

POPULATION PROBLEM AND THE PROCESS OF TRANSITION TO A DYNAMIC ECONOMY IN DEVELOPING COUNTRIES

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Within the last decades world population has increased greatly. In the period 1920 to 1960 alone, it increased by 60 per cent, which accounts for more than a 100 million people, thus totalling 300 million as a whole. Between 1950 — 60 alone, the increase in world population corresponds to the overall number of Europe's population.

During the last 40 years, population growth has not been even in all countries or regions. The rate of increase has varied in various periods.

Population increase within the period 1920 — 1960 in 8 regions of the world is shown in the following table :

Region	1920	1930	1940	1950	1960
	population in millions				
World total	1,862	2,070	2,295	2,517	2,990
further developed countries	606	678	730	751	854
Europe	327	355	380	392	425
Soviet Union	155	179	195	180	214
North America	116	134	144	166	199
Oceania	8.5	10	11.1	12.7	15.7
less developed regions	1,256	1,392	1,565	1,766	2,136
Eastern Asia a)	553	591	634	684	793
South Asia	470	529	610	697	858
Africa	143	164	191	222	273
Latin America	90	108	130	163	212
Northern Regions b)	1,151	1,259	1,353	1,422	1,631
,Southern Regions c)	711	811	942	1,095	1,359

a) excluding the high estimates of China's population.

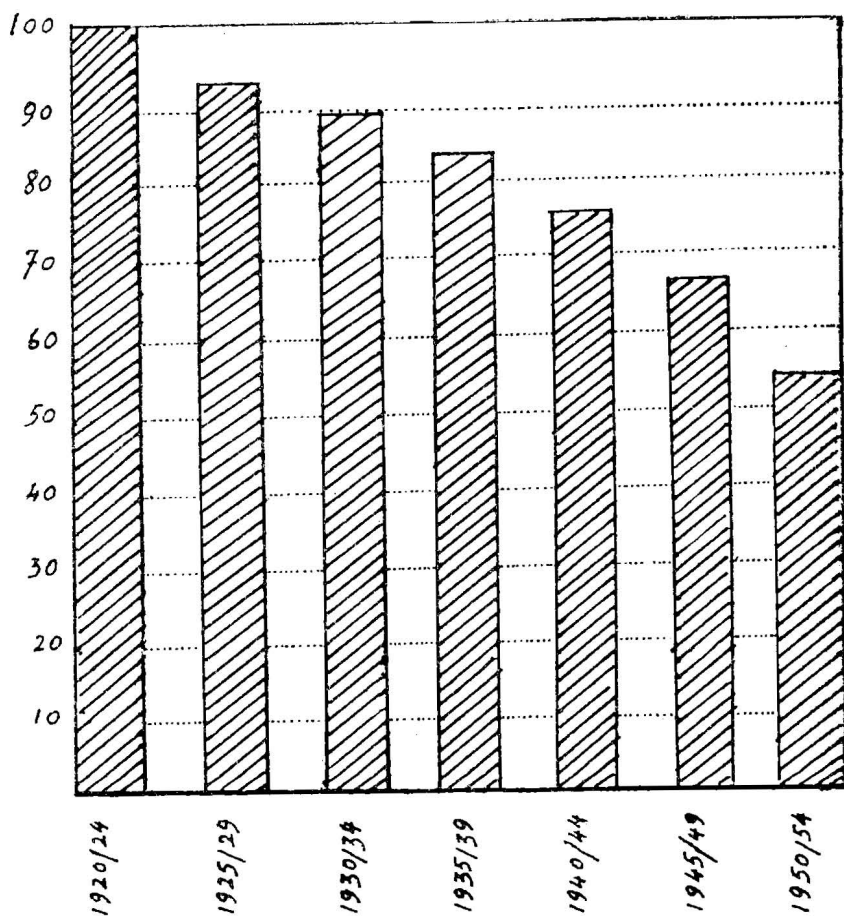
b) Europe, Soviet Union, North America and Eastern Asia.

c) South Asia, Africa, Latin America and Oceania.

(Provisional Report on world population prospects, as assessed in 1963, UNO, New York, 1964, p. 38).

Following the table a rapid growth can be observed in less developed countries from the regional point of view. In the period from 1920 to 1930 the annual rate of increase totalled 1.2 per cent in developed countries, but 1.1 per cent in the developing countries within the same period. In the following decade the rate of increase rose faster in the developing countries, coming to an annual rate of 2.1 per cent in the period 1950 — 1960, i.e. nearly double the rate of the period from 1920 to 1930. Compared to this, the rate of increase in the highly developed countries is lower accounting only for 1.4 per cent in the same period. Apart from this general conclusion concerning the rapid population growth in the developing countries two different phases may be observed within the period 1920 — 1950, i.e., firstly a period characterized by a gradual rate of population growth in the developing countries and secondly the period from 1950 — 1967, the post-war-period, showing a rapid increase in population, especially in the developing countries.

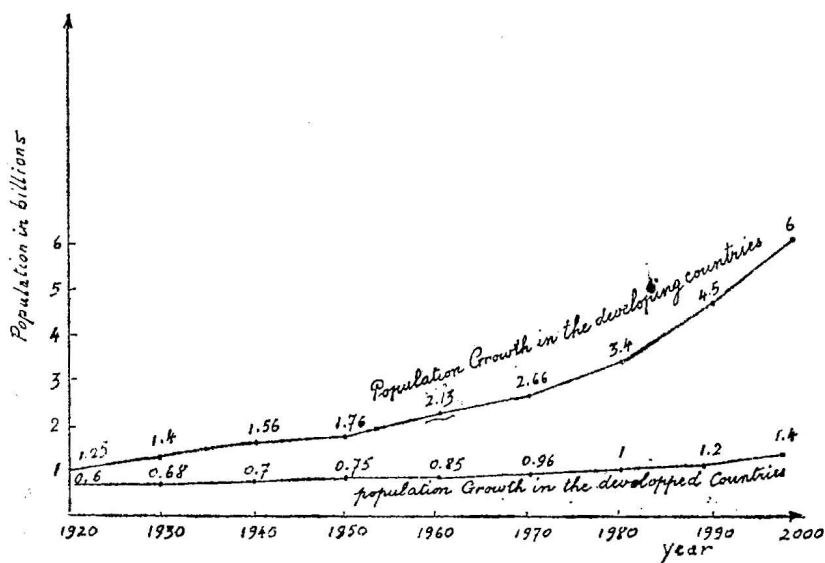
Currently this rate of increase totals 2.5 per cent annually on an average, i.e., twice the rate of the highly developed countries. Apparently, this rapid rate of population growth is due to the advance of modern medicine in these countries lowering rapidly the death rate while keeping the birth rate at a constant level. From 1920 — 1950, i.e., a period showing a relatively moderate rate of population growth in the developing countries, the death rate decreased. The following chart illustrates this decrease for 18 developing countries (Barbados, Costarica, Ceylon, Cyprus, El Salvador, Fiji-Islands, Jamaica, Malaysia, Mauritius, Mexico, Panama, Philippines, Puerto Rico, Surinam, Taiwan, Thailand, Trinidad, Tabago, U.A.R.) :



Reduction of death rate in 18 developing
countries during 1920 — 1954

Due to a further decrease in the death rate after 1950 the natural increase in population reaches now 2.5 per cent annually. According to an U.N. estimate the rate of population growth in the developing countries is going to rise successively to 2.8, 3.2 and 3.4 per cent per year. Thus the population in the less developed countries will be tripled within the next 30 years, increasing from 2,136 million in 1960 to 6,017 million in 2000. These data on population movement from 1920 till today and presumably till 2000 in the highly developed countries (Europe, Soviet Union, North America, Oceania) as well as in the less

developed countries (Eastern Asia, South Asia, Africa, Latin America) may be demonstrated in a diagram in the following way :



One can see that following the U.N. estimates, a proper population growth in the developing countries is still to be expected. Providing the growing population with food, jobs, housings, schools, etc. will be the task arising from the process of economic growth. The dilemma, however, is that the rapid increase in population predominantly occurs in agrarian systems. The slow pace of the development of productive force, especially in the agriculture of such economies gives it a relatively stagnant character, thus resulting in a disparity between economic system and population growth. The cause of this dilemma, however, is not simply the increase in population, but the increase in population in a relatively stagnant system, unable to absorb the growing population.

The problem of surplus population.

Due to the large disparity between population growth and the economic system in the developing countries, it seems to be

impossible at first sight to maintain a healthy proportion between these two factors. The developing countries are lacking in economic factors which in the developed countries led to a population growth as well as to modifications of the population structure. Population growth advances economic development. Though dependent on exogenous conditions, the increase in population is independent of the economic conditions existing in the developing countries. Quite a few scientists regard population movement in the developing countries as an independent variable. In the introduction to his book « The Economics of Agrarian Change under population Pressure » E. Boserup maintains that the autonomous character of population movement is an undisputable fact, caused by exogenic conditions in population movement in these countries.¹

According to the marxist view, population movement can be gleaned from the character of the economic system. Each social order has its own principles or laws of population growth.²

What is the situation like in the developing countries with backward and stagnant economic systems ?

There, ought to operate the population law of a stagnant social system, i.e., a high death-rate and a high birth-rate and thus a moderate increase in population which actually was the case in these regions about 50 years ago, even up to the end of the second world war. The reason for the rapid population growth in the developing countries stems from the fact that a difference should be made between agrarian systems. Whereas before the formation and development of the capitalist mode of production, the relatively stagnant system appears as closed social systems, having their own laws of development, the rela-

(1) Vid. E. Boserup, *The Economics of Agrarian Change under population Pressure*. George Allen & Unwin Ltd. London 1965, p. 11.

(2) Vid. K. Marx *Grundrisse zur Kritik der politischen Ökonomie*, Dietz Verlag Berlin, 1953, p. 489 and also *Das Kapital*, 1. vol. in : Marx Engels Werke vol. 23, Dietz Verlag Berlin, 1962, p. 660.

tively stagnant systems which coexist with capitalism and are subordinated to it, are influenced by the laws operating under capitalist conditions and are thus strongly modified by them.

In the first case, in stagnant systems in the classical sense, there operate population laws corresponding to this mode of production. In the second case, however, the stagnant system coexists with capitalism and is subordinated to it in a way that the proper population laws working under backward modes of production are influenced and modified by the predomination of capitalism. In the developing countries there is no sole pre-capitalist mode of production, but a dualistic economy : the coexistence of capitalist and pre-capitalist relations are sometimes closely connected. There are very complicated and manifold interrelations between the stagnant system and sectors formed according to the requirements of capitalism on the one side and the national capitalist relations developed in a deformed way on the other, as well as the general interrelations with the capitalist system on a world level. These manifold interrelations and thus the gradual integration of the developing countries in the capitalist economic world system are related to the process of polarization within the capitalist world system, relegating a special position for developing countries as « villages of the world » within the system.

This means that population movement in developing countries is the integrated result of the rather different population laws in all these very varied relations. The integration of the developing countries in the capitalist world system, the formation of a dynamic sector orientated towards the requirements of the metropolitan countries as well as the « paternal » development of national capitalist relations have contributed to a regular decrease in the death-rate. In this way the originally stagnant economic system and accordingly the balance in laws are disturbed. But in conformity with their function, these factors were not able to eliminate the traditional systems and set up a proper foundation for modifying the social standard values and the status of women and children in society. The sectors orientated towards the requirements of the metropolitan countries form a part of its production process. Its development

scarcely gives impetus to an essential structural modification of the economy in the developing countries. The national capitalist sector could not develop to a factor to effect economic structural modification because of the pressure of colonial economic policy. As usual, the main branch of the economy remains the backward agriculture with certain functional modifications to meet the requirements of a rural market resulting in a « grafting » of one another set of horrors on.

The superstructural institutions of this traditional system continue to exist and operate. Thus the related birth-rate movement remains unchanged.

Population explosion and deformed population growth is a result of the successively operating diverse population laws now becoming the regular population movement in developing countries.³

Population growth continues, but mainly in systems of a predominantly stagnant character. This process is most distinct in the agriculture of countries which are less involved in the development process. Population growth in a stagnant sector leads to surplus population according to a law-governing process, exerting an ever growing pressure on constant values as land, jobs, food, etc. In these countries, surplus population can be observed, though in a different way.

Features of the growth process in developing countries.

The transformation of the economic system in the developing countries from a relatively stagnant into a dynamic system bears a character of its own because of population movement. This character differs in connection with the process of growth in countries, where population explosion influence economic growth. Rapid population growth in developing countries gives the process of economic growth a number of special features, i.e., developing countries have to place enormous investments

(3) Vid P. Khalathari, Over-population in developing countries. Akademie Verlag, Berlin 1968, p. 74 ff.

to maintain at least the present level. This special aspect of the growth process in the developing countries caused by the complex of the population problem may be explained in two different ways :

They are not simply the result of population increase in a stagnant system, but the result of demographic structural changes within a stagnant system. The special features of the growth process may also be seen from the following point of view. It is well known that the demand on manpower in every mode of production is determined by the technology applied. In a stagnant system or sector, manpower needs are constant. Due to rapid population increase new and additional manpower steadily flow into the labour process from the basis of the age pyramid. Since manpower demand remains constant, the additional manpower exerts pressure on employment opportunities. There are no exact data on the additional manpower available. The existing data vary from 8 to 15 million people annually. Apart from these figures the process of economic growth is greatly influenced by the simple fact that under conditions of stagnation, the additional manpower appears as pure consumers, from the theoretical view-point, i.e., theoretically its withdrawal from the production process will not change the quantity of production. This increase in manpower is, however, only one aspect of the demographic structural transformation. Whilst the inflow of redundant manpower into the labour process gives rise to additional consumers (and no producers) in the middle of the life pyramid, the number of consumers in the basis of the pyramid increases as well. The rapid decrease in the death-rate results mainly in an increase in children, i.e., a part of the population still unable to work. Mr. Adenola A. Igun estimates the dependents and pure consumers in Africa's present population as totalling 49 to 53 per cent of the overall population,⁴ the figure for Latin American being 46 per cent.⁵ This percentage

(4) Vid. Adenola A. Igun, Demographic approach to the problem of social and economic development in Africa, in : world population Conference 1965, UNO, New York, 1967, p. 68.

(5) Vid. José Antonia Mayobre, Economic Development and population growth in Latin America, a. a. o. p. 73.

of the population in the industrialized countries (under the age of 15 and past 65) amounts to only 39 per cent of the overall population.

None of the countries, not even England and Japan, were importers of foodstuff in the initial stages of their economic-growth⁶ In the developing countries an increasing pressure of the population on food can be observed. This can be explained by the real proportion between population and food production in a stagnant system :

Based on the formula by Mackenroth.⁷

$$A \circ P = B \circ K$$

Or in plain language :

Working population (A) multiplied by the average productivity (P) is equal to the consuming population (B), multiplied by the average consumption (K).

It is possible to state the following :

Since in a relatively stagnant system $A \circ P$ is nearly a constant value, K has to decrease, if B rises. Let us assume that the current agricultural production cannot sufficiently feed the number of consumers (B). Thus they are consuming a quantity of food (K) which is below their need (K). In this condition one part of B , B has to die of starvation, if the other part of B is to have enough to eat. The part of B , being surplus with regard to the parameter food this can be calculated in the following way :

(6) Vid. A. K. Cairncross, *Factors in economic development*, George Allen & Unwin Ltd. London, 1962, p. 64.

(7) G. Mackenroth, *Bevölkerungslehre, Theorie, Soziologie and Statistik der Bevölkerung*, Springer Verlag Berlin, Göttingen, Heidelberg 195 p. 416.

$$B \circ K = (B - B_s) K_1$$

B = consuming population

B_s = surplus population compared to the parameter food

K_1 = actual food demand, per head

K = actual food consumption, per head

Thus :

$$B_s = \frac{B (K_1 - K)}{K_1}$$

The more $\frac{K}{K_1}$ drops under 1, the bigger will be the number of starving people. Since the capacity of food production is relatively constant in the developing countries, the increase in population leads to a steady decrease of $\frac{K}{K_1}$ and thus to an increase in surplus population compared to the parameter food. Providing food for the increasing population is a serious problem weighing on the developing countries at present. According to some data, developing countries import food at a value of about 500 million dollars annually, i.e., this enormous sum has to be spent to satisfy the food consumption of the population.

As we know, the main result of the process of economic growth is the growth of national income or the national income per head. The increase in national income is, of course, a function of the national combination of the factors growth and national investment. The rapid increase in population complicates the rational utilization of the accumulation resources in the initial stage of growth and from the mere theoretical point of view there may prevail a situation, in which additional and even increasing investment will be necessary to maintain the given level of national income per head. If the necessary investment is confined to only 3 parameters : rate of increase in national income, capital coefficient and rate of increase in population, leaving out the effects of other parameters, the equation of Harrod with certain modifications would provide a certain basis, in spite of its inadequacy:

$$C_r = (G + p) = 1$$

C_r = capital coefficient

G_r = rate of growth

P = rate of population increase

I = investment rate.

The sum which is to be invested in accordance with the scheme to keep the income per head at a constant level totals to about 15 million dollars (provided $C = 4$, $p = 2,75$ per cent and thus $I = 9$ per cent), i.e., about 1500 million dollars. Assuming that the capital coefficient is variable and the increase in population is 1 per cent annually, U.N. experts believe that an investment of 2 — 5 per cent of the national income is necessary⁸.

In connection with this special character of growth in the developing countries, i.e., an « investment in order to maintain the level » and the sum of special investment, some studies on this exist with varying results⁹, in any case confirming the

(8) UNO Measures for Economic Development of underdeveloped countries, New York 1951.

(9) The following studies :

- a) UNO, Measures for Economic Development of underdeveloped countries, New York 1951.
- b) L. Tabah : Le problème population — Investissements — Niveau de vie dans les pays sous-développés 1956.
- c) M. F. Millikan and W.W. Rostow, A propos¹ : key to an effective foreign policy, 1956.
- d) GATT, International Trade, 1959.
- e) Paul G. Hoffman, One hundred countries, one and one quarter people, 1960.
- f) P.N. Rosenstein-Rodan, Industrial Aid for underdeveloped countries, 1961.

special features. This is known as «demographic investment»¹⁰ The essence of the demographic investment is the provision of jobs for the increasing population. As already mentioned, in the agriculture of developing countries there is a surplus in manpower and any further increase cannot be absorbed. It is the non-agricultural branches that should absorb this increase. The number of necessary jobs which has to be provided in non-agricultural sectors to employ the increasing manpower is in a direct proportion to the rate of increase in population and in an inverse proportion to the percentage of non-agricultural population multiplied by the number of working people as compared to the overall population.

Therefore :

$$L = \frac{1}{B_i} \frac{A}{B} P$$

L = percentage of additional jobs in non-agricultural branches.

B = number of urban population (percentage of overall)

p = rate of population increase

$\frac{A}{B}$ = ration: working population to overall

If we assume that $\frac{A}{B} \frac{1}{B_i}$ is equal and constant in the initial

stage of growth in all developing countries the necessary jobs is a function of the rate of population increase.

$$L = f(AP)$$

Thus it depends on the rate of population growth whether, apart from the increasing population, also a part of the surplus rural population can be absorbed with additional jobs.

(10) Leon Tabah calculated the sum of demographic investment, mentioned in his study (footnote 8) according to the following formula :

$$I_n = \frac{1}{P_0} \frac{R_0}{P_0} P_n e^{n} (n + 1)$$

whereas $\frac{1}{P_0} \frac{R_0}{P_0}$ = capital coefficient

$\frac{R_0}{P_0}$ = income per head, in the first year

P_n = number of population after n years

e = rate of population growth

n = rate of increase in income per head

Whereas in the European countries it was possible to absorb a part of the rural population by a job increase in the non-agricultural branches by 1 per cent, it is not possible to employ even a fraction of the growing population by such a moderate increase in the developing countries. To give an idea of the proportion between increase in population and the provision of new jobs let us assume that $\frac{A}{B}$ is equal $\frac{5}{100}$ (according to Igun and Mayobre) and further let us assume that the proportion is constant within the next years. If the urban population accounts for about 25 per cent of the overall and the rate of increase in population is about 2,5 per cent, it will be necessary to increase the number of jobs in the non-agricultural branches by 5 per cent, if the employment of increasing manpower is to be ensured. This means that according to A. Assouline¹¹ in Morocco alone 100.000 new jobs annually were necessary. This increase in jobs can by no means contribute to lessening unemployment now prevailing in the agriculture of developing countries. It may just maintain the level of unemployment.

The investment sum necessary to provide additional jobs has been variously estimated. In 1951, the investment sum necessary to employ one person in a non - agricultural branch was given by the U.N. as 2500 dollars¹². On this basis it was maintained that 15.200 million dollars would be necessary for additional employment alone¹³. This relatively small sum can be attributed to the fact that the U.N. estimated the rate of population growth in the developing countries to be 1.25 per cent. If we assume a more realistic rate of increase, i.e., 2 per cent, the sum required for employment will rise to 24.000 million dollars.

(11) A. Assouline : Evolution naturelle de la population et développement économique au Maroc, World population conf., Belgrade 1965, paper A 10/I/F/193.

(12) Vid. UNO Measures for Economic development, a. a. O.

(13) This sum corresponds to the amount mentioned by us as «investment=

The sum necessary to provide jobs today for the non-agricultural population is estimated to be about 4.000 dollars. Taking into account the revised figures, the employment of the increasing manpower in the developing countries will require about 33.000 million dollars annually. This sum cannot be compared to the situation existing at present in the developing countries. If we keep to the relatively moderate sum of 15.000 million dollars it will be obvious that the developing countries would have to double their present investment to prevent a rise in unemployment.

The present study is restricted to demographic investment only i.e. the additional manpower resulting from population growth to be employed, but disregarding the movement of rural population from the overpopulated agriculture. It is just intended to give an idea of the expenditure required to maintain the present level in the developing countries.

If we considered, however, the actual growth in connection with the movement of rural population and the solution of all the problems concerning growth and assumed a rate of increase equal to that of e.g. Japan in the period 1880 — 1920, the picture will be quite different, solely because of demographic investment.

Within the period mentioned, population increase in Japan was 1.1 per cent annually. At the turn of the century the national income per head increased in Japan by 2.5 per cent annually, requiring an annual increase of the gross national pro-

= required to keep the level». However, we should mention that the UNO has indicated the capital coefficient with a higher amount than we have in our example, but the rate for population growth has been calculated low. Thus about the same result could be obtained, only with different numbers. Apart from that fact our calculation is based on only two parameters, whereas the U.N. estimates results from some more parameters.

duct (GNP) by 3.6 per cent. If the developing countries showing a rate of population increase of 2.5 per cent require the same increase in income per head, the GNP would have to rise by 5 per cent annually¹⁴.

What is the significance of an increase of the GNP by 5 per cent regarding the movement of the rural population ?

According to U.N. estimates, the displacement of 1 per cent of the population employed in agriculture into non-agricultural branches or industry would result in an increase of the industrial output by about 10 per cent, thus obtaining a rise in national income by 1.5 per cent. It may be easily calculated that an increase in the national income by 5 per cent would involve a movement of the population employed in agriculture by 3.3 per cent, thus producing an increase in the industrial output by 33 per cent which is equal to an increase of the national income by 5 per cent.

An increase in the national income by 5 per cent implies only some improvement for the developing countries which is, properly speaking, a desirable goal. But if the developing countries set themselves a further task, with their already rapid increase in population, namely to reach a living standard corresponding to the 1962 level in the European and North American countries in some 30 years, i.e. in 2000, they will have to raise their GNP by the following annual rates according to calculations by Philip A. Hauser¹⁵ :

(14) Vid. Hans Ruthenberg, *Landwirtschaft und anfängliche Kapitalbildung*, DLF Verlag GmbH Frankfurt/M.

(15) Philip A. Hauser, *Interrelationships of manpower policy and population policy*. World population conf. 1965, UNO 1967, vol. IV, p. 288

	North and Western Europe	North America
Asia	9.2	11.2
Africa	9.2	11.1
South America	7.3	9.3
Central America	7.2	9.1

According to the view of Hauser it will not be possible for any people to maintain this rate of growth over a long period.

The place of population growth within the process of economic growth.

The high demographic investment in the developing countries leads growth theorists as well as planning experts to pay due consideration to the factor population broadly in their studies and operations. This is justified because the problem of rapid population increase in the countries is still in need of proper assessment and investigations. Whereas there is no doubt about the fact that population movement is important for the process of economic growth, there exist different views about the assessment of this importance. The question is whether population growth plays a positive or a negative role in the process of economic development in the developing countries, in spite of the difficulties mentioned, which are caused by demographic investment? There are two clear and obviously contradicting answers which are raised by growth and population theorists. Albert O. Hirschman answers this question affirmatively. He takes his two well-known theses as points of departure that the pressure exerted by the population on living standard means resistance against the lowering of living standard, i.e. people strive to maintain the present level. The activities of man to resist a lowering of the living standard lends him the ability to influence his surroundings. Thus they will be able to take advantage of the possibilities of economic growth¹⁶. According

(16) Albert O. Hirschman, *The Strategy of Economic Development*, Yale University press, New Haven and London 1964, p. 177.

to Hirschman population growth in a backward system may be regarded as a stimulant and even as the decisive factor contributing to economic growth. He is not the only representative of this theory regarding population growth as a driving force in economic growth. To consider population growth as an absolute stimulant and even as a determining factor operating on the process of growth does not appear to be justified. If this were really the case a country with a larger population would reach a higher stage of economic growth. This, however, does not occur. From the pure historical point of view population growth does not go beyond the economic possibilities, i.e., in the ancient society this led to infanticide, murders and to armed conflicts between tribes. That means, certain measures were applied to maintain the living standard, but measures not contributing to economic growth. As far as the developing countries are concerned, they do not confirm the theses of Mr. Hirschman. As a matter of fact population growth in backward and dualistic economic systems is now playing an impeding role in the developing countries, partly due to demographic investment in the process of transforming the system into a dynamic, efficient system. This has led some growth theorists to the other extreme when assessing the role of population growth within the process of economic growth. They regard the role as being absolutely negative and reduce the problem of growth process to the population problem. This unjustified deduction leads necessarily to the fact that the so-called demographic measure to lower the rate of population growth comes to be regarded as a central problem within the process of economic growth in the developing countries. A great many scientists, especially in countries with a relatively strong population pressure have come to this conclusion. Victor L. Urquidí mentions in his interesting study «Population growth and the economic development in Latin America» a number of factors and problems affecting growth in that continent. But his conclusion expresses clearly the position of population within his conception of economic growth :

«There can be no doubt, however, that unless population trends can be significantly altered, they will assume first-rank importance and necessitate a more intense search for solu-

tion.»¹⁷ Thus the population problem will assume first-rank importance within the process of economic growth and measures as birth control and family planning will rank first in this process.

Without doubt some reduction and slowing down in the rate of population growth has taken place in the developing countries thus operating as an accelerating factor in the process of economic growth. However, it would be wrong to attribute the general problem of growth exclusively to the solution of the population problem and to attach primary importance to the measures taken to slow down the rate of population growth. At present, this view has already gone beyond the framework of pure theory and has become the principle of the operative policy pursued in some countries, a policy showing poor results and high expenses¹⁸. These two extreme approaches to solve the population problem and to assess the role which population plays in the process of economic growth (though obviously contradictory) are based on a common theory regarding population growth as a decisive factor in transforming and developing social order. This theory has been already propounded by Emil Dürkheim and others in the last century. It exaggerates the importance that population plays in the process of economic growth. The marxist way of solving the population problem denies the dominating role of population growth in the process of economic development, stating that population growth and the laws of population movement are based on the existing mode of production with all its complexities. It does not deny the importance and role of population growth for the process of economic growth.

There exist dialectic relations between population movement and the economic system, but the economic system is the dominating factor. Population growth can, both speed up and retard the process of economic growth. This effect of popu-

(17) Victor L. Urquidi, Population growth and economic development in Latin America, World Population conf., 1965, a. a. O., p. 37.

(18) Vid. Detailed and concrete handling of this subject, see study carried out by Bern Wolf, Das Problem der Familienplanung in den indischen Entwicklungsplänen.

lation growth does not operate independently. The accelerating or retarding role of population growth in the process of economic growth depends on the character of the economic system. The same population figure can play a stimulating role in one economic system, but a retarding one in the other. This mechanism is based on the fact that every mode of production is related to a definite population figure, a definite number in manpower and a definite population structure as well. The present population movement as well as the rate of population increase is neither compatible with the relatively stagnant economic system existing in the developing countries, nor with the process of change into a dynamic economic system. For this reason population growth is impeding this process of change. A slowing down of the rate of increase in population implies an acceleration of change. This is one side of the problem, the other is that the present population movement in the developing countries is a result of the economic system existing in these countries. An alteration and slowing down of the growth rate may be obtained by rapidly changing this system into a dynamic one. These two sides, dependent on each other, form the so-called vicious circle of population.

Comparing the relations between population growth to a vicious circle is correct, because it reveals the proper dialectic relations, but does not show any way out. Certainly the change in or slowing down of the rate of increase in population implies a change and dynamization of the economic system. In addition to this the present population movement in the developing countries is impeding the process of economic growth. But it would be wrong to regard these relations as principle relations within the whole process of changing the economic systems in the developing countries. The deformed character of population growth and its relations with the economic systems is not the principle retarding factor within the process of economic growth in the developing countries and thus in the first place the factor impeding the stabilization of population growth, but the character of the economic system itself. This mainly complicates the stabilization of population and thus transforms the process of population growth into an impeding factor. The deformation of the economic system in the deve-

loping countries, based on grafting capitalism onto pre-capitalist economic systems does not only imply a deformed population growth, but forms factors really impeding the change into a dynamic system. By interlacing the stagnant system with the capitalist world system, the backward conditions in the agriculture of the developing countries have been preserved. Already for a long time there have existed conditions, in which it has not been possible to produce an abundance in agricultural output, or (as has often occurred) the abundance produced in agriculture could not be transformed into an economic abundance. So long as this transformation is being hindered, so long will a rational distribution of population and rational employment be made impossible. In both cases mentioned, integration of the means (resources) forms a common aim, the real basis of dynamism, and is in contradiction to the present agrarian situation in developing countries. This shows that rapid structural reforms in agriculture, which eliminate this situation and prevent integration of the means, is one of the main conditions for building up an agrarian economic surplus. The transformation of agrarian surplus into economic surplus is related to the establishment and expansion of employment possibilities outside agriculture. It leads to a reduction in surplus agrarian manpower, minimises the burden on agriculture and hinders or prevents negative effects of population growth. Further, it is in this transformation to be found the kernel of establishing new living conditions, with new values and decisive effects on the tempo of population growth.

The process of transformation of agrarian surplus into economic surplus is a process that in no way is in causal relation to population growth. It is a social process with the class question as the kernel. The forms and methods of transformation can vary greatly according to the power relations of the classes and can serve this or that class. The effects of transformation depend on the forms and methods of this transformation. The less is the transformation in the interests of the broad masses, the greater are the interests of the exploiting class as for example, the capitalists. As a consequence, the smaller are the effects in the transformation of agrarian surplus into economic surplus and in a rational distribution among the people. This is only one side of the medal.

The other and no less important aspect in developing countries is related to the hypertropically developed sector of the economy which is actually a part of the reproduction process of the highly developed capitalist countries. The increase or decrease in population scarcely affects this sector. But a change in the function of this sector will decisively work towards the process of population stabilization. We are here dealing with a process of long duration and a long term struggle against imperialism.

It is not only a matter of nationalization of this hypertropically developed sector which can take place depending on the decisive measures adopted at the beginning or at the end or at any stage of this process. It is much more a question of the organic inclusion of this sector in the local reproduction process of the developing country. A measure whose realization both in time and space has to be differentiated from other growth measures, has to be oriented to a certain extent and has to be seen in the entire process of growth. Apart from this important aspect in the realization of these measures which will not be treated here in detail, there is in the phase of carrying out of the transformation of the agrarian surplus into economic surplus and the extent, forms and methods adopted.

Both these measures will be for a long time to come the content of economic growth in developing countries. Their successful and consistent implementation is in causal connection with the class struggle and power relations of the classes. Population growth cannot cause the realization of these measures, but in the consistent realization of these measures, there are the successful redistribution of population, of lessening population pressure and the establishment of the material basis for slowing down the tempo in population growth.