p>From</p> <p style="text-align: center;">Doris</p>			

Table 1: CLASSIFICATION OF COUNTRIES BY INCOME LEVELS AND INEQUALITY¹

	HIGH INEQUALITY			MODERATE INEQUALITY			LOW INEQUALITY		
	GINI > .50			GINI = 40-50			GINI < 40		
	Country	Ratio ²	GINI	Country	Ratio ²	GINI	Country	Ratio ²	GINI
Low Income ² < US \$ 300	Bolivia 68 (138)	9.2/57.7	.53	Ceylon 52-53 (126)	14.0/54.0	.46	Ceylon 70 (155)	17.0/46.0	.37
	El Salvador 61 (249)	12.0/61.4	.52	Taiwan 61 (147)	14.0/52.2	.45	India 53-57 (75)	20.0/42.0	.33
	Honduras 67-68 (224)	7.3/67.5	.61	Dom. Rep. 69 (234)	13.0/54.0	.47	Korea 70 (180)	18.0/45.0	.36
	Iran 59 (192)	12.0/57.0	.51	Guyana 55-56 (272)	14.0/45.7	.40	Libya 62 (220)	23.5/37.0	.26
	Sierra Leone 68 (139)	10.0/67.0	.61	India 60 (83)	14.0/52.0	.46	Pakistan 63-64 (83)	17.5/45.0	.37
				Iran 68 (279)	12.5/54.5	.47			
				Philippines 61 (149)	12.1/56.4	.50			
Middle Income ² \$ 300 - 700	Costa Rica 61 (340)	13.8/60.0	.51	Argentina 61 (681)	17.3/52.0	.42	Japan 62 (515)	15.3/46.0	.40
	Costa Rica 69 (423)	14.0/60.0	.503	Chile 68 (427)	13.0/56.8	.49	Spain 64-65 (572)	17.0/45.2	.37
	Jamaica 58 (388)	8.2/61.5	.56	Costa Rica 71 (423)	14.7/50.6	.43	Yugoslavia 63 (428)	19.0/41.3	.33
	Lebanon 55-60 (454)	13.0/61.0	.52	Uruguay 67 (460)	14.3/47.4	.42	Yugoslavia 68 (451)	18.5/41.5	.33
	Mexico 63 (419)	10.5/58.5	.52						
	Mexico 68 (464)	10.2/65.8	.53						
High Income ² > US \$ 700				France 56 (1159)	11.6/51.1	.46	Canada 61 (1754)	19.8/39.0	.31
				France 62 (1373)	9.5/53.7	.49	Canada 65 (2057)	20.0/40.2	.32
				Puerto Rico 63 (988)	13.7/50.6	.44	Hungary 67 (870)	30.0/26.0	.14
				Venezuela 62 (752)	13.3/29.7	.44	N. Zealand 66 (1771)	22.0/39.0	.30
							U.K. 68 (1574)	18.8/39.0	.32
							U.S. 66 (3195)	15.0/44.0	.39

¹ The table is based on household size distribution data

² Figures in Parentheses are per Capita income in 1964 U.S. \$ for nearest year

³ Ratios are ratio of bottom 40 percent to top 20 percent

% Annual Growth
of Income in Top 20%

CHART II

Korea (64-70) (X)

14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
-1

Mexico (63-68) (X)

Bulgaria (57-60) (X)

Panama (60-69) (X)

(X) Iran (59-68)

Brazil (60-70) (X)

France (56-62)
Canada (61-65)
Finland (52-62)*

(X) Costa Rica (61-69)

United States (60-66) (X)

(X) Costa Rica (66-71)

India (54-63) (X)

(X) Colombia (64-70)

Yugoslavia (63-68) (X)

Ceylon (53-70) (X)

(X) Guatemala (65-68)

Philippines (61-65) (X)

(X) El Salvador (61-69)

(X) Costa Rica (67-71)

-1 0 1 2 3 4 5 6 7 8 9 10 11

% Annual Growth in GNP

A CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF POVERTY

H. B. Chenery and Montek Ahluwalia

Introduction

More than half of last year's Address to the Governors was devoted to a discussion of social equity in relation to development policy; some aspects of this theme will be elaborated this year and probably next. Since the speeches themselves cannot give a very complete diagnosis of the sources of poverty and the merits of alternative policy approaches, it is important for us to develop for internal use a conceptual framework that can guide the drafting and further elaboration of these themes. Given the limited extent of scientific investigation in this field -- in contrast to the vast amount of speculation and political rhetoric -- the conceptual basis can only consist of a set of working hypotheses that will be elaborated or discarded in the light of ongoing research. Some of the elements of empirical evidence and policy diagnosis that are most relevant to this year's Address are set out below.

I. EMPIRICAL EVIDENCE

1. Size Distribution of Income. Since few developing countries have even minimal time series on the size distribution of income, empirical generalizations must rely heavily on intercountry comparisons. Some classification of countries is also useful in the discussion of policy, since the nature of the poverty problem varies considerably with the economic and social structure.

The Development Research Center (Tiemann) has now compiled and evaluated data on the size distribution of income for 61 countries; 44 less developed, 13 developed, and 4 centrally planned. The tabulation includes nine (Argentina, Brazil, Ceylon, Colombia, Chile, Costa Rica, India, Korea, and Mexico) for which there is some basis for comparison of changes over the past decade, although none of these is entirely satisfactory. Brazil, Mexico and India were cited in last year's Address.

Two types of summary measure have been found useful in comparing income distributions; decile shares and the coefficient of concentration (Gini coefficient). In focusing on lower-end poverty, it is appropriate to compare the share of income (of individuals or households) received by the poorest 30% or 40% (this is an arbitrary range, but less sensitive to error than the lowest 20% or less). Redistributive possibilities are shown by the share received by the rich (upper 5%) or the upper 20% (which is more reliably estimated). Decile figures are consolidated in the Lorenz curve, which is obtained by plotting the cumulative percent of recipients against the cumulative share of income. The coefficient of concentration (which is defined as the ratio of the area between the Lorenz curve and the diagonal to the area under the diagonal) measures overall inequality but is not the best measure of low-end poverty.

All the developing countries for which data are available are classified by means of all three of these measures in table 1. The classification is based on the median values of the three measures:

Gini coefficient	:	.45
Share of upper 20%	:	50%
Share of lower 40%	:	15%

Discussion of table 1:

-- relation of income level and inequality. Inequality increases in middle income (200-500), then decreases with elimination of duality, redistributive policies (Kuznets, Weisskopf, Adelman).

-- difference in poverty problem of poorest countries (little gain from redistribution) and middle income (large redistributive possibilities).

* We have used household data for this purpose wherever available; otherwise individual income data. The difference

2. International Distribution of Poverty:

-- based on absolute poverty standard (\$50 p.c.

income in exchange rate terms or \$100 in purchasing power).

Caution: do not base welfare statements on exchange rate comparisons.

-- policy significance only for international transfers

-- table 2: rough estimate of distribution by region

(or major countries) of absolute poverty. Can be calculated

from Lorenz curve and per capita income for country groups

with sufficient accuracy. (Substitute for present figures

in Speech). E.g.: Asia 500 million (excl. China), Africa 100,

Latin America 60, EMENA 40.

3. Income Distribution by Sector and Occupation:

*Dist
Occupation*

-- greater policy relevance than size distribution,
and more data available(?). (Kuznets [1963] gives some
useful comparisons)

-- greater within-sector inequality in developing
countries. Leads to identification of several target groups

(small farmer, landless rural labor, urban "informal").

4. Regional differences. Last year distinguished 3 types of poverty: poor countries, poor regions, lowest 40% within region. Poor regions useful target in poverty-focused policies for administrative and political reasons. Regional differences in p.c. income of 3-4 times in almost all larger countries above poorest (data for Yugoslavia, Brazil, India, Thailand, Turkey, Mexico, ...?)

II. RECONCILING GROWTH AND DISTRIBUTIONAL OBJECTIVES

While it is now common to talk of the tradeoff between growth and distributional objectives, the terminology is misleading because it is likely to suggest inefficient policies for reducing poverty. We should take the opportunity of the 1973 President's Address to restate the overall objective as the "redistribution of the benefits of growth" or some such phrase.

In analytical terms, the basic issue is the weight to be given to the welfare of different income groups. Although this is not an economic question, it is crucial to the analysis of economic policy and has been much discussed by economists. For our purposes, it will be sufficient to show that the adoption of a plausible system of welfare weights in place of those implicit in the use of GNP permits a restatement of the distributional objective in a much more useful way.

This approach to the problem can be illustrated by comparing the effects of using three alternative weighting systems for evaluating social welfare -

- I. GNP weights;
- II. Egalitarian weights (one man, one vote);
- III. Poverty weights.

GNP
-- The/index values a dollar increase in consumption
(or investment) equally, regardless of the recipient. In

welfare terms, the only justification is in terms of maximizing investment and long-term growth.

-- Egalitarian preferences would give equal weight to a 1% increase in consumption by any member of society. Numerically, this implies weights that are the reciprocal of the per capita income (or consumption) of each income group.

-- Poverty weights would give higher values to a 1% increase in income for the poorer than for the richer groups.

Table 3 gives an evaluation of the growth performance of a hypothetical economy having the growth rates and income distribution of Mexico: population growth of 3%, GNP growth of 6.6% over a ten year period. The initial growth rates of each size group (Assumption A) vary from 2% per capita for the poorest quintile to 4% per capita for the richest, which is probably less unequal than the actual Mexican experience.

Case I assumes that the welfare increase is measured by GNP growth (i.e., 3.6%). Using egalitarian weights (case II),

welfare growth is reduced to 3%. With the assumed poverty weights of case III, it drops to (2.5%).

From these assumptions as to typical growth by income groups, we can proceed to evaluate two redistributive alternatives that would aim at 4% per capita growth of the lowest quintile in assumption B and 5% in assumption C. These two examples are designed to illustrate the effects of "redistributing growth". It is assumed for simplicity that redistribution would cause some loss in GNP growth but no loss in welfare growth as measured by egalitarian weights, which stays constant at 3%. The evaluation of the three assumptions in terms of rates of welfare increase over a decade is as follows.

		<u>Targets for Lowest Quintile:</u>		
	<u>Criteria</u>	<u>A: (2%)</u>	<u>B: (4%)</u>	<u>C: (5%)</u>
I.	GNP growth	3.6%	2.3%	(1.6%)
II.	Egalitarian weights	3.0%	3.0%	(3.0%)
III.	Poverty weights	(2.4%)	(3.1%)	(4.0%)
	Share of Growth to lowest 40%			

This example suggests several ways of describing redistributive policies:

-- as giving greater weight to lower income groups.

Egalitarian weights would be sufficient for most purposes, and would also provide a convenient basis for measuring welfare growth and the shadow prices needed for project evaluation.

-- as giving the poor a larger share in the increment to GNP than their existing share. This is implicit in the targets now stated in the draft, but has less value for judging alternative policies since it ignores what happens to the remaining 60% of the population.

The choice among alternatives of the type suggested is of course constrained by political will, administrative capacity, and the distribution of physical and human capital. (The latter constraint is taken up in section III.)

III. LIMITS TO DISTRIBUTIONAL POLICIES

While the speech will outline various types of distributional policies, it will focus on those that the government can implement directly, largely through the re-allocation of budgetary resources, external assistance, and government personnel. In suggesting how much can be achieved for lower income groups over a period of say ten years by this type of program, we need to consider it in the context of the government's total budgetary resources and other resource limits. This will be done here on an illustrative basis, assuming a resource transfer large enough to implement the type of policy of "redistribution through growth" that was outlined above.

Initial Distribution of Resources

Apart from a few countries that have already adopted redistributive policies (Yugoslavia, Italy,), poverty groups (where they can be separately identified) have substantially less physical and human capital avail-

able to them than the average for the economy. (Can illustrate with data for Thailand, Brazil, Mexico....).

In accounting for the variations in income levels among regions and occupational groups, the bulk of the difference can be explained by the availability of capital and land for productive units and of education for wage earners (to be qualified), although in some cases a lower productivity of total resources in poor areas has also been demonstrated.

In respect to overhead capital, this situation tends to be accentuated both for poor regions and poor sections of the rural and urban economies. The reasons are in part the greater political power of the modern sector, in part the limited ability of the central government to redistribute resources by fiscal means. Since more than half the cost of transportation, power, education, etc. is borne by state and local budgets, which are at best proportionate to income levels, the gap in public facilities

between richer and poorer segments of the community tends to widen over time.

Effects of Redistribution of Growth

The main mechanism for the redistribution of growth is the allocation of additional public and private investment (plus public services) to target poverty groups in amounts greater than their existing per capita share of the total. Policies that may be used to bring about this incremental redistribution include the redirection of public investment, incentives to private investment, extension services, etc. In addition to changing the composition of resource increments, it may also be necessary to redistribute agricultural land. To produce a redistribution of income, the amounts of resource inputs reallocated must be sufficiently large to offset any differences in productivity. While there is no reason to expect such differences to persist indefinitely, they may be significant in a period of 5-10 years, reflecting learning phenomena and limits

to absorptive capacity.

To test the feasibility of growth targets for poverty groups that may seem desirable on welfare grounds, we will examine the possibilities for incremental shifts in (i) investment in overhead facilities, and (ii) directly productive investment. Although we are concerned with the welfare of the lowest 40% of the population, it is unlikely that programs of this sort can be devised to reach more than half of them directly through regional programs, credit to small farmers, urban construction, etc. By way of simplification, we can think in terms of a resource redistribution from a rich to a poor region (Sao Paulo to the Northeast, Bangkok to the Northeast), although the analysis applies equally to any other target group.

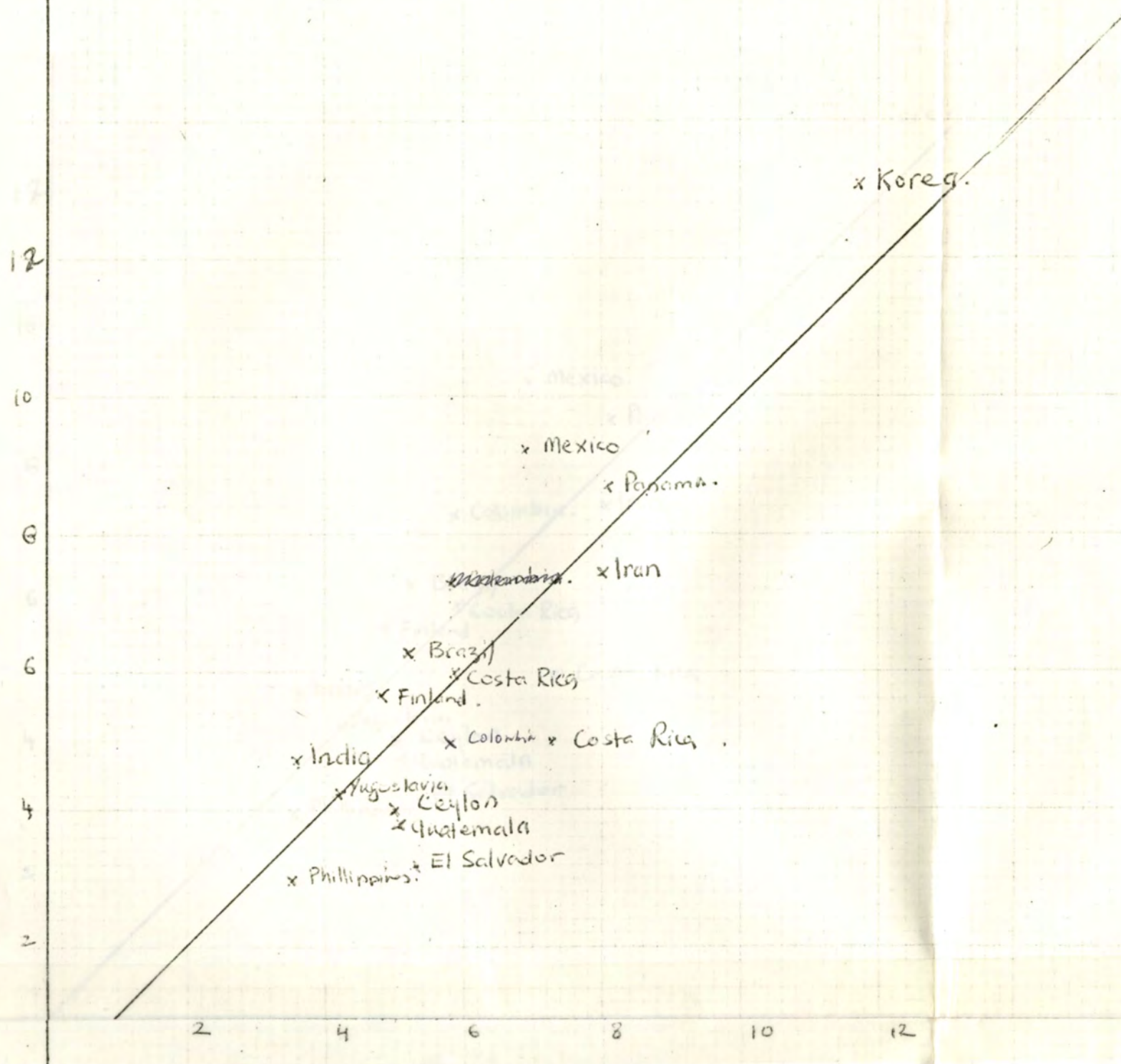
The analysis (being worked out by Ahluwalia) will assume that a large enough proportion of GNP will be transferred to the poor region (20% of population?) to increase its share in

incremental investment substantially above its initial proportion. Given alternative assumptions as to productivity, savings, tax revenues, etc., regional growth will be simulated in a simple aggregate model. (Without specifying the market for the increased production, this exercise will be useful mainly in testing the plausibility of targets for growth of production or employment that may be used in the Speech).

	HIGH INEQUALITY				MODERATE INEQUALITY				LOW INEQUALITY			
	GINI > .50				GINI = 40-50				GINI < 40			
			Ratio	GINI			Ratio	GINI			Ratio	GINI
Low Income < US \$ 300	Bolivia	(138)	9.2/57.7	.53	Ceylon	(126)	14.0/54.0	.46	Ceylon	(155)	17.0/46.0	.37
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					Iran	(279)	12.5/54.5	.47				
					Philippines	(149)	12.1/56.4	.496				
					Philippines	(150)	11.6/55.4	.496				
					Tanzania	(70)	14.0/57.0	.48				
					Zambia	(150)	14.6/57.0	.49				
Middle Income \$ 300 - 700	Costa Rica	(340)	13.8/60.0	.51	Argentina	(681)	17.3/52.0	.42	Japan	(515)	15.3/46.0	.40
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	Mexico	(464)	10.2/65.8	.5787								
High Income > US \$ 700					France	(1159)	11.6/51.1	.46	Canada	(1754)	19.8/39.0	.31
					France	(1373)	9.5/53.7	.49	Canada	(2057)	20.0/40.2	.32
					Puerto Rico	(988)	13.7/50.6	.44	Hungary	(870)	30.0/26.0	.14
					Venezuela	(752)	13.3/29.7	.44	N. Zealand	(1771)	22.0/39.0	.30
									U.K.	(1367)	18.8/39.0	.32
									U.S.	(3195)	15.0/44.0	.39

Figures in Parentheses are per Capita income in 1964 U.S. \$ for nearest year
Ratios are ratio of bottom 40 percent to top 20 percent

Annual Growth
of Income in ~~bottom~~ Top 20%



Annual Growth
in GNP

12

10

8

6

4

2

x Korea.

x Mexico

x Panama.

x Colombia.

x Iran

x Brazil

x Costa Rica

x Finland.

x Costa Rica :

x India

x Yugoslavia

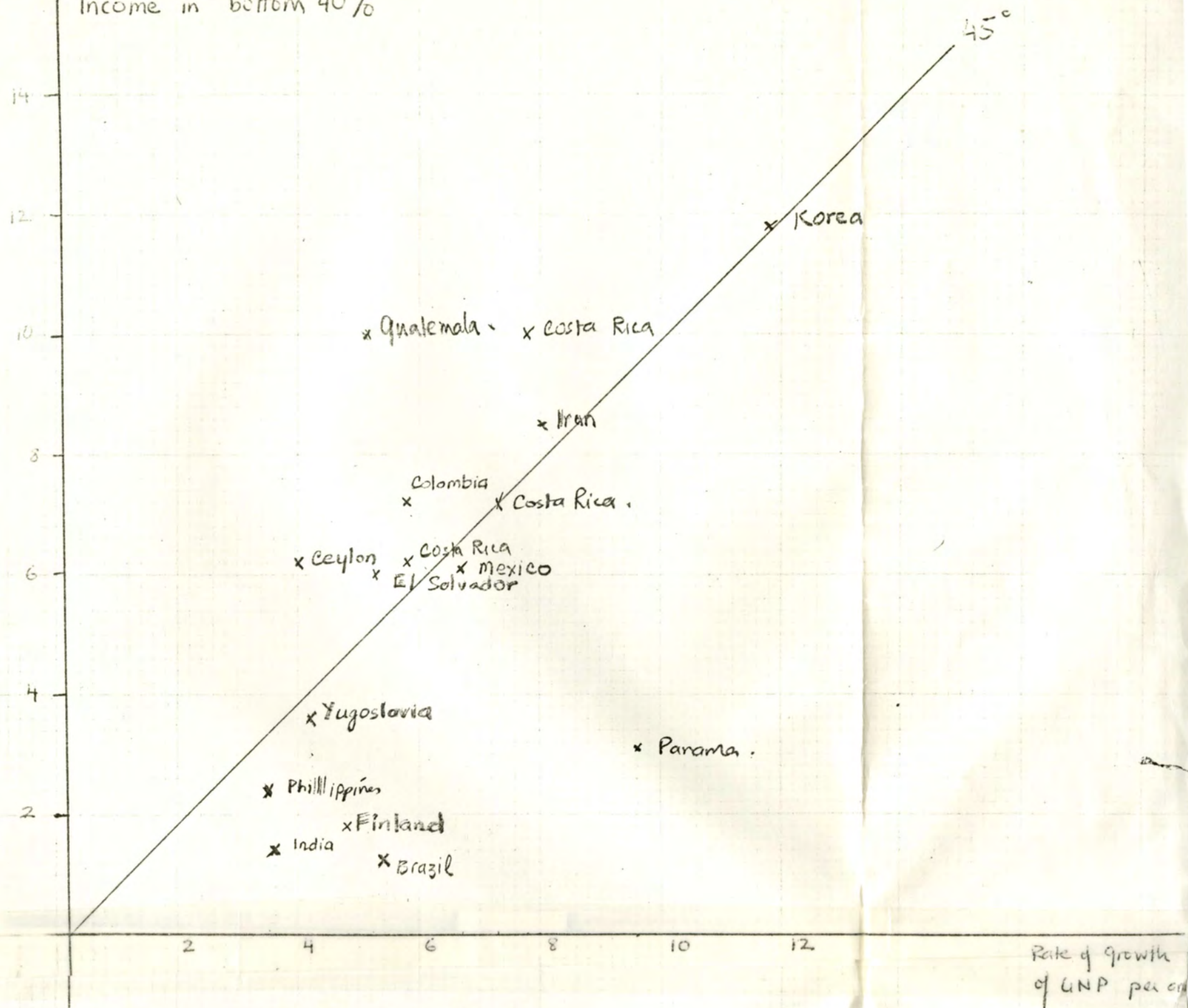
x Ceylon

x Guatemala

x Philippines

x El Salvador

Annual growth of
Income in bottom 40%



Note: Countries above 45° line show increased share of bottom 40%.

Mr. Kuczyński
D-448

File

Mr. Robert S. McNamara, President

May 8, 1973

Hollis B. Chenery, ^{WV}VP, Development Policy

1973 Annual Speech

1. Attached is a paper describing the analytical background for the annual speech. This framework should help us to define better the target poverty groups, to identify realistic objectives for governmental programs (and ours) in dealing with the poverty problems.

2. The principal conclusions which emerge are:

- A. The rates of growth of income by quintiles show significant differences as between countries. For instance, the income of the lowest 40% grew at less than half the rate of GNP. In India, where the distribution of income is not very skewed, the rate of growth of income of the bottom 40% was, however, also less than half the national growth rates. By contrast, in Mexico with its very unequal distribution of income, the income of the lowest 40% grew almost as rapidly as GNP. This suggests that from a policy viewpoint, we should focus more on the shares in growth of the income groups in relation to their average shares in total income.
- B. The diagnosis and the programs should focus on how to redistribute the benefits of growth rather than redistributing income. While it may still be necessary to redistribute assets (e.g. land), the concept of redistributing the benefits of growth is a more acceptable and operationally meaningful target for governments to focus on.
- C. It follows that we should evaluate the performance of countries differently than we do now. Table 3 shows the GNP growth rates of 13 countries and their growth rates if equal weight were given to each 1% increase in income by any member of the society. Both our judgements on performance and creditworthiness depend largely on overall and sectoral growth rates. Using equity weighting would substantially change our assessments. In addition, the use of poverty weighted growth rates provides a different framework for project analysis. Investment programs aimed at the poor would have a much more favorable rate of return than they do in the standard GNP derived analysis.

2. poverty weighted growth rates? -

Mr. McNamara

- 2 -

May 8, 1973

3. During your absence, we will incorporate these concepts, plus the suggestions in the Yudelman paper, into a revised technical draft for the speech.

Attachment

EStern/HBChenery:lm

Final Draft
May 8

A CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF POVERTY

H. B. Chenery and Montek Ahluwalia

Introduction

More than half of last year's Address to the Governors was devoted to a discussion of social equity in relation to development policy; some aspects of this theme will be elaborated this year and probably next. Since the speeches themselves cannot give a very complete diagnosis of the sources of poverty and the merits of alternative policy approaches, it is important for us to develop for internal use a conceptual framework that can guide the drafting and the further elaboration of these themes. Given the limited extent of scientific investigation in this field -- in contrast to the vast amount of speculation and political rhetoric -- the conceptual framework can only consist of a set of working hypotheses that will be elaborated or discarded in the light of ongoing research. Some of the elements of empirical evidence and policy diagnosis that are most relevant to this year's Address are set out below.

I. RELATIVE AND ABSOLUTE MEASURES OF POVERTY

1. Size Distribution of Income. Since few developing countries have reliable time series on the size distribution of income, empirical generalizations must rely heavily on

intercountry comparisons. Some classification of countries is also useful in the discussion of policy, since the nature of the poverty problem varies considerably with the economic and social structure.

The Development Research Center (Tiemann) has now compiled and analyzed data on the size distribution of income for 61 countries: 44 less developed, 13 developed, and 4 centrally planned. The tabulation includes twelve developing countries having some basis for comparison of changes over a recent five to ten year period which are analyzed in the next section.

Two types of summary measure have been found useful in comparing income distributions; decile shares and the coefficient of concentration (Gini coefficient).^{1/} In focusing on lower-end poverty, it is appropriate to compare the share of income (of individuals or households) received by the poorest 40% (this is an arbitrary measure, but less sensitive to error than the lowest 20%). Redistributive possibilities are shown by the share received by the upper 20%.

^{1/} Decile figures are consolidated in the Lorenz curve, which is obtained by plotting the cumulative percent of recipients against the cumulative share of income. The Gini coefficient (which is defined as the ratio of the area between the Lorenz curve and the diagonal to the area under the diagonal) measures overall inequality; lower values indicate greater equality.

Table 1 gives a classification of 29 less developed and 6 developed countries by income level and inequality (a more complete listing will be given in the next draft). With few exceptions, the same classification would result from using the ratio of the share going to the top 20% to that of the lowest 40% in place of the Gini coefficient.

This classification tends to confirm the hypothesis advanced by Kuznets and Myrdal in the 1950s that income distribution tends to worsen in the course of development, but that this tendency is offset at higher levels of income by redistributive measures and the spread of modernization. Countries with a high degree of inequality are shown to be concentrated in the \$200 to \$500 income bracket. The poorest countries (few of which are shown here) have more equal distributions because economic development is just getting started.

The main factor causing the growing inequality that is characteristic of the middle-income countries is the greater dynamism of the modern sectors of industry and agriculture, combined with their greater access to resources and public services. Rapid population growth accentuates this tendency, since it prevents the modern sector from absorbing all of the increments to the labor force at rates of growth of less than 8 or 9%.

Table 1 is useful in illustrating the range of observed variation in income distribution, which can be related to their social structure and economic policies (cf. Adelman paper). This

tabulation also suggests that we should consider a coefficient of concentration of .40 -- or a share of the lowest 40% of 17% of GNP -- as relatively favorable, and concentrate attention on countries in which income distribution is more unequal. The extent of change in the developing countries for which several observations are available is analyzed in Section II.

2. The International Distribution of Poverty.

For most purposes, relative measures of poverty within countries are needed since action will be taken by the government of the country. International measures based on some absolute standard of poverty are of some use in focusing world attention on the problem and in the allocation of IDA and other sources of international assistance.

Since passing reference is made in the Speech to this question, we are compiling a rough breakdown based on per capita GNP by major country and the coefficient of concentration, which together will indicate the proportion of the population falling below a given income level (\$50 GNP per capita), measured at average exchange rates.* For comparative purposes, a rough correction for non-traded goods and services will be made, which will have the effect of raising the poverty level to say \$100 GNP per capita (if comparisons to more advanced countries are implied).

3. Target Groups. Since poverty programs are designed to reach particular target groups -- small farmers, landless laborers, urban unemployed, etc. -- it is important to determine the relation of each to the overall poverty problem in each country and the economic characteristic of each group. For this purpose the size distribution of income by itself is of little use, and we need a cross-classification indicating the relation between the main occupational sectoral and regional categories and the overall distribution of poverty.

Although this type of analysis has only been done for a very few countries (Puerto Rico, Brazil, ...), we will assemble the available material over the next month to get a better idea of the "poverty

* Table 2 in next draft.

profile" in several cases. At a minimum, it is important to have an idea of what proportion of the problem we are covering in the typical target groups that are discussed and what proportion of a country's resources might be used for a given type of program.

Two dimensions of the problem on which considerable information is available are the rural-urban split and the per capita income by region in the larger countries. (Kuznets 1963 article also contains an extensive discussion of the variation in labor returns by major economic sectors among countries.)

Next year's Address will presumably cover other aspects of poverty and we should by then be in a better position to fill in the profile in more detail. This approach also forms the background for the Bank/Sussex paper on distributional policy.

II. RECONCILING GROWTH AND DISTRIBUTIONAL OBJECTIVES

The recognition of the importance of income distribution and employment by policy makers has not yet led to an adequate restatement of social and economic objectives for development policy and project evaluation. After giving considerable thought to the alternative approaches (which was a main topic of our Bank/Sussex meeting at Bellagio), we have developed a more precise formulation of the concept of "redistribution through growth", which we propose for incorporation in the Address. It is based on the observations that (a) relatively little can be done through redistribution without growth, and (b) the formulation should be sufficiently flexible to allow policy makers to incorporate their own preferences in an acceptable common framework.

It is almost universally agreed that social policy should give greater weight to the welfare of the poor than is implied by the GNP measure of economic performance. Most people would also agree that the absolute increase in consumption of the poor is the critical element rather than the increase relative to the rich (although it may also be considered desirable to reduce luxury consumption in order to limit its demonstration effects). On these assumptions, we can express the growth of social welfare as the weighted average of the growth of consumption of different income groups. Dividing the population into quintiles by income level, this means:

$$G_w = w_1 g_1 + w_2 g_2 + w_3 g_3 + w_4 g_4 + w_5 g_5$$

where G is the rate of growth of social welfare and $g_1 \dots g_5$ are the growth rates of the five size groups.

The GNP index gives equal weight to each dollar of income, which implies that the weights are the shares of each quintile in the national income. Typical shares for developing countries would be:

$$\begin{aligned} w_1 &= .53 \\ w_2 &= .20 \\ w_3 &= .11 \\ w_4 &= .08 \\ w_5 &= .05 \end{aligned}$$

The GNP index therefore measures essentially the growth of the upper 40%, who account for three quarters of the total, and is not much affected by what happens to the remaining 60% of the population.

Although any number of alternative weighting systems can be devised, one which is firmly rooted in liberal philosophy is the notion of "one man, one vote". In economic terms, this means giving ^{relative?} equal weights to each income group. One way of doing this is to assume that a 1% increase in consumption in one decile group would have equal value with a one percent increase in any other decile. This implies that a dollar increase to the lowest quintile would be valued at 13 times a dollar to the upper quintile for the example above. The "egalitarian" welfare index constructed on this principle is simply the average of the growth rates of each

80 16
20 13

- 19 -

income category weighted only by the numbers of people in each group. eg 1)

For many individuals (and some countries), egalitarian weights are not sufficiently radical. They would put most (or all) of the weight on the consumption increases of the lower groups. To illustrate the effects of such "poverty weights", we will give a weight of .67 to the growth of the lowest 40%, of .33 to the next 40%, and of zero to the top 20%.

Effects of Welfare Weights. This form of analysis is applied in Table 3 to 12 developing countries (plus Finland) for which we have measures of the change in income distribution over an interval of five years or longer. To minimize the effects of random fluctuations, we treat only three income classes: the top 20%, the middle 40%, and the lowest 40%. Growth rates for these three groups for the relevant period are shown in columns (1) to (3). The effects of the three weighting systems are given in columns (4) to (6). Measures of the income distribution in the terminal year are given in columns (7) to (9), and the shares of the increase in income over the period going to the upper 20% and lowest 40% in columns (10) and (11). For graphical comparison, the growth rates of the top and bottom groups are plotted against GNP growth in Charts I and II, which also include some advanced countries.

Table 3 reveals a great variety of country experience, demonstrating that the use of either egalitarian or poverty weights would substantially alter our assessment of the relative performance of the 13 countries.

		t ¹	t ²	△	Weighted △
eg 1)	GNP	100	110	10 %	6.5 %
top 20	60 %	60	68	13 %	
bottom 80	40 %	40	42	5 %	

--In four countries (Brazil, Panama, Mexico, and India), performance is notably worse when measured by either set of welfare weights. Perhaps the simplest way of describing the worsening of the income distribution in these countries is to say that between 62% and 85% of the increment of GNP went to the top 20% -- raising its share by 5% of GNP or more -- while the increment to the lowest 40% (Column 11) was less than their initial share. Using welfare weights, Mexico, Brazil and Panama are shifted from above-average to below-average performers.

--In three countries (Ceylon, El Salvador and Colombia), the incomes of the lower groups have been increased faster than those of the top 20%; their performance measured by poverty weights is therefore considerably better than that shown by the GNP index. These cases indicate the feasibility of raising the share of the lowest 40% by 1% of GNP per decade by maintaining the incremental share of the lowest group some 20% above its initial share, while the top 20% receive correspondingly less of the increment.

--Two countries (Korea and Yugoslavia) had already achieved relatively equal income distributions by the early sixties and have grown with little change. Where there is little scope for further redistribution, all three weighting systems give equal results and the GNP index is an adequate welfare measure.

44. Policy Implications. Until there has been further statistical work on income distribution, we should be cautious about drawing policy conclusions for individual countries. However, the general patterns of change shown here are confirmed by other evidence, and the method of analysis provides a useful guide to policy formulation. Principal policy conclusions are the following:

--Redistributive policies should be stressed in countries in which the lowest 40% receive less than 15% of the GNP or the top 20% receive more than 50% with emphasis in proportion to the departure from these levels. This group would include almost all of the countries of high and moderate inequality in Table 1 (Gini coefficients greater than .40).

--As shown in Chart I, the overall growth of GNP is ^{an} the ^{important} ~~main~~ determinant of the growth of the lowest 40%; in half the countries the two rates were within 1% of each other. Countries in which the growth of the lowest 40% lags by more than 1% should receive particular attention. (It may be noted in passing that Finland and France are in this category before taxes, but probably not after taxes.)

--Growth rates of the lowest 40% can be maintained at 1% or so above the growth of GNP for 10 to 20 years in countries where the initial distribution is quite unequal to start with, ^{but} this difference cannot be maintained but for longer periods.

These examples also suggest several ways of describing redistributive policies:

- as giving greater weight to lower income groups.

Egalitarian weights would be sufficient for most purposes, and would also provide a convenient basis for measuring the shadow prices needed for project evaluation.

superfluous?

- as giving the poor a larger share in the increment to GNP than their existing share. This is a simple formulation and illustrates the main conclusion of the analysis, but it has less value in judging alternative policies.

Elaborate?

The extent to which governments are able to redistribute income is of course determined by factors such as political will, administrative capacity, and the need to change the distribution of physical and human capital. The latter constraint is taken up below.

III. LIMITS TO DISTRIBUTIONAL POLICIES

While the speech will outline various types of distributional policies, it will focus on those that governments can implement directly, largely through the reallocation of budgetary resources, external assistance, and government personnel. In suggesting how much can be achieved for lower income groups over a period of ten to twenty years by this type of program, we need to consider it in the context of the government's total budgetary resources and other resource limits. This will be done here on an illustrative basis, assuming a resource transfer large enough to implement a policy of "redistribution through growth" that transforms an unequal into a relatively equal distribution within twenty years.

Initial Distribution of Resources

Poverty groups (where they can be separately identified) can be shown to have substantially less physical and human capital available to them than the average for the economy. (Can illustrate with data for Thailand, Brazil, Mexico....). In accounting for the variations in income levels among regions and occupational groups, the bulk of the difference can be explained by the availability of capital and land for productive units and of education for wage earners (to be qualified), although in some cases a lower productivity of total resources in poor areas has also been demonstrated.

In respect to overhead capital, this situation tends to be accentuated both for poor regions and poor sections of the rural and urban economies. The reasons are in part the greater political power of the modern sector, in part the limited ability of the central government to redistribute resources by fiscal means. Since more than half the cost of transportation, power, education, etc. is borne by state and local budgets, which are at best proportionate to income levels, the gap in public facilities between richer and poorer segments of the community tends to widen over time. Possibilities for reversing this trend are illustrated in the following examples.

Resource Implications of Distribution Via Growth

The essence of distribution via growth is that government policy should concentrate on raising productivity and income levels in lower income groups. Since the diagnosis of poverty in these groups is the lack of human and nonhuman productive assets, public policy must aim to provide an appropriate package through various types of public investments and institutional support. What are the resource implications of such a strategy? One way of examining this question is to identify the share of total capital resources owned by poverty groups such as the lowest 40 percent and to project changes in this share over time to achieve distributional goals. These target changes can then be compared with projected ownership in the absence of any poverty oriented development strategy and the difference can be interpreted as "resource transfer requirements" to be achieved largely through public investment and poverty oriented development programs. An illustrative example with plausible numbers is given below.

We divide the economy into three income classes: the top 20 percent the middle 40 percent and the lowest 40 percent and the income structure of such an economy is summarized in Table 4 below. Col. 1 shows shares of total income accruing to each group and reflects median values for LDCs with relatively unequal income distributions as reported in various size distribution estimates.^{1/} In our table total income comprises three sources of income:

^{1/} Size distribution data refer to personal income which excludes undistributed corporate profits and institutional income but our example is consistent with the necessary corrections.

Profit income which includes essentially modern sector profits and income from property of various kinds;

Wages and salaries which includes wage payments to labour in the modern sector and also the agricultural sector;

Income from self-employment which includes both high and low productivity self-employment.

These income categories constitute 30 percent, 40 percent and 30 percent respectively of total income and are distributed as shown in Cols. 2,3 and 4. The distribution between income classes is arbitrary but not unreasonable since it is made consistent with total income shares estimated independently. Profits go entirely to the top 20 percent while both wages and income from self-employment are distributed to all three income classes as shown.

Table 4

Income Structure: Table Income 100

	1	2	3	4
	Share of	Components of Total Income		
	Total Income	Profit	Wages	Self-Employment
Top 20%	60	30	10	20
Middle 40%	30	-	20	10
Lowest 40%	10	-	5	5
TOTAL	100	30	35	35

*Redistribution
wage power
↓
stocks and
bonds
This is to be a
package.*

The incomes of the lowest 40 percent consist of wage income (mainly unskilled labour) and income from self-employment which would include small farmers, artisans and other small craftsmen. Any distribution cum growth strategy must aim at increasing the share of these components of total income through additional employment, upgrading of labour by education, and provision of capital, infra-structure and other resources for productive self-employment. Most of these require substantial investment of additional resources to supplement the existing share of the bottom 40 percent in both human and non-human capital. The magnitude of this transfer is estimated below on the basis of (a) an estimate of the change in share of capital stock and (b) an estimate of investment implications of this change in share.

a) Redistribution and Share in Capital Stock of Lowest 40 percent

It is obvious from the composition of income of the lowest 40 percent that the capital stock ownership of this group consists of assets owned by the self-employed. If we take half of all self-employment income to be capital income or "profits" the total profits in the economy amount to 47.5 units of which only 2.5 units accrue to the bottom 40 percent. If this is taken as a measure of capital stock ownership it implies a share of about 5 percent in total capital stock, which is fairly reasonable given a 10 percent share in total income and the heavy dependence upon wage incomes in this group.

The next step in the analysis is to identify the target share of capital resources that should be owned by the lowest forty percent to achieve stated distributional goals. We assume that the distributional goal is to raise the share

of income of the lowest 40 percent from 10 percent to 20 percent - a very large shift by any standards since it represents the highest levels achieved in the countries listed in Table 3. Let us consider the implications of achieving this target through expanded income from self-employment. This requires self-employment income to expand from 5 percent of income (Table 4) to 15 percent. Assuming a constant average capital output ratio, this increase requires a three fold increase in the share of capital stock owned by the lowest 40 percent from about 5 percent to 15 percent. This target change in the share of capital stock must then be translated into investment requirements.

b) Targets for Investment Allocation

We assume that the capital stock in the economy will grow at about 5 percent per annum with a net investment rate of about 15 percent of GDP (This is consistent with an over all growth rate of slightly more than 5 percent in GDP). Table 5 summarizes the implications for achieving the target share in capital stock in 10, 15 and 20 years respectively. For each terminal year the volume of the total capital stock is shown (base = 100; projected growth at 5 percent per annum). Column A gives capital ownership in the absence of redistribution when we assume that shares of each income group will remain stable compared to the base year. Column B gives the target capital ownership by applying the target share to the terminal year capital stock. The difference between the two gives the resource transfer to be achieved over

the period. This transfer can be expressed as a proportion of total net investment over the period which is equal to the difference between terminal year capital stock and base year capital stock. Since we know that the net investment rate is 15 percent of GDP we can express the transfer of resources as a percent of GDP as in the row 5 of Table 5.

Table 5

Investment Implications of Doubling Share of Lowest 40 percent

	Base Year	Case I		Case II		Case III	
		Terminal Year 10		Terminal Year 15		Terminal Year 20	
		A: Without Redist	B: With Redist	A: Without Redist	B: With Redist	A: Without Redist	B: With Redist
1. Capital Stock	100.0	163.0	163.0	208.0	208.0	265.0	265.0
a) Owned by lowest 40%	5.0	8.2	24.5	10.4	31.2	13.3	39.8
b) Owned by rest	95.0	154.8	138.5	197.6	176.8	251.7	225.2
2. Total Net Investment							
Over Period:		63.0	63.0	108.0	108.0	165.0	165.0
3. Total Transfer Over Period		-	16.3	-	20.8	-	26.5
4. Transfer as % Net Inv.		-	25.9	-	19.3	-	16.1
5. Transfer as % GDP ^{1/}		-	3.9	-	2.9	-	2.4

1/ Since Net Investment is 15 percent of GDP this figure is obtained by multiplying the figure in row 4 by .15.

The simple simulation described above shows that the resource transfer required to achieve a doubling of the share of the lowest 40 percent amounts to 3.9 percent of GDP if the target is to be achieved over a ten year period

and declines to 2.4 percent of GDP as the horizon is extended to twenty years. It is obvious that similar exercises can be undertaken to show that for any given time horizon the proportionate resource transfer will be smaller for more modest increases in the income share of the bottom 40 percent. Raising income share from 10 to 15 percent, for example, calls for resource transfers between 2 percent and 1.2 percent of GDP, depending upon whether the 10-year horizon or the 20-year horizon is assumed.

Drawing conclusions from essentially illustrative numerical examples obviously calls for extreme caution. The calculations above are presented as suggesting the following:

Korea? (i) Quite substantial changes in income shares and asset concentration patterns can be achieved by operating on the increment to capital stock providing governments are willing and able to divert between 2-4 percent of GDP to asset formation to support lower income groups.

(ii) A strategy of direct support of consumption will in the long run be more expensive than allocation of resources to build up productive potential at lower income levels. This is not an argument against consumption transfers but it points to the importance of designing effective programs to increase productive potential as a "self-supporting" long run strategy.

(iii) The volume of resource transfer required is not small but neither is it totally infeasible especially if resource mobilization and performance in this field can be adequately supported by external resources. Resource transfers of this order of magnitude have been carried out in Southern Italy, Yugoslavia, Ceylon and Brazil. It is obvious that in some cases the object of the resource transfer (supporting productivity at low income levels) may not be achieved. Indeed the design of invest-

ment programs to ensure that they reach target groups may well prove the most intractable problem.

Attachments

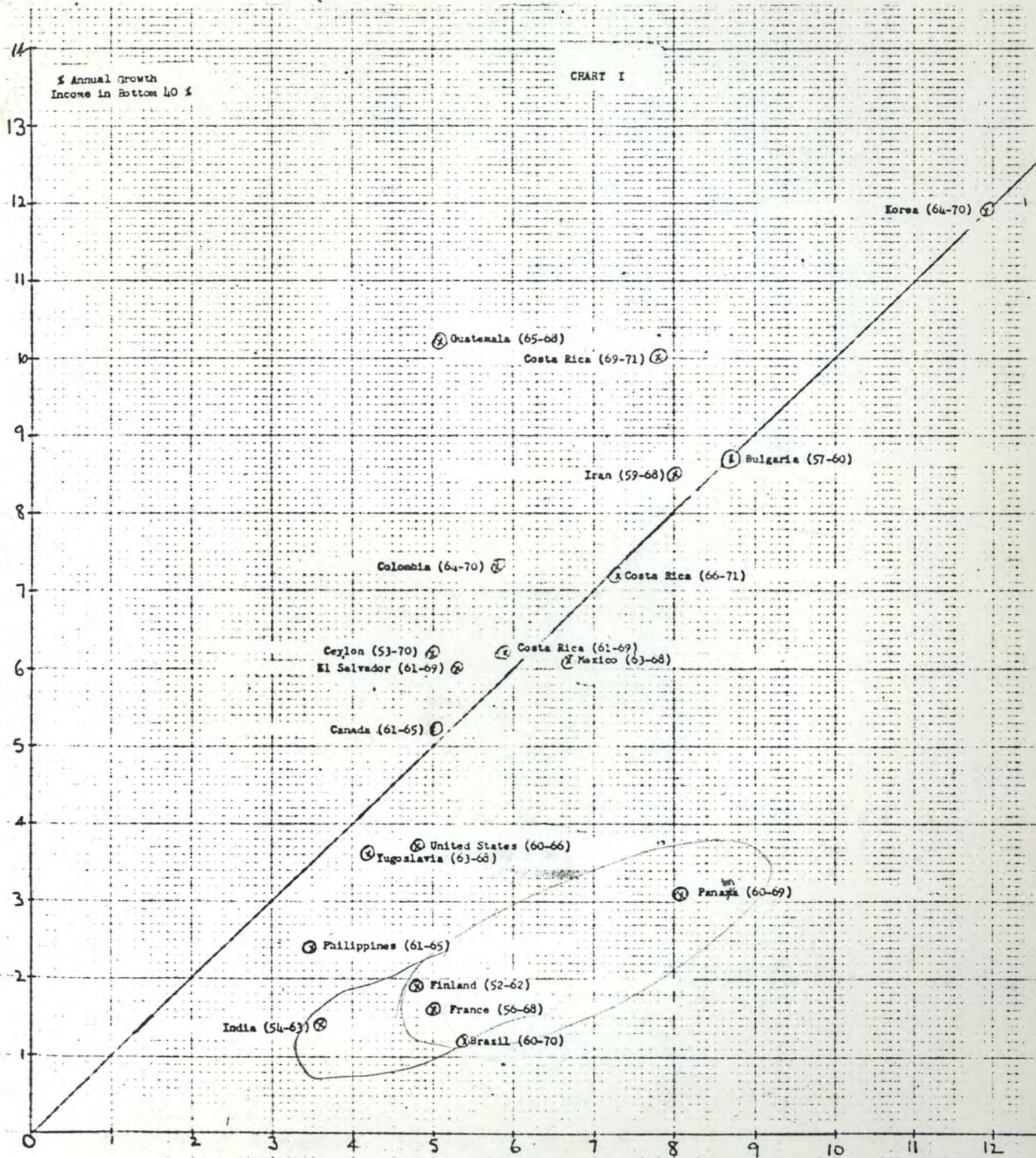
Table 1
Table 3
Chart I
Chart II

Table

HIGH INEQUALITY					MODERATE INEQUALITY					LOW INEQUALITY				
GINI > .50					GINI = 40-50					GINI < 40				
			Ratio	GINI				Ratio	GINI				Ratio	GINI
Low Income < US \$ 300	Bolivia	(138)	9.2/57.7	.53	Ceylon	(126)	14.0/54.0	.46		Ceylon	(155)	17.0/46.0	.37	
	El Salvador	(249)	12.0/61.4	.52	Taiwan	(147)	14.0/52.2	.45		India	(75)	20.0/42.0	.33	
	Honduras	(224)	7.3/67.5	.61	Dom. Rep.	(234)	13.0/54.0	.47		Korea	(180)	18.0/45.0	.36	
	Iran	(192)	12.0/57.0	.51	Guyana	(272)	14.0/45.7	.40		Libya	(220)	23.5/37.0	.26	
	Sierra Leone	(139)	10.0/67.0	.61	India	(83)	14.0/52.0	.46		Pakistan	(83)	17.5/45.0	.37	
					Iran	(279)	12.5/54.5	.47						
					Philippines	(149)	12.1/56.4	.496						
					Philippines	(150)	11.6/55.4	.496						
					Tanzania	(70)	14.0/57.0	.48						
					Zambia	(150)	14.6/57.0	.49						
Middle Income \$ 300 - 700	Costa Rica	(340)	13.8/60.0	.51	Argentina	(681)	17.3/52.0	.42		Japan	(515)	15.3/46.0	.40	
	Costa Rica	(423)	14.0/60.0	.503	Chile	(427)	13.0/56.8	.49		Spain	(572)	17.0/45.2	.37	
	Jamaica	(388)	8.2/61.5	.56	Costa Rica	(423)	14.7/50.6	.43		Yugoslavia	(428)	19.0/41.3	.33	
	Lebanon	(454)	13.0/61.0	.52	Uruguay	(460)	14.3/47.4	.42		Yugoslavia	(451)	18.5/41.5	.33	
	Mexico	(419)	10.5/58.5	.52										
	Mexico	(464)	10.2/65.8	.5787										
High Income > US \$ 700					France	(1159)	11.6/51.1	.46		Canada	(1754)	19.8/39.0	.31	
					France	(1373)	9.5/53.7	.49		Canada	(2057)	20.0/40.2	.32	
					Puerto Rico	(988)	13.7/50.6	.44		Hungary	(870)	30.0/26.0	.14	
					Venezuela	(752)	13.3/29.7	.44		N. Zealand	(1771)	22.0/39.0	.30	
										U.K.	(1367)	18.8/39.0	.32	
										U.S.	(3195)	15.0/44.0	.39	

Table 3: INCOME DISTRIBUTION AND GROWTH

	Period	I. Income Growth			II. Annual Increase in Welfare			III. Income Distribution			IV. Share of Increase to	
		Upper 20%	Middle 40%	Lowest 40%	(A)	(B)	(C)	Gini Coeff.	Share of		Upper 20%	Lower 40%
					GNP Weights	Equal Weights	Poverty Weights		Upper 20%	Lower 40%		
1. Korea	64-70	13.1	10.2	11.7	11.7	11.4 ✓	11.3	.360	45.0	18.0	48	18
2. Panama	60-69	8.7	9.0	3.1	8.1	6.6 ✕	5.1	.537	59.3	9.4	62	5
3. Iran	59-68	7.5	8.7	8.5	8.0	8.4 ✓	8.6	.473	54.5	12.5	52	13
4. Mexico	63-68	9.0	1.3	6.1	6.7	4.8 ✕	4.5	.579	65.8	10.2	85 ✓	9
5. Costa Rica	61-69	5.9	5.7	6.2	5.9	5.9	6.0	.504	60.0	14.0	60	15
6. Colombia	64-70	4.8	7.4	7.3	5.8	6.8	7.3	.542	59.5	9.4	51	11
7. Brazil	60-70	6.3	4.7	1.2 ✓	5.4	3.6 ✕	2.4	.614	66.7	6.5	74 ✓	2 ✓
8. El Salvador	61-69	3.2	9.2	6.0	5.3	6.7	7.1	.451	52.0	12.7	34	14
9. Ceylon	53-70	4.0	5.9	6.2	5.0	5.6	6.0	.373	46.0	17.0	40	19
10. Finland	52-62	5.7	4.7	1.9	4.8	3.8 ✕	2.8	.455	49.3	11.1	56	5
11. Yugoslavia	63-68	4.3	4.3	3.6	4.2	4.0	3.8	.333	41.5	18.5	42	16
12. India	54-63	4.7	2.7	1.4 ✓	3.6	2.66 ✕	1.8	.461	54.0	14.0	72	9 ✓
13. Philippines	61-65	3.0	4.7	2.4 ✓	3.5	3.44	3.2	.496	55.4	11.6	48	8 ✓



% Annual Growth in GNP

OFFICE MEMORANDUM

TO: Mr. Hollis B. Chenery, Vice President DATE: May 7, 1973
VPD
FROM: Ernest Stern, VPD
SUBJECT: 1973 Annual Speech

Attached is a first draft of a covering note to Mr. McNamara. As I mentioned to you on Friday, I think that all we should attempt to do by Tuesday is to complete the Chenery-Ahluwalia note and highlight its conclusions. This will give us another week to revise the draft along the lines we discussed.

cc: Messrs. Haq
Kuczynski ✓
Ahluwalia

Attachment

DRAFT
EStern/lm
5/7/73

TO: Mr. Robert S. McNamara, President
FROM: Hollis B. Chenery, VP, Development Policy
SUBJ: 1973 Annual Speech

1. Attached is a paper describing the analytical framework for the annual speech. The framework help us to define better the target poverty groups, to identify the objectives of governmental programs and ours in dealing with the problems of poverty, and it provides a focus for our action program.

2. The principal conclusions which emerge are:

A. The rates of growth of income by quintiles show significant differences as between countries. For instance, the income of the lowest 40% grew at less than half the rate of GNP. In India, where the distribution of income is not very skewed, the rate of growth of income of the bottom 40% was, however, also less than half the national growth rates. By contrast, in Mexico with its very unequal distribution of income, the income of the lowest 40% grew almost as rapidly as GNP. This suggests that from a policy viewpoint, it is more on the shares in growth of the income groups than on their average shares in total income.

- B. The diagnosis and the programs should, therefore, focus on how to redistribute the benefits of growth rather than redistributing income. It may still be necessary to redistribute assets (e.g. land), but the concept of redistributing the benefit of growth is a much more operationally meaningful target for governments to focus on.
- C. The Bank has a welfare objective, then it follows that we must evaluate the performance of countries differently than we do now. Table _____ shows the GNP growth rates of 15 countries and their growth rates if equal weight were given to each 1% increase in income by any member of the society. (In the GNP, a 1% increase in the top income group - income of \$1,000 - has a weight of 10, while a 1% increase in the income of the bottom group - income of say \$50 - would be 0.5.) Both our judgements on performance and creditworthiness depend largely on overall and sectoral growth rates. Using equity weighting would substantially change our assessments. In addition, these use of weight growth rates provide a different framework for project analysis. Investment programs aimed at the poor would have a much more favorable rate of return than they do in the standard GNP derived analysis.

3. During your absence, we will incorporate these concepts, plus the suggestions in the Yudelman paper, into a revised technical draft for the speech.

5/7
PPK

Subj: Annual Speech

The attached article by J. Grant has some points which may be useful. Particularly note

the table on p.18 re education

If we could have more countries to add it would be helpful.

Also Annex A makes an interesting point.

E. Stern

pp 6 #7

EQUAL ACCESS AND PARTICIPATION
vs
TRICKLE DOWN AND REDISTRIBUTION
The Welfare Issue for Low-Income Societies

by
James P. Grant
Overseas Development Council
1717 Massachusetts Avenue, N.W.
Washington, D.C.

One Asia Assembly 1973
New Delhi, India
February 5-7, 1973

Equal Access and Participation vs Trickle Down and Redistribution:
The Welfare Issue for Low-Income Societies

by
James P. Grant

The unparalleled economic growth rates achieved by most developing countries during the 1960s brought relative affluence to many in these countries, but had little effect on most of the three-quarters of the world's people who continue to live in desperate poverty. The increased output of goods and services somehow did not "trickle down" to the poorer half of the citizenry as expected. And those developing countries such as Sri Lanka and Uruguay which introduced massive welfare programs to redistribute goods and services to the very poor have found themselves in great financial difficulty, with their economic growth stunted by heavy taxation and lack of capital for investment, and consequently with growing unemployment.

Yet the experience of several less developed countries with different ideological backgrounds during this period offers some encouraging evidence that an effective mix of domestic as well as international policies can be designed--and implemented--to create new jobs, increase social services, reduce income disparities, and check population growth. The development record of these countries indicates, contrary to the assumptions of the 1960s, that policies which enhance social equity need not deter, and may even speed up, overall economic growth. We are learning that if the little farmers and the underemployed urban workers are provided opportunities to participate in the development process equal to that given the traditionally advantaged and more affluent, larger farmers, entrepreneurs and skilled workers, they too can become highly productive,

with high capability for savings and effective investment. Their output can "trickle up" to accelerate significantly the development process.

GNP and Human Welfare

During the 1960s, the developing countries achieved a 5.5 per cent average annual increase in gross national product (GNP)--a rate unequalled by the developed world at any time in its history. But in many of these countries, unemployment levels nevertheless continue to increase, some even exceeding those of the Great Depression in the United States; the income gap between the poorest half of the population and those relatively well off is actually widening, and urban squatter settlements are mushrooming because of massive rural migrations. In many areas, these problems become more unmanageable every day because population growth continues unrestrained.

Thus the experience of most developing countries over the past decade indicates that a rising GNP growth rate is no guarantee against worsening poverty. Take the case of Mexico. By traditional standards, Mexico has been very successful: its GNP has risen by 6 to 7 per cent annually for the past fifteen years. Yet unemployment in Mexico has been increasing at the same time, and the income disparity between the rich and the poor has been widening. This is not only because of Mexico's very rapid population growth (far greater than that experienced by any presently industrialized country, including Japan), but also because government policies have encouraged the use of labor-saving production techniques. In addition, the jobs, housing, education, and health facilities provided by the government have generally favored higher income groups. In the early 1950s, the total income of the upper fifth of the population

was ten times that of the lowest fifth; by 1969, it was sixteen times as great. Nor are these trends representative of Mexico's experience alone; a similar serious worsening of income distribution has occurred in many other countries, including the Philippines, Brazil, Pakistan, and Ghana. The implications are clear: economic growth policies in most developing countries have led to a dual economy which has provided considerable benefits for a sizable part of the population--civil servants, large landowners, and industrial workers--but the underprivileged majority has shared very little--if at all--in the new prosperity.

Development Redefined

To continue to measure development by GNP increases alone is to forget that, after all, the goal is human progress. Development planners need to be equally, if not more, concerned with how GNP increases than with the rate by which it increases. To greatly reduce malnutrition, disease, and widespread unemployment, the poor countries need to expand their goal of economic growth to encompass jobs and minimum standards of health, nutrition, education, and income. Their development needs to be evaluated in terms of improvements in these factors for most of the population, not only in terms of overall economic growth. What is urgently needed is increased experimentation with development strategies that will harness the human resources of the poor countries more effectively and distribute the domestic benefits more evenly.

A New Development Strategy

There is growing evidence that policies that are carefully designed to raise the income of the poorest half of the population by increasing their ability to participate in the development process can actually accelerate, not hinder, growth.

The role of savings provides a good example. It has long been a premise of most economists that the rate at which poor people save is very low because they spend any additional income on consumer goods and services. Hence, in the low-income countries, most government policies to increase savings and investment--the necessary precondition for economic progress--generally have been aimed chiefly at the higher income groups and larger firms. Conventional economic wisdom thus had a built-in conflict with social justice, at least in the short-run, in that it favored the already successful and underestimated the role of the little producer, who was considered both inefficient and unwilling to save.

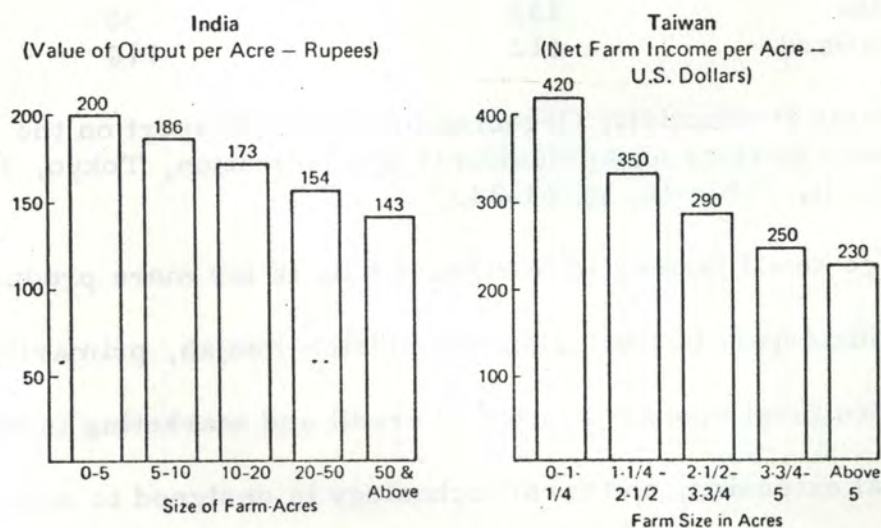
But we are now learning a different lesson from the savings performance of urban workers in some cities, as well as that of small farmers in a range of developed and developing countries. The experience of these countries is that the savings rates and productivity of the poor on any increased income can be very high if they own or rent their own economic equipment or facilities, and if governments encourage a nationwide network of institutions and economic incentives to support their participation in development.

In Singapore, an imaginative, popular withholding scheme, requiring both the worker and the employer to contribute an amount equal to 12 per cent of the worker's salary, finances the down payments for their flats and subsequent mortgage installments. The benefits of these savings are not deferred until some remote retirement date. Through largely self-financing devices such as this, a majority of Singapore's slum-dwellers have dramatically improved their living conditions in the past ten years. In Japan, Egypt, South Korea, Taiwan,

and Yugoslavia, small farmers--who have achieved extraordinarily high per acre yields on farms averaging 2 to 3 acres with the help of credit and technical advice from effective farmers' associations--have also shown that they can provide much of the savings needed for development. We know that the marginal savings rates of the small farmers in Taiwan, for example, ranged from 30 to 50 per cent during the 1960s.

There is a similar beneficial impact on per acre productivity and employment where the small farmer has effective access to credit, marketing facilities and technology. We have long been told that the small farm is "inefficient" and "less productive" per acre than large farms. This simply need not be true, as is shown by Table I below.

Table I



Sources: Taiwan — Raymond P. Christensen, *Taiwan's Agricultural Development: Its Relevance for Developing Countries Today* (Washington, D.C.: Economic Research Service, U.S. Dept. of Agriculture, 1968), p. 41. India — Lester Schmid, *Relation of Size of Farm to Productivity* (Madison, Wisc.: Land Tenure Center, University of Wisconsin).

The crucial difference in productivity in the countries shown in Table II below and in Annex A and B is not cultural habits toward work, but how the agricultural system is organized. In those countries where small farmers have access to credit and other facilities, they work hard and are productive. Where given the opportunity as in Northeast Asia and Egypt, small farmers are demonstrating a very high capacity to employ greater amounts of technology and labor to complement rather than to substitute for each other.

Table II*

Country	Net Agricultural Production/hectare (in U.S. \$)	Agricultural Working Population/100 hectares
Japan	1,350	216
Taiwan	696	195
Korea	477	196
Sri Lanka	352	120
Philippines	186	71
Pakistan	169	109
India	133	90
Thailand	112	110

*Asian Productivity Organization (APO), Report on the Expert Group Meeting on Agricultural Mechanization, Tokyo, 1968, Vol. II, Table 10, pp 23-24.

The average small farmer in Northeast Asia is far more productive per acre than his counterpart in the Indian or Pakistan Punjab, primarily because the entire agricultural support system of credit and marketing institutions, agricultural extension, and farm technology is designed to serve the average farm of just over 2 acres. (The legal maximum is $7\frac{1}{2}$ acres.) The Indian agricultural system, on the other hand, is geared to providing effective support for larger farms, and the Pakistan Punjab system for still larger farms. As a result, the smaller farmers in these South Asian countries do not have

adequate access to credit or to technology appropriate for small farms and are far less productive than they should be. Their small farms are described as "inefficient" when the real fault lies with the system rather than with the farmer or the size of his farm.

Under a different system and after considerable experimentation (including sizable unemployment in the 1950s when following the Russian capital-intensive model), China since the early 1960s has been following a set of policies with many similarities to those pursued by the Northeast Asian countries, including Japan at an earlier period: an agriculture which is far more labor-intensive than that of most developing countries, a decentralized, small-scale industry which also has been far more labor-intensive than that of most developing countries, a "management system" for agriculture and rural industry based on an essentially cooperative structure built around the commune (township farmers' association), and subordinate "production groups" (village co-ops), a heavy industry which is capital-intensive, and, finally, an extensive system of social services far more effective than those found in most developing countries, which provides the average worker with rudimentary education and health services.

All of the countries whose development "successes" have been cited earlier have found a way to increase the ability of the average worker to participate effectively in the development process, thereby helping both the individual and his society. This has required not only favoring use of plentiful labor over scarce capital, but also providing the incentive to encourage savings, establishing or supporting institutions to give small farmers and entrepreneurs ready access to capital and technology, and ensuring the availability of rudimentary but meaningful education and health services for virtually all. Through such policies, these countries have made social justice a major ally of growth. Their acceleration of growth by full employment should not surprise us, as it not only means a stake in society for more people, but also increases national output by putting idle labor resources to work and making more efficient use of capital and foreign exchange.

Effective Policies in Developing Countries

As a first major step, most developing countries need to assign more realistic values to capital, labor, and foreign exchange. These countries are generally labor-rich and capital-poor, yet many have adopted policies encouraging the use of scarce capital for equipment rather than making effective use of idle labor. Thus, foreign exchange often has been undervalued, with the result that labor-displacing equipment has been imported at artificially low prices. At the same time, most developing countries have made it far easier for producers to borrow money to buy equipment (often at subsidized interest rates) than to borrow money to obtain the working capital to employ locally available laborers. The prohibition of imports to protect import substitution industries frequently creates a quasi-monopoly situation which also favors the wholesale use of foreign technology without reference to the lower cost of labor in the developing country. This artificial system of pricing and controls has benefited a small group of entrepreneurs and skilled industrial workers at the expense of creating new jobs and distributing the benefits of growth more widely.

Industrial Technology

For some industries, such as steel and fertilizer, the most modern technology used in the West may still be the most efficient in the poor countries, regardless of the changes in the price structure. A modern steel mill produces steel much more cheaply and of much higher quality than does a small backyard furnace. Thus, during the "great leap forward," China decided to create

employment by use of small-scale technologies in the steel industry and found they were a very costly drain on resources. The effort created some jobs but only at the cost of a lower quality and higher cost product. If employment is accorded sufficient priority, this type of technology may be worthwhile, but it will result in lower rates of economic growth.

However, there are a wide range of other industries, such as those engaged in making nondurable consumer goods, and in processing, construction and agriculture, where there does appear to be a viable range of technologies. If the price of capital relative to labor is raised, entrepreneurs can shift to an alternative technology, using more labor and less machinery, to produce equally as good a product at less cost than with the use of Western technology. Let us take ditch-digging as a simple example, and let us assume that a bulldozer can do the same work as 120 men with shovels. If, under the typical price structure, a bulldozer and driver can be rented for \$100 per day whereas the wages for a man with shovel are \$1 per day, it would obviously pay a contractor to use a bulldozer. If, on the other hand, the price of capital were to be raised 25 per cent, then it would cost the contractor \$125 per day to rent the bulldozer, so that it becomes more profitable for him to employ the 120 men. In practice, of course, most decisions on industrial technology are much more complicated than this simplified illustration, but similar considerations apply. As an actual example, we can look at the rubber products industry in Asia. The following table from a study by Dr. M. M. Mehta of the ILO gives the cost of investment per worker in five Asian countries.

Table III

Rubber Products, Investment per Worker

	<u>Year</u>	<u>\$</u>
Philippines	1965	2,645
Japan	1965	1,765
India	1963	1,272
Taiwan	1965	756
Korea	1966	626

One would expect that Japan, with its high per capita income and availability of capital, would be using the most sophisticated technologies and that this would be reflected in a higher investment per worker than for the workers of the developing countries of the region. Instead, in the Philippines, because machinery was subsidized and import substitution heavily protected it has been profitable until recently to import Western technologies wholesale. In Japan, on the other hand, where machinery is more expensive than in the West because capital is scarcer and where the more abundant labor is cheaper, the technologies have been adapted to that situation. The same sort of relationship applies to the differences in investment per worker between India and Korea and Taiwan. The rubber products produced in Korea and Taiwan appear to be just as good and just as profitable as those made in India, and they provide nearly twice as much employment for a given amount of investment in the industry. There are many other industries with similar examples in which more labor-intensive products can be competitive, given the right price structure.

But where are these technologies to come from? Here we encounter a vast vacuum of knowledge that needs to be filled. In some cases Western machinery can be adapted as has been done so effectively in Northeast Asia.

Alternatively, it may be necessary to experiment with entirely new technologies developed especially for the conditions of the low-income countries, as is being done by the Chinese in many areas, and by IRRI in the Philippines for rice. But it should be noted that little research is being done in this field and that there are few institutions devoted to the discovery of appropriate technologies in particular industries. Perhaps 98 per cent of all research and development expenditures is made in the rich countries. We desperately need an expansion of research in this area, as well as on the effect of project design and contracting procedures on the use of labor-intensive rather than capital-intensive means in such areas as road building, dams, tube wells, and irrigation works.

Rural Development

Far more attention also needs to be paid in many developing countries to increased output in the rural sector and more effective use of its large pool of underemployed labor. After all, the developing countries are still essentially a rural world and most of their people will live in the rural areas at least for the next generation, and these people are the hard core of the world's poverty problem. In the past, many countries have ignored either increasing agricultural production or the participation of the small farmer, or both, while the development of heavy industry and of urban centers has been favored. This is inefficient, since the majority of people in developing countries live in rural areas, and improvement in their productivity and their living conditions could (1) make more food available; (2) slow the flow of

unemployed people to the cities; (3) provide a mass market for labor-intensive products such as textiles and shoes by increasing the purchasing power of the poor majority; and (4) provide large numbers of nonfarm jobs in rural labor-intensive industries which spring up to service this market and with the further benefit of decentralizing industry.

The problems of rural development are enormously complex, and they vary both between countries and between different regions of the same country. We are, however, learning that in many areas of the world, small-scale labor-intensive farming is a viable proposition: a farmer with suitable water control and no more than two or three acres can make a decent income for his family, providing that he has access to credit, fertilizer, high-yielding seeds and a place where he can sell his produce for a reasonable price. Perhaps the most striking demonstration of this is to be found in Northeast Asia's recent agricultural history. Thus, between the period 1911-15 to 1961-65, total agricultural production quadrupled in Taiwan, despite the fact that population pressure halved the average farm size from about five acres to a mere two and a half acres. All this was done with the intensification of farming which employed technologies appropriate to farm size on the island--using irrigation, new seed varieties, small-scale machinery and diversified patterns of crops (including vegetables, fruits and livestock). During this period the total amount of agricultural work doubled, as the number of agricultural workers rose 50 per cent and the number of days worked by each person increased one-third. The agricultural output per worker also rose by 250 per cent during this period, so that the productivity and incomes of the growing labor force also

increased significantly. Elsewhere in the world, however, a great deal of research is still needed, in order to find more suitable crops, varieties and technologies for the small peasant farmers of the third world, especially those in dry areas.

While agricultural technology is the source of this hope, it is also providing a threat to its realization. The danger is that labor-displacing tractors and combines may be introduced at a time when the poor countries must find jobs in the countryside. The use of advanced machinery is being encouraged by the same economic forces that are working in industry--the present price structure makes it profitable. Until recently, for example, an Indian or Pakistani farmer could buy a tractor without taxes or import duties, at the world market price. But the price he receives for his wheat is higher than the world price. So he pays much less in terms of wheat than his American counterpart for the same type of tractor. The possibility is imminent, therefore, that larger farmers in the poor countries will buy tractors, displace workers and cut their costs so that they corner the market for agricultural products. This would force many peasant farmers back off the farm or back to where they were only producing for their own families. The issue of agricultural mechanization is highly involved, since there are some areas where increases in production depend on the use of tractors. However, if tractors are encouraged, the general prospect is for a dual system of farming--a group of large commercial farmers making handsome profits with which they can buy more land and machinery, and a host of small subsistence-level farmers. This development would cause the displacement of many laborers and tenant farmers

who have no alternative jobs and would lead to a further concentration of income and migration to the cities.

An alternative approach to rural development which should be more suitable for job creation would be to work for a single agricultural system of viable small-holders. A prerequisite for this would be a serious attempt to redistribute land. If nearly all plots were relatively small, there would be no need for large tractors. This approach would also redistribute income and stimulate demand for those basic goods that tend to be more labor-intensive in production. There is no reason why this approach should not also increase the supply of food, provided of course, that the land reform is accompanied by measures such as credit and irrigation that allow the new landholders to farm profitably. Indeed, the available evidence on land reform--in Mexico, Bolivia, Chile, Japan, Taiwan and Egypt--shows that, although in some cases there was an initial decline, average productivity increased rather substantially after the reforms. For example, a study by an Egyptian economist, Mohamed Ghonemy, compared yield increases over the period 1951-64 on estates expropriated during the land reform with the average yield increases for the whole of Egypt. He found the following percentage comparisons:

	Cotton	Wheat	Corn	Rice	Sugarcane
	(in percentage)				
Expropriated estate increases	79	51	135	88	41
National increases	29	43	10	86	17

Though agriculture provides most of the employment and income for those in the rural areas, we should not neglect other employment opportunities there. The growing commercialization of farming, along with the use of new technologies,

is likely to add to those opportunities. In the first place, this trend requires much higher levels of inputs such as seeds, tools, fertilizer and credits. The provision and distribution of these inputs will all create jobs. In the Pakistani Punjab, for example, the town of Dasca has grown into a center for the manufacture of simple diesel engines for tube wells and grain mills. There are now more than 100 small factories producing diesel engines from principally local materials. More than 1,000 workers are employed there, all of them entirely trained in the local factories. There are many similar examples elsewhere.

Second, the increased flow of agricultural products must be processed, transported and marketed: all of these activities will also create more jobs. And finally, the increased incomes that farmers obtain will be spent on goods and services, particularly of a labor-intensive nature. Much of this activity associated with agriculture can be located outside the main urban centers in smaller market towns. In this way, medium- and small-scale industries could form the nuclei of a network of rural growth centers which would also help to increase the level of employment and the demand for food. This network would consist of a series of small country towns strategically placed to supply goods and needed services to rural villages. They, in turn, would be linked to service centers and supply lines in large towns. The Green Revolution presents an ideal spur to such a strategy because the new agricultural technologies encourage the growth of the market economy and increase the demands for productive inputs, marketing facilities and consumer goods. The growth centers could help meet these needs as well as provide social services quickly and cheaply to the farming community, thus raising its real income. They

could have agricultural processing facilities and, like Dasca in Pakistan they could manufacture simple, improved tools for the new technologies.

The centers could provide seasonal employment for laborers during the slack agricultural periods. They could also serve as alternative foci of migration for surplus farm workers who would otherwise move to metropolitan centers. Thus, growth centers could make a vital contribution to a rural employment strategy.

Public Works Programs

Several poor countries, most notably Brazil, Korea, India, Bangladesh, Indonesia, Morocco and Tunisia, have tried to absorb some of their unemployed by using them in public works programs, similar in nature to the Works Projects Administration of the 1930s in the United States, which tried to absorb some of the depression unemployed in government-financed efforts designed to improve public facilities. Attempts to put such projects on a long-term, large-scale basis have been frustrated by the fear of inflation caused by food shortages. Now, however, the situation is altered. In many poor countries, the advent of new agricultural technologies allows the supply of food to be more responsive to demand. This gives governments an opportunity to experiment with more ambitious public programs as a partial solution to their employment problem.

Of course, if the programs are simply used to clean up public places, their effect is likely to be of short-term duration. But it is possible to use public works as a means to create investment, that in turn will create new

jobs. If the labor in these programs is used for canals, dams and houses, it will help to create an infrastructure that is essential to rural regeneration. And this in turn will provide long-term employment opportunities in intensified agriculture. These projects are likely to be far more profitable in the context of rapidly increasing agricultural productivity: the returns on the investment in farm-to-market roads and in small-scale irrigation are very high when they enable farmers to use the new agricultural technologies. At the same time, the wages paid to the laborers on these projects will largely be spent on food and other basic essentials, which will further stimulate demand for these products and employment in their production.

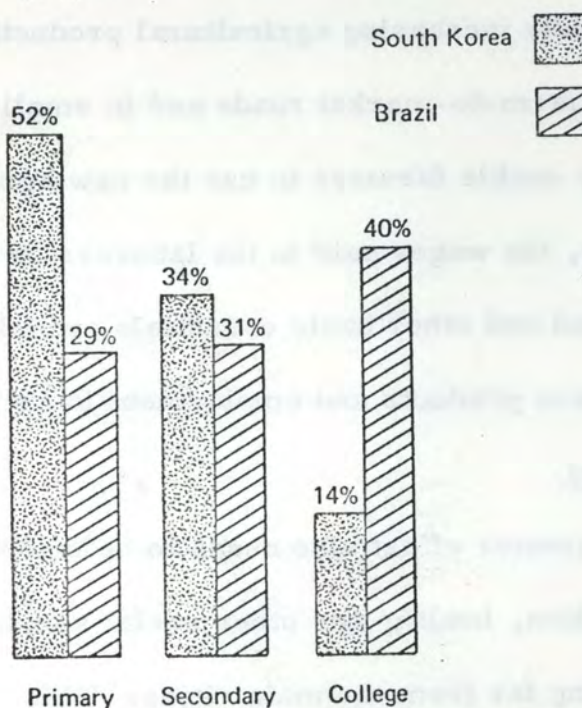
Social Services

A far greater effort also needs to be made by most developing countries to bring education, health, and other social services to the majority of the population living far from the main cities. This can be done despite the very limited availability of financial resources. For example, thanks to the extensive use of paramedics, rural clinics, and other low-cost approaches to mass medical care, infant mortality rates of Cuba and Sri Lanka are about half those of Brazil and Turkey whose health systems are patterned along essentially Western lines. Similarly, in Korea and Taiwan, where public education budgets mainly support the lower grades rather than higher education, the great majority of the people consequently does receive a meaningful primary school education. By contrast, Brazil and Mexico, whose per capita income is double that of Korea and Taiwan, respectively, devote the lion's share of their education budgets to subsidizing the costs of university education--with

the result that great numbers of the rural poor remain virtually without any education at all.

Table IV

Allocation of Government Funds According to
Level of Education in South Korea and Brazil



SOURCE: Data for Brazil from *Publicacion Anuario Brasileiro de Educacao, 1964*, published by Brazil's Ministry of Education and Culture, 1966, page 29. Data for Korea from *Social Development, 1970*, published by the South Korean Ministry of Health and Social Affairs, 1970, page 233.

Welfare and Birth Rates

Above all, there can be no long-term solution to the welfare problems of the developing countries unless population growth is brought under control. Conversely, it may not be possible to halt rapid population growth in most developing countries without major improvement in the well-being of the majority of their peoples. We now know that once better medical care, housing, jobs, and the possibility of a better life become available, old attitudes favoring large

family size begin to change rapidly. Encouraging evidence from societies as different as China, Barbados, Singapore, Uruguay, the Punjab, Taiwan, and South Korea indicates that birth rates have been declining sharply in some areas even before the introduction of large-scale family planning measures--and at much lower income levels than in the West. Preliminary examination of these cases reveals a common factor. In each of these countries, the population as a whole has shared in the economic and social benefits of progress to a far greater degree than in most developing countries--and far more so than in Western countries during their comparable period of development.

Recent evidence increasingly suggests that more equitable growth and intensified family planning programs are necessary "allies" if population stabilization is to be achieved. The latter alone is not enough. Annex C indicates the relationship between economic and social development and the motivation for smaller families. Basically there is an inverse correlation between per capita GNP and birth rates--the higher the income the lower the birth rates. The exceptions--where there are high birth rates with high per capita GNP or low birth rates with relatively low per capita GNP--are explainable largely on the basis of unusual patterns of income and services distribution. Thus, Venezuela with an extremely high disparity of income and a large group living under conditions of serious poverty has high birth rates despite its per capita income of nearly \$1,000. Conversely, South Korea, Cuba, Taiwan, and, reportedly, China, with their well above average patterns of equitable income and services distribution, have relatively low birth rates despite their modest per capita incomes.

Economic and Social Equity Can Be Efficient, Inequity Inefficient

That policy changes of this kind across a broad sweep of the economy to provide more opportunity for the "little man" to participate in development can be highly efficient in helping economic growth is amply demonstrated by the following table and Annex D. Table V shows the amount of new investment needed to increase GNP by \$1 for a number of countries over the decade of the 1960s.

Table V

	<u>Investment Cost of Increasing GNP by One Dollar (1960-69)</u>	<u>Average Annual Increase in Per Capita GNP (1960-69)</u>
Korea	1.70	6.4%
Taiwan	2.10	6.3%
Brazil	2.80	3.2%
Israel	2.90	5.3%
Japan	2.90	10.0%
Mexico	3.10	3.4%
Philippines	3.50	1.9%
United States	3.70	3.2%
India	3.90	1.1%
Colombia	4.30	1.5%

Source: World Bank, 1971; Organization for Economic Cooperation and Development, 1971; and U.S. Agency for International Development, 1970.

In other words, for each \$3.90 invested, India increased its GNP by \$1.00, the Philippines by \$1.11, Taiwan by \$1.86 and Korea by \$2.29. This efficient use of appropriate technologies in both industry and agriculture, and of appropriate systems in education and health, goes a long way to explaining the extraordinary performances of the latter two countries in both production and employment over the last decade. It has also resulted, as is shown in Annex D, and as might be expected, in these two countries over the past 20 years having dramatically decreased the disparity of income controlled by their top 20 per cent

of income recipients compared to the bottom 20 per cent at a time when the disparity has been increasing in most countries. If comparable data were available for China and Cuba, it could be expected to show significant improvement in the distribution of income and services in both countries, with considerable but not dramatic increases in per capita GNP in China, and little if any in Cuba.

Role of the U.S. and Other Developed Countries

While it is now clear that economic growth alone will not solve the problems of the low-income countries, neither will these problems be readily solved without achieving higher economic growth rates. Quite simply, higher rates of growth make it easier for a determined government to carry out necessary reforms without major violence or extreme authoritarianism, and for these reforms to succeed when introduced. And the achievement of higher rates of growth requires more machinery, raw materials, and technical know-how--all of which in turn require foreign exchange. Thus it is no accident that most of the development "successes" cited in this paper took place in countries that had broad access to foreign aid, trade, and investment. Many developing countries can acquire some additional foreign exchange by adopting more outward-looking economic policies. However, the international economic environment frequently is not congenial to their development. Policies of developed countries and the structure of international institutions often discriminate against the poor countries in both trade and finance. There must be major changes in the ways rich countries relate to the poor countries if there is to be anything like the needed increase in the transfer of resources in the 1970s. Additional sources of foreign exchange must come from trade,

investment, aid, and possibly, from such new global sources as the raw materials of the seabed and the foreign exchange made available by the International Monetary Fund through the Special Drawing Rights (SDR) mechanism.

Let us take the case of trade as an example of the predicament of the developing countries and an example of how the developed countries, including the United States, can alleviate that predicament while helping themselves at the same time. Trade is the greatest potential source of foreign exchange earnings for the developing countries, but world demand patterns and national trade policies continue to block their efforts in this critical field. In 1971, for example, the price of manufactures (the main imports of the developing countries) rose by 6 per cent, while the prices of agricultural commodities (the main exports of these countries) rose by only 4.7 per cent. Furthermore, the products which the poor countries can produce best--those with a high labor content, such as textiles and shoes--are frequently the very products upon which the U.S. and other developed nations are placing import restrictions in order to protect their own less efficient producers of these goods.

If the poor countries are to "earn" their way, therefore, rich nations will have to reduce barriers to imports from developing countries. But the responsibility of those concerned with improving human welfare cannot end with encouraging freer trade. For increased imports of low-cost products--while benefiting American consumers generally, as well as workers in its export industries--will also displace some United States workers in its less competitive industries. And just as we should not prevent poor-country products from competing with those from developed countries, we should not allow their success to penalize disadvantaged United States workers

largely belonging to minority groups, working in low productivity industries.

The United States Government, as well as the larger corporations, must accept a major responsibility for assisting and retraining American workers who are displaced as a result of efforts to reduce barriers to free trade.

New, more effective policies are urgently needed in the United States to phase out low-paying, non-competitive jobs and to help place workers in higher-wage industries encouraged by free trade.

Development Means Reform

Adoption of many of the policies outlined here requires major changes in the way in which power is exercised in many countries. Such changes will not be easy. Established interests in any country naturally resist reforms aimed at removing much of their power. Effective land reform programs require a shift in power from landlord to tenant. Similarly, effective low-cost health systems that reach an entire population require changes in doctors' professional attitudes and standards to allow widespread use of less costly, but also less qualified, paramedics. Unions are reluctant to slow their demands for wage increases where surplus labor is available in order to reduce incentives to use labor-saving machinery. Freer trade policies require the resisted phase out in both low- and high-income countries of industries that are inefficient for their societies.

We know how difficult such adjustments are to handle in a wealthy, modern society like the United States; Americans are still at odds over the "hows" and "whys" of full employment, free trade, and national health care policies. How much more complex such changes are to achieve in a low-income,

more traditional society! Yet if the leaders of the developing countries pursue economic growth without reforming existing political, economic, and social structures, the ultimate result will be failure to reach national goals. As the American and European experience of the past century demonstrates, development is not possible without constant change in these structures. The growth of one sector leads inevitably to forces for change elsewhere, and if change does not occur, tensions rise to a dangerous level.

How to bring about these needed changes? Some, such as the introduction of more realistic interest and foreign exchange rates and changes of government practices in such areas as project design and contracting which currently favor unduly the use of equipment over labor, are relatively easy to introduce once a determined government has a correct perception of the issues. In general, it appears that a sense of crisis or urgency is the determining factor in forcing governments to act and to create the needed climate for change--the apparent political costs of inaction need to exceed the perceived costs of action. Thus the serious food shortages in South Asia in the mid-1960s partially explain why the necessary policy changes were made in India and Pakistan to make possible a Green Revolution but have yet to be made in most Latin American countries. Similarly, the major reforms in Singapore were greatly facilitated by the sense of urgency created by major crises of the past eight years--separation from Malaysia with its loss of the Malaysian market, the economic confrontation with Indonesia, and the unexpectedly rapid British withdrawal. The "New Deal" social revolution in the United States of the mid-thirties was a direct consequence of the Great Depression. The truly massive

Marshall Plan of the late 1940s and the major reforms it helped engender in Europe were greatly facilitated by the rapidly escalating Cold War and the critical need for post-war reconstruction.

Effective land reform is particularly difficult. The $7\frac{1}{2}$ acre land ceiling in Japan was forced on it by the U.S. military occupation authorities, and in Taiwan it was legislated by a still fearful authoritarian government which had learned some important lessons from its disasters on the mainland. Drastic land reform was belatedly introduced in South Vietnam only three years ago when it became increasingly obvious that the conflict was not going to be settled through force of arms. Most recently in the Philippines, the economic and social conditions had deteriorated to the point where the public apparently was prepared to acquiesce in President Marcos seizing authoritarian powers to introduce sweeping reforms. A principal issue now is whether his social reforms in, say, land tenure will turn out to be largely words, as in Pakistan recently, or will be effective measures.

Political power needed to enable a chief executive to make major reforms obviously need not come only from authoritarian rule. President Roosevelt had great power to make reforms in the 1930s, and Prime Minister Gandhi probably had equal or greater power after her successful electoral and military victories of the early 1970s.

The media in both developed and developing countries clearly can affect the climate for reform and change. The media can greatly increase governmental and public awareness of key issues which need address, such as growing

unemployment and widening income disparities in low-income countries.

The media also has an important role in promoting perception of alternative solutions and their costs and benefits. Reforms have been made far more difficult in many countries by widespread dissemination of such myths as "social justice measures can be implemented only at the cost of economic growth," "small farms are inefficient," "the poor won't save," "free trade means export of jobs," et cetera.

The media in the developed countries also has a major role to play in alerting its audiences to global problems and alternative solutions. In America, for example, the decision-makers and the public generally need to be made far more aware of the rapidly growing dependence of the United States on the cooperation of other nations, including importantly the developing countries, for continued progress in American living standards. By 1985 the United States will depend on imports for more than one-half its energy needs, and by the end of the century can conceivably be dependent on foreign sources, largely in developing countries, of a major share of 12 of the 15 basic raw materials required by a modern industrial economy. Threats to the environment, such as pollution of the seas, do not always respect national frontiers. There also are international problems of narcotics control, aircraft hijacking sharing the resources of the seas, shaping the potential of burgeoning technology, and assessing the implications of the multinational corporation. We are approaching a time where the international trade and monetary systems may not work very well for the rich countries unless they also benefit developing countries far more than before. Progressively, common action among

states--including developing states--will be required if countries are to find satisfactory solutions for their problems.

Conclusion

We have seen that income distribution policies cannot readily be divorced from growth policies. And that once national and international production has been so organized as to leave a fairly large number of people unemployed or otherwise disadvantaged, and certain nations largely outside parts of the international economic system, it becomes very difficult to redistribute incomes to those who are not participating effectively in the production process. The interplay of economic and political systems is such that not only are those favored by the economic system reluctant to participate in a large-scale redistribution but the actual mechanics of doing so are frequently difficult. Therefore, it is more effective to distribute income more fairly in the first place largely through a system which results in meaningful jobs for virtually all.

Reforms within developing countries as well as changes in the trade, investment, and aid patterns between rich and poor nations, have become more than requirements of justice; they are becoming fundamental to the political survival of nations and of the international economic system. Greater equality of opportunity to participate, rather than more welfare, important as that may be, is the most urgent need of both the poor within countries and the low-income states within the community of nations. And, as we have seen, equity can be more efficient than inequity in advancing growth in countries both rich and poor.

TOO MANY FARMERS IS NOT THE PROBLEM

Agricultural Workers per 100 acres, 1965

<u>Country</u>	<u>Number of Workers Per 100 Acres</u>
Japan	87
South Korea	79
Taiwan	79
Egypt	71
Sri Lanka	49
India	36
Philippines	29
Colombia	20
Brazil	17
Mexico	12
Morocco	10
Israel	11
United States	1

Source: Derived from tables in FAO Production Yearbook, 1970

THE CAPACITY OF RURAL SOCIETIES TO USE TECHNOLOGY

~ Yields per Acre for Foodgrains, 1948-50 to 1968-70 (Pounds Per Acre)

<u>High Performance Countries</u>	<u>1948-50</u>	<u>1968-70</u>	<u>Increase</u>
Taiwan	1800	3510	1710
Egypt	2120	3370	1250
Korea	1640	2850	1210
Yugoslavia	1145	2185	1040
<u>Less Performance Countries</u>			
Thailand	1190	1670	480
Chile	1125	1630	505
Indonesia	1240	1530	290
Colombia	915	1480	565
Mexico	700	1265	565
Brazil	1170	1225	55
Philippines	930	1145	215
Turkey	835	1105	270
India	640	945	305
Iran	900	950	50
<u>Other Countries</u>			
Japan	2920	4585	1665
Denmark	2670	3860	1190
Great Britain	2155	3170	1015
United States	1495	2895	1400

Sources: FAO Production Yearbook, Rome, 1970 and
World Crop Statistics, 1966

Fertility Levels and Social Indicators for Developing Countries, 1970

	Crude Birth Rate (birth/thousand)		Per Capita GNP	Per Cent Literacy	Death Rate	Life Expectancy	Infant Mortality (1000 births)	Extent of Family Planning Programs Per Cent
	1970	1960						
Argentina	21	23	1,068d	91	8	67	56	0.6g
Barbados	21	30	523('69)	92	8e	65a	42	--
Singapore	22e	35.6f	960	75	5	68	21e	64.0h
Uruguay	22	24	833	91	9	69	54	1.9g
Trinidad-Tobago	23	40	890	89	6	66	37	19.6g
Taiwan	27e	37.1f	373	85	5e	68	18e	56.0i
Chile	28	35	854	84	9	61	92	11.3g
Cuba	29	32	280	94	7	69	41c	n.a.
Sri Lanka	29e	35.1f	169	75	8	62	50	--
South Korea	29e	39.3f	258	71	10e	58	60e	30.0i
Costa Rica	33	48	539	84	7	65	60	17.4g
Jamaica	36	42	630	82	7c	65	32	3.3g
Brazil	37b	40	394	67	9b	64	94	1.1g
Guyana	37	42	330b	80	7	61	43	--
Egypt	37e	49.3f	200	26	17e	53	120e	13.0h
India	38e	44.2f	96	28	16e	50	128e	13.2i
Malaysia	38e	41.1f	355	43	10e	63	75e	13.0h
Turkey	39e	41.0f	257	46	13e	54	119e	5.0j
Venezuela	41	46	931d	76	7	67	46	6.2g
Mexico	42b	45	670	76	9b	61	66	1.0g
Thailand	42e	44.2f	174	68	9e	56	68e	18.7i
Colombia	42-44	46	320	73	10	60	76	4.1g
Paraguay	43b	41	246	74	10b	58	67	2.3g
Peru	43b	46	446	61	12b	54	62	0.2g
Pakistan	43e	51.3f	150	16	16	51	132	--
Bolivia	44	44	203	40	19	50	108	n.a.
Ecuador	44	47	267	68	11	52	80	1.8g
Philippines	44e	46.6f	266	72	10e	55	78e	8.1i
El Salvador	44b	50	294	49	10b	58	63	10.5g
Indonesia	45e	46.6f	105	43	18e	48	135e	0.8j
Dominican Rep.	48b	49	356	65	14b	58	72	6.8j
Morocco	49e	50.1f	211	14	16e	51	149e	4.0i
Honduras	49-51	49	267	45	17	49	136	5.9g
Kenya	51e	47.0f	141	20-25	17e	48	115e	2.2k

SEE PAGE 2 FOR FOOTNOTES AND SOURCES

Footnotes

- a Average of male and female life expectancies, 1951-69
- b 1970 estimate
- c 1968 data
- d Income distribution in Argentina is better, and in Venezuela worse, than the average for Latin America; in Venezuela the poorer half of the population receives a smaller proportion of total income than any other country of the region. ECLA, Income Distribution in Latin America (U.N. Publication Sales No. E.71.11.G.2), pp. 41-61.
- e 1971 data
- f Average 1960-1965 data
- g Accumulated acceptors as a percentage of women of fertile age
- h Acceptors as a percentage of married women, 15-44 years, in 1972
- i Users as a percentage of married women, 15-44 years, in 1972
- j Acceptors as a percentage of married women, 15-44 years, in 1971
- k Users as a percentage of married women, 15-44 years, in 1971

Sources

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ANNEX D

COMPARISON OF THE ECONOMIES OF THE PHILIPPINES,
TAIWAN, MEXICO, BRAZIL, AND KOREA

Indicator:	Philippines	Taiwan	Mexico	Brazil	Korea
Per capita income (1960)	\$ 169	\$ 176	\$ 441	\$ 268	\$ 138
(1969)	203	334	606	348	242
GNP growth rates in 60s	6%	10%	7%	6%	9%
Annual increase in industrial jobs	3% (1960-69)	10% (1963-69)	5.4% (1969-70)	2.8% (1966-69)	—
Unemployment and gross underemployment*	14.5% (1961) 15% (1968)	10% (1963) 4% (1968)	Significant and rising		7.5% (1970)
Ratio of income controlled by top 20% of income recipients to bottom 20%*	12:1 (1956) 16:1 (1965)	15:1 (1953) 5:1 (1969)	10:1 (1950) 16:1 (1969)	22:1 (1960) 25:1 (1970)	5:1
Income improvement of poorest 20% over past 20 years*	Negligible	200%	Negligible	Negligible	Over 100%
Investment cost of increasing GNP by \$1 in 1960s	\$ 3.50	\$ 2.10	\$ 3.10	\$ 2.80	\$ 1.70
Exports (1960)	\$ 560	\$ 164	\$ 831	\$1,269	\$ 5.2
(\$ millions) (1970)	961	1,428	1,402	2,310	835.2
Effective land reform	No	Yes	No	No	Yes
Agricultural working population per 100 hectares	71	195	35*	43	197
Percentage of farmers belonging to cooperatives (late 1960s)	17%	Virtually 100%	5%	28%	Virtually 100%
Yields per acre for food grains	1,145	3,570	1,225	1,280	2,850
Literacy	72%	85%	76%	61%	71%
Life expectancy	55	68	62	59	64
Infant mortality per 1000 births	72	19	68	89	41
Rural households electrified*	6%	75%	—	—	27%
Consumption of electric power (kilowatt hours per person)	39 (1951) 184 (1968)	116 (1949) 745 (1968)	162 (1948) 481 (1968)	200 (1952) 390 (1966)	55 (1953) 200 (1968)
Population growth rates	2.4% (1952) 3.0% (1963) 3.4% (1970)	3.8% (1951) 3.0% (1963)** 2.2% (1970)	3.5% (1955) 3.4% (1963) 3.4% (1970)	3.0% (1960) 2.9% (1970)	3.0% (1958) 2.7% (1964)** 2.0% (1971)

*Approximate figures

**Intensive family planning program started

NOTE: The five countries have many differences in their backgrounds, but each has fashioned its own variant of a vigorous entrepreneurial system and has had its own special form of access to American resources and technology: Mexico via proximity, tourist earnings, and access to Wall Street finance; the Philippines by special treaty and tariff relationships, large sums from the U.S. via sugar quotas, veteran payments, etc., and moderate foreign aid; and Taiwan through large amounts of U.S. military aid and supporting economic assistance until the mid-1960s. Taiwan did not begin to perform spectacularly until it made a series of major policy changes, for the rural areas in the early 1950s, and for the industrial export sector in about 1960. The same is true for Korea, whose performance bears many similarities to Taiwan and Brazil, whose growth rate went up to 10 per cent in 1970-71 after financial reforms in late 1960s.

ROUTING SLIP		Date April 27, 1973	
NAME		ROOM NO.	
E. Stern			
Mr. Kuczynski			
	To Handle		Note and File
	Appropriate Disposition		Note and Return
	Approval		Prepare Reply
	Comment		Per Our Conversation
	Full Report		Recommendation
	Information		Signature
	Initial		Send On
REMARKS This is a cut and paste first draft of the chapter written in Bellagio. A more coherent product will be available next week. Unless time is of the essence I would recommend waiting for next week's version. <hr style="border: 1px solid black; margin: 10px 0;"/> <p style="font-size: 1.5em; font-weight: bold; margin: 0;">PPK</p> <p style="margin: 0;">This is Montek's preliminary draft. While the typology makes for an orderly discussion I don't see that it helps us very much.</p>			
From Montek Ahluwalia E			

Chapter III

THE SCOPE FOR POLICY INTERVENTION 1/

The operational significance of any planning exercise necessarily reduces to the extent to which it helps in choosing between alternative combinations of policy instruments available to the policy maker. In this sense planning is essentially an attempt to trace the relationships between "instrument variables" which are under the control of the policy maker and "target variables" in terms of which the objectives are defined.^{2/} Planning models may or may not explicitly identify policy instruments but when they do not it is left to the policy maker to consider how to design policy packages that will induce the economy to follow the particular solution simulated by the planning model. In either case successful planning depends crucially upon the availability of a wide range of policy instruments to give the planner maximum maneuverability in plan implementation. This is particularly true in planning for income distributions and employment related objectives which, as we have seen, cover a whole range of different "target variables" each of which may need very different types of policy instruments. In this chapter we will attempt to identify the broad types of policy instruments that are available in most countries, their potential impact on distribution and employment related objectives, and some of the considerations relevant in choosing combinations of such instruments.

^{1/} This chapter is based on a discussion paper submitted to the Bellagio working party entitled "Policy Instruments and Planning Models for Income Distribution and Employment", by Montek S. Ahluwalia and Jorge Cauas.

^{2/} If we define target variables in terms of ultimate targets and not "proximate" targets (e.g. the rate of growth rather than the rate of savings) then the target variables are the arguments of the objective function of optimizing models with "welfare weights" on each target.

1. Areas of Intervention: A Framework of Analysis

Any classification scheme for policy instruments is necessarily arbitrary and can only be defended on the grounds that it illuminates some analytical aspects of the problem. The classification scheme we have adopted is to group policy instruments according to the "areas of intervention" at which they are directed. Thus all policies affecting factor prices can be classed together as the feasible set of factor market interventions as opposed to interventions of a similar kind aimed at commodity markets. This classification enables us to separate the particular instrument (be it tax or subsidy or quantitative restriction) from the area of intervention at which it is directed. Indeed it is on those "areas of intervention" on which we should concentrate since they represent separate components of a linked general equilibrium framework for the determination of income distribution and employment in the economy. We shall argue that the scope and desirability of intervening in some areas rather than others can be determined on the basis of structural, institutional and other "typological" characteristics of the economy and the particular nature of the distribution-employment problem. The choice of particular instruments to achieve intervention in a desired direction in a particular area is essentially a matter of detailed designing and is discussed for each area separately.

We distinguish between five broad areas of intervention which correspond to the five elements in the determination of income and employment in an economy:

- (1) determination of factor prices, utilization levels and factor shares in the factor markets;

- (ii) concentration patterns of productive assets and labor skills in the population and changes in these patterns over time;
- (iii) fiscal correction of market determined income distribution through direct taxes;
- (iv) provision of public goods or direct transfers by the state;
- (v) determination of output prices and production levels. This not only affects real income given money income but in a properly closed general equilibrium model it must be consistent with factor prices and utilization levels.

Most "policy instruments" that are usually discussed in the context of income distribution and employment related problems can be seen as intervening in one or other of these five areas. This is true whether we define policy instruments narrowly to include only the traditional economic variables or broadly to include institutional and even legal changes. A major problem with most economic analysis is that it tends to ignore the importance of institutional factors concentrating instead on purely economic variables.^{1/} This is particularly unfortunate when the plan objectives involve major structural change in which the importance of institutional changes may be overwhelming. In the rest of this chapter we will attempt to emphasize the institutional implications for successful policy interventions in particular areas. Our general conclusion is that in most cases institutional reform is a necessary complement to successful use of economic policy intervention. Indeed the detailed design of policy within particular areas of intervention

^{1/} In effect, behavioral and technological relationships are defined on the assumption that the institutional factor is given. Institutional factors are implicitly assumed in the equilibrium conditions of the model which are usually based on perfect competition but sometimes relaxed to include monopoly behavior.

should be viewed not only as defining the appropriate policy instruments but also the institutional framework in which they are to operate.

2. Relative Factor Prices and Employment

Neo-classical production theory has emphasized the existence of a unique relationship between relative factor prices and employment levels as a basis for a theory of functional income distribution (distribution by factor shares). This framework is often implicit in many policy recommendations aimed at increasing employment levels in the economy. In essence, these recommendations boil down to using various policy instruments to reduce the relative price of labor to capital in the economy. Abolition of minimum wage limitations, removal of payroll taxes and social security contributions by employers, pursuit of lower wage policies in the public sector to prevent "trend setting" are all examples of price intervention aimed at the relative price of labor. These are paralleled by a whole range of recommendations directed at raising the price of capital. These include higher interest rates, abolition of effective exchange rate subsidies on capital imports (through undervaluation of the exchange rate and/or differential protection) and abolition of various investment incentives based on the fixed capital component of investment such as various types of investment allowances and accelerated depreciation provisions.

If we accept the neo-classical theory underlying these recommendations the scope for such price intervention to achieve employment and income distribution objectives depends crucially upon the technological possibilities for substituting labor for capital. This is essentially the empirical question which must be settled for the particular country in question and indeed for particular sectors. Such evidence as is available does not, however, suggest much ground for optimism. Most empirical findings on the elasticity of sub-

stitution parameter suggest that while it is greater than zero for most sectors it is also, in most cases, somewhat less than unity. Even these results relate to long-run elasticities of substitution with the short-run elasticities being typically much lower. These results suggest that the scope for employment promotion through relative price intervention is fairly limited in most sectors. The implications for the share of labor in the neo-classical framework are somewhat different from the implications for employment and generally more pessimistic. As long as the elasticity of substitution is less than unity any additional employment obtained from changes in the relative price of labor must necessarily be at the expense of a decline in labor share since employment increases by a smaller proportion than the decline in wages to the employer. This implies that the distributional effect of the relative factor price changes would need to be offset by very substantial fiscal transfers. Unless the change in relative prices is itself achieved through labor subsidies increased employment is likely to be achieved at the cost of reduced labour share.

3. Concentration Patterns in Asset Holdings and Labor Skills

Given factor price determination and employment levels for each type of factor and the earnings of each asset it is the distribution of these assets and factors among households (and the patterns of concentration therein) that determines the distribution of personal income. At the root of high concentrations of income we will find highly concentrated patterns of asset holdings and skill endowments. This pattern is necessarily an "initial condition" for any planner but it is also an "area of intervention" in which government policy can aim to change this pattern of concentration over time. The great appeal of this approach is that it separates the question of "efficiency pricing" of factors from the question of income distribution. Distributional

changes induced by changes in the patterns of concentration are more permanent, especially since such changes are likely to be self reinforcing in terms of their effects upon factor pricing^{1/}. The main question is how to implement changes in the existing patterns of asset distribution. Policy makers are faced with several alternatives implying very different institutional and political constraints and time horizons for income distribution.

(a) Land Reform and Nationalization

The most immediate and correspondingly most radical approach is to undertake direct redistribution of the existing stock of assets. Two forms of redistribution can be envisaged. In the first case, concentrated "holdings" of productive assets can be distributed to lower income units. Land reform aimed at transforming tenant cultivators into small holders are an example of this policy. An alternative to redistribution is "collectivization" whereby the ownership of the asset (and the earnings therefrom) are "socialized". In this case, the impact on income distribution depends upon the "distributional impact" of the socialized sector of the economy both in terms of wage and employment policies and use of undistributed surplus. Examples of such policies are land reforms aimed at "collective farming" or "state farms" and nationalization of industrial enterprises.

How far are such measures likely to be effective in redistributing income assuming that they are politically feasible? This requires a comparison of two critical elements: (i) the size of compensation payments, if any, in acquiring assets, and (ii) the earning ability of the asset in the redistributed form. The simplest rule is that compensation payment necessary

^{1/} Improvements in the distribution of income are frequently associated with consumption patterns which are labor using and thus likely to reinforce the initially favorable impact of asset redistribution.

should be less than the earning ability of the asset in its redistributed form. Indeed, policy makers should aim as far as possible for the minimization of the one and the maximization of the other. The first is essentially determined by political constraints although these are not insuperable. Even if compensation payments for expropriated assets are politically necessary, in most cases it will suffice to pay only a part of the value of the asset to the previous owner (especially if payment is made in money terms over time and, therefore, significantly eroded by inflation). The need to maximize the earning ability of the redistributed asset is self evident on examination but is often ignored in practice. In principle there should be no difficulty in this connection. In many cases the potential value of the asset may be substantially higher after redistribution - e.g. in the case of land reforms it is frequently argued that land productivity in relatively large holdings is low compared to land productivity in small holdings, suggesting much greater potential for increased utilization after redistribution. Nevertheless, the redistribution of assets fails to redistribute income due to the failure to provide the necessary institutional infrastructure and complementary inputs for the redistribution to be successful.

Thus, land reform may be ineffective as an instrument of income distribution if other distortions in the system prevent small holders from being efficient producers. A whole range of institutional constraints are relevant in this context - education and skill level of beneficiaries of the reform, provision of critical inputs such as marketing, credit, fertilizer, seeds, etc. Institutional structures providing these resources before the land reform are unlikely to adapt rapidly to the changed circumstances

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and failure to anticipate these difficulties will undoubtedly lead to high "trade-offs" in the short run. Similar problems obviously arise in the nationalization of industry as a "feasible" asset collectivization policy. Here again it is important to ensure that these collectivized assets remain productive after nationalization - a concern that is not particularly evident in the experience of several countries. Institutional change of any significant dimension invariably implies some short term trade-offs in the sense of output losses as the economy adjusts to a new equilibrium. Unfortunately, in this process of transition the economy may be forced to accept unnecessary trade-offs which could have been minimized through effective planning.

(b) Public Investments

Public investment determines the accretion over time to the stock of public capital and its deployment in different sectors has obvious implications for income distribution. It affects the pattern of concentration of assets by offsetting the process of private asset accumulation through the pattern of "public asset" distribution. The crucial question is how do public assets help income distribution? We may distinguish in this context between two different approaches to public investment from the point of view of income distribution policy. The first approach is to move forward some sort of semi-socialist or "mixed economy" situation in which increasing proportions of the total capital stock are socially owned. The second is to attempt to increase the earning ability of low income and low productivity occupations by "poverty focussed" public investment programs.

The socialist or "mixed economy" approach is one in which public investment is seen primarily as a means towards increased socialization of the producing sectors of the economy. This approach has obvious advantages in terms of the influence on inter-generational perpetuation of concentration

patterns, but it also presents several problems on both production and distributional grounds. On the production side there are the familiar problems of public sector inefficiency which reflect to a large extent the failure to develop appropriate institutions to ensure economic efficiency of public sector enterprises.^{1/} These constitute "trade-offs" for the achievement of inter-generational equity. On the distribution side the problem is that public sector enterprises in the various industrial sectors are most likely to be in the high wage sector of the economy and also in the highly capital intensive branches of industry. Such enterprises have a minimal impact on the distributional problem in its most serious form: open unemployment of unskilled and low skilled categories, disguised under-employment of the self-employed in low productivity occupations and, of course, the bulk of the disguised and/or open unemployment in the rural areas.

In general, the distributional impact of public sector investment in the modern producing sectors is ultimately limited by the technological characteristics of these sectors which do not favor increased labor absorption. In this situation, distributional gains depend primarily on such familiar factors as output and productivity and the growth of public assets through higher rates of re-investment.

The poverty focussed approach is one in which public investment is directed primarily at improving earnings and income levels of the poor.

^{1/} The question of public sector efficiency is invariably controversial and in almost all cases a large number of specific explanations can be provided to explain low productivity of public sector enterprises. Whatever the reasons there can be no doubt that public sector efficiency is well below the levels necessary if a generalized policy of socialization of assets is to be pursued without excessive trade-offs in terms of output losses. Measures to improve existing efficiency levels will vary in different countries but they will need to be widespread enough to be termed "institutional change".

The great advantage of this approach is that it constitutes direct and visible action aimed at increasing earnings (or providens employment) at lower income levels, hopefully its benefits are concentrated on identified poverty groups that are otherwise difficult to reach. Rural development programs aimed at providing a balanced addition to (and improvement of) rural infrastructure in the form of land improvement, drainage, small irrigation, feeder roads, credit and marketing institutions, etc., are examples of this approach. The aim of public investment in such programs is to provide "complementary assets" to increase the earning ability of small holders and through the purchasing power of those directly benefited to stimulate other productive activity in rural areas.

The limitations of this approach are fairly obvious. In the first place, the institutional constraints on successful implementation of such programs are extremely severe. Selectivity is not automatically ensured by designing such programs and much of the "benefits" may still spill over into non-target groups. This is particularly so in rural development programs, where the ability to benefit from complementary assets may itself depend upon the ownership of other assets and privileged access to institutions. Attempts to develop "poverty focused" programs are, therefore, likely to be substantially diluted unless these institutional constraints are tackled simultaneously. The second major problem with poverty focussed public investment is the productive potential of such programs. How far does selective and carefully designed public investment actually complement the productive capability of low income groups? This is in principle an empirical question but it also is frequently an act of faith. We would expect that the answer would depend essentially upon objective circumstances of each particular case. Where a few key constraints contribute to a very low average level of productivity unidentified

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poverty groups selective poverty focussed programs will be most effective in raising productivity. On the other hand, where poverty is a reflection of relatively complete absence of owned assets, the "complementary" character of public asset formation is correspondingly unimportant and poverty focussed programs should perhaps be aimed at direct support of consumption and health (see Public Goods below). It is obvious however, that public investment aimed at increased "productive power" has very strong appeal as a viable permanent improvement in income distribution patterns. But, if there is no scope for "complementary low income activities" to increase productivity, public investment must be aimed at creating productive assets overtime in the low income groups. The most obvious case of this is education.

(c) Education Promotion

The concern with unemployment and poverty is frequently accompanied by the call to expand educational opportunities for the population through appropriate public expenditure policies. Education is widely accepted as a sector for substantial public sector involvement and the political constraints upon implementing various types of educational policies are on the whole less restrictive than some of the other policies discussed.

What are the education policy's? It is self-evident that the observed relationship between poverty and education should not be taken as implying causality. The effect of education on productivity and earnings depends essentially upon the production characteristics of the economy and the type of education provided. Increased education will over time increase the supply of higher skilled labour and alter the skill composition of the labour force, but if the capacity of the economy to absorb skilled labour in relatively high productivity occupations remains limited, it is unlikely that income distribu-

tion will improve. Proponents of education oriented strategies therefore implicitly believe that the marginal product of skilled labour will remain relatively high although as the supply of skilled labour increases some of the scarcity premium associated with skilled labour may well decline. Couched in neoclassical terms the argument is essentially that the production structure is sufficiently flexible over time to absorb a gradually skill-upgraded labour force at fairly high levels of productivity.¹

An additional advantage of vigorously pursuing education oriented policies is that it widens the opportunities for employment to include large sections of the people. ~~xxxx~~ This is quite distinct from the ability to absorb skilled labour at productive occupations since it holds even where job opportunities are relatively limited and there is an excess supply of skilled labour. In this environment depending upon the selection process adopted in the job market there is at least

some scope for upward social mobility with obviously beneficial effects upon income distribution.

[This section to be expanded to include consideration of "types of education" i.e. institutional change needed.]

(d) Wealth and Inheritance Taxes

Wealth and inheritance taxes are the traditional fiscal instruments aimed at correcting inter-generational ~~xx~~ perpetuation of concentration patterns in asset ownership. Experience with these taxes in under-developed countries does not however suggest much optimism. Where they exist they are clearly marginal and in most cases highly ineffective owing to difficulties in implementation.

¹ Given the available evidence on the high elasticity of substitution between labour at different levels of skills this may imply some worsening in the share of unskilled labour through substitution in favour of higher skills.

3. Direct Taxation of Market Determined Income

Much of the welfare basis of neo classical theory is based on the ability to correct "market determined" inequality patterns through direct taxation of personal incomes and direct transfers to lower income groups either through money transfers or provision of public consumption goods.

Available evidence suggests that whereas governments have been reasonably successful in raising the proportion of tax revenues to GNP these increases have not been accompanied by any very significant improvements in the progressivity of the tax system. Two kinds of problems arise in this context. Firstly there is the difficulty of extending direct taxation to cover all categories of higher income earners. In most countries there is widespread evasion of taxation among high income groups except for the small range of middle and higher salaried workers in government and to some extent also the modern corporate sector. The problems here are primarily institutional but there is no reason to suppose that these problems are less important than those which arise with other policy instruments. Note that the trade-off usually associated with this policy instrument relates to "incentives" which may be adversely affected by such policy measures. Strictly speaking if the economy is closed for factor movements (an important assumption) the incentives question relates essentially to the work-leisure choice and this is ultimately again an act of faith and judgement by the policy maker.

4. Provision of Public Goods

Section to be added here to emphasize the importance of public provision of consumption goods. This is important when "particular section of the population" need to be "raised above the poverty line" faster than can be achieved through market determined income distribution. Also since all consumption wants cannot be satisfied public action can help to meet "key" consumption gaps of "child nutrition programs". All such policies compete with public investment from scarce resources.

5. Output Patterns and Relative Prices

Para The fourth major area for government intervention is in the commodity markets where governments may intervene to affect either the pattern of output or relative prices of particular types of output. A whole range of instruments is available in such interventions - taxes and subsidies on production and consumption, tariffs on imported goods, quantitative restrictions on domestic or import markets. Indeed much of traditional planning has been concerned exclusively with such questions of resource allocation between sectors although not in pursuit of income distribution objectives. How can intervention in this area help ~~more~~ income distribution and employment objectives? Two sorts of intervention are frequently recommended. The first calls for stimulating sectors where the production characteristics favour income distribution and employment. The second relies on stimulating the production of mass consumption goods to maintain high real incomes. It should be noted that in many cases both approaches may lead to the same sectors being expanded on the grounds that wage goods tend in most cases to be relatively labour intensive.

[This section will be expanded to discuss the "production costs" of various types of output subsidies and the scope for promoting specific "distributionally significant" sectors eg. construction, small scale industry etc.]

Choosing Policy Packages: Direct vs Indirect Approaches

Given this wide variety of areas of intervention the problem facing the practical planner is to devise a framework in which the net effects and relative merits (including complementarities and contradictions) of intervening at particular points can be evaluated. The problem of choosing a policy package is not a simple matter of choosing from the available menu. Each policy instrument will affect more than one target variable usually (although not necessarily) in opposite ways in terms of the objectives and this is the essence of the trade-off problem. Successful planning requires the minimisation of these trade-offs by selective choice of policy instruments. At one extreme this can only be done in a formal planning model (whether economy wide or sectoral) which simulates the time path of "target variables" for given combinations of policy instruments. Available planning models and their likely successors in the near future do provide some scope for such exercises and this is discussed in detail in Chapter V; but there is no doubt that we do not have at present planning models powerful enough to endogenise all policy choices.

In the absence of formal models can we at least speculate on the sort of considerations that would determine in what areas to intervene and what sort of policy combinations should be chosen? For this purpose it is useful to treat the various areas of intervention discussed above as belonging to one or the other of two rather different approaches. Firstly we have the indirect approach which attempts to intervene in the commodity and factor markets to change the market determination of real income distribution without significantly altering the pattern of concentration of assets. Secondly

we have the direct approach which attempts to alter the pattern of asset and skill distributions through various measures. As we have seen this approach may be more or less radical depending upon whether the aim is to expropriate and re-distribute existing assets or bring about longer term changes in concentration patterns through public investment and education. We have also seen that each approach suffers from its own limitations. The indirect approach relies heavily upon the extent and speed of market response to price intervention, and this depends upon short and long run substitutability in both demand and production. It should be noted that such interventions are particularly difficult to implement if they involve a whole series of interventions precisely tuned for individual sectors. Attempting to redistribute assets is a familiar radical slogan and has very strong appeal particularly because it does not rely upon continuous intervention in the market. This approach faces obvious political constraints, and the effectiveness of this approach is usually discussed only in terms of political feasibility. In fact we have argued that there is an additional problem to consider viz: the institutional constraints upon the productivity of the re-distributed asset. Asset redistribution will only lead to significant "income redistribution" if these constraints are tackled simultaneously.

The two approaches to income distribution policy should not be treated with planners having to rely upon one or the other as polar opposites. In fact we would expect that a successful policy package would consist of a judicious mixture of the two approaches depending upon the structural characteristics of the economy and the particular nature of the distribution problem. The precise mixture adopted would depend on several factors eg:

- the production structure of various sectors and the degree of factor substitutability which determines technological flexibility. The greater the flexibility the greater the scope for factor price intervention *in favour of labour using techniques.*
- the distributive character of the sector including existing patterns of asset concentration. (This is particularly important in the case of land in agriculture or natural resources in mining and extractive ~~resources~~ *industries*). In general the more concentrated the pattern of asset holding within a particular sector and the smaller the degree of technological substitution the more attractive are asset redistribution policies for the sector.
- relationship of the sector to the production equilibrium of the rest of the economy. Output losses following from distributional policies may be particularly serious for "key sectors" where the economy cannot adjust easily in response to such losses. (Exports are an obvious example). In different countries particular production sectors may be in some sense "key sectors" which should be insulated from distribution policies.
- scope for expanding tax revenues through "progressive" direct and indirect taxation. This combined with the ability to "redirect public expenditure" determines the limit for distribution oriented public consumption and investment programs.
- existence of clearly identifiable "poverty groups" which are largely outside the structure of market relationships and will have to be helped by specific public investment and public consumption programs.

As these characteristics vary substantially across countries we would expect the optimum set of distribution policies to vary accordingly.

Finding the optimum set of distribution policies for a given planning environment in the absence of formal models is a major planning problem. What we need is a systematic linkage in the planning process whereby (a) trade-offs at the micro-level in terms of the detailed design of alternative possibilities can be examined and (b) implications of a whole range of policies at sectoral or micro levels can be examined at an aggregate level. The elegant way of doing this is by constructing multi-level planning models which are formally linked (see Section III). Until this is operationally feasible planners will have to rely upon informal linkages of various sorts.

Pava An important aspect of establishing such linkages is that they emphasise that the need to develop and implement various types of macro-policies aimed at controlling aggregate demand and/or the Balance of Payments have an important bearing on the mix of distribution policies that should be pursued. The experience of many countries (Chile; ~~Sri Lanka~~ Sri Lanka) suggests that particular distribution oriented policies have led to cumulative disequilibrium well beyond the capacity of the planners to manage at aggregate levels. Attempts to establish appropriate links should be seen as informal iterations which led to more consistent planning on the whole.

The problems involved in handling such linkages through informal means are discussed in Section II (ILO chapter)

Table 3: INCOME DISTRIBUTION AND GROWTH

Table 3: INCOME DISTRIBUTION AND GROWTH															
1	Period	Income Growth			Annual Increase in Welfare					Overall welfare Rank	Change in Income Distribution				
		Upper 20%	Mid 40%	Lower 40%	GNP weights	Equal weights	Poverty weights	Final	Share of Upper 50		Share of Lower 40	Upper 20	Lower 40		
1. Korea	64-70	13.1	10.2	11.7	11.7	1	11.4	1	11.3	1.	.336 .360	41.8 45.0	18.0 18.0	48.0 ✓	18.0 ✓
3. Iran	59-68	9.5	8.7	8.5	8.0	2	8.4	2	8.6	2	.506 .473	57.0 54.5	12.0 12.5	52.0	13.0 =
2. Panama	60-69	8.7	9.0	3.1	8.1	5	6.58	7	5.1	7	.481 .537	56.6 59.3	14.5 9.4	62.0 ✓	4.5 X
4. Mexico	63-68	7.0	1.3	6.1	6.7	8	4.80	8	4.47	8	.521 .579	55.5 65.8	10.5 10.2	85.0 ✓	9.4 X
5. Costa Rica	61-69	5.9	5.7	6.2	5.9	6	5.94	6	6.63	6	.506 .504	60.0 60.0	13.8 14.0	60.1 ✓	14.6 ✓
6. Colombia	64-70	4.8	7.4	7.3	5.8	3	6.84	3	7.33	3	.573 .542	63.1 59.5	8.6 9.4	5.6	11.4 *
7. Brazil	60-70	6.3	4.7	1.2	5.4	11	3.62	12	2.36	11	.552 .614	61.5 (66.7)	9.8 6.5	74.1 ✓	1.8% X
8. Salvador	61-69	3.2	9.2	6.0	5.3	4	6.72	4	7.1	4	.528 .451	61.4 52.0	12.0 12.7	33.8	14.0 *
10. Finland	52-62	5.7	4.7	1.9	4.8	10	3.8	11	2.8	11	.395 .455	45.3 49.3	14.8 11.1	55.9 49.0	5.0 1.5 ✓
9. Ceylon	53-70	4.0	5.9	6.2	5.0	7	5.64	5	6.03	5	.461 .373	54.0 46.0	14.0 19.0	39.7	19.3 *
11. Yugoslavia	63-68	4.3	4.3	3.6	4.2	9	4.02	9	3.8	9	.330 .333	41.3 41.5	19.0 18.5	42.4	16.3 ✓
12. India	54-63	4.7	2.7	1.4	3.6	13	2.66	13	1.83	12	.396 .461	49.0 54.0	17.0 14.0	72.1 ✓	8.9 X.
13. Philippines	61-65	3.0	4.7	2.4	3.5	12	3.44	10	3.2	10	.496 .496	56.4 55.4	12.1 11.6	48.5 ✓	8.1 ✓
Canada (H)	61-65	5.8	4.1	5.2	5.0		4.9		4.7		.307 .312	39.0 40.0	17.8 20.0	45.8	20.9 ✓
U.S. (H)	60-66	5.2	4.8	3.7	4.8		4.4		4.1		.370 .388	43.0 41.0	16.0 15.0	47.0	11.9
France (H)	56-62	5.9	4.8	1.6	5.0		3.7		2.7		.461 .478	51.1 53.7	11.6 9.5	61.3 51.7	3.4 5.0

Messrs. E. Stern, M. Haq

April 25, 1973

Hollis B. Chenery

Draft Annual Speech

McNamara has asked me to give first priority to this topic so I have spent the morning going over your draft. I think it is at least as far along as the first drafts of previous years and contains many good ideas. I will outline my negative comments now and try to produce some more constructive ones after the jet fatigue wears off.

Style and Organization. The speech needs a clearer analytical line and progression from diagnosis to cure than it has at present. Each section goes back and forth between problems and solutions in a rather confusing way. As in many McNamara speeches, too much weight is put on examples which to my mind should be used to illustrate a general principle which has already been enunciated but not in place of general principles. v
dwd, 5/1

Concepts. Several conceptual problems need to be clarified. I have no objection to talking about poverty in both a relative and an absolute sense but it should be clear which one is appropriate to the context which is not always the case here. We should get away from making intercountry comparisons based on conversions of per capita GNP at exchange rates since there is about well-known bias in such estimates. Even a rough correction for purchasing power and the prices of non-credit goods would be better. In this case, the difference between rich and poor countries is cut down by a factor of 2 (see Balassa or Paul David article).

I think a new conceptual basis is also needed for discussing the distribution of benefits between upper and lower income groups. I would find it clearer to talk about the proportion of growth which goes to different income groups in comparison to their initial shares. If the marginal sharing of incremental income is more favorable to the poor than their initial average share this is progress even though gaps may be widening and the increment may seem quite small. This is obscured in the measures used here. (In many countries of course the marginal sharing is in fact worse than the initial average.) dwd

April 25, 1973

Policy Instruments. In the interest of a more orderly approach to the problem, I would suggest having a section dealing with policy instruments rather than introducing them on an ad hoc basis. In this connection, the paper prepared by Ahluwalia and Cauas for the Bellagio meeting is useful and the redraft by Ahluwalia after discussions should be better. There are also drafts on "Employment Focused Approaches" and "Poverty Focused Approaches" by the Sussex Group that you might find interesting when Montek returns at the end of the week.

I do not find the injection of targets without any particular rationale to be a helpful way of presenting policy recommendations unless the targets grow out of some analysis which is at least consistent with the rational allocation of resources (which there is no evidence of in the present draft), they seem very superficial. If you (or McNamara) feel it useful to rely on illustrative targets, I think they might be compared to the results of a well worked out distribution-oriented program in one or two countries to see what is feasible when all the appropriate constraints are recognized.

includes? Don't know

Conclusion. As you see, my reaction to the present draft is rather negative for the reasons which we anticipated from the beginning -- we do not have a great deal new to say on this subject. I think there are some new things to be said but it will take more digging to assemble them.

HBChenery:esm

(dictated but not read)

ROUTING SLIP		Date 5/1
NAME HBC		ROOM NO.
To Handle	Note and File	
Appropriate Disposition	Note and Return	
Approval	Prepare Reply	
Comment	Per Our Conversation	
Full Report	Recommendation	
Information	Signature	
Initial	Send On	
REMARKS Re your note to Simmons on review of Bank education program See attached. Please pass to PPK after way. ES		
From		

MAY 1 1973

OFFICE MEMORANDUM

TO: Mr. E. Stern, Senior Adviser, Office - V.P.

DATE: April 30, 1973

FROM: John Simmons, ~~ICHR~~, ~~DED~~ *JS*SUBJECT: ^{Sept.} August Speech to the Board of Governors*→ Kuczyński*

You have asked for ideas on education and poverty. The attached paragraphs (hardly a paper) are my second foray. A copy of the first is also attached. I assume that there is not much space for explanation in the speech. Listeners familiar with the educational policy area will know what these paragraphs are all about. If I had more time, I would provide more evidence. My time is EMENA's until mid June.

It has been exactly one year since the Santiago speech, still unread by a significant proportion of the Bank staff. Mr. McNamara promised both leadership and determination. For the education sector the Bank has produced neither. He said, "What are required are feasible... educational reform measures". We haven't suggested any. "What is needed most of all is a determination to move against the inequities of income distribution." Central Projects hasn't even produced a set of guidelines on education and income distribution for Bank missions yet! and we are spending about a million dollars a day to support students from the upper 20% not the bottom 40%!

Is the objective lacking? or is it the management? or a determination to manage by objective?

Attachments

JSimmons:ed

cc: Messrs. A. Stevenson
R. Gulhati
D. Turnham

Education for Poverty?

John Simmons

April 1973

The World Bank began investing in education in 1962. The Board of Directors has authorized more than 72 projects, but only 9 have graduated their first class of students. The rate of lending has reached almost US\$400 million per annum. But this limited experience when combined with other research and experience has encouraged us to reconsider our educational investment policy. We will make a detailed statement about our new policy in the near future, but let me suggest several ideas we are studying.

As we look around the world we see one inescapable fact. The children of upper income parents tend to get more education than low income children. Job applicants with more education tend to get better paying jobs. Thus in the next generation the gap in income increases. Only a few countries like Tanzania and China seem to have policies designed to avoid this perverse investment effect.

There are many reasons for this result. They include the disadvantages that poor children face like inadequate nutrition and parental encouragement, and the high cost of attending post primary school, even in countries where education is "free". Rich children avoid these disadvantages, and have several crucial

advantages. These include hearing the foreign language at home which is taught in primary school and is essential for passage into secondary.

Schooling shapes behavior. Children who do poorly in school develop a sense of failure which can prevade non-school activities. Teachers often reinforce this failure syndrome by paying more attention to the bright student rather than the dull.

Exams are often biased to test the cultural knowledge of the middle and upper income children, rather than the low income.

The vast inefficiency in educational investment and management is both economically costly and socially regressive. Dropout and repeating rates are high for primary school. Only one Brazilian out of three finishes the 4-year primary cycle. Dropout rates are high for secondary. In an increasing number of countries vocational and secondary school graduates do not find jobs. In Ceylon 25% of the secondary school graduates who are in the 15-24 age interval are unemployed. Often the vocational training is not geared to manpower needs^{*/}. Only one out of two Tunisian found jobs for which they were trained. Primary school children often get their certificates without being able to read and understand materials comparable to the difficulty of a national newspaper. Primary systems around the world are producing illiterates.

^{*/} The fallacy of vocational training was discussed in the literature ten years ago to the month: it's about time the Bank the Bank recognizes what it sees in the field, writes in its supervision reports, and gets with it!

These observations are more applicable to some countries than others. But the regressive nature of education investment exists in most countries. Our review of the evidence has led to two major conclusions.

First, after this review we now realize that we need to know a great deal more. What does schooling do, and what doesn't it do, for students and the society?

Some research in the LDCs tends to support research in western countries showing that investment in improving the quality of schooling like teacher training has little effect on improving achievement scores.^{*/} Furthermore, an additional year of schooling seems to have a small effect on improving lifetime earnings, or personal satisfaction. These limited findings need further study. If schooling does not make much difference in achievement scores and lifetime earnings, what does? How can policy-makers intervene with direct investment in people to improve individual incomes and economic development?

Because of these unanswered questions, we plan to launch a program of research and development. The program will be a coordinated effort. A consortium of aid agencies and policy-makers from the developing countries would develop an agenda for R & D investment. The program would be executed by researchers in the developing countries. This effort will not have an immediate impact, but should make the significant difference over time. The research and development efforts required for the new wheat, rice and corn varieties required more than 15 years. Thus our first new policy direction will be in research and development effort.

^{*/} 12% of the Bank educational lending has gone for teacher training.

Second, we do not need additional evidence to show that investment in education can have a regressive effect. But it does not have to. Following Bank objectives that our projects should improve the efficiency of the investment and development processes, and contribute to an improvement of income distribution, we will strictly limit our investment in secondary and vocational training to the few countries that have clear economic need, and that can show that the effects will not be socially regressive. We will continue to expand our assistance to primary education with the goal of providing a useful experience to the vast majority of students who will never receive additional formal education. Finally, we will expand our efforts of assistance to improve the planning of investment in human resources.

Mr. Ernest Stern
Senior Adviser, Development Policy
John Simmons

January 22, 1973

August Speech

Thanks for the comments on the first draft of my policy paper. The paper is meant to raise some policy issues in a most tentative way and thus serve as a tool for opening rather than limiting discussion. The paper will be revised after another round of talks with the Regional and Central Projects people.

I have several thoughts about a possible section on education for the August speech. The speech could clarify the education problems and suggest future directions. The speech might suggest what schools cannot do, what they can do, and what the Bank is doing to help.

1) The demystification of schooling. It was often asserted that schools could not do everything for the student, parent or society. Western research during the past twenty years has now produced consistent results showing that schooling does even less for achievement scores than educators had thought. Furthermore, schooling is shown to affect behavioral traits in often uncontrolled and perverse directions.

What are the implications of the Western research for the developing countries? First, there are three facts.

a) Many children in the developing countries do not get to school, or if they do, they are failed before they reach a functional level of reading and arithmetic ability.

b) The amount of research on the developing countries is limited.

c) That research which does exist gives results comparable to the Western data.

In short, while many children are not in school in the poor countries, those who are in school tend to learn in ways similar to their Western counterparts. Thus we would expect that further research in the developing countries will only confirm these initial findings and substantiate hypotheses based on the Jencks conclusions.

Several generalizations from the traditional wisdom should be debunked.

a) The FAO and UNESCO publications assert that increasing productivity per hectare or per man is constrained by illiteracy and insufficient schooling among farmers. Not only does little evidence exist to support these assertions, but the assertion also contradicts field observations, economic logic, and research. (UNESCO has just completed a six-year experimental program costing \$30 million dollars unsuccessfully trying to establish the causality.)

b) Educators and some planners assert that more schooling per student is always a net benefit to the individual and the society. This is not true. Evidence from many poor countries suggests that attendance at secondary school alienates students from working with their hands. Additional evidence suggests that vocational training can sufficiently mis-train students to make them less effective workers than if they had learned as apprentices.

c) Some economists assert that without exception investment in schooling enjoys a positive marginal utility. This needs qualification. In many countries primary students drop out or graduate before learning to read materials like newspapers. Secondary, technical and university dropouts and graduates have often lost their ability through lack of practice. Furthermore, when non-technical students find jobs, they may displace an individual who was performing effectively, but had less schooling. This domino effect is termed "bumping" by manpower planners.

2) What can schools do? School attendance and certificates in most poor countries are essential for personal economic advance and social status. Children who are either excluded or dropped out of primary school thus have a low probability of economic advance, regardless of their abilities. Given present hiring practices for adolescents, schooling is essential to open most employment opportunities. Thus basic schooling is needed if adolescents are not to be excluded from consideration for job opportunities.

Basic schooling can also assist in teaching useful skills and information. The probability of maximizing these results is greatest when basic schooling is considered as an end in itself rather than the first step towards a university degree. Present primary schooling would require significant reform to increase its private and social utility. Reforms are also needed for secondary and higher education, but they are less important than primary since most students as a percentage of their age groups do not, and will not, go past the primary.

Because of its fiscal importance, regional distribution and intersectoral linkages, the education sector could be a major dimension to a development strategy based on the objectives of increased income distribution and employment generation.

3) What are the chances for successful reforms? They are slim for most countries, regardless of the rhetoric to the contrary. This is because they imply a shift of the school resources from benefitting the high income groups to benefitting the low in most countries. Furthermore, after decades of research, experimentation and pilot projects in Western countries, we know a good deal about reforms that do not improve private and social welfare, but very little about reforms that do^{1/}.

4) What are the political implications of educational reform? If the reforms are going to be significant in terms of income distribution effects and employment generation, then the reforms will have considerable political implications. If decision-makers are willing to increase access to upper income positions for the low income groups, and thus limit the access to these positions for high income groups, then the educational reforms will not be a political contradiction. Examples of countries in this category would include Algeria, Bulgaria, Tanzania, Yugoslavia, Peru, Cuba and China.

If the educational reforms are going to focus on internal and external efficiency and neglect income distribution effects, then the political implications of the reforms are still important but less sweeping. Examples of reforms would be improving the cost effectiveness of teacher training and initiating realistic agricultural training. The major political problems arise from the educational establishment who see a threat to their power to initiate and manage the educational processes.

1/ The major goal of the reforms has been to improve the cognitive achievement scores of the students. The recent reviews of the research suggest that it is unreasonable to expect that school reform will greatly alter achievement scores. What reforms might be able to achieve are changes in behavioral traits and improvement in both employment generation and income distribution.

5) What are the policy alternatives for the Bank?

I hesitate to put this section in now, since my policy paper will suggest answers in several months. The following are therefore crude and tentative.

a) Continue the present policy of investing mainly in general secondary and vocational education, with assistance to teacher training. Continue to ignore the context of the curriculum. The time horizon for extending this policy is limited since the Bank will soon run out of projects in these areas.

b) Realize that in most countries the present policy is widening the incomes gap for the bottom 40% and wasting resources. Given the income distribution objective of Bank policy, lend to countries which share this objective and which would welcome a quantitative and qualitative improvement in basic education. Since it is unclear how to do this in optimum ways, this would mean an important learning experience for the Bank and other interested observers.

This alternative might mean concentrating the Bank's education funds in a smaller number of countries, and maybe reducing temporarily the Bank's commitment in education in order to determine what the optimum education programs will be.

c) Declare a ten-year moratorium on Bank loans to education. Invest significant resources into research and evaluation of ideas and programs that appear promising, and then try and replicate them as pilot projects in different types of countries.

The three policy options may be seen as extreme by some observers. Certainly numerous permutations and combinations are possible. But for those who are involved daily with the crisis in education, other alternatives may appear as panaceas.

Mr. Ernest Stern

- 5 -

January 22, 1973

The education community has so far been unable to provide leadership in how to handle the crisis in education. The Edgar Faure Report²/for UNESCO was expected to begin to fill the leadership vacuum, but will not. The formulation of realistic research programs and policy alternatives is urgently needed.

Ernie, please note that I will be on a Basic Economic Mission from February 12 -- March 19 (Tunisia).

2/ See John Simmons, "One step forward and two steps back concerning the crisis in education: The Report of the Faure Commission", Draft, IBRD, January 1973.

JSimmons:ed

cc: Messrs. Hawkins
King