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IMPROVING INCOME DISTRIBUTION AS A DEVELOPMENT GOAL: AN OPERATIONAL APPROACH

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The Setting

Throughout the world, the poor are ascending to political power. In the newly developing countries, the educated elite is looking toward the nascent middle-class and the masses of farmers and workers for political support. A widely observed effect of prevailing development strategies has been a concentration of benefits in the higher income groups of the small modern sectors of the economy, while the great majority of people in the lower income groups and the densely populated small-farm areas are by-passed. Often they are becoming worse off as a result of labor-saving and capital-intensive technologies, increasing unemployment in cities and backing-up of growing labor-surpluses in rural areas. 1/

This process has contributed to the rise of political unrest in many developing countries. It is responsible for a shift in the goals of development strategy, from increasing the GNP for its own sake to increasing it for the sake of improving the income distribution -- the clout of which is reducing poverty. The United Nations Report on the Second Development Decade, prepared under the leadership of Jan Tinbergen, concludes that while the sixties were dedicated to the growth

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1/ Empirical evidence to this effect is accumulating fast throughout Asia, Africa and Latin America. See Robert d'A Shaw "Jobs and Agricultural Development," Overseas Development Council. Monograph 3, Washington, D. C. 1970.

of the GNP, the seventies must be dedicated to the reduction of poverty. Similarly, World Bank President Robert McNamara ended his address to the UN Conference on Trade and Development in Santiago with this challenge: "Our clear duty for .., this decade is to face up to mass poverty ..., determine its dimensions, locate its whereabouts, set a limit beneath which we will not accept its continuance, and make our first priority a threshold of human dignity and decency which is achieveable within a generation." This paper sets out to contribute precisely to this task.

Our analytical techniques for planning and monitoring development are geared to handle production economic problems, to measure changes in national income. Countries are improving their statistical data on inputs and outputs, prices and trade, on many items related to national income accounting. In contrast, income distribution problems deal mainly with differential rates of consumption in various income groups and regions, with establishing minimum adequate standards of necessities of life for normal functioning of man's body and mind, for exercising his rights and duties, his freedoms and responsibilities as a citizen and human being.

Practically useful methods for dealing with these distribution problems and the statistical data required to "determine the dimensions and locate the whereabouts" of poverty are badly needed for charting effective strategies for improving income distribution, with the basic goal of achieving critically required consumption levels in the low income groups and preventing excessive concentration of wealth and economic grower in the high income groups,

Measuring Income Distribution

Around 1890, Pareto was intrigued by the fact -- which later was proven erroneous -- that every society seemed to have just about the same proportion of rich people. To prove it statistically, he derived the "Pareto curve". With both axes on log scales, he plotted the cumulative percent of consumer units on the ordinate and their incomes in monetary units and in ascending order on the abscissa. The curve shows the percent of consumer units above the income designated. His curve is most sensitive at the high-income end. Later, Gini converted the abscissa to cumulative percent of aggregate income. This facilitated comparison between countries and between time-periods. Still later, Lorenz used cumulative income shares on the ordinate, and both axes on natural scales. Here, the curve is most sensitive in the middle-income range.

All three pioneers in distribution measurement used income equality as the norm: the Pareto- and Gini- coefficients express the degree of inequality by the curve's angle with the equality line, the Lorenz coefficient by the area between the curve and the equality line. 1/

Adelman and Morris have done pioneer work by gathering distribution data from 44 countries and analyzing them in Lorenz terms. In testing the effect of a wide range of 31 independent variables on these distributions

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1/ For a brief summary of these methods see Mary Jean Bowman, "A Graphical Analysis of Personal Income Distribution in the U.S.A.," pp. 72-102. Readings in the Theory of Income Distribution, Blakiston, Phil. 1951. See also Simon Kuznets, "Economic Growth and Income Inequality." American Economic Review, Vol. XLV, No. 1, March 1955, pp. 1-28.

they find school enrollment, natural resources (fuel, minerals and agricultural land), and government's share in total net investment the most significant, making for lower degrees of inequality; the impact of per capita GNP was much less effective. 1/

Since population and income are expressed in percentage shares of their respective aggregates, the Lorenz method reveals nothing about income levels, and hence cannot measure the extent of poverty. All it can measure is the degree of inequality of income relative to the equality norm. This norm, however, is a purely statistical one and does not represent a policy goal of any nation, whatever may be its stage of development or its political ideology. We shall return to this issue later. 2/

The most relevant aspect of the Lorenz method concerning the issue of poverty is the fact that income concentration in the high-income groups tends to increase the extent of poverty if the per capita national income is very low. In countries with a high per capita income, this does not necessarily hold since a high income concentration can occur in a distribution without a large extent of poverty.

This can be seen in Table 1. For instance the U.S. has a comparatively high concentration ratio, but none of its people have less than the very

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1/ Irma Adelman and Cynthia Taft Morris, "An Anatomy of Income Distribution Patterns in Developing Nations," Development Digest, Vol. IX, No. 4, Oct. 1971, pp. 24-37, National Planning Association, Washington, D. C.

2/ See Edward C. Budd, ed., Inequality and Poverty, Norton, N. Y. 1967; and Martin Bronfenbrenner, Income Distribution Theory, Aldine, Chicago, 1971, Ch. 3.

Table 1. Per Capita Income, Concentration in Top 20%, and Concentration Ratio of Top to Bottom 20% of Population, around 1960. 1/

Countries	Per Capita GNP	Income Concentration in Top 20% of Population	Concentration Ratio of Top to Bottom 20%	Percent of Population Below $150 income Line
Per Capita GNP	$	%	Multiple	%
over $300				
U.S.A.	2,220	52	12	-
Israel	1,093	39	6	-
Japan	709	46	10	8
South Africa	533	57	30	36
Libya	437	90	895	66
Venezuela	768	47	11	20
Argentina	564	52	7	-
$150 - 300				
Iraq	228	68	34	61
Taiwan	186	52	12	58
Tunisia	226	65	13	64
Ivory Coast	208	55	7	68
Brazil	268	62	18	55
Colombia	266	68	31	68
Ecuador	186	42	7	51
Under $150				
Ceylon	138	52	12	65
India	90	42	5	88
Burma	70	48	5	92
Sudan	104	48	9	77
Tanzania	64	61	6	91
Bolivia	117	59	15	83

1/ Based on data from Adelman and Morris, op. cit., p. 27.

low income level of $150, despite the fact that 52% of total income comes to the top 20% of the people. One of the reasons is the high level of per capita income. Another example how little one can learn about poverty from the Lorenz-type analysis is Ecuador as compared with the Ivory Coast. Both have the same low concentration ratio of 7, and the per capita income in the Ivory Coast is 12 percent higher, yet 68 percent of the people fall below the $150 income line compared with only 51 percent in Ecuador. Furthermore, countries with very low degrees of income inequality can have a very large extent of poverty, such as India and Burma.

Adelman and Morris constructed six different concentration coefficients for measuring the income distribution of the various countries, concluding that the Gini coefficient ",,, represent the best simple index of overall concentration. However, income distributions with very different properties can have the same concentration ratio." Hence, they found various combinations of more specific indices more useful, namely the "percentage shares in total national income going to population groups of different income levels", i.e, those going to the poorest 20% and 60%, the middle 40-60% and the highest 20% and 5%. Our table shows the percentage income share of the highest 20% of the population, and the concentration ratio of the highest 20% in multiples of the lowest 20% of the population; the first index focuses on the income concentration in the top quintile, and the second relates this to the income share of the bottom quintile.

None of these measurements of income inequality reveal anything directly about the extent of poverty. The index of the relative extent of poverty shown in the last column of Table 1 cannot be obtained from the Lorenz-type data which relate only to the equality norm. Income equality, however, has no necessary quantitative relation to the concept of poverty, and hence cannot serve as a norm for dealing with poverty problems. Instead, we need a norm or a set of norms with reference to which income distribution can be analyzed and evaluated. This requires a method in which the Key dependent variable is expressed in terms of specified levels of consumption of specified goods and services.

Measuring the Extent of Poverty

Governments need for their development strategy an objective method for measuring the extent of poverty in its various aspects. They must know the number of families who live below designated levels of nutrition, education, medical care, other goods considered essential, and income in general.

A modification of the original Pareto approach can serve this purpose by changing the ordinate to show the percent of people falling below (instead of above) the income designated on the abscissa. This is the Pareto-type curve we shall use in our analysis.

The distributions of twenty-five countries in very different stages of economic development along with their per capita national incomes are shown in Table 2 and for twenty countries in Figures 1-3. 1/ We can now compare directly the percentages of the people whose incomes fall below any designated income level. For instance, in India 88% of the people had less than $150 income in 1960, as compared to only 58% in Taiwan and practically none in Japan. At the $800 level, in Japan 70% of the people fell below that level as compared to only 22% in the U.S.A. This is a very useful and concrete kind of information for studying the extent of poverty in various countries, and for monitoring the effects of development strategies on the extent of poverty, as we shall examine in more detail later.

1/ Derived from data in Adelman and Morris, op. cit.; the conversion from Lorenz to Pareto-type data can be done by (1) dividing total population by 5 to obtain number of people in each quintile, (2) distributing total national income according to the percentage income shares over the quintiles, (3) dividing the income of each quintile by its population yielding the average income per person for each quintile, (4) assuming that this mean income of the quintile approximately represents the median, and (5) that the mid-points between the quintile means represent the limits of the quintile ranges. By plotting these income means and limits against the population quintiles we obtain the Pareto-type curve. We assume that the exchange rates used for converting country currencies into U.S. dollars approximately reflect the same real purchasing power of one dollar's equivalence in local currencies, i.e. that one dollar would buy about the same basket of goods -- adjusted by differences in consumption habits -- in India as in Japan or any other country.

Table 2, Per Capita Income and Comperative Extent of Poverty in Various Countries, around 1960.

Country	Per Capita GNP	Percent of People falling below the Income Line of:			
		70$	100$	150$	300%
Per Cap. National Income over $400	$	%	%	%	%
U.S.A.	2,220	-	-	-	-
Israel	1,093	-	-	-	< 10
Venezuela	768	-	-	< 10	24
Japan	709	-	-	< 10	20
Argentina	564	-	-	< 10	33
Greece	555	-	-	-	23
South Africa	533	16	27	36	52
Libya	437	56	59	66	74
$200-400					
Mexico	386	10	20	35	59
Chile	324	10	15	29	66
Brazil	268	17	26	55	78
Colombia	266	33	44	58	74
Philippines	254	17	25	46	74
Iraq	228	31	52	61	76
Tunisia	226	26	44	65	78
Ivory Coast	208	< 10	22	68	84
Under $200					
Morocco	187	32	64	75	81
Taiwan	186	23	35	58	84
Ecuador	186	17	32	51	89
Ceylon	138	33	49	71	85
Bolivia	117	43	14	83	91
Sudan	104	48	61	77	> 90
India	90	48	71	88	97
Burma	70	78	88	92	98
Nigeria	75	74	84	90	94
Tanzania	64	86	89	91	95

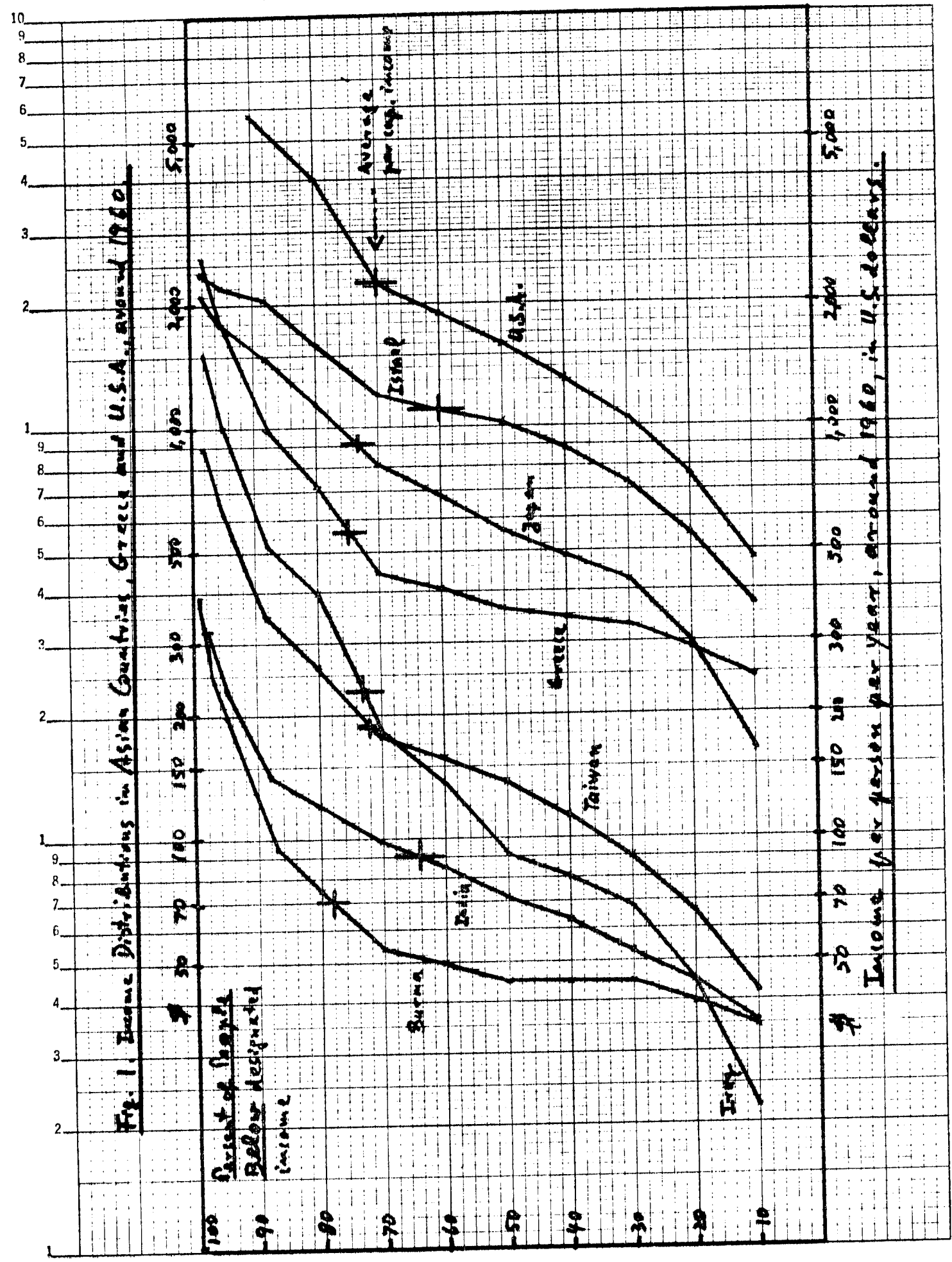
Fig. 1: Income Distributions in Asian Countries and U.S.A. around 1960
Percent of People Below Respected Income
Israel
U.S.A.
Japan
Greece
Taiwan
Burma
India
Iran
Income per person per year, around 1960, in U.S. dollars.

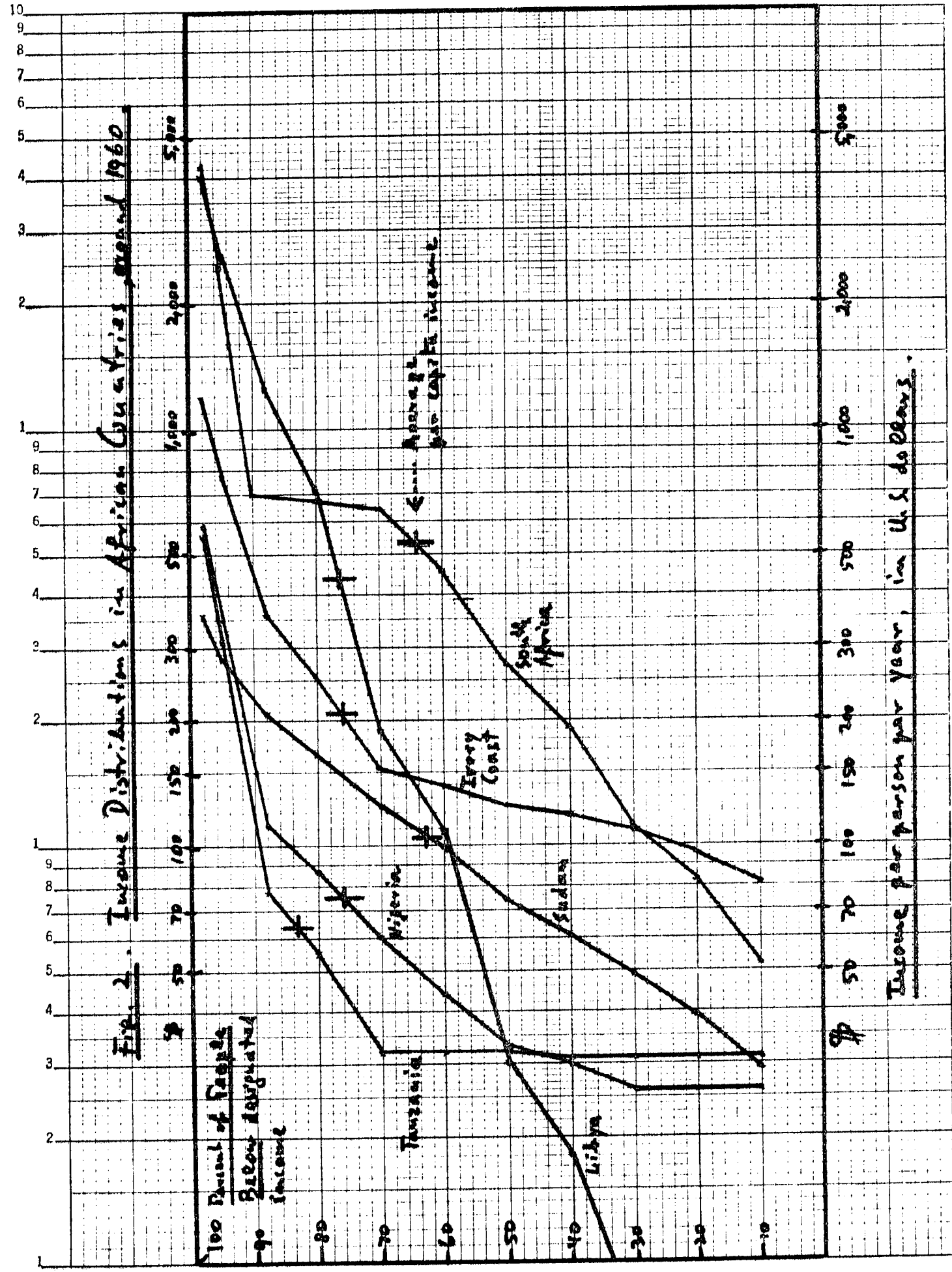
Fig. 2. Income Distributions in African Countries, Around 1960
100 Pounds of People Ranked by Income
Income per person per Year, in U.S. dollars.
Ivory Coast
Nigeria
Tanzania
Sudan
South Africa
Libya
<---- Average per capita income

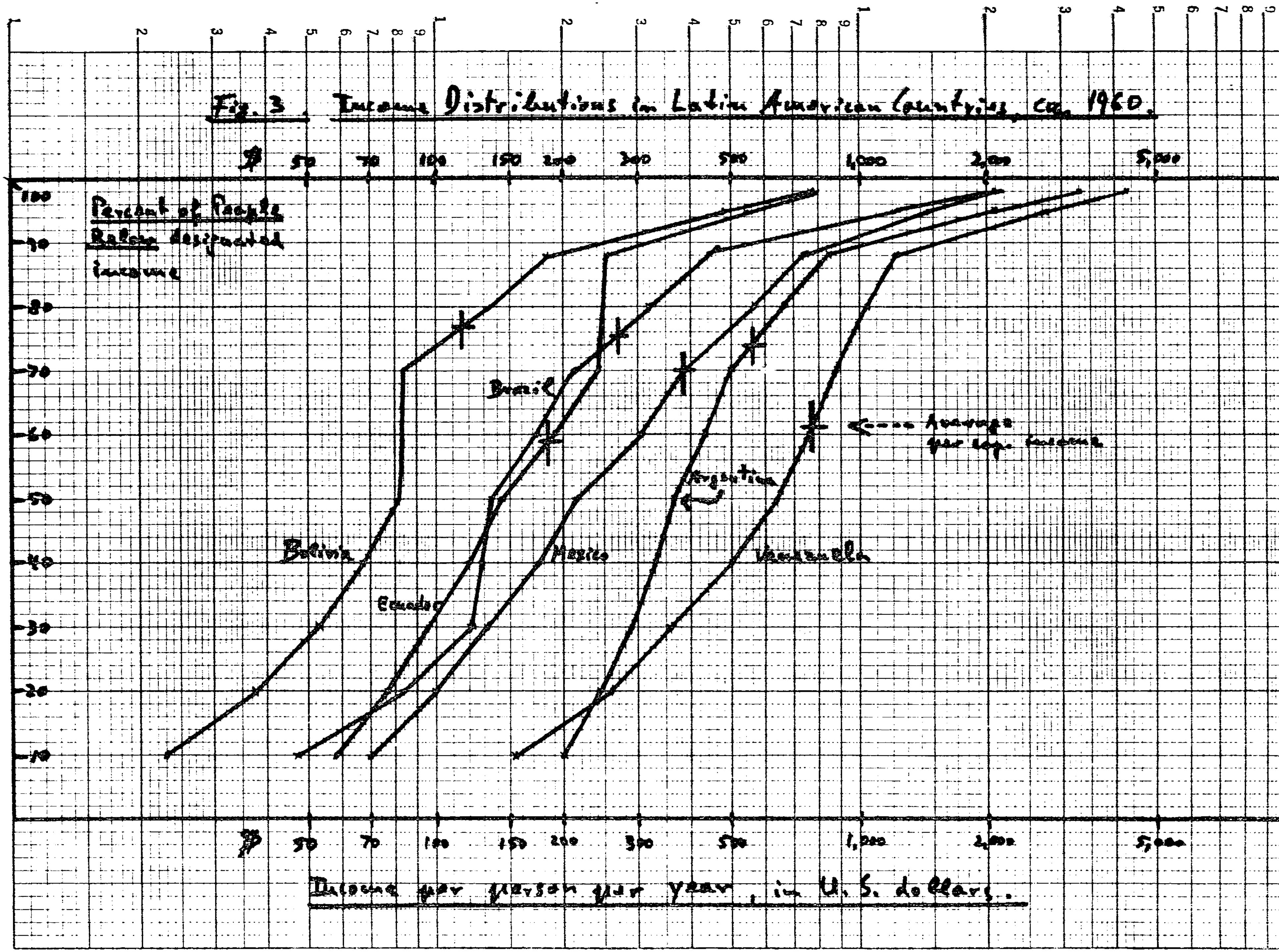

Fig. 3. Income Distributions in Latin American Countries, ca. 1960.

The graphical presentation of distributions in Figure 1-3 greatly facilitates inter-country comparison. There are wide variations in the slopes of the curves which appear to be quite unrelated to the level of the average national income per capita. For instance, in Tanzania and Burma the slope is nearly vertical for the lower 70% of the people, i.e., these people are almost equally poor, while in India, Nigeria and the Sudan, the slopes are much less steep which may indicate greater opportunities for economic advancement of poor people, at least up to 1960. All five countries have low average per capita incomes of around $100 or less. Similarly, among countries with higher average incomes, the shape of their distribution curves also varies widely.

It is interesting that in 13 of the 20 countries shown on the charts, the people falling below the national average per capita income constituted about 70% of the population, ranging between 65 and 75 percent. These 13 countries included the U.S.A. with the highest as well as Burma, India and Nigeria among the lowest income countries. Would this perhaps support Pareto's hunch of a "constant percentage" of rich people which Gini proved erroneous?

Table 2 reveals many important aspects of income distributions. For instance, with average incomes of around $400 per capita, Libya had 56% of the people living below the $70 level compared with only 10% in Mexico. Comparing Libya with the very low income country of India (average $90), the proportions of Indians living below the $70 income line is considerably smaller, 48%, than the 56% of Libyans in a much higher income country ($437 average).

Our main concern here is the method of analysis, not the accuracy and cross-country comparability of the original data upon which these tables are based. We are fully aware that these data leave much to be desired. 1/ It is also clear that the wide variations in income distributions cannot be explained by a few simple independent variables, and that the per capita national income is one of the less important ones, as Adelman and Morris have proven. This means, of course, that any given country can pursue its economic development along different paths of strategy, among which some would increase, and other reduce poverty as the national income grows. This makes it critically important for a country to obtain the required information to test alternative development policies with respect to their distribution effect, and to keep track of changes in income distribution and the extent of poverty.

In recent years, evidence has been mounting from many parts of the world that benefits from economic development are accruing mainly to the modern sector, to the large enterprises in agriculture, industry and trade, while the traditional sector, the small farms and craftsmen get by-passed by progress; in fact, they often become worse off as a result of labor-displacing machines and capital intenstive techniques in areas of severe labor

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1/ The comparison of distributions between countries is subject to several limitations. The most obvious is the validity of the foreign exchange rates by which national currencies are converted into U.S. dollars. These rates, however, would not affect the slopes of the distribution curves, only their relative positions. More serious is the question of how comparable the statistical data are upon which the distributions are based. What sources of "income" are included, how is the "consumer unit" defined, what kinds of sample surveys and aggregate data enter into the calculation of the distributions? Despite these limitations, international comparisons of distributions can tell us much more about the various economies than the per capita national incomes.

surplus and unemployment. In response to these experiences, the goal of full employment is moving into the forefront in the development strategy of many countries.

For tracking down the effects of development processes on income distribution, it is much more important to compare the extent of poverty in a certain country over time than between countries at a point of time. Unfortunately, there are few newly developing countries with the required data.

From the 1968 Consumer Survey in Ceylon, it is possible to derive an income distribution which should be fairly comparable to the one for 1960 reported in the Adelman and Morris paper. The result is presented in Table 3 and Figure 4. In Ceylon, the extent of poverty increased during the 1960-68 period despite a fair rate of growth in the GNP per person. The percent of people below the $100 income level increased from 49 to 60 percent. In the U.S.A. during the 1960's, the extent of poverty decreased, at the roughly comparable level of $1,000 per person, from 28% to 17%. 1/ The respective shifts of the distribution curves, upward toward more, poverty in Ceylon, downward toward less in U.S.A., are clearly seen in Figure 4.

1/ Although poverty in the U.S.A. is more wide-spread among the non-white population, it also has decreased substantially. During the 1950-70 period, the percent of non-white families falling below the poverty line of $3,700 decreased from 62% to 27%, while that of white families decreased from 30% to 12%. For a study of changes in poverty in various categories of families in the U.S. between 1947-1960, see H. W. Locke Anderson, Trickling Down: The Relationship between Economic Growth and the Extent of Poverty Among American Families, Quarterly Journal of Economics, Vol. 78, No. 4, Nov. 1964, pp. 511-524.

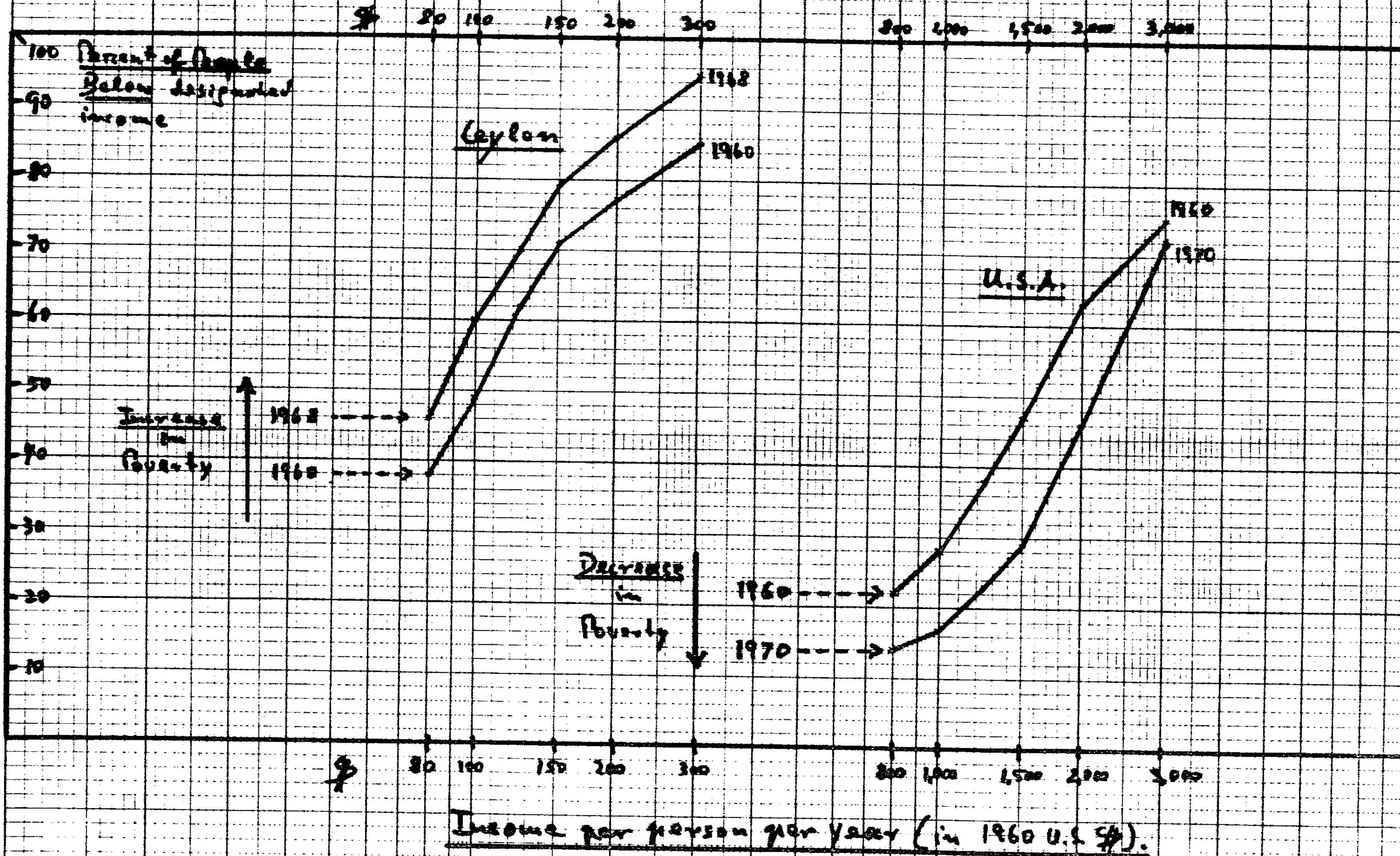
Table 3. Changes in Income Distribution, 1960-70, in Ceylon and the U.S.A. in 1960 Dollars. 1/

Ceylon			U.S.A.		
Income per Person	Percent of People Below Designated Income 1960	1968	Income per Person	Percent of People Below Designated Income 1960	1970
$	%	%	$	%	%
80	38	46	800	22	14
100	49	60	1000	28	17
125	62	70	1250	38	23
150	71	79	1500	47	29
200	77	86	2000	63	46
300	85	95	3000	75	72
Average Income	138 2/	156 2/	Average Income	2,210	3,130

1/ Source of data: for Ceylon, 1960, Adelman and Morris, op. cit.; for 1968: ILO, Matching Employment Opportunities and Expectations - A Program of Action for Ceylon. Technical Papers, 1971, p. 63-64; for U.S.A.: Bureau of the Census, Current Population Reports, Consumer Incomes, May 20, 1971, p. 7.

2/ For 1960: average of 1958 and 1963; for 1968: average of 1967-69; Source: United Nations International Statistics Yearbook 1970.

Fig. 4. Change in Income Distribution in Ceylon and U.S.A., 1960-70.



Necessities and the Poverty Line[1/]

So far, we have used the term "poverty" simply for the lower end of the income distribution. For policy guidelines, and especially for measuring the effectiveness of anti-poverty measures, it is necessary to specify more concretely at which level of income a family suffers from lack of certain minimum needs for a sustained normal functioning in society, as workers, citizens, parents and human beings.

Some of these basic needs consist of distinct physical requirements: certain amounts of food, clothing and shelter of various kinds which are necessary for sheer survival. Others are of a more economic and cultural nature and change with the development process in society: education, health and medical care and sanitation, and a collection of goods for work and house-hold and transport which come to be considered "essential goods and services". Both categories of physical requirements and essential goods make up the concept of "necessities of life" and include for each society at a given time, a specified collection of such necessities. For each component a minimum amount and quality considered adequate for the normal functioning of people can be specified.

Each "necessity" has two dimensions: quantity and quality. For instance, the minimum adequate quantity of food can be specified in terms of calories, proteins and vitamins. These required quantities of nutrients in the form of low-cost foods constitute the quality dimensions of the food "necessity", while the same amount of nutrients in the form of pastry, artichokes and oysters do not. For practical purposes we simply stipulate that a "necessity" be determined by a minimum adequate quantity of low-cost quality.

1/ I am grateful to Dr. Keith Bryant for valuable advice in the preparation of this section.

A further distinction is useful: there are necessities available free or at a below-cost rate to the individual, such as school education, roads and parks, protection of law and order, health and medical services and others. These we call "infra-structural necessities" which are not or only in part paid out of the personal incomes of the individual. All other necessities must be so paid in full, either in money or in kind (e.g. home-produced food), and are called "personal necessities".

Clearly, income distributions are based upon personal income and do not or only in part include the real income received by individuals in the form of infra-structural necessities. This is particulary important when distributions are compared between countries with widely different kinds and amounts of infra-structural necessities made available without personal expense, such as between communist and non-communist countries, and among the latter between those with or without extensive national education, health and medical care and other welfare schemes.

For some of these infra-structural necessities, modern governments designate standards of minimum adequacy and aim to implement them. The most common is elementary education which governments not only offer free of charge, but require mandatory school attendance for a specified period of years. Other examples include the number of medical doctors per 100,000 population, sanitary water supplies, etc. Whatever the government or someone else (e.g. charitable foundations) pays for these infra-structural necessities does not come out of the personal income of the users, and hence does not appear in their "personal income" received in money and home-produced goods. These contributions from external sources to the real income of the individual in the form of

specific infra-structural necessities are very important as anti-poverty measures in a country's development, but are not included in income distributions.

In principle, the sum of all the "personal necessities" valued at the minimum adequate quantity and low-cost quality represents the "poverty line". These are things that can be objectively measured, and the income level which society designates as the poverty line can serve the government in implementing policies designated to reduce the number of people falling below that income level.

For example, in the United States such a poverty line was designated for the first time in President Lyndon Johnson's State of the Union Message to Congress in January 1964, in which he declared "war on poverty". He referred to the Council of Economic Advisors' Report whose second chapter deals with "Eliminating Poverty - A National Goal", outlining the main features of a strategy. Various studies of "low-cost" and "economy-plan" family budgets for a non-farm family of 4 had been worked out by the Social Security Administration. They ranged between $3,000 and $4,000 in 1962. On the basis of such studies, the annual money income of $3,000 per family was designated as the "boundary" below which poverty sets in (p. 58 of Report). In 1962, 20% of all families (with over 30 million people) had total money incomes below $3,000. In 1950, that percentage stood at 32%.

Income distributions for the United States are published every year, broken down by white and non-white families of different sizes and other characteristics, by urban and rural families, and by various regions. The poverty lines are adjusted according to size of family, urban or rural households, and by regions. Periodically, reports of

the Consumer Incomes Series (U.S. Department of Commerce) summarize changes in the "Extent of Poverty Among Families", showing "families below poverty level" in the various categories of population. These distributions reports are used in the administration of several welfare programs and as guides in policy proposals and decisions.

Clearly, the concept of the "poverty line" is not a subjective or arbitrary judgment of some individual, but represents a consensus of society, based on studies of consumer budgets, on what people concur to consider necessities of life in their country and at the present period of time. This socio-economic consensus is evidenced by general public acceptance and by legislative or administrative action with reference to the poverty line and renders it "objective" in the same sense as many other institutional facts such as the standards of individual and group behavior established by law or custom are objective facts to an economist.[1/]

In newly developing countries, such an official designation of a specific poverty line for the personal income of a family, as has been done in the United States, is rarely found. Yet, there are many examples for applying the poverty line concept to certain critical kinds of necessitities. For instance, Ceylon has been distributing free rice rations to every man, woman and child for many years, to establish a nutritional floor below which no-one should fall. Cities in may countries have built low-cost housing with reasonably adequate water and sanitary facilities for poor families at rental rates geared to their ability to pay. Often, minimum wage laws are intended to keep a worker above the poverty line - although this intent is often not realized as governments find no ways to guarantee full employment, and labor unions tend to become

1/ Another example of an objective norm is the speed limit on highways; it also changes with the state of the transport system, as the poverty line changes with the state of economic development.

closed shops to internalize the benefits of their collective bargaining strength for a limited membership. Still, in these and many other distributions policies the concept of the poverty line constitutes the operative principle for their implementation.

Strategies for Improving Income Distribution

Improving income distribution does not necessarily mean soaking the rich for redistribution of current income to the poor. Granted that such redistribution of current income streams could in fact eliminate poverty in the affluent countries, it is quite obvious that this strategy would not raise the income of the poor above the poverty line in the newly developing countries with present average per capita incomes of considerably less than $1,000 - at least not within an economic system with a fairly large private sector.

Economic development is not a zero - sum game. Modern technology and production organization make it possible to raise labor productivity and income of the poor without necessarily reducing the income of the rich - that is according to the "Pareto - better" conditions where some people become better off without others becoming worse off. Theoretically, this condition can be met whenever the national income increases faster than the population - which has been true for many developing countries during the last decade or two.

A good demonstration of this "Pareto - better" change in income distribution has been presented in a recent study by Marsden.[1/]

1/ Keith Marsden, Toward a Synthesis of Economic Growth and Social Justice. International Labor Review, No. 1969, p. 389-418. ILO, Geneva. - In this stimulating paper, the author presents also an intermediate model providing for some modernization in the traditional sector.

Using simulation techniques, he compares the impact of two development strategies upon income distribution. The "crash model" follows the strategy of concentrating development processes in the modern sector of the economy, and leaving the traditional sector to its time-honored ways. This represents the neo-classical approach of maximizing production for its own sake by a laissez-faire policy of private capital investment and free market forces (except that often the government encourages large-scale enterpreneurs by such measures as import licenses, tax exemptions, special foreign exchange rates, and other incentives).

The "progressive model" represents the anti-poverty approach of maximizing production for the sake of reducing poverty by raising the productivity of the poor and letting them internalize their producitivty gains in their income streams through strenthening their bargaining power in the market. The government guides private and public investment, including education, training and other requirements, into areas where labor is poorly utilized and under-employed, and into production of sufficient necessities of life to meet people's needs more adequately. The large enterpreneurs can be left free to continue their production expansion as far as the market forces encourage them to do so, but without the special privileges and incentives offered them by the government under the "crash model".

Some results of this study are summarized in Table 4. In the "crash model," labor productivity or income per person in the labor force increases 18% in the modern sector, and decreases 22% in the traditional sector; this means, the rich are getting richer, the

poor poorer. In the "progressive model," the income per worker in the modern sector remains the same, in the traditional sector it increases 93%; this means, the rich remain rich, and the poor get richer.

This result also means that under the "crash model" the income increase in the modern sector will lead primarily to an increase in demand for luxuries, since the income elasticity of demand for necessities falls sharply in the higher income groups. Luxuries have a high import component in the scarce foreign exchange resources of most developing countries. Under the "progressive model," the income increase will lead primarily to an increase in demand for necessities - which have a much lower import component and a much higher domestic input component, especially of local labor and material resources. This, in turn, will alleviate the unemployment problem and encourage the mobilization of local labor and materials through the demand-pull of large numbers of people working themselves out of poverty. In contrast, unemployment is aggrevated under the "crash model."

It is clear that improving income distribution by reducing poverty in the newly developing countries must depend primarily upon (1) making knowledge of modern techniques and access to modern inputs available to low-income farmers, (2) providing incentives for using them, e.g. through price policies, production credit, marketing cooperatives and various other measures (including land reforms if necessary in some areas), (3) strengthening their bargaining position in the markets so that their productivity gains become internalized in their income streams rather than externalized into those of landlords, merchants and

Table 4. Contrasting Two Development Strategies[1/]

		Total Economy (Assumed the same in both models)	
Labor Force,	1970	mil. 623	
	1980	" 808	
Percent Change			+30%
Gross Domestic Product,	1970	bil. $ 295	
	1980	" 528	
Percent Change			+80%

		"Crash" Model Sectors:		"Progressive" Model Sectors:	
		Modern	Tradit.	Modern	Tradit.
Labor Force, Percent of Total, 1970		3%	97%	6%	94%
Change in Labor Force, 1970-80		+118%	+27%	--	+32%
Labor Productivity					
$ per worker	1970	9,200	246	4,000	251
	1980	10,850	191	4,000	485
Percent Change, 1970-80		+18%	-22%	--	+93%

1/ Adapted from Marsden, Synthesis of Economic Growth and Social Justice. International Labor Review, 1969, ILO, Geneva.

money-lenders, and (4) guiding capital investment in the direction of (a) increasing output without displacing labor into unemployment and (b) increasing output of necessities at a much higher rate than that of luxuries. Policies of a similar nature for improving the productivity of low-income workers and small craftsmen, merchants and other enterpreneurs in manufacturing and service trades are required to draw these non-agricultural sectors into the development process and to make their labor force beneficiaries of the growth in the GNP.

Mahbub ul Haq, formerly with the National Planning Commission of Pakistan and now with the Programming and Budgeting Department of the World Bank, recently summarized the salient points of this new appraoch to the charting of development strategy most succinctly as follows:

"First, the basic problem of development should be redefined as a selective attack on the worst forms of poverty. . .

"Second, the developing countries should define minimum or threshold consumption standards that they must reach in a manageable period of time, say a decade. . . concerning minimum institutional, educational, health and housing levels. . . The demand concept. . . will only distort the pattern of production and consumption in favor of the "haves"; it should be replaced by the minimum need concept. . .

"Third, the concerns for more production and better distribution should be brought together in defining the pattern of development. . .

"Fourth, . . .employment should become a primary objective of planning. . It is only if we proceed. . .with people doing something useful at least, even with small capital and organization, that we can eradicate some of the worst forms of poverty. . .

"The evidence is unmistakable: divorce between production and distribution policies is false and dangerous. The distribution policies must be built into the very pattern and organization of production."[1/]

1/ Muhbub ul Haq, "Employment and Income Distribution in the 1970's: A New Perspective." Development Digest, October 1971, pp. 3-8 National Planning Association, Washington, D.C.