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DEVELOPMENT, INCOME DISTRIBUTION
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by

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1. Development and Environment Policies as United Nations Tasks

For the largest part of world population Socio-Economic Problem Number One is to reduce the inhuman poverty they are living in. The complex of measures and activities needed in order to bring at least part of a solution to this problem is nowadays referred to as development policy. After World War II the United Nations system of institutions has been built and extended, first to overcome some of the war damage, but increasingly directed at co-operation between countries in order to further the development of the low-income countries. The system consists of the central organization, of a number of regional commissions and of a number of specialized organizations. Some of the latter existed already, for instance the International Labour Organization, or have been the outcome of expansion of the field of activity of previously existing organizations. Others have been created, one after the other, after World War II. An important role has been played by the International Bank for Reconstruction and Development which has financed a large number of projects and programmes, increasingly in developing countries. In the early years of its operation, the Bank's philosophy was influenced strongly by American views on development. These implied that a division of tasks had to be seen between the public and the private sectors. The field of action of the public sector in development should be seen to provide the infrastructure, whereas manufacturing industry had to be operated in the private sector and could be expected to come along more or less automatically, once the infrastructure was there. For developing countries this theory does not apply and it is not necessary to quote Eastern Europe as an illustration; Southern Europe, and in particular Italy and Turkey, could be quoted even more convincingly. Although the World Bank has shown considerable flexibility in its policy and repeatedly adapted its activities to newer views on both development and other types of socio-economic policy, the example quoted of its early days seems to explain why in the building-up of the United Nations system, UNIDO was rather a late-comer, still underdeveloped with regard to its tasks, and hence in its budget.

Neglecting this aspect for a while, we may say that the UN system now contains institutions dealing with all the components of a development policy in the modern sense of that concept. On the one hand, furthering of material production, such as agriculture and industry, are basic preconditions for development, but increasingly, on the other hand, it has been understood that

a number of social aspects are of no less importance, such as income distribution, health, and education. While in the early years of the development debate the emphasis was often on the necessity to raise total production, experience has shown that the distribution problem becomes more serious during the early phases of development and needs special attention. Not only is there a distribution problem within developing countries, but also one among countries. At present both distributions are becoming more unequal. In what follows we propose to discuss the causes and possible remedies of this phenomenon.

Before doing so we must deal with the general framework in which today development policy has to be seen; a framework determined by the finite dimensions of our globe and referred to as "limits to growth". While the roots of the main problems covered by this phrase, pollution and exhaustion of some natural resources, have been recognized quite some time ago, their significance was not impressive to most observers until the last decade or so. In most industrial countries a century ago some legislation was enacted to protect the immediate environment of factories and in a number of countries - developed as well as less developed - the dangers of deforestation and erosion were known and action to reduce them had been taken. In the last decade, however, economists became aware of some more "costs" of "progress" and a sudden shock was produced by the Meadows couple and their collaborators when they reported to the Club of Rome on the joint effects they expected from unlimited growth of population and production [7]. Almost simultaneously the Stockholm Conference of the United Nations in 1972, moved by a similar concern, but less intensively, resulted in the creation of the United Nations Environmental Programme (UNEP), to be taken care of by an Assembly, a Board and a Secretariat in Nairobi, headed by Mr. M. Strong [13].

Since there may be incompatibilities between the development and the environment policies any further specification of either of them must be preceded by a tour d'horizon attempting to evaluate the context of a general framework within which both have to be carried out.

2. Lacunae in Our Knowledge; Main Controversies

In an attempt to evaluate the planet's present position the first discovery we make is that many of our traditional certainties have disappeared. We cannot go on as if there is an infinite earth, atmosphere or ocean into which we can dump our wastes and from which we can extract our raw materials and foodstuffs. Knowing the we cannot go on does not imply, however, that we also know when and where to stop or to accelerate. Upon inspecting the Meadows pioneering exercise we are confronted with a number of question marks, many of them placed by industrious critics, without, however, also answering the corresponding questions. While we seem to know more or less how to clear the known forms of pollution of land, rivers and the atmosphere, opinions on other points widely diverge. Will nuclear fusion be a reliable, safe source of energy? One physicist has an answer completely different from a colleague's. Will other mineral resources become too expensive to extract them fifty or a hundred years from now or never? Wide gaps separate various geologists. Can we stop world population to grow to twice the present level or three, or four times? Large differences of opinion again exist between demographers, psychologists, sociologists and other experts. How many people can the earth feed? The ham question, probably. Here the gap between agronomists and a number of biologists is not only large when it comes to figures, but biologists have reasons to deny the possibility to decide on figures for years to come; they need to carry out a tremendous programme of further research before they can give an answer.

Since we have to plan our policies, however, we will have to make some reasonable guesses on the latter question, as I propose to do in Section 4. After our having done so, a few more questions will arise. The time may come, in the next century, when we have to ration some natural resources between all users of the world. How much time of preparation will we need, keeping in mind that it took fifteen years to conclude the cocoa agreement? Of course, in times of war we usually act more quickly, but what interpretation do we have to give to "war", if the "war on poverty" which the Second Development Decade was believed to be has not so far impressed American, British or German governments in the least?

One conclusion can be safely drawn. There is an urgent need of carrying out a very large programme of scientific research, by representatives of all

sciences and all countries involved. And this programme may imply a considerable reorientation of the existing programmes now carried out. This will require a degree of co-ordination by far surpassing past levels. Already hundreds of initiatives have been taken and many are in execution, not to speak of the supply of co-ordinators, convenors of symposia, conferences, action groups and so on - too many to quote here.

3. Some Examples of Solutions Seen.

The attitude some people assume vis-à-vis a scene as just sketched is partly determined by their knowledge and partly by "non-cognitive skills" - to use a term favoured by educationalists and psychologists. People who are easily impressed by their own capabilities - I may be one - have already given the answers. Thus, one well-known futurologist from the United States has already reassured us that the world will smoothly move towards bliss, to remain there. Citizens of developed countries will on time be saturated and prefer leisure over more consumption. They will also prefer to have smaller families than so far. Even people from now developing countries will go the same way, but a few decades later. Shortages of exhaustibles will be gradually compensated for by new inventions and the Forresters and the Meadowses are just another few Malthuses.

Somewhat similarly, but less scientific perhaps, since they are rulers not scientists, some powerful rulers tell us not to worry about pollution, exhaustion of energy, lack of food or the need for a population policy - if only we change the social system; presumably following the invariable laws of Marxism-Leninism, although I am not sure whether to continue by adding further names and, if so, which.

Slightly less certain of themselves some more modest Western Europeans are concerned, but more about the development problem of the poor countries than about doomsday à la Meadows. They can be found in Sussex but also on the continent. For safety's sake they are also recommending caution on all fronts mentioned in Section 2. The present writer's vision is not far from theirs, as will be set out in Section 4.

4. A Working Hypothesis: A Framework for Population and Consumption

In this section I attempt to formulate a (multiple) working hypothesis in the form of a framework of some of the primary determinants of a combined development and environment policy for the world at large. By a multiple hypothesis I mean a set of hypotheses, or a multi-dimensional hypothesis

For reasons of arithmetical convenience I propose to consider the period 1970-2012. For 1970 World Bank figures are available for all countries of the world. The length of the period offers conveniences of arithmetic, but should not, of course, be taken too literally.

The most vital dimension - literally and abstractly - is that of population development. With the dangers threatening mankind and in view of its significance in other respects, a deceleration of population growth seems to have a high priority. Even for those continents where this proposition still meets with doubts the proposition is valid that their development will be furthered by such a deceleration. Making a distinction between developed and developing - or, for brevity's sake, between rich and poor - countries, a stronger deceleration for the rich than for the poor countries makes sense: the use of scarce national resources per capita being much higher in rich than in poor countries. To fix the ideas, I submit that by 2012 the total population of the rich countries will have to be returned to its figure of 1970. For the poor countries taken together I assume that by 2012 zero growth of population must have been attained. As an average rate of growth for the total of these countries over the period considered I propose a figure of 1.5 per cent per annum, reflecting the feature that in the beginning the fall in growth will not yet materialize.

The other dimension of our framework concerns total income measured in the buying power of 1970 US dollars. For it I assume that the average rate of growth of income per capita of all rich countries together must be gradually reduced, so as to stop at a reasonable level of income; again, to fix the ideas, I think of an average growth rate for all developed countries over the whole period of 1.7 per cent per annum, since that amounts to about one half of the present rate of growth. For the developing countries, however, I submit that we have to plan for an accelerated growth of consumption per capita and I propose 5 per cent per annum as an average for all countries

and the whole period. This implies a doubling of per capita income every fourteen years and hence eight times the 1970 figure around 2012. It is this assumption, by the way, which makes it preferable to consider a period of 42 years for this exercise of "indicative macro-planning", as the working hypothesis may also be called.

The seeming contradiction between the growth assumptions for rich and poor countries is in fact quite natural: it implies that there is a bottom - not yet reached by at least a billion people - to a human life in dignity, but also a ceiling of saturation of what makes for a decent life; moreover, as already said, the citizens of the rich world use so much more natural resources than those of the poor countries, that the necessary caution about exhausting these resources must be shown first of all by the former group of citizens.

The multi-dimensional working hypothesis just set out works out as indicated in Table I.

Table I.

Population (in millions), Income per Capita (1970 \$ purchasing power) and Total Income (in billions of \$) for Developed (D) and Developing (U) Countries and Totals (T), 1970 and 2012

Year	Population			Income per Capita (\$)		Total Income (bln \$)		
	D	U	T	D	U	D	U	T
1970	1089	2588	3677	3700	320	4030	830	4860
2012	1089	4835	5924	7400	2560	8060	12400	20460

As already mentioned the basis of the figures in Table I is a World Bank publication [5] giving figures on incomes converted into 1970 US dollars using official exchange rates. These have been transformed in the way suggested by Balassa [2] as an amendment on an earlier suggestion by David [3]. This transformation has only been used for the developed countries, since for the developing countries it would supply income figures of several hundreds of dollars per capita even if the figure based on the official exchange rate would have been zero, which does not seem acceptable. Balassa's line has been prolonged by a curve passing through the origin of the graph

showing Delassa's corrected income figures as a function of the World Bank figures. This curve is of course somewhat arbitrary, but the manoeuvring margin is not wide. It does lead to a multiplication by 1.6 of the lowest World Bank figures. Below I come back to this question with an alternative derived from an as yet unpublished report by Kravis on the comparison of real incomes among a number of countries.

In order to illustrate what the working hypothesis implies for world income distribution we may assume for a while that the assumptions made for all rich and for all poor countries also apply to the richest and the poorest ten per cent respectively of the world's countries (measured in terms of their populations). In fact we submit that the richest ten per cent should even grow somewhat less than all developed and the poorest ten per cent somewhat more than all developing countries; therefore this next exercise for the year 2012 overestimates the incomes of the richest and underestimates those of the poorest ten per cent, by an amount not yet specified by more precise proposals. The ratio of per capita incomes between the upper and the lower ten per cent of countries amounted to 32 in 1970 and would have been reduced to below 8 in the year 2012. In these figures no correction has been made for the effects of pollution, and other "costs of progress" as analyzed by Nordhaus and Tobin [9]; their figures suggest that incomes of rich countries overestimate "net beneficial income" by about one quarter of the conventional figures (if the overestimation were negligible in 1929); this correction would reduce the figures to 24 and less than 6. In addition, unpublished results of research by Kravis show that the buying power correction applied in Table I to low income countries has been too low and that better figures seem to be almost twice the ones used (where the officially converted dollar figures had been multiplied by 1.6 for these countries). Finally we already stated that the figure is an overestimation. Altogether, the ratio for 2012 might then be about 2 to 3.

5. A Common-Sense Defence of Our Working Hypothesis

At first sight, the working hypothesis or framework set out in Section 4 will look very unrealistic to many experts on development co-operation. All four basic assumptions can be easily criticized. Population projections now adhered to show considerably higher figures for both main groups of countries.

Economic growth of the developed countries is usually estimated to slow down less than we assumed, and economic growth of developing countries to accelerate less than we suggested.

The main defence to be attempted in this section is that most of our usual figures are neglecting two challenges which are much more serious than the traditional complex of disciplines (economics, technology, geology and agronomy with a bit of sociology) seems to believe. These two challenges are the welfare gap between rich and poor countries and the challenge of the limitations on the biosphere.

The way in which our working hypothesis attempts to take into account these two challenges is the following. First, I believe that within forty years the world community must be socially integrated to about the same extent as some of to-days national political units. I am thinking of countries such as the United States, France or the German Federal Republic. When we calculate the regional differences between the richest and the poorest, taking again ten per cent of the population of American States, French regions and German "Länder" we find ratios of 1.8, 1.7 and 1.5 [10].

Secondly, the food requirements around 2012 for the populations in our framework can be estimated on the basis of our knowledge of the income elasticity of demand for food and amount to about three times the 1970 agricultural world production. This equivalent to an average annual rise in agricultural production of slightly less than 3 per cent, as compared with the average rate of growth arrived at in the FAO World Indicative Plan for 1965-1985, and somewhat higher still than the actual performance of agriculture over the last decade. From discussions with a number of biologists I am left with the impression that this is hardly acceptable to them - just as my population and development assumptions are hardly acceptable to the traditional group of disciplines.

A final element of defence of our working hypothesis that restriction of population growth is among the most important ways to exercise power open to the masses of the poor population. By making unskilled labour scarce they improve their bargaining power position more than in any other way.

Part of the assumed further development of the "rich" countries among which is also a country such as Italy, or Great Britain, is needed in order

to attain a less unequal income distribution which is virtually the only way for these communities to survive. The same applies in a much stronger way to the internal income distribution of the poor countries, but that is reflected in the growth rates suggested for these countries.

This state of affairs with regard to our working hypothesis is what I call common sense as opposed to scientific accuracy. It is one of the few alternatives that are left if we try to distribute all the pressures we are set out to meet or less harmoniously.

It is the essence of a working hypothesis that it be tested. This is the challenge this essay tries to bring to the professions involved.

Perhaps an alternative common-sense approach is that the world will not survive the challenges. The main reason why I do not deal with it is that it needs no further analysis. It is bound to be an unproductive way of thinking; ours has a slight chance not to be.

6. Two Main Sets of Means to Apply: I. Financial

The working hypothesis can be seen also, as already observed, as the set of aims of world socio-economic (development cum environment) policies. Our next subject therefore must be to indicate the main sets of instruments conducive to these aims. In this and the next section I propose to discuss the means of an international character needed. In Sections 8 and 9 I will take up some means to be applied inside countries in order to reduce inequality

In 1970 the Strategy for the Second Development Decade 1971-1980 has been unanimously accepted by the U N. General Assembly. Among the international means the recommended financial transfers of 1 per cent of GNP of the developed countries, of which 0.7 per cent official development assistance, played the main part. The developed partner countries have chosen not to carry out their part of the common policy. As a consequence we can only recommend that the developing world use what power they have to apply other means. Part of their limited power is their supply of some natural resources which will be increasingly scarce. We witness the application of this means in the form of higher oil prices. They will be followed by similar attempts to raise the prices of copper, bauxite and phosphates; and there may be a few

more commodities. Also, as already observed, family planning should be seen as a means to exert power, especially in order to improve the bargaining power of unskilled workers. For the time being the rise in oil prices only constitutes a solution for a small part of the developing world, with some of the higher proceeds in the hands of a few already rich persons. It is too early to judge whether all these proceeds will be used for the development of other developing countries which, to begin with, are in more trouble than ever. But negotiations with oil producing countries in order to obtain their co-operation are under way.

Another part of the limited power of developing countries may perhaps be used to further, through the United Nations, the institution of two transnational bodies meant to serve interests not only of the developing but also of sections of the developed countries' public opinion. This is somewhat more long-run policy, subject to many hazards, but essential for world welfare.

One transnational body is needed to co-ordinate the use of the oceans and might be called an ocean authority. Its tasks should be (i) to prevent further pollution of the oceans; (ii) to prevent overfishing; (iii) to license the exploration and exploitation of the oceans' mineral resources, both in the field of oil and gas and in that of nodules containing manganese and nickel ore. The subject is topical since the possible foundations will be discussed at the forthcoming 1975 conference on the law of the seas [14]. Among the seven proposals available at the moment of writing more than one have been formulated by developing countries in mutual co-operation. The feature of the new body to be created that is of immediate relevance to our present subject is that the Authority should be entitled to collect its own financial means from its licensing activity and that part of these means could be made available for development purposes. Since the pollution of the oceans is alarmingly increasing, support from a number of developed countries might be forthcoming and the power of the developing countries in this matter could be the power of sound arguments: the "power of the mind".

Another transnational body is needed to take care of an orderly and equitable co-operation between multinational enterprises and governments, especially but not only, governments of developing countries. Multinational

enterprises are another example of the efficient and forward-looking attitude of business, which is far ahead of public authorities. Their activities are of course directed at making profits but they have contributed to the creation of employment in poor countries and to the transfer of know-how. It is true that governments of developing countries, in their bargaining with such enterprises, often are the weaker party, especially because of the lack of expertise on the matters involved, but they are sovereign and have often shown this by imposing conditions on the enterprises concerned which reflect the strength of sovereignty. A more equilibrated position may be arrived at if the countervailing public power - which any citizens in developed countries also want to be present - were organized in an international framework in which also trade unions and consumer interests were represented. Such an authority should also be entitled to collect taxes from multinational enterprises, avoiding double taxation, however, and part of these tax proceeds might constitute another independent source of finance for development purposes.

7. Two Main Sets of Means to Apply; II. Trade and a New Division of Labour in the Field of Industry

As announced, a second important means of executing world development policies is to be found in trade policy, with as its basis a new division of labour between the world's countries, particularly in the field of manufacturing industry. Indeed, another part of the limited power of developing countries consists of their capability to produce at very low prices a number of labour-intensive industrial products. Their exports of these products have risen by 20 per cent per annum during the period 1960-1970 [6]. Generally speaking, agricultural production is to a large extent determined by climate and type of soil of countries and their geographical parts, whereas for industrial products a much higher mobility of location prevails. Many industries are in that sense "footloose".

The fact just stated that exports of labour-intensive industrial products of developing countries have developed so rapidly illustrates the possibility of a new pattern of international division of labour, and the theory of international trade as well as practice have shown that the resulting trade can be "to the mutual advantage of the trade partners". In other words, the

poor countries' income can rise substantially if trade in manufactures be developed, implying that industrial production increases. The deceleration in growth of developed countries and the acceleration of growth of developing countries, proposed in our working hypothesis, also implies that the share of total industrial production in its world total will increase, in contradistinction of its stagnancy during the last decade. There is no need for concern - in the longer run - for the rich countries, since services will be demanded at a higher level as per capita income rises.

A well-known pre-condition for attaining the full results of the new division of labour among countries, and hence the maximum increase in employment and income, is the absence of obstacles to trade, except as a temporary means to overcome initial difficulties and disruptions by sudden changes.

The quantitative role industrialization in the development process as suggested by the Framework may be illustrated by two figures derived from it. In the 42 years considered the growth rate of non-agricultural consumption of the poor countries will have to be over eight per cent per annum; and the portion of this consumption in poor countries will rise from its present 10 to 57 per cent of world totals.

The types of industries which are the most appropriate for the poor countries to develop depend on their comparative advantages. For the first decade these will doubtless consist of the abundance of cheap unskilled labour and some natural resources. By and large therefore comparative advantages will be found in industries using these factors. Cases of doubt may arise where the extraction and initial processing of the country's natural resources require capital-intensive methods of production. Other factors of importance will be the level of sophistication of industries; generally speaking in the early phases the less sophisticated processes must be preferred; this means the use of less human capital [4] per unit of product.

Comparative advantages will change over time and the most spectacular example of a quick change in this respect has been Japan. This example is not representative, however, and since the developed countries will continue to grow to some extent, the speed of change in comparative advantages should not be exaggerated - even more so if our framework would appear to be too ambitious and would require a longer period of transition from the present

situation. In principle, dynamic comparative advantages indicate that over time some endowments of individual countries will change and hence the most competitive industries. Scientific information and analysis on the main trends in these changes in endowments will be a useful piece of information to both governments and industrialists. In this field there is an important task for the United Nations and it stands to reason that UNIDO is the organization in whose field this piece of information and research belongs.

The change in world industrial structure needed will, if carried out, improve the possibilities of creating, in the coming decade or so, considerably more employment in developing countries. This will be contribution to both a higher national income and a less unequal income distribution, since unemployed don't add to production and in poor countries, don't receive an income. For the execution of this policy the aspect of marketing should not be overlooked. Mahfuzur Rahman [6] has made a point where he shows that there is a high correlation between the volume of exports of developing countries and the number of trade flows which exists between the country considered and its trade partners.

In developed countries there is considerable concern over the reconversion of their own structure which an elimination of trade barriers will entail. No doubt the transition of workers and employers to other, more competitive, branches of industry must be facilitated by current information on the situation and by subsidies to transition for both retraining and moving geographically, but some initiatives of employers must also be required. Cases of successful reorientation are there to show the possibility: for instance a switch from textiles to textile machines or from coal mining to chemical industry. In a general way it can be stated that the reconversion process of the American economy from war to peace production after World War II went much more smoothly than some had feared [8].

The nature of the reconversion process may be clarified by indicating the steps involved. Opening a market in a developed country for products of a developing country will (a) reduce employment in the industry whose products are imported in large quantities; (b) reduce the prices of these products by the reduction in import duties and possibly by a lower cost of production; (c) create new demand by the developing country for, for instance, machines and new demand by the developed country as a consequence of the

price fall; (d) increase employment for those who remain. The latter increase will possibly fall short of the reduction mentioned under (a); if so, the gradual reduction in working hours characteristic for the period of industrialization may help to solve the problem. It might be added that the new employment created under (d) will be in the high wage industries and that, finally, a reduction in the number of foreign workers may also be part of the solution; this latter on the condition, however, that the country of origin of these workers receives more financial transfers.

8 Income Distribution within Rich Countries

The policies suggested must be accompanied by a further reduction in income differences within all countries. In this section I propose to discuss the possibilities within developed countries. In a series of studies undertaken recently the effect of some measures conducive to such a reduction has been estimated. They can best be summarized by making a distinction between primary incomes (received for productive services such as the supply of labour or capital) and incomes after complete redistribution (that is, after taxes have been paid and adding the values of services received from the government, to the extent that these values surpass the prices paid for them). Primary incomes can be seen as prices for productive services and these prices will be high for services of great scarcity and low for services abundantly available. Primary incomes can be made less unequal by reducing both scarcity of highly paid and abundance of badly paid services. These main background phenomena are influencing relative scarcities of production factors, namely technological development, saving and expansion of schooling and training. So far, technological changes have tended to raise demand for highly qualified labour and for capital, whereas saving and the expansion of education have tended to raise the supply of these factors, both times relatively to less qualified labour. Thus, we are faced with a race between technological development and the counteracting phenomena. In the average, over the last century, the latter phenomena have "won the battle", which resulted in a reduction of the share a unit of capital or a highly qualified individual received of total national product. Put differently, interest rates (corrected for inflation) and salaries of professionals have fallen in comparison to wages of unskilled workers. For interest rates this is well known. For salaries Ullman [12]

estimates that the ratio between qualified and less qualified labour which was 2.5 in 1900 amounted to 1.5 in the period 1948-1963. For the Netherlands the ratio of income of academically trained to other labour was around 7.8 in the period 1900-1930 and fell to about 4.5 in 1960-1970 [11].

Incomes after redistribution have become less unequal to an even higher degree; around 1900 there was hardly any redistribution. Around 1960 in the Netherlands the ratio of income of the highest 20 per cent to the lowest was 10 before tax and 6 to 7 after redistribution for households, for consuming persons it was 3.2 before and 2.1 after redistribution, a fall by one third. Another measure of inequality often used, the so-called Lorenz coefficient, for Great Britain around 1960 amounted to 0.32 for primary incomes and to 0.25 for incomes after redistribution.

Forecasts for the coming one or two decades for the USA and Holland led me to a further reduction around 1990, by one-third in the ratio of academically trained labour in relation to other for both countries [11]. By the addition of some further measures, such as an increase in estate duties or the limitation of income from enterprise board membership, further results can be obtained. This would bring us close to what I tried to define as an equitable income distribution; discussion of this concept in this context would lead us too far afield, however.

9. Income Distribution within Poor Countries

Income distribution within poor countries is less easy to ascertain than income distribution within rich countries. To a large extent this is due to their different structure, close to feudal in rural areas and comparable to the situation one or two centuries ago of rich countries in urban areas. Important progress in our understanding of the factors behind income distribution in poor countries has been made by Professor Irma Adelman [1], but our quantitative knowledge of the impact of the relevant factors is slight. Some measures can be suggested on the basis of Mrs. Adelman's findings, but it would require further research to estimate the size of their impact. Both time series for now developed countries and cross section comparisons among countries of different stages of development show that with the policies followed so far in the early stages development entails an increase of inequality followed, in the

later stages, by a decrease as discussed in the previous section. This sequence of events is not necessarily the only possible one. It already saw that the observed long-term decrease in inequality depends on the "race" between two counteracting influences. Detailed figures show deviations from the general pattern. The same may apply to developing countries and new policies may be found which might reduce at an earlier stage of development the inequality that would have prevailed without them. A common feature to Mrs. Adelman's and my findings is the importance of education to arrive at less inequality. Other suggestions to be derived from Mrs. Adelman's studies are that too intensive exploitation of natural resources only and too intensive use of capital are making for inequality and should be kept within limits. Also the development of small farms - presupposing a land reform - will contribute to less inequality. Finally, measures to increase political participation may lead to an improvement in the distribution of income, especially for the middle groups [1, p.186/187].

10. Summary and Conclusions

Co-operation within the United Nations framework on matters of industrialization is still relatively underdeveloped since initially industrialization was seen as a concern for the private sector and hardly for governments. This view is outmoded

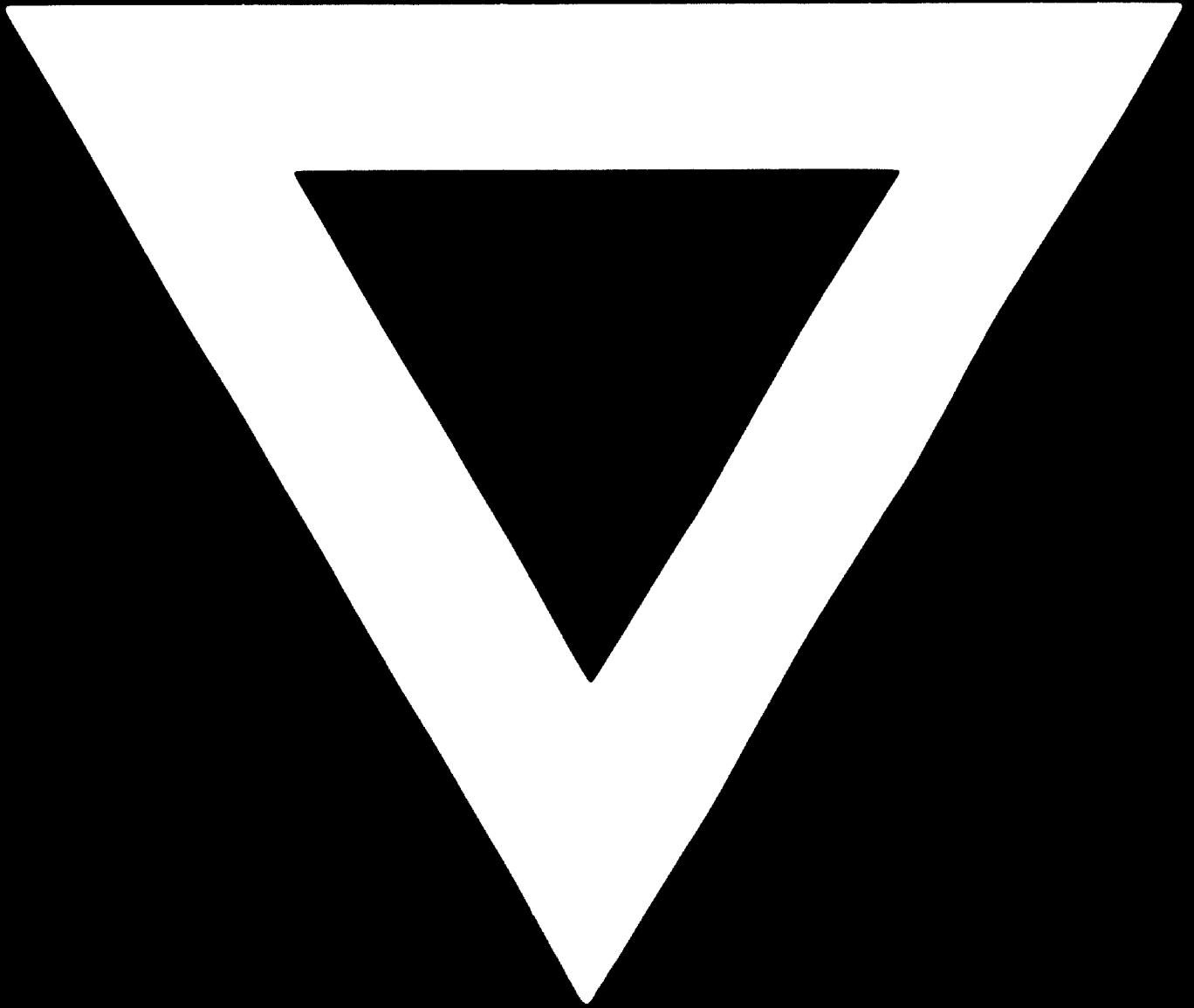
Industrialization also requires world-wide co-operation, which has to be placed in the framework of development as well as environment policies. As for the latter important lacunae in our knowledge exist and for the time being only an intuitive (pre-scientific) view can be presented. The author submits a frame of population and production targets for the next forty years for both developed and developing countries and believes this to be equilibrated with regard to the strong tensions between the necessity for the poor masses to improve their position and for the world at large to remain within the constraints of food and other shortages. Some figures can be found in Table I, with some possible corrections following that Table.

The means to be applied for development purposes are, among others, financial transfers and more trade in industrial products. In the absence of transfers by individual rich countries alternative finance may be derived

from an Ocean Authority and from an authority regulating the co-operation between multinational enterprises, governments, trade unions and consumer unions. As for trade, the developing countries' power is embodied in their raw material supplies and their supply of labour-intensive, less sophisticated products. Inside countries income distribution has to be made less unequal by a reduction of the supply of unskilled labour, to be attained by more and better education as well as by family planning.

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76 . 05 . 21