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POPULATION GROWTH AND THE FIRST STAGES OF POPULATION POLICY
IN LATIN AMERICA: EFFECT ON PROBLEMS
OF YOUTH AND DEVELOPMENT

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INTRODUCTION

In any consideration of the problems of children and youth in Latin America two basic demographic facts must be taken into account: (1) the very rapid increase in the number of young people; (2) the very high proportions they represent of the national populations.

The present paper examines these facts in relation to the prerequisites for economic and social development, the changing structures of Latin American society, and the consequences in the major areas of public policy - education, nutrition, housing, etc. It then discusses the present shifts in dominant opinions concerning rapid population growth in the region, points to the beginning of programmes to influence the rate of growth, and discusses the measures needed and currently available to reduce the burden upon society and the family represented by maximum biological fertility in low-income, under-fed and under-employed population strata.

DEMOGRAPHY

1. Unprecedented and unparalleled population growth

Latin America has the doubtful distinction of a population that is growing faster than anywhere else in the world or than at any other time in history. What is more, the growth rate has quickened in recent years and is only now showing signs of slackening. From 1.9 per cent in the second decade of this century it rose to 2.8 per cent between 1960 and 1962, and is now 3 per cent, at which rate the population is expected to double in about twenty-three years' time. At a growth of 4 per cent, as in Costa Rica, the population would double in seventeen years and if the rate were maintained it should multiply fifty-five times in a century. At present Latin America's population increases by over 7 million annually, i.e., slightly under the whole population of Cuba or Chile. From 63 million in 1900 it is now approaching 240 million. At the beginning of the century it represented 2.7 per cent of the whole human race, and this share has gradually increased to 7 per cent, notwithstanding the rapid increase in the world population (2 per cent), which is also unprecedented.

It would be superfluous to explain the mechanism of this phenomenon which is only too well known and consists in the co-existence of a medieval fertility rate (41 per mil) with an almost modern mortality rate (13 per mil), which is declining and may still be appreciably reduced. As in other parts of the world, the mortality rate has dropped in the past in relation to the progress achieved in the social, economic and health spheres. In recent years extremely efficient weapons, which are within the reach of the lower-income sectors, have been added to those used in the control of communicable diseases, both infectious and parasitic. They were brought in from other countries, together with the techniques for their use, thanks to international co-operation.

Since then the mortality rate has ceased to be dependent on the general conditions prevailing in the various countries, and Ceylon, for example, was able to reduce it to one-third (from 30 to 10 per mil) between 1921 and 1951. This gain, due mainly to the successful results of the malaria eradication campaign, bore no relation to the modest improvement in the components of the level of living or in other health indexes. It will not be amiss to add that, once malaria had been brought under control, some 10 to 15 dollar cents per capita were spent annually on DDT in order to maintain the results.

Since Latin Americans are of European extraction, these health measures were absorbed more quickly in this region than in Asia or Africa, possibly under the influence of the growing tendency for medical practitioners to specialize abroad. Antibiotics, insecticides of lasting effect, chlorine for drinking water, and other agents signified the saving of untold lives and by 1920 had revolutionized the demographic situation, a trend which gradually gained impetus throughout Latin America. To give some idea of the magnitude of this change, suffice it to record that in less than twenty years (from 1935-39 to 1960-63) the mortality rate had dropped to half or below in Chile (from 23.7 per mil to 11.9 per mil),

/Costa Rica (from

Costa Rica (from 20 per mil. to 8.4 per mil), El Salvador (from 21.1 per mil to 11 per mil) and Mexico (from 23.3 per mil to 10.9 per mil). As a sequel to this, there have been very substantial gains in life expectancy sometimes as much as one year for every calendar year. Thus in Mexico it rose from 40 years in 1940 to 60 years in 1960, and in Puerto Rico it is already approaching 70 years.

It is common knowledge that a high fertility rate produces a young population, so described because it has a high proportion of persons under 15 years of age and a small proportion of persons over 60 or 65. In the Latin America countries, with only two exceptions, the younger age groups represent 40 per cent and even 45 per cent of the total, as compared with just over 20 per cent in Belgium. Accordingly, half the inhabitants of Brazil are under 19 years of age, while one-quarter of the inhabitants of France are over 65; half the inhabitants of Mexico are children and 2 or 3 per cent are old (over 65 years); in the United Kingdom one-fifth of the inhabitants are children and 12 or 13 per cent are old.

On the other hand, few people know that if the fertility rate is maintained, the reductions in the mortality rate will have little or no effect on the distribution, since they always primarily benefit the younger age groups. Any effect they might have is, contrary to expectations, to make the population younger. Thus in Taiwan the average age has dropped from 21 to 18 years since 1915, and in the United States from 29.5 to 28 years since 1960. The number of inhabitants under 15 years of age - the base of the pyramid - tends to increase more than the number of persons over 60 years and the burden of dependants, instead of lightening, becomes heavier. Moreover, the survival of so many children means an increase in the number of prospective parents.

In spite of the appreciable reduction in the child mortality rate, it so happened that in the first five years of the sixties the proportion of deaths occurring in the under 5 age group was 7 per cent in Western Europe and 42 per cent in Latin America. It is understandable, therefore, that the 15 to 64 age group constitutes 65 per cent of the population in the United Kingdom or France as compared with 56 per cent in Latin America. Since the economically active persons are recruited from among this group, it follows that the Latin American contingent is proportionately smaller, in addition to carrying a heavier burden, i.e., approximately double owing to the combination of the two factors.

2. Effect of the high fertility rate and the drop in the mortality rate

Apart from its indirect repercussions, the rapid population growth has two unfavourable results: it adversely affects the distribution by age groups, and current consumption absorbs resources which could otherwise be used for capital formation in order to promote economic development. All children at birth represent mouths to feed today, while only some are prospective workers who, moreover, cannot always be turned to account. In the normal course of events, large families

/obviously have

obviously have less chance of saving and the State collects less from them in taxes. Inasmuch as capital is the difference between the product and consumption, the higher the level of consumption the lower will be the margin of surplus. Thus a vicious circle is established; the shortage of capital precludes an increase in returns, and low returns aggravate the capital shortage.

The high proportion of children makes it imperative to increase investment in the social services - education, health, housing, etc. -, the returns of which are less direct and take longer to materialize. The alternative would therefore be to build schools instead of factories and housing instead of hydro-electric plants. The situation is even more serious because the Latin American countries have yet to complete their infrastructure including plants such as ports, roads, railways, etc. Structural deficiencies impede the development of agriculture and industry which, even if established, produce a lower return.

Be that as it may, funds will have to be earmarked for preparing vast numbers of persons who, under these conditions, swell the ranks of the labour force every year.

The alternatives they are reduced to are: unemployment or under-employment in the form of occasional work, a swollen bureaucracy, and other activities including domestic services and small-scale industries, whether itinerant or otherwise. More often than not, they set up as car park attendants or shoe-shiners, who have a useful function but produce little or no return.

On the basis of his wide knowledge and experience, J.J. Spengler estimates that, at a population growth rate of 1 per cent, 4 per cent of the national income must be set aside for the training of these people. If the rate is 3 per cent, as is our situation about 12 per cent would be required, and this would serve only to maintain the existing living levels. As more than one person has observed, the result would be the same as in the case of the character Lewis Carrol who ran faster and faster and still remained in the same place. To the fact that we have been incapable of making a still greater effort is due, in part, our prevailing stagnation.

POPULATION AND NATURAL RESOURCES

1. Benefits deriving from a larger population

Strong arguments might be brought forward to show the advantages of a larger population than at present exists in Latin America. Nobody has called this statement in question: nobody claims that the population is excessively large, or even that it should be kept at the existing level. It is not only on grounds of language that exception is taken to the term "over-population", which is vague and misleading. In its broadest sense it could be applied to all cases in which resources fall short of

/requirements and,

requirements and, indeed, this situation has actually arisen, and can still arise now, even where the population density is relatively low. However, the resources are usually there and it is only a question of lacking the necessary knowledge or facilities to exploit them. It might be pointed out that Italy and India have similar population densities.

Since it is no longer contended that a nation's power is dependent upon the number of its inhabitants or that the population should be increased in order to swell the armed forces - to provide more cannon fodder - the time has come to dispense with the considerations which shaped demographic policy towards the end of the seventeenth century and, intermittently, up to Mussolini's time. Suffice it to reflect that although such power oscillates between the United States and the Soviet Union, although two other countries have more than twice their population. What is more, mainland China and India are far less prosperous than Switzerland.

2. The illusion of unpopulated areas

The argument that there are still large unexploited and unoccupied areas holds little weight. They remain so for want of the huge resources that would normally be required to exploit them, and this is borne out by the fact that internal migration is eminently centripetal in nature and directed towards cities, in particular the capital. A casual glance at the map will show that the Latin American populations are indeed concentrated abnormally in highlands and along the coasts, with vast empty tracts in between. This conspicuous fact has provided grounds, inter alia, for the somewhat pretentious claim that the inflow of people who will eventually populate them will constitute a heaven-sent blessing.

There are powerful reasons for maintaining that the above population distribution did not come about by chance, and still less for want of an enterprising and adventurous spirit. Those empty lands would present serious problems in relation to soil: they would consist of poor, barren land, lacking in humus. A further tremendous problem would be the tropical rivers, which would do more harm than good. It is calculated that the Amazon contributes one-fifth of the waters contained in all the oceans of the world and that the three systems - the Amazon, the Orinoco and the Magdalena - would be so rapid and unmanageable that they would be harder to dominate than the Mississippi. The United States with all its wealth, is only now succeeding in harnessing it. Some experts, however, take an optimistic view of the question; but there is no point in disputing it because the path of progress seems to lie in another direction.

The size of those empty spaces is apparent if it is considered that altogether the twenty-eight American countries and territories - taken in the broadest sense of the term - possess approximately 21 per cent of the area, and 10 per cent of the population, of the world. At the same time, their gross domestic product is barely 6.5 per cent of

/the total.

the total. Kingsley Davis contrasts these figures in order to explode the myth that the new lands and accumulation of natural resources would explain Canada's or Oceania's rapid rise to prosperity. He very aptly points out that while there are geographical and other similarities between Argentina and Australia, and between New Zealand and Chile, Australia's per capita income is 2.5 times that of Argentina, and New Zealand's is 3.5 times that of Chile. As Davis goes on to say, it might well be that the very abundance of land and resources is the reason why the Latin American countries have done nothing before to reduce the birth rate and why there is little incentive to acquire technical education and competence, to establish institutions and so to organize and discipline themselves as to be able to exploit these assets efficiently. Such abundance has served merely to maintain more people at a subsistence level.

3. The intention is not to arrest growth

On the other hand, the population increase undeniably broadens the domestic market and promotes large-scale production at lower cost, makes for a wider diversification of activities and spreads public expenditure over a larger number of taxpayers. However, the small size of the Latin American markets is attributable to the shortage not of consumers but of money, to the extent that manufactured goods tend to stay in shop windows. They might be said to be manufactured for show cases, since they are beyond the reach of the majority. In the United States there are so many cars on the road not because the inhabitants are so numerous - compared with India, for example -, but because they are rich or "affluent", as Galbraith expresses it. If Chilean nationals were able to purchase cars in the same proportion, local manufacture of automobiles would probably be justified.

The large numbers of children, among other factors, are a tremendous obstacle to education. Without education it is difficult to overcome an apathetic and fatalistic attitude, while the inhabitants are uninterested and incapable of introducing innovations, which are the incomparable spring-boards of progress. They need not originate in Latin America, but can be brought into the region and adapted. As H.C. Wallich says, they can be absorbed more easily and rapidly and at the expense of less vital energy; but this method creates fewer avenues for creative energy. Illiteracy is the enemy of rational thinking which opens up new mental horizons. Mexico has achieved notable successes in agriculture, because it has introduced up-to-date methods; for instance, it has transferred wheat sowings to land under artificial irrigation. If, in addition, agriculture could be provided with the necessary capital and steps could be taken to train the region's surplus unskilled manpower, it might be possible to achieve diversification on the desired scale. In extreme cases, taxes may be as high as 90 per cent of earnings and be paid without undue sacrifice in the case of really huge incomes.

It is not out of place to repeat that the aim is to curb the population growth rather than to arrest it. It might do someone good to go up 20 kilogrammes in weight, but not in one week or one month.

/This is`

This is illustrated by the case of Brazil, with which Ansley J. Coale was concerned. Its population in 1900 was estimated at 17 million inhabitants; the 1950 and 1960 censuses showed 52 million and 71 million, respectively, and if the present rate were maintained it would reach 235 or 240 million by the year 2000. This would mean that it had multiplied 14 times. Even assuming that the estimate for 1900 was 10 per cent, or possibly 20 per cent, below the actual figure, the bases for the calculation would not alter much. If the present fertility rates were cut down by half, the group aged 15 to 64 years would still increase from 38 million to 161 million within the next sixty years. This group would then be 42 per cent larger than it is now in the United States. It cannot truly be said that under those circumstances, there would be a labour shortage.

FUTURE POPULATION PROSPECTS IN LATIN AMERICA

1. The demographic transition

By way of disguising their prejudices, some people claim that it is unwise to encourage birth control in the Latin American countries because successful results would be achieved only in population sectors which had already attained much higher levels of living. It would be best, therefore, to await the demographic transition. The first argument ignores the experience gained recently in Taiwan, Korea, Hong Kong, Barbados and other parts of the world, and the second neglects the fact that this process took a century or more in Western Europe, during which time the population trebled. In the meantime, Latin America might have over 1,000 million inhabitants. This does not mean that there are not already glimmerings of this transition in some parts of the region, and that it is bound to come sooner than most people expect.

Since this is most likely to happen some think that too pessimistic a view is taken of Latin America's population prospects. Admittedly, past population projections have fallen short of the actual figures and it seems evident that several countries have not yet passed the peak of natural growth. It is a fact that the mortality rates in several countries could be considerably reduced and although the existing birth rates - which are not far of 50 per mil - reflect a fertility that is close to the peak of human capacity, there are others which might still rise. Health improvements tend to diminish the frequency of sterility and even to increase fecundity. The extensive studies on human reproduction carried out in the forties seem to have brought to light the large and hitherto virtually unknown number of spontaneous abortions. This seems to be a feature of underdevelopment and to grow more infrequent as living and health conditions improve. It is reasonable to infer that much of the increase in the number of births registered recently is attributable to this process.

It is an established fact that evident progress in economic development is accompanied by a temporary increase in the number of births as a result of the prevailing spirit of optimism. This lasts until inexorably the depressive forces exerted by prosperity itself begin to

/to make

to make themselves felt. Because the "baby boom" lasted for nearly a decade in the United States it was expected to prove the exception to the rule. Since 1957, however, the birth rate has declined, and in 1965 there will be fewer than 4 million births, i.e., below the 1953 level, notwithstanding the existence of many more women at the age of fecundity than before. What this amounted to, therefore, was a "demographic holiday", more lasting than any other and with its own peculiar characteristics, since the "boom" was clearly given an impetus at the end of the Second World War. Many deferred marriages were able to take place and many separated couples to meet again.

2. Latin America's more rapid transition

These phenomena, therefore, are transitory and even short-lived. There is reason to suppose that the action of those depressive forces will be faster and more vigorous in Latin America, even if only because there is a pressing social demand for birth control which will soon become a widespread practice. Not counting this voluntary control, there are numerous other curbing factors, ranging as someone once said, from the spots on the sun destroying action of soap on semen. In up-to-date industrial civilization, they include: later marriages; the decrease in concubinage and the number of consensual unions which tend to be formed earlier in life; separation and travel; the emancipation of women and their progressive absorption in the labour force; the higher cost of children's maintenance and education; laws prohibiting the employment of minors; and many others.

On the basis of highly ingenious and creditable methods of calculation, Dr. Kingsley Davis has proved that the birth rate in Argentina - which was the first Latin American country to become urbanized and to reach a certain stage of industrial development dropped from about 45 per mil in 1880 to 25 or 26 per mil fifty years later. It declined gradually up to the First World War and then more rapidly to reach a point of stabilization during the Depression. The picture is made clearer if the birth rate is based on the number of women between the ages of 15 and 44, the decline being from 206 to 103 over the same span.

Davis attributes these variations to voluntary control along the same lines as that practised at different times in other Catholic countries - Spain, Portugal and Italy. It so happened, therefore, that in 1947 there was a frankly negative relationship between fertility and the degree of urbanization in the various provinces, which was virtually non-existent between 1869 and 1895. At that time contraceptive practices had not begun. The same situation is noted in other Latin American countries. In Chile, for instance, the fertility rate in 1950 was 82 per cent of that recorded in 1900-04. In terms of demographic evolution, Chile is lagging behind Argentina and Uruguay - whose population growth is already slower than that of the United States -, but is ahead of the rest of the Latin American countries.

/According to

According to Rubén Talavera, there are also differences in fertility in Chile ranging from 190 per mil for women in urban areas to 270 per mil for those in rural areas. Since in 1960 74.3 per cent of the women aged from 15 to 49 years belonged to the urban sector, it is perfectly logical that the fertility rate for the whole country should be closer to the urban than to the rural rate. Among the unoccupied women it is 240 per mil, that is, more than twice the rate for the economically active women (110 per mil). That the decline in the urban area was not more marked was probably due to the fact that 13 per cent of the increase in the urban population settled in shanty towns, where the gross reproduction rate of 2.5 per mil is somewhat higher than in the rural area.

Harold Geisert demonstrated that, in 1950, for every 1,000 women at the age of fecundity there were 456 children under 5 years of age in the cities and 813 in the country in Costa Rica; 537 and 726, respectively, in Nicaragua; and 505 and 851, respectively, in Panama. The survey conducted by Tabah and Samuel in 1959, alluded to in another section of this study, showed that the fertility rate was reduced to half in the more cultured high-income sectors and that this reduction was brought about deliberately and has been intensified in the last five years. Generally speaking, the women maintained that 23 was the ideal age at which to marry; four was the right number of children, and two and a half years should elapse between pregnancies.

On the basis of eight separate variables, six of which are considered as indexes of economic development, D.M. Heer and E.S. Turner recently established an inverse relationship between economic development and fertility in 318 political units of eighteen Latin American countries. The fertility rate temporarily takes a sharp upward turn with increased development, subsequently falling to below its former level. Other social factors more closely related to the urban sector are now beginning to make themselves felt. Of these, none has a greater effect than education. These examples are more than enough to prove that the demographic transition is at hand and that it will be more rapid than in any other part of the world or than in the past. It can safely be said, therefore, that the population forecasts are too pessimistic.

INTERNAL MIGRATION

1. The world urbanization process

One of the phenomena defining the current period is that which is mistakenly called urbanization. It consists essentially in progressively larger population shifts from the country to the cities. They are impelled by two forces: the attraction of the city and the rejection by the rural area. They are attributable, respectively, to the fact that the one offers expectations of better levels of living, while the other needs fewer workers owing to the advances made in agriculture. Improved levels of living are reflected in a higher and perhaps more regular income, social security and services, wider educational and training possibilities and, consequently, the opportunity of rising to a higher level, etc.

/Reliable data

Reliable data presented by Amos H. Hawley reveal that, at the beginning of the nineteenth century, less than 2 per cent of the world population lived in cities of over 100,000 inhabitants, and not more than 2.5 per cent in cities of over 20,000 inhabitants, of which there were no more than twenty-two. In the course of the next hundred years Europe's urban population doubled and trebled. Towards the end of that period England, whose prosperity had started earlier and had proceeded more rapidly, already had 61 per cent of its population in centres of over 10,000 inhabitants. In France the proportion was 26 per cent, and in Germany, Austria and Sweden, 15 per cent. As to the cities of over 20,000 inhabitants, which had risen to 120, the proportion of 2.5 per cent had quadrupled, and in 1960 had reached 25 per cent. For those with over 100,000 inhabitants the increase was somewhat less - from 2 per cent to 16 per cent - ranging from 11 per cent in Asia to over 50 per cent in Oceania. The population in cities of this size totalled 15 million in 1800, and twenty-one times that total (314 million) in 1950. Concurrently, 3,134 United States counties had suffered a greater or lesser exodus in the previous decade, inasmuch as the rural population proper had been reduced to 13.4 million - or 7.5 per cent -, whereas the urban population as such was over 70 per cent.

There is no need to comment on the distortions and difficulties created by this process in other parts of the world. They include such monstrous agglomerations as Tokyo or Shanghai and those which merge into co-urbations (as in England); decay of the centre of a city which gives rise to the formation of veritable ghettos of underprivileged citizens (negroes, jews, etc.); tangled transport and traffic systems; and many other situations.

If the forecasts are fulfilled, 75 per cent of all the inhabitants of the United States will live in 200 metropolitan areas and nearly 40 per cent in three complexes: the first stretching from New York, Philadelphia and Washington to Norfolk, the second covering the whole territory lying between Milwaukee and Cleveland, and the third extending the length of the California coast from San Francisco to San Diego. This is not a very bright prospect. Be that as it may, the general process is backed by the development of industry which employs workers no longer needed in agriculture and, in spite of its tremendous speed, it has permitted settlement on a more or less organized basis.

2. Megacephalia

The above phenomenon has its own peculiar characteristics and is far more harmful in Latin America. As so aptly stated by John V. Grauman, in the region there have existed the greatest extremes between urban and rural life, i.e., the sharpest contrasts between agglomerations of unwarranted size and the huge number of inhabitants scattered over the countryside. What is more, some administrative centres of a certain size and structure up to 10,000 inhabitants have become stagnant and have disintegrated because of the effect of faster and better transport. As Grauman says they have become re-ruralized. Moreover, the population shifts have taken place in the present century, and probably in the last twenty or thirty years. This is clearly revealed by the surveys carried out in Greater Santiago, where 6 per cent of Chile's population lived in 1885 and 25 per cent in 1952.

/Migration has

Migration has taken place on a scale and at a rate unequalled anywhere, in the direction of a single city, usually the capital. It has no doubt been partly influenced by the Spanish colonial system, under which the capital cities had foundational importance, were the focal point of political and economic power and the hub of intellectual activity. While retaining these privileges, in the course of time they have acquired commercial and industrial hegemony and have become tremendous suction pumps that are draining out the life blood of the countryside. They give the impression that they are still occupied by Spanish settlers and that the rest of the inhabitants are subordinate to them. They usually have more than twice as many inhabitants as the city next in order of importance.

Thus, nearly half the Uruguayans live in Montevideo; one-third of the Argentinians in Buenos Aires; one-quarter of the Chileans, Cubans and Panamanians in Santiago, Havana and Panama, respectively; and nearly one-fifth of the Venezuelans, Peruvians, Costarricans and Paraguayans in Caracas, Lima, San José and Asunción, respectively. Exceptions to this rule are Brazil, Ecuador and Haiti. If the United States were to follow the same pattern as Uruguay, Washington would have over 90 million inhabitants.

As a result of this suction process, there are today ten metropolitan cities with over one million inhabitants, of which only two (Rio de Janeiro and Sao Paulo) are not seats of government, whereas in 1930 only Buenos Aires had reached that size. They have all been growing at a rate of about 6 per cent; thus they have accounted for 9 million of the increase of 50 million between 1950 and 1960. This is a prodigious rate of growth and the Latin American countries have become macrocephalous, to the obvious detriment of progress.

Because of the attraction of the town and the exodus from the country, 25 million of those 50 million came to swell the urban population. During the sixties Fortaleza and Belo Horizonte doubled their population and that of Matanzas - one of the administrative units of the half circle backing on to the River Plate in Greater Buenos Aires - went up by 310 per cent. The unprecedented increase in Brazil - from 52 million to 71 million, or 36.5 per cent - is broken down into 70 per cent in the urban sector and just under one-fifth (18 per cent) in the rural sector, the growth rates for Colombia being 5 per cent and 10 per cent, respectively. In Chile and Ecuador, population centres with over 10,000 inhabitants expanded at a rate of 12 per cent.

3. Selective population shifts

To make matters worse, the population shifts are notably selective in nature. To begin with, foreign immigrants were responsible for the fact that Argentina so early became a prey to elephantiasis, to the

/extent that

extent that in 1940 half the male inhabitants of Buenos Aires over 20 years of age had been born abroad. Within the country itself, the young and strong persons with initiative and some education tend to leave the villages, and this results in a qualitative deterioration in agriculture. There are more women than men, as borne out by the sample obtained by CELADE in Santiago, which showed a ratio of 100 to 71, and an index of masculinity of 86. That they did not leave the countryside proper is shown by the fact that two-thirds came from centres of over 5,000 inhabitants, while only 13 per cent came from the rural area proper, notwithstanding the fact that - excluding the capital - it represented 50 per cent of the population in 1952.

It is of enormously greater significance to note that the growth of the Latin American cities bears no consistent relationship to the expansion of manufacture, capital formation or agricultural earnings; that it is in inverse proportion to the percentage of the domestic product represented by manufactured products and in direct proportion to the number of economically active persons engaged in primary production.

4. Poverty belts

However, the greatest tragedy lies in the coming into being of those hideous tumors known as shanty towns (villas miserias in Buenos Aires, barriadas in Lima, cantegriles in Montevideo, vilas de calocas in Porto Alegre, bidonvilles in Port-au-Prince, callampas in Santiago, and so forth). There are already about 30 million dwellers in these poverty belts in the region.

In the major cities, 20 to 30 per cent of the inhabitants apparently live in primitive shacks, and in Colombia 42 per cent of them have no piped water and 72.3 per cent no sewerage. According to the Organization of American States (OAS), barely 68 million urban and 23 million rural inhabitants of Latin America have piped water, i.e., much less than half the total population. Between 1950 and 1960 it was laid on for 21 million, while the population increased by 30 million.

It would take too long to go into the tremendous problems created by these groups of human beings which have no organic structure or cohesion, and in which the younger age groups predominate. They are a source of primary concern to many rulers, as they are hotbeds of delinquency, political unrest and even of sedition. Under the name of "promoción popular", Chile is making stubborn efforts to organize the community. This movement has a serious defect in that it settles people wherever they are, -with no real justification for their presence there, and makes the place more attractive to others. Hence the tumor grows and infiltrates into the system. These groups also emphasize the country's macrocephalia and obstruct policy which could consist in the establishment of industrial and other centres at different points so that the countries could expand on the basis of a sounder and more homogeneous structure.

It is a mistake to believe that these poverty belts absorb a large number of outsiders, who, in any case, are far more numerous. According to CELADE's survey of Greater Santiago, these outsiders are spread all over the city and, curiously enough, the largest proportion is to be found in the eastern sector. They consist mainly of women employed in domestic service with wealthy families living in that sector. On the other hand, a fair number of old city dwellers, who belong to the lowest-income sectors or who have been rejected by the capital, live in callampas and might be described as outcasts. It is a well-known fact that these outsiders mainly swell the ranks of the employed in minor or minimum-productivity services.

5. Housing

In view of the unrestrained growth of the population in general, and of the urban population in particular, and the considerable expansion of the poverty belts, it is not surprising that the housing situation should be so unfavourable. Mainly on the basis of the Census of the Americas, the Pan American Union estimated that in 1951 there was a shortage of over 25 million housing units, since only half those in existence met the requirements and it was necessary to replace 80 per cent of those occupied by 85 per cent of the population. A further 6 million could be repaired. According to Eduardo San Martín, this deficit does not include the need to provide shelter for the enormous group of lodgers.

If housing is to be provided for 80 per cent of the city dwellers and 60 per cent of the country dwellers, Dr. Manuel San Miguel, Executive Director of the International Bank for Reconstruction and Development (IBRD) considers that 12.6 dwellings would have to be built annually in the urban sector and 4.6 in the rural sector for every thousand inhabitants, that is, an average of 8 per mil. Thus, there would be an annual increase of 1,850,000 housing units throughout the sixties. As half the decade has already gone, an even more titanic effort would be called for. As the International Labour Organisation points out, there still exists in the country the tumble-down straw shack of pre-Colombian days, with earthen floor and no sanitation or protection.

It is not too much to add that, according to ECLA, if the natural growth rate continues to rise to 3.5 per cent annually, the chronically poverty-stricken urban sector would increase from one-third to half in the space two decades. However, it is not likely to reach 3.5 per cent because of the weight carried by Argentina, Chile and Uruguay. If on the other hand that increase were halved, the whole of the marginal sector could be fully absorbed by the productive labour force.

LATIN AMERICA: A HOMOGENEOUS UNIT

1. Similarities and differences

Some distinguished observers contend that it is erroneous to use the term "Latin America", since a comparison of the data on living levels and other factors clearly show that conditions in the region vary so widely as to preclude it from being regarded as a true unit. The author of this paper hopes, however, that his unremitting studies, frequent and extensive travel and opportunity of working in different parts of the world may entitle him to express the opinion that Latin America is a more unified entity than many of those commonly recognized as such. To appreciate the region's homogeneity, it should be borne in mind that it covers a fifth of the globe, accounts for about 7 per cent of the world population, and, in addition, has long been the prey of disruptive forces.

For more than three hundred years during the Spanish conquest and rule, the Latin American countries had virtually no contact with one another and trade between them was forbidden. Later, bilateral agreements of different kinds encouraged relations with foreign countries but militated against those forged among the Latin American nations. The geography of the region was an even more fundamental barrier, and it would be no exaggeration to say that before the days of the Pan American Highway and other modern means of communication, and, above all, before air transport became widespread, it was an arduous task to travel through this part of the world or even to visit a neighbouring country.

Nor would it be exaggerated to claim that there are probably more differences between northern and southern Italy and, without any doubt, between the different Indian States and the north-east and south of Brazil than between any two of the Latin American countries. Most of the divergencies that mark these countries are not so much innate and permanent as the result of the different stages reached by them in their demographic, social evolution and other areas of growth. Now that the physical barriers have been surmounted, and agreements are multiplying thick and fast, the Latin American nations will become increasingly homogeneous without having to intermingle.

2. Social structures

It seems to be widely agreed that Latin America's social structure with its rigid and almost impermeable strata presents a formidable obstacle to the course of human progress and the efforts made to achieve prosperity. This structure has sometimes been denounced more vehemently at certain moments than at others, but it has never failed to arouse criticism of some kind. The explanation of its origins is convincing enough, but in the interests of simplification this will be shortened by presenting its main lines only. North America was settled by families who established their homes wherever they could live in freedom and peace of mind. There they found a primitive native population,

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under-nourished and few in number. The conquistadores who came to Latin America brought no women with them and lost no time in mingling with the natives. For this reason, and also because they came across fully-developed civilizations in certain parts of the region, they could not dispense with, still less eradicate, the indigenous elements. They chose instead to make use of them and, thirsty for spoil, seized whatever came within their grasp.

The system of entail and land distribution and grants gave rise to the great farms which spread and multiplied when the Jesuits were expelled and their property confiscated. They are a paramount and lasting feature of the region's past history and present-day existence. Now, as in the past, they make for the division of society into two clearly defined groups: on the one hand, a paternalistic oligarchy holding the reins of power and, on the other, the great dispossessed masses. This original dichotomy has evolved into the co-existence of a handful of people enjoying relatively great wealth and leading a life of ease and vast numbers of illiterate people eking out a wretched existence and earning their bread with the sweat of their brow.^{1/}

As recently as 1913, the Chairman of the Chilean Conservative Party made a speech in which he declared that it was God's will that there should be only a very few rich and a great many poor, and that any attempt to alter this state of affairs would have disastrous results. The rich were satisfied with their lot, and saw no reason why changes should be made. They were not likely to benefit, and some of them thought that the way to improve matters would be for more people to become rich and swell their ranks.

^{1/} Disraeli, referring of the England of his day, said that it consisted of two nations. This is true, in an even more striking way, of each of the Latin American countries today, as ECLA has demonstrated with the aid of a host of data. With an average personal income of 370 dollars a year, half the population of Latin America has an income of 120 dollars and 5 per cent of the privileged groups 2,400 dollars or twenty times as much. In Chile, 3 per cent of the population has 25 per cent of the total income, while at the other end of the scale, 55 per cent of the people have less than 16 per cent of the income. The wealthy class and the amount of total income it enjoys would be respectively 5 and 36 per cent in Mexico, 8 and over 50 per cent in El Salvador, 15 and 50 per cent in Venezuela and 1 and 17 per cent in Ecuador. The gap is widening because the tax system is regressive rather than progressive, around 60 per cent of the taxes being indirect. The same dichotomy is discernible in land tenure, housing and education, etc. Today each nation may be said to be truly split in two.

3. The middle classes

Barely emerging in the majority of Latin American countries, although representing a large proportion of the population in others, the middle classes embody the hopes of the people in the fight for progress. They have also been severely criticised on the grounds that what counts is not their number but their quality, and that this leaves much to be desired. Instead of helping to bring about the drastic changes required in the existing situation, they are said to have deserted the men of distinction who took over the reins of political or financial power. They appear to be irresistibly impelled to mimic and adopt the ideology, customs and opinions of the oligarchy. They stand in equal dread of workers' and leftwing movements and of the bugbear of Communism, and have allied themselves with the right wing to suppress such movements, aided by the Church and the armed forces. These apprehensions, and the fear of losing foreign aid, which is often given in the form of military assistance as well as money, seem to have caused them to lose all sense of identity with their country. In itself, foreign aid may well have been instrumental in entrenching them in their new positions and bolstering their determination to halt the tide.

These views are conceivably over-simplified and subjective, but they undoubtedly contain a grain of truth. It has been said, in a spirit of deliberate over-statement, that no Jacobin who becomes a Minister remains a Jacobin, and some of the left-wing parties have clearly become more bourgeois, as do so many who, on achieving an important position, furl the banner of reform. It is easier in this context to explain the fate suffered by so many basic attempts at reform. In principle, it is widely recognized that the first steps in economic and social development policy are a radical reform of the tax and land tenure systems. But it is only very occasionally, when the pressure becomes unbearable, that measures of this kind are adopted and even then they are hardly ever forceful enough. Either their application is systematically and wilfully sabotaged, they remain a dead letter or their implementation is dangerously slow.

There can be no doubt that the social structure of the region is improving, as with nearly all the other aspects of Latin American life, thanks to the effects of the progress achieved and to the determined efforts of a few guiding spirits. Even those who are foremost in condemning this structure admit that it is becoming slightly more permeable. It would otherwise have been torn asunder by the forces of expansion just as the caste system was destroyed in India. It would be an easy task to show that those who manage to penetrate it and rise to the top are persons who have had the benefit of an education. In fact, the ease with they move up seems to be in direct relation to their education, since, with few exceptions, those who reach the top levels of the structure come from among the university graduates, are technicians and skilled workers.

EDUCATION

1. Achievements and reversals

It should be pointed out that, despite his gigantic efforts and achievements of recent years, man is losing the two battles in which he is or should be most deeply concerned: the battle against ignorance and against hunger. Nearly every country is allotting a larger share of its gross national product or budget to education, there are areas in which a new school is opened every week and yet the world has far more illiterates than ever before. A mere increase in the numbers of those enrolled at school is not a real step forward, since, as Marshall Wolfe has pointed out, the enrollment figures are probably hiding a growing number of school drop-outs. The experts seem to agree that regular attendance at primary school for four years or less produces functional illiterates who may ultimately find themselves worse off than those who know nothing at all. Regular attendance in such cases means for five hours a day during a school year of at least 200 days. To claim that children would remain in school longer if school capacity were expanded is a hollow boast.

Drop-outs, or academic deaths as they are known in the Chilean Faculty of Medicine, occur mainly for economic reasons. This can be summed up by the story of the rural worker in India who justified the fact that he had five children on the grounds that he needed four to help him work the land and, since primary education had become compulsory, a fifth to send to school. Lack of understanding or interest on the part of the parents plays some part, but its influence is negligible compared with the urgent need for the child to begin working, the inability to pay for his keep, distances and transport problems, etc. The impossibility of building school houses and of finding enough teachers has led the Chilean Government - in common with others - to introduce a double shift system with one in the morning and another in the afternoon. By shortening the hours of school for the primary pupil and placing an unbearably heavy burden on the teaching staff, this substantially reduces the efficiency of the teaching and makes for more drop outs.

The simplest way of estimating the level of education is to determine the proportion of illiterates among those over a certain age, usually 15, and the average number of years of schooling which adults have had. The calculation is so rough and ready that it should be used only when better data are unobtainable, since it gives no idea of the type and calibre of the teaching and, only very indirectly, of the drop-out rate. It can be improved upon determining the number of enrollments or, better still, of the pupils actually attending school at each level, the ratio of these to the number of teachers, the amount of money spent annually on each pupil and the percentage of the national budget allocated to education, etc.

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The data, which are fairly plentiful, but incomplete and uncollated, show that great sacrifices have been made in Latin America in order to bring about some improvement and that much has been accomplished. The region is, however, further than ever from attaining the targets set by modern society and is even less able to meet the requirements arising from the desire to give it a swifter and more dynamic rate of development. The widening gap is due to the fact that science and technology have made tremendous strides forward, that the region is starting from scratch, and that it cannot dispense with the systems it inherited from its forebears. It would be easier to wipe the slate clean and start again.

2. Educational planning

There are two main reasons for taking an optimistic view of the future. Firstly, it is now generally recognized that education should be given top priority in development programmes because it is the most direct and effective way in which society can influence the calibre of its human resources. Secondly, it has come to be viewed as a whole whose constituent parts cannot be considered independently. For both reasons, the requirements for education in terms of men and materials are so enormous and increase so rapidly that they are practically limitless and far outstrip the region's powers of providing them. Accordingly, it is imperative that education should be planned; in other words, balance must be struck between what is needed and what can be done and steady growth must take place both horizontally and vertically, with whatever adjustments may be necessary.

Acceptance of the need for planning has brought to light shortcomings and defects that should have been remedied long ago. No defect has more harmful repercussions than the acute shortage of specialists in education. It used to be thought that it was enough for teachers to have a modicum of knowledge and be able to pass it on with the result that teacher training was neglected to a shameful degree. Of the handful who went into this neglected and under-rated profession, there must be some still teaching in state schools or even directing them. This assertion is based on the obvious fact that the poor educational returns in Latin America are due to mistakes in organization and practical application rather than to a lack of resources. The development of a system that would channel such resources properly and avoid waste would be more beneficial in the short run than any amount of money.

3. Shortcomings and waste

In order to grasp the scale of the present waste and inefficiency, it will suffice to refer to a joint report prepared by UNESCO, ECLA, the United Nations Bureau of Social Affairs and CELADE in which it is stated that despite the vigorous impetus given to education in Latin America during the past fifteen years, and the last decade in particular, its average level has hardly risen at all. The educational drive can be appreciated from the average percentage of national budgets - the main source of funds - allocated to education, which has increased from 11 per cent in 1937 to 23 per cent or more at the present time.

Except for Argentina, Colombia and Brazil, where primary schooling lasts for seven, five and four years respectively, every Latin American country has made primary schooling compulsory for six years. Nine have succeeded in educating a number of children of equivalent age that exceeds or is only slightly less than the number in the 7-12 age group; six countries have more than 70 per cent, and of the others who fall below that figure, only one is in a really bad position. The increase in the number of secondary school pupils has been even more striking. In several countries the enrolment figures have doubled and Argentina, Chile and Panama, 32, 27 and 22 per cent respectively of the 13-18 age group are now enrolled. Higher education has also made great strides forward.

The other side of the coin is disheartening in the extreme. Not one country has managed to reduce the absolute number of illiterates, which is now reckoned at about 38 million. The percentages range from 13.6 for Argentina to 70 for Guatemala and 89.5 for Haiti. Each year, there are some 12 to 15 million children who cannot get into any school, and for every 100 children who enter primary school, only 10 complete the whole course of studies in Honduras and Nicaragua, less than 40 in Costa Rica, Uruguay and Venezuela and 46 in Panama. For secondary studies the figures vary from 46 per cent in Costa Rica to 31 per cent in Chile and 27 per cent in Panama. Less than half the primary school teachers and only a third of the secondary school teachers have been specially trained for their work. In the rural areas, in particular, many of the primary schools do not go beyond fourth grade.

4. Defects of quality

It would be taxing the patience of the reader to enumerate all the shortcomings in the quality of educational services: they include lack of continuity between the different levels; unbalanced and top-heavy curricula that are poor on the scientific and technical side; frequent repetition of courses which reduces performance and school capacity; an almost complete lack of any services for child guidance or aid; an unsatisfactory pupil-teacher ratio, which throws an unduly heavy burden on the teaching staff; secondary education regarded as training for the university or for white-collar jobs, etc. Then, too, the practical aspects of the subjects taught are not sufficiently emphasized, and as a result, the rural schools have little to offer. As Arciniegas has said, rural labourers have nothing to read nor any need to write. What the prevailing type of education usually does, however, is foment migration from the rural areas.

Furthermore, education in Latin America has always been conservative in its methods and systems and has made no effort to introduce the changes that are needed in the present-day world, instead it has contributed to the inflexibility and dichotomy of Latin American society. The schools, particularly in the upper grades, have an unusually large number of children from families in the higher income brackets. It is harmful, as well as anachronistic, to maintain the system of free university education, since the benefits thereof are enjoyed by the self-same group, whose

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parents are wealthy enough to pay their expenses and can do without the income they might provide. Students from these income brackets should be required to pay a large entrance fee, and scholarships covering all necessary expenses should be made available to the other groups requiring this help.

Regarded as the final product of its different parts, education in Latin America is so unsatisfactory that it is superfluous to ask what the relation is between product and investment. Until educational services are remodelled and extended, there is not the slightest chance of giving a dynamic impetus to development and we may well continue to profess that "education has the highest economic, social and cultural multiplier", in concert with the Declaration of Santiago issued in 1962 by the Conference on Education and Economic and Social Development in Latin America. No sum would be too great to invest; it is limited solely by possibilities and the main problem is one of strategy: how and where to give battle.

FOOD

1. Deterioration of the world situation

In all the age-long history of agriculture there has never before been a case like that of the United States, which for over a decade has been increasing its grain output at an annual rate of 4.8 per cent, and within fifteen years will have doubled it; which provides its population with a diet so rich in quantity and quality as to generate various over-feeding problems; which pays farmers to sow less corn, and obtains a production surplus that its vast storage facilities cannot house. This it distributes prodigally throughout the world, free of charge or on manifestly easy terms. Nor has there ever been a parallel to the case of Denmark, where the work of one man feeds twenty, and one square kilometre of cultivable land tilled by ten workers yields food for two hundred. It thus supplies its own 4.4 million inhabitants at a very satisfactory level, in addition to 3.6 million inhabitants of other countries. Hardly less striking are the examples afforded by Australia, Canada, the United Kingdom, France, the Netherlands and Japan.

Nevertheless, according to a categorical statement by Mr. Binay R. Sen, Director-General of FAO, the gap between the food supply and the population increment is widening, and unless the latter is stabilized and revolutionary measures are adopted whereby the former can be enormously increased, mankind will be threatened with disaster on an unprecedented scale. Nor is the danger a remote one; the remaining years of the present century constitute the crucial period.

Sufficient evidence of the widening of the gap is provided by the fact that during the five-year period just ended - 1959/60 to 1963/64 - the population of the world increased by 11.5 per cent and the output of food by 6.5 per cent, so that per capita supplies contracted by about 4.5 per cent. Even if success attends the far-reaching programme concerted

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by the United Nations and FAO - the Freedom from Hunger Campaign - to promote a tremendous expansion of food production, the headway made will only be enough to give the human race time to control the birth rate so that agricultural output can keep pace with it.

In the meanwhile, the "submerged" peoples of Africa, Asia and Latin America, whose annual exports, up to the end of the nineteen-thirties, amounted to 11 million tons of grain, have become net importers. The volume of their annual imports rose from 4 million tons between the beginning of the forties and the year 1960, and reached 25 million tons by 1964. China (Mainland) alone is apparently buying 4 or 6 million tons of wheat a year on the world market, and earmarking about 40 per cent of its export earnings for the purchase of food and fertilizers. Since 1963, the Soviet Union has become an even bigger purchaser.

2. Necessity of assigning a high priority to agriculture

In Latin America there is a strong current of opinion to the effect that it has been a grave mistake to relegate agricultural development to a secondary position: a mistake that is responsible for the disadvantageous situation existing today. Apart from the fact that the majority of the population of Latin America earns its living on the land, the development of agriculture conditions the progress of the other sectors of the economy. Measures to remedy this state of affairs and spur on agricultural development should clearly be given a high priority, second only to that assigned to education. The mistake may have arisen from two equally erroneous assumptions. On the one hand, many believed that industrialization, as it has been dubbed, constituted a sort of panacea, as well as the most effective instrument for rapidly raising levels of living. On the other hand, land yields seemed to be registering so vigorous an upward trend that it was not considered justifiable to devote much attention to this line of production. In reality, the increments reflected a recovery from the depletion and disruption that the Second World War had brought in its train. This is why projections based on the upward trend in question - confined that is, to the extrapolation of data for the late fifties - have proved unduly optimistic.

Per capita yields have in fact decreased in Latin America by 6 per cent since 1958, which was the peak year of the post-war period. This is not to be wondered at, since even the countries with the best-developed agricultural sectors would have serious difficulty in maintaining a per capita rate no higher than Latin America's, if their populations increased as fast. To take three examples, the United States has expanded its annual wheat output by 2.7 per cent, and France by 2.3 per cent, while Japan has increased its production of rice by 1 per cent. All these figures would of course have been negative if the rate of demographic growth in these countries had been about 3 per cent, as in Latin America. Nor is it surprising that although the daily per capita intake of calories does not amount to 2,200 a day in four of the Latin American countries, and in most of them barely exceeds 2,500, agricultural imports represent an overwhelming

burden on some economies, and are still increasing. Several governments have found themselves compelled to restrict consumption of meat and other foodstuffs and to introduce rationing systems.

Too many criticisms have been levelled against the land tenure system for the problem to be worth stressing here. Suffice it to quote the information given by Hugo Jordan. About 100,000 persons are in possession of 471 million hectares, or 65 per cent of the privately-owned land; some 2 million are medium-scale farmers; and about 30 million are smallholders (minifundistas) or landless workers. More than 50 per cent of the total population of the region lives in rural areas; but the proportions range from 87 per cent in Haiti to 18 per cent in Uruguay, and an inversed and fairly consistent correlation is observable between the percentage in question and the levels of living that prevail. Various studies have shown that the agricultural worker's income is far lower than that of his opposite number in the towns, and that illiteracy rates among the rural population are more than twice as high as in urban areas (in some instances, four times higher). Such anomalous extremes are more than sufficient to account for the deplorable state of agriculture in Latin America.

3. The take-off in agriculture

Obviously, there are two fundamental ways of promoting agricultural production: by increasing the yield per unit of land and per worker in the area already farmed, or by bringing more land under cultivation. The first method would offer very considerable advantages. What is more, recent research gives strong grounds for the belief that in this sphere, as in the economic process, there would be a "take-off" after which productivity would continue to increase steadily and, up to a point, automatically. Among the countries in which such development would seem to have occurred are the United States, the United Kingdom, Japan and Australia. Lester R. Brown substantiates this assertion with sufficiently reliable data.

Again as in the economic process, certain preconditions would be necessary before this desideratum could be achieved. Without going into detail, acceptable levels of per capita income, of literacy and of productivity in the non-agricultural sector would be required. Adequate incentives would also have to be provided, essentially in the shape of opportunities for the agricultural worker to obtain yields above the bare family subsistence level, which he could market and for which he could receive direct and equitable remuneration. Neglect of this latter requisite would seem to account for the relative lack of success of collective and State farms in the Soviet Union. In the case of latifundia, the incentive is still less, since the profits revert to the owner's benefit.

For the sake of brevity, it will suffice to note that between the pre-war period and 1960-62, the average annual increments in productivity were 0.2 per cent in countries where per capita income is less than

/200 dollars;

200 dollars; 1 per cent in those where it ranges from 200 to 1,000 dollars; and 2.2 per cent where it exceeds the latter amount. Similarly, increases of 0.2, 1.1 and 1.4 per cent correspond, respectively, to literacy rates lower than 50 per cent, between 50 and 80 per cent, and above 80 per cent.

Clearly, a certain amount of personal income is necessary for the purchase of a plough, fertilizers and pesticides (insecticides, weed-killers and fungicides), and to get money the agricultural worker must have at his disposal a surplus to sell and market that will buy it. Experience has plainly and repeatedly shown that in order to learn and assimilate any of the innovations that have revolutionized agriculture, without forgetting them almost at once, the farmer must be able to read and must even have been literate for some time. Transmitted orally, even simple ideas are apt to be distorted, and do not reach far beyond the research centres and experimental stations.

For extensive farming, the productivity of the non-agricultural sector matters less; for intensive agriculture, a variety of goods and services is needed, ranging from capital inputs such as the above-mentioned fertilizers and pesticides to research, credit and transport facilities. Moreover, oxen do not suffice for depth sowing; tractors and heavy equipment are needed, as well as jet sprays for the application of certain pesticides.

Once these various requirements have been met, a time will come when production increases substantially and continues to do so steadily and almost automatically. To ensure that the process becomes really automatic society must take advantage of it and strengthen it. The characteristics of a society capable of doing this will be defined later. If the logical approach just outlined is as valid as it seems, there can be no doubt, in the first place, that the alternative of bringing new land under cultivation should be considered only in so far as it does not absorb effort that could be more usefully directed towards intensifying the development of the existing agricultural area; and, secondly, that the attack must be launched on several fronts.

THE ECONOMIC PROCESS

1. Rostow's take-off

Some idea should be given of W.W. Rostow's theory, which is too complex to be reproduced here in its entirety. According to this writer, economic history resembles other forms of history in that it is a seamless web, like the robe of Christ - a continuum in which it is difficult to draw a clear line of demarcation between successive phases. There seems, however, to be one lengthy period, lasting up to a century or longer, conceivably more, during which progress is very gradual, and what Rostow calls preconditions or facilitative conditions are established. At a given moment, within the space of two or three decades, the take-off occurs, after which the rate of saving and investment (plough-back) increases sufficiently to cause a considerable rise in per capita productivity. These two processes carry with them radical changes in production techniques and in the flow of income, whereby they are perpetuated in such a way that they become progressive and fairly automatic. The initial innovations, whether they relate to methods of production, to the channelling of income towards productive investment, or to the utilization of the potentialities for international economy, require that some group have the will and the authority to introduce and diffuse them, and that society as a whole be prepared to respond to and perpetuate these innovations.

Besides a society of this type and a group prepared to assume increasing responsibilities, another precondition is that the rate of productive investment should have exceeded 10 per cent of the national income and that one or more important industries sectors should have gained momentum. The take-off is sparked, to use Rostow's term, by a sharp stimulus, such as a political revolution, which directly affects the balance of power, the character of institutions, the distribution of income and the propensity to innovation; it may acquire impetus from the innovations themselves or from a change in international conditions that opens up a market or closes one, as in the case of a blockade. In this latter event, the need for import substitution arises. Rostow's theory deserves careful study, not only on account of its intrinsic interest, but also because of its applicability to Latin America. It may be that our countries are still in the chrysalis stage and have not yet taken wing because the disproportionate growth of the population keeps down per capita income levels, or because the rigid structure of national societies in the region is unfavourable to the emergence of the aforesaid group endowed with will and authority, and gives it no chance to take a grip on progress and perpetuate it.

2. Recent economic trends

Any reader of the United Nations publication entitled The Economic Development of Latin America in the Post-War Period receives an exceedingly pessimistic impression. With a wealth of statistical evidence and manifest competence, it presents a picture that must be briefly outlined here. In addition to the fact that economic growth was not sustained, shortly after the Second World War a downward movement began which became more widespread from 1955 on. In many countries it led to stagnation, and in some to a reduction of real per capita income in absolute terms. The annual rate of increase of the domestic product, which had originally been 5.7 per cent dropped first to 4.7 per cent and then to 4.3 per cent. Even the expansion of manufacturing industry at an annual rate of 6 per cent was not as significant as would appear, in view of the low level from which it started, and the faster pace achieved in some other regions. As agricultural production increased by barely 3.5 per cent, it could not meet the demands of the export trade and of domestic consumption, to the obvious detriment of the over-all development process. Since export prices fell while those of imports remained constant or rose, balance-of-payments disequilibria reappeared, and the deficit swelled to approximately nine times its former size.

The growth rate of the per capita product, which had attained over 25 per cent in a decade, has been only 40 per cent in the last sixteen years. Of the workers joining the labour force, about 40 per cent found employment in business, government offices and other services - activities of low productivity or whose benefits are felt only on long range (education, public health, etc.). It is therefore not surprising that the per capita domestic product remained stationary or declined. Despite the expansion of foreign investment and the use of other sources of financing, the corresponding coefficient did not improve, because of the relative decrease in domestic savings as a consequence of the deterioration of trade relations.

As J.A. Mayobre rightly points out in a recent comment, it is difficult to trace the role played by the demographic process in this unsatisfactory development, because the ideological positions of the analysts are often diametrically opposed. With a touch of exaggeration, it may be said that they have set up two different camps, and to have adopted so polemical an attitude as to give the impression that they view the facts in the light of pre-established convictions. Even so, it is certainly unjustifiable for an official representative of the Catholic hierarchy to have accused those who dissent from the opinion of his Church of presenting the public and even politicians with over-simplified distortions of the truth.

The two conflicting interpretations are as follows. One group contends that inasmuch as economic expansion is engulfed by the flood tide of the population increment, levels of living cannot rise; consequently, some reduction of the volume of this inflow constitutes an indispensable requisite for progress. The other sees no grounds for anxiety in the

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rate of demographic growth which in the past has usually coincided with boom periods, arguing that resources are plentiful and that in any event considerable impetus could feasibly be given to economic development. The present writer confesses that his sympathies are with the first of these views; but he recognizes that the phenomena under discussion are too complex and variable to be reduced to terms of a simple ratio between population trends and the evolution of levels of living.

3. Supposed resemblance to the pre-industrial phase in developed countries

In the special case of Latin America, it happens that Brasil, Mexico and Venezuela, the three countries that have lately achieved the biggest increases in per capita income, also register rates of population growth considerably above the average for the region. Conversely, Argentina, Chile and Uruguay are at roughly the other end of the scale. These facts have been interpreted as a recurrence of what took place in some of the countries that are highly-developed today, when their industrialization process was just beginning. At that time, economic expansions and contractions did usually coincide with faster and slower rates of population growth, but there is absolutely no resemblance between the conditions attending the development of the advanced countries in those days and the present situation in Latin America. The population increases in question never for a moment resembled those registered in Latin America, and did not amount to even half as large an increment over the long term; moreover, they subsequently dwindled, irrespectively of economic fluctuations.

On the other side, certain incontrovertible evidence can be adduced. The annual rate of demographic growth, which, as has been shown, has risen progressively in recent years and probably has not yet reached its peak, is already 3 per cent. As real income increased by 4.8 per cent a year in 1950-55, 4.3 per cent in 1955-60 and 3.5 per cent in 1960-63, the annual increment in per capita income dropped within this period from 1.9 to 0.65 per cent. If, as Mr. Mayobre adds, the population of Latin America were to increase, like that of Western Europe, at a rate of 0.8 per cent, and economic growth regained its 1950-55 tempo, the region could double its per capita income within 17 years, i.e., in half the length of time that will be necessary if the current rate of fertility persists. In the latter event, in order to maintain the present level of income a proportion 3.5 times higher than in Europe would have to be allocated to investment, on the assumption that the product-capital ratio remains constant.

In connexion with the supposed analogy under discussion it will not be inappropriate to recall that in their pre-industrial period the developed countries of today had very small populations. Suffice it to reflect that the inhabitants of England and Wales numbered about 7 million in 1770, and those of the United States less than 20 million in 1840. Several of the Latin American populations already exceed 10 million; Brazil has

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81 million inhabitants, Mexico 42 million, and Argentina 23 million. The population of the European countries at the time in question increased by 10 per cent in a decade, as against the increment of 20 per cent or more which is usually registered in the Latin American countries. What is more, the latter increase is mainly due to very high crude fertility rates, whereas in the European countries these had dropped to 30 or 35 per mil. The outlet provided by large-scale emigration scattered Europeans all over the globe, and a no less important factor was that Europe had then already achieved a considerably higher degree of technological progress than the rest of the world, which its peoples were able to exploit for their own benefit. It is estimated that 67 million persons migrated between 1800 and 1950, and that 60 million of them came from Europe.

Accordingly, there are major differences between the situation of the developed countries in their pre-industrial phase and that of the Latin American countries at the present time. Yet another argument might perhaps be adduced. As the gap has widened in many directions, new difficulties have arisen in the course of time. The prosperity of Europe, the United States and other regions has considerably weakened the incentive to invest or settle in Latin America.

POPULATION CONTROL IN THE ANIMAL KINGDOM

1. Numerus clausus

In view of their exceptional interest, it is of interest to refer to the findings of the surveys which specialists in the behavioural sciences have carried out among what we loftily style irrational beings. They should give food for thought to those who maintain, in all good faith, that deliberate birth control is against nature. The fact is that nature takes good care to impose such control, and it is we who thwart her intentions. It is common knowledge that in the past all animal populations were subject to the restricting influences that Malthus described as positive. When they expanded to the point of exhausting their resources, the rate of increase slowed down, or they were decimated by epidemics, famines, wars and other catastrophes. Man was no exception to the general rule, and the "melancholy" wheel has been described elsewhere. It is because the ravages of such disasters have been considerably lessened that population increments are overflowing all bounds. Other known facts were that when rats have plenty of food, they multiply at a prodigious rate until the supply is used up, whereupon the mortality rate soars; and that the rodents of circumpolar distribution belonging to the genus Lemmus, in periods of over-proliferation, even make organized mass pilgrimages to the coast, and plunge into the sea to drown.

It has recently been discovered that a number of species bring various other control mechanisms into operation. From time to time, incredible quantities of guillemots congregate on the shores of Newfoundland and build their nests side by side on the rocks. It looks as though a

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population explosion is about to take place. V.C. Wynne-Edwards, a Professor of Aberdeen University, has observed that only those birds which manage to nest on the steepest cliffs actually hatch out broods. An ancestral tradition of behaviour traces, with tremendous efficacy, an imaginary boundary beyond which reigns an apparently implacable sexual taboo. Although no physical impediment exists, "enforced virgins" and "involuntary bachelors" renounce procreation, unless deaths in the privileged colony, leave gaps which they then proceed to fill. It would seem that like many other animals they have a numerus clausus, thus ensuring that there are always enough fish to catch. They have not waited for a shortage to supervene, and have adopted a population policy to avert tomorrow's famine. A "social guillotine" also seems to operate among penguins, petrels, seals, etc.

At the United States National Institute for Mental Health, Calhoun has verified that when the number of tame or wild rats in a cage exceeds a certain limit, however plentiful the food available, the captives seize upon it, hide it and defend it with their lives; moreover, the males become homosexual and the females neglect or even devour their young. The female rats exude an odour which, in sufficient concentration hinders the development of the genital organs. It is neutralized by another odour emanating from the mate, provided that he is "the husband". Parental infidelity is fatal to the unborn young, and so is the promiscuity which is a typical feature of ill-organized communities. Perhaps the tension generated by over-crowding is a sufficient explanation of these psychological and physiological phenomena. Not only population density, but also environmental conditions regulate the fertility of Australian rabbits. In times of drought, they copulate less frequently; production of spermatozoa and ovules decreases, and fewer babies are born in each litter. Sexual maturity is retarded in the young rabbits, and abortions and "mother and child mortality" increase. All these processes are reversed as soon as the first rains fall.

2. Inhabitants versus resources

When cockroaches are becoming too numerous for the flour at their disposal to suffice them, they eliminate in their excrement a substance that reduces fertility, prolongs the larval period and, finally, induces them to eat their own eggs. There is a species of wasp that procreates on such a colossal scale as to devastate whole pineforests and form huge clouds. The two sexes fly together companionably enough; but they show no interest in each other. Their zest for "marriage" is renewed when their numbers decrease by something like 95 per cent. From hippopotami to crickets, all creatures alike defend their territory. When deer are very plentiful and consequently each herd's domain is small, the stags cannot grant lebensraum to outsiders, and even have to drive their weaker brethren away from the forest, where they will probably be unable to survive. Many more examples could be cited.

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It is worth repeating that irrational beings seem to have a numerus clausus which induces them to take steps to ward off disaster in time. Only man, locusts, certain butterflies and several species of grubs that are harmful to plants go on multiplying indefinitely, whatever the devastation they cause. With the exception of sacred cows, stray dogs and other unfortunate domestic animals, beasts do not suffer from the hunger and under-nutrition that prevail among the broad masses of the human population in the "submerged" regions of the world, except in periods of privation resulting from unusually intense cold, floods, droughts, etc.

In the primitive civilizations of the past and even of our own time, sexual taboos exist which enforce abstinence not only at specific dates and during specific periods - such as the month of Ramadam - but also in the case of nursing mothers, even in societies where traditionally children are not weaned until three years of age. Nor are infanticide and abortions uncommon. Since we have shaken off these barbarous customs, Wynne-Edwards asks, has not the time come for really putting into practice the humane and effective methods of birth control available today, before the population avalanche overwhelms us or the axe of group selection falls?

3. The revolution of rising expectations

Nowadays the word "revolution", as well as the concept, are very much in vogue. Revolution is referred to in relation to demography, fields of knowledge, science, technology, and innumerable other aspects of contemporary life. No form of revolution is more obvious, or has more dynamic power, than the revolution of nascent or rising expectations, to use the expression first employed by Cleveland, and later popularized by Adlai Stevenson. This is no hyperbole, nor is it to say that in no other major area of the world is this feeling as strong as in Latin America. Underlying it must be the conviction that we should have advanced much further than we have. For so long we have talked of our continent as the land of the future, and stressed its great riches, that the image of El Dorado is always present to our minds. Because we are their close neighbours, we cannot avoid comparison with the United States and Canada. The proximity of these two giants - whose history, incidentally, is shorter than our own - makes the demonstration effect spoken of by Duesenberry even sharper and more painful.

Be that as it may, few people in the world today wish to remain as they are, and there is a burning desire for a better life. The poverty in the countryside has been revealed to all, and the rural population are fleeing in growing numbers, desperately clamouring for admission into the civilized world. In the past we have been accused, with all too much reason, of a leaning to dictatorship. Indeed we have had dictators who have maintained themselves in power, and have even handed down this power

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to their heirs. Most of the disturbances of earlier times can be attributed to this ambitious self-seeking. It would not be hard to show that present disturbances, as well as the political unrest that prevails everywhere in Latin America, are due essentially to the longing to raise levels of living, substantially and without delay. Resignation is no longer a virtue, but a sign of inferiority.

Apart from the benefits that this ferment implies in itself, it has had two desirable results. It is true, of course, that we are judging our social structure, our institutions, attitudes and behaviour with excessive severity, but this constitutes a strong spur to change. In addition there is a growing passion for planning. As many others have pointed out, planning is no longer considered the exclusive prerogative of socialistic systems.

Until recently Ministries of education or finance took piecemeal measures, and Ministries of agriculture and industry practically none, but merely to wait on the course of events. Granted that certain energetic reforms were undertaken in agriculture and even in education, it is no exaggeration to say that these reforms were inspired by visionary ideals. Only in recent years has been a concern with collecting and collating the relevant data, training the necessary staff, and considering development as a process whose components are inseparable and act on one another to varying degrees, and require successive adjustments. These recent changes hold out brighter prospects of rapid and effective progress.

4. Recent concern over population growth

We are not open to reproach for not having taken into account in these projects, the population problem. Ileras Camargo, the eminent statesman, has had the intellectual and moral courage to proclaim to the four winds that, after having dedicated his life to public service, he awoke too late to the realization that all too often he had been struggling with problems whose real cause he had not succeeded in pinpointing clearly in good time. This illustrious Colombian laid to the door of uncontrolled population growth most of the blame for political instability, social disruption, unrest and fear, the frustration of national leaders and the despair of the masses in the Latin American countries. President Eisenhower stated in December 1959 that his Government's programmes would involve no definite stand in the field of birth control, a matter beyond the province of that Government. Now General Eisenhower himself is supporting energetically birth control programmes, and has declared that the population explosion is one of the most dangerous problems of the world today, which threatens to nullify the economic progress achieved by many countries, and endangers the free world's hopes of peace and security. He considers that much greater efforts are needed, both by governments and private bodies, to check this explosion.

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Mutatis mutandis, much the same is true of many other leading men. Only two years ago FAO changed the attitude it had maintained for two decades, and is now stressing, as we have already noted, the disasters that could overtake us in future years. This change is due to the conviction that an increase in food production alone will not suffice. As recently as February 1965 the United Nations Secretary-General said that the studies of the Organization and of its specialized agencies must include a population policy and national action programmes. WHO is proposing to concentrate on research on human reproduction, and ECOSOC, ECAFE and ECLA have also sounded the alarm.

In December 1964 Peru established, by decree, a centre for studies in this field, recognizing the close link between population growth and economic development. In addition official statements have been made by Colombia, saying that although the basic economic indexes have risen, they have not kept pace with population growth; by Guatemala, saying that economic development has not sufficed to match population growth, and by Panama, saying that population growth has not been consistent with the economic changes needed to provide the necessary rise in per capita income. At least for the Latin Americans it can be stated that there has been an appropriate reaction, considering that this phenomenon is of such recent date, and has taken us so much by surprise. In any case general agreement is increasing and becoming more vocal. Those who disagree with the general view are so few, and their arguments so inconsistent, that there is no need to dwell on them.

5. Population policy

In general, few other countries have practiced or even formulated a population policy, even though for many of them the population problem is much more serious than in Latin America. This is obviously true of South East Asia, and everywhere else in the world where there is a dangerously narrow margin between population growth and natural resources. The situation in Latin America is very different, and requires careful definition. To take only two examples with which the author is very familiar, poverty in India and Pakistan has nothing in common with poverty in Latin America, except in so far as we, like those two countries, must check the population growth. Our poverty is that of a millionaire who keeps his money in a safe, but finds it difficult to open the door.

The abundant and reliable data and observations provided by experts in education, economics, agriculture and other fields provide us with a clear lesson. In popular terms, it is said that to him that hath shall be given, and that the curse of the poor is their poverty. It is clear that in order to give impetus to the development process, or to bring it to the take-off point, as Rostow would say, the gross national product must attain a certain level, income must be equitably distributed, and literacy and education must also reach satisfactory standards. These are requirements that must be met. Obviously, for this purpose the social structure will have to be modified, and far-reaching reforms will have

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to be introduced in the tax and land-tenure systems. Unquestionably the excess income of the rich must be siphoned off, so that instead of being spent in luxury items, or uselessly hoarded, it can be channelled into capital formation that will yield results. It is also true that the prevalence of latifundios and minifundios hinders the establishment of efficient and productive farms, and that education is necessary in order that social structures may be transformed. Yet the uncontrolled population increase is the most formidable of all these obstacles.

6. Birth control

Many politicians and leaders have not fully understood the significance of birth control, although it is clear to the man in the street, and even more so to the woman. This emerges clearly in their attitude towards birth control. Various sample studies have shown that a substantial majority of women (about four out of five) want birth control services, and want to have contraceptives made available to anyone who wishes to use them. The main reason given for their use is the financial situation, with consideration of health in second place. Moreover, the 20 per cent of women who reject any form of contraceptive admit that their reasons for doing so are religious. Nevertheless, the surveys of Tabah and Samuel, inter alia, show that even in this section of the female population, the proportion practising birth control is similar to that for the rest of their social group. Thus resistance is purely ideological, or, as the psychologists would say, represents the persistence of a stereotype. Birth control clinics installed in Santiago and in various provincial towns in Chile are overwhelmed with applicants, and the present impossibility of dealing with any large number makes it necessary to work without publicity. Hence many people do not benefit from the clinics.

The plague of abortions is so great that, according to some studies, the number of artificially interrupted pregnancies is one out of three for married couples and one out of two in consensual unions. In addition interruption has been considered in one out of five pregnancies brought to term. It has been established beyond any shadow of doubt that abortions are used as a form of birth control by those who know of no other, or who fail to terminate their pregnancies by means of the usually ineffective and even absurd measures they have resorted to. This is demonstrated by the repeated confirmation that the proportion who resort to this crude procedure is considerably higher, among married than among single women - perhaps even twice as high - to say nothing of the specific statement of hundred of women. It is no longer possible to suppress this social urge, which has become compelling and pressing, and is spreading like a forest fire.

It is not enough to make contraceptives easily available to the public; education is also needed. This point is well illustrated by a true story. The maid of a lady who was following a course of birth control pills made a practice of buying "a pill" to take every time she had her day out. The mistress was well aware of why the maid did this.

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This story reveals both the maid's dangerous ignorance of the proper procedure, and the selfishness of the mistress, who was herself pursuing the same aim. Some have proposed that couples should be given information about family planning principles by the priest or the civil registration official at the time of the marriage. This may seem far-fetched, but in any case, there is no doubt that these principles should form part of education for living, and acquired at the very outset of sexual activity.

There is no doubt that voluntary organizations play strikingly effective part. It is usually with such associations that the movement begins, in every part of the world, opening the way for the governments to draw up a population policy. This is an urgent matter in Latin America, but once a population policy exists, and is implemented, voluntary agencies need not disappear. As the Pan American Assembly at Cali clearly stated, these agencies can still play a useful role, in obtaining support for the policy, and introducing new procedures, and in other ways. The activities of the International Planned Parenthood Federation (IPPF) deserve special praise, and on a smaller scale, the Asociación Chilena de Protección de la Familia (Chilean Association for the Protection of the Family).

7. The attitude of the Catholic Church

There has been unfair criticism of the Catholic Church in this respect. Its attitude may appear rather conservative, but the Church cannot be accused of indifference or neglect, according to the Reverend Father T. Riedmatten, spokesman for the Holy See at the World Health Assembly. Many married couples, he said, urgently need to limit their families, either permanently or temporarily, and patriotic considerations must also be taken into account in reaching a decision. The signatures of the Jesuit John L. Thomas of the University of St. Louis, and of the Catholic philosopher, Dr. Louis Dupré, were among those on an appeal issued in 1956 seeking support for official and private efforts to limit the world population by voluntary methods. The publication, Catholics and Birth Control has an enthusiastic foreword by Cardinal Richard Cushing, who also assisted the IPPF in its successful fight to repeal legislation in the United States that prohibits contraceptive practices.

With the same object, the National Catholic Council for Civil Liberties was represented as a friend of the court in a case before the Supreme Court. In the United States a recent Gallup poll showed that 81 per cent of all citizens and 78 per cent of all Catholics - as against a percentage of 53 two years before - considered that information on birth control should be available to all.

There has been a considerable number of priests taking part in conferences and meetings on population and family planning, and also in the various associations that have been formed in their own countries. The Catholic Church in Chile has clearly adopted an attitude of praiseworthy

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caution, and, far from attacking programmes of this type, has encouraged them. The Chilean Government has also adopted a reasonable attitude, by giving official support. This is significant in view of the fact that once more, after a lapse of many years, the political coalition in power contains an overwhelming majority of Catholics.

8. The population explosion on the family, and the attitude of the medical profession

Specialists in social medicine and public health need no more than reasonable assurance that a reduction in the birth rate will not be a hindrance to development, since we are fully convinced of the desirability of such reduction. We are concerned for the health, and even the life, of mothers and children, and for the welfare of the family itself. We know that it is in the family that the real and dramatic effect of the population explosion is felt. Our experience has given us many eloquent and painful lessons. We have seen fathers deserting their homes because the burden of supporting the family is too heavy; children handed over to charitable institutions or simply abandoned; waifs picked up every day by the police; children forced to beg by their elders, and so on, without end. To mention only one problem, the abortion racket is flourishing, at least in Chile. We are well aware, even though not with exactness, of the effect of interrupted pregnancies and of excessive fertility, in terms of maternal mortality.

Even more significant is the fact, that despite persistent and large-scale effort and expenditure, there has been no reduction in infant mortality, which is still considerably in excess of 100 per thousand. This persistently high rate is clearly due to the serious malnutrition of a high proportion of children of nursing age. As a result, they are sickly and apathetic, and become victims of sudden violent infections. Consequently the mothers do not realize the seriousness of the situation, and fail to seek a doctor's help in time.

Clearly the major responsibility for carrying out birth control programmes lies with the doctors and, above all, the public health officials. As the American Journal of Public Health (the official organ of the American Public Health Association) has stated in an editorial, there should be a population section, equal in hierarchy to the other major sections, in every well organized health service. The work involved is very similar to that of controlling communicable diseases - tracing of cases, multidisciplinary co-operation, etc. - and is facilitated by preparatory work of voluntary agencies, not available when these campaigns were initiated. As with disease control campaigns, or environmental sanitation campaigns, or the establishment of periodic health examinations, the proper climate of opinion must be created. The editorial referred to above also pointed out that huge sums of money are spent on dealing with the end results of excessive fertility - overcrowding, malnutrition, illiteracy - while their basic cause is neglected. It should also be remembered that we have much more detailed knowledge on this subject than our ancestors had about the great plagues they had to fight.

Fortunately UNICEF is already deeply concerned with this question, as clearly shown by the discussions at the last meeting of its Executive Board. There are signs that in the near future UNICEF will be co-operating in the programmes that Governments are anxious to carry out. This is only right, in view of the fact that birth control is an essential contribution to the protection of mothers and children. The main target should be women who have recently given birth or had an abortion, or those who are pregnant. These are the people most likely to respond to and benefit from advice on birth control. As a side result, UNICEF may win praise for encouraging postnatal care which, unlike prenatal care, is making little progress in Latin America, or even in the world as a whole.

SUMMARY AND CONCLUSIONS

The following main conclusions can be reached:

1. In Latin America the population growth rate, which is the highest in the world and is unprecedented in the history of mankind, poses formidable obstacles, perhaps the most important, to economic and social development.
2. Yet though it is a major obstacle, it is not the only one, and it cannot be claimed that birth control is a universal panacea that can replace other measures to promote development.
3. It is understandable that concern with the acceleration of population growth is recent, since the phenomenon itself is recent; but it has forced us to divest ourselves of the outworn notion that it is necessary to increase our population within a short period of time.
4. As the problem is urgent, and public opinion is becoming more receptive, each Latin American country should formulate its own population policy, and begin to implement it. To carry it out, they can count on the assistance of international and foreign agencies. However, in formulating policies, it is clear that there must be co-operation among countries in the region.
5. An over-pessimistic view is taken of our demographic outlook. Although natural population growth may not have passed its peak, there are clear signs of a change. It can be expected that the process will be speeded up, because the effects of urbanization and higher standards of living will be reenforced by deliberate birth control.

6. Birth control is already being practised on an appreciable scale, and has such social demand that it cannot be detained.
7. For these purposes it will be sufficient to make contraceptive devices available to all who want them, and to persevere in education. Fortunately effective and acceptable devices are available, that can be recommended without major reservations, and there are facilities for training doctors and other staff.
8. As far as possible the clinics concerned should form part of the maternal and child health services and be combined with postnatal care. The services should, of course, also be available to other persons, both women and men.
9. Even such measures had no effect on the over-all birth rate - which has been repeatedly disproved by experience - contraceptive practices should still need to be promoted, because of the tragic consequences of the population explosion in individual families, which these practices would help to obviate. In this field doctors and, above all, public health workers, have a major responsibility.
10. My own view, which is undoubtedly shared by many other Latin Americans, and leaders in many under-developed countries, is that UNICEF should include this subject among its priorities, and give assistance to any country that asks for it.
11. The Catholic Church has been unfairly criticized in this connexion, although many members of that church have a greater understanding of the subject than some political leaders.
12. The revolution of rising expectations, which is the main dynamic force in the under-developed countries, has spread with lightning speed in Latin America. Even though it results in political unrest, social disruption and other undesirable consequences, it is nevertheless the main spur to development efforts.
13. The vigour of these rising expectations is responsible for the tendency to excessive criticism of the social structure, government policy and development programmes, but it is also responsible for the enthusiasm for planning and programming.
14. The dissatisfaction with the existing situation, and the desire to speed up development on the basis of well-grounded and rational plans, is our best guarantee that we can look forward with hope to a better future.

