Some Socio-economic Aspects of Population Growth in the USSR

Vasily SIMCHERA [1]

AUGUST 9 1973 was an important date in the demographic history of the USSR, for it was on that day that the population of the Soviet Union topped the 250 million mark; it then accounted for more than 6.6 per cent of the world's population and 38.1 per cent of Europe's. Thus the population of the USSR was now almost precisely double that of Russia at the time of the first general census in 1897 (124.6 million persons). Since 1922 (the year in which the USSR was formed) it had increased by more than 84 per cent.

On 1 January 1974 the population numbered 250.9 million. The USSR is the third largest country in the world in terms of population and the first in terms of the number of constituent nationalities and peoples (more than 100).

Trends in population growth

The average annual rate of population increase between the first (1920) and the second (1926) Soviet population censuses was 1.2 per cent (the absolute increase was 10.2 million); between the second and third (1939), 1.15 per cent (an increase of 23.5 million); between the third and fourth (1959), 0.45 per cent (an increase of 18.1 million); and finally, between the fourth and fifth (1970) the increase was 32.9 million, or an average of 1.4 per cent per annum. Since the Second World War the average annual rate of population increase in successive five-year periods has fluctuated as follows: in 1946-50 it was 2.3 per cent; in 1951-55, 1.7 per cent; in 1956-60, 1.8 per cent; in 1961-65, 1.5 per cent; and in 1966-70, 1.0 per cent. The natural increase in the population of the USSR

[1] Candidate of Economic Sciences.

in 1973 was 0.95 per cent, a slight increase over the previous year's 0.92 per cent. The highest natural increase was registered in 1926 (2.37 per cent), the lowest in 1970 (0.89 per cent).

Wars have exerted a particularly adverse influence on the over-all trends of demographic development in the USSR. The First World War, the Civil War and the foreign intervention, and subsequently the Second World War took a toll of more than 30 million Soviet lives, more than 20 million during the Second World War alone. And these were only the direct losses. Indirect losses were even greater, to say nothing of the irreparable spiritual wounds which were inflicted on practically every Soviet family.

The extent of these losses can be judged from the following data: between 1897 and 1913 the population of Russia increased by 34.6 million; if there had been no First World War and if this rate of increase (1.55 per cent per annum) had continued, by the end of 1922 the population of the USSR would have been at least 182.8 million and not 136.1 million, the figure actually reached. The hypothetical figure of 182.8 million was not in fact reached until 1952.

Still greater as far as population growth in the USSR is concerned was the indirect loss suffered during the Second World War. If the war had not occurred, the population figure for the USSR in 1950 (at the 2 per cent rate of increase recorded between 1922 and 1940) would have been as high as 236.6 million, whereas in fact this figure was not reached until 1968. The demographic effects of the war are being felt even today in the USSR. No other country in the world has suffered such population losses through war during the present century. In its 56 years of existence, the Soviet Union has spent 22 years either at war or reconstructing its war-damaged economy—for each year and a half of peaceful construction there has been a year of war or of postwar reconstruction, with the terrible hardships this entails.

In spite or perhaps because of this, the Soviet population is still growing. More than four-fifths of the population have been born since the October Revolution—there are only 43 million people who were born before the Revolution and only 7.5 million born in the last century. In the last 23 years alone (1951-73) the population has increased by 71.2 million at an average annual rate of 1.5 per cent (more than 3 million persons). It is perfectly obvious that there is no marked trend towards a reduction in the rate of population growth; there is a trend towards a reduction in the birth rate, but that is not at all the same thing.

How are we to account for the regularity and stability of population growth in the USSR? The real reasons are to be found in the conditions of socialist production and in the relations inherent to it; these offer maximum scope for the operation of socialist population principles, the main features of which are high rates of population growth on the one hand, and full employment of all able-bodied persons on the other.

A feature of the Soviet economy is its high and stable rate of growth of public production, which is consistently and significantly higher than the rate of population growth. For the period 1940-72, when the population increased 1.27 times (i.e. by 27 per cent), the national income increased 9.51 times; fixed assets, 8.76 times; industrial production, 13.65 times (consumer goods production, 7.53 times); agricultural output, 2.14 times; capital investment, 14.52 times; and retail commodity turnover, 7.37 times. A number of consumer goods showed even higher increases than that indicated. Real incomes per head of wage earners and salaried employees rose 3.15 times and those of peasant farmers 5.22 times. It can be seen from these figures that there has been a significant increase in the indices of production and consumption per head and a steady rise in the material and cultural well-being of the Soviet people.

These conditions provide the concrete prerequisites for rapid population growth in the USSR, but it would be wrong to take too simplistic a view of them and expect the growth of population to be " proportional ". In practice, the situation is more complex and the connection between demographic and socio-economic factors is much less direct. There is no inherent reason why population should keep pace with high rates of economic growth; nor are high rates of economic growth necessarily accompanied by low rates of population growth. The important thing is that growth should be optimised, i.e. the achievement of maximum numbers compatible with a stable birth rate and minimum mortality, and that balanced and harmonious growth should be ensured over the whole range of demographic, economic and social interests.

The dynamics of the birth rate

Over-all rates of population growth are influenced by a whole complex of individual factors, which interact in a complicated chain of intermediate links. The dynamics of the birth rate, on the one hand, and of the death rate, on the other, are of the utmost importance in this connection. Other factors which have a certain role to play are the internal mobility of the population and structural changes; external mobility (migration) has so far been of practically no significance in the USSR (except during the first years of Soviet power and the war years; and as regards Jewish emigration to Israel).

The birth rate has been falling in the USSR ever since the First World War. The rate per thousand was 45.5 in 1913, 44 in 1926, and 36.5 in 1939. After the Second World War it began to decline more sharply: 26.7 in 1950, 25.7 in 1955, 24.9 in 1960, 18.4 in 1965 and 17.4 in 1970. The lowest level was recorded in 1969 with 17 births per thousand; in the last few years an upturn has been observed—in 1972 there were 17.8 births per thousand. Objective analysis, as well as the experience of all advanced countries, indicates that as a society makes the transition from a low to a

medium and better-than-medium standard of living, the birth rate declines. Once a high standard of living is achieved, it starts to rise again. Thus the birth rate becomes a function of the economic conditions of development and gradually frees itself from purely biological constraints.

In the USSR the level, trend and structure of the birth rate are being determined to an ever greater extent by the influence of consciously regulated factors, and by social standards of behaviour and ethics. The physiological potentialities of women, family means, as well as spontaneous natural and social factors are coming to count for less and less. Malnutrition as a factor has lost all significance. Some of the very earliest decrees issued by the Soviet Government were designed to provide maternity protection, assistance for large families and paid leave for expectant mothers. Further contributions came in the form of the development of a network of medical, pre-school and educational establishments, the advance in the cultural and material standards of all strata of Soviet working people, and above all the increased consumption of foodstuffs and the unprecedented scale of housing construction.

Naturally, this raises the question why, in these circumstances, there should be a decline in the birth rate and not an increase. Isn't this a contradiction? Not really. The fact is that procreation has changed from being a largely fortuitous occurrence to a consciously regulated one. In these conditions each child has become a wanted child. The very structure of the birth rate is undergoing a substantial change. Take, for instance, the question of family size: first and second children now account for 71 per cent of all births as against 60 per cent in 1950; at the same time, because people are marrying later, there is an increase in the number of women giving birth for the first time at a mature age (29 and over).

Or consider the differences between the urban and rural birth rates. The increase in the urban population [1] with its lower birth rate (57.9 per thousand women aged 15 to 49) and the decrease in the rural population with its far higher birth rate (83.5 per thousand women in the same age group), have had a negative effect on the over-all birth rate. Considerable though it still is, however, the gap between urban and rural rates has been diminishing ever since the end of the Second World War, with obvious consequences for the total birth rate.

Disparities in the birth rate are similarly on the wane as between the different Union republics and the economic regions of the country, and as between the different nationalities, etc. With an average birth rate in 1940 of 31.2 per thousand, the highest rate was 41.2 per thousand (Armenian SSR) and the lowest 16.1 (Estonian SSR), whereas in 1972 the corresponding spread was considerably smaller: from 35.3 for the highest

[1] The urban population in mid-1973 numbered 147.4 million (59 per cent of the total population) and the rural population 102.3 million (41 per cent), whereas before the war (in 1940) only 33 per cent of the total lived in towns.

(Tadjik SSR) to 15.3 for the lowest (RSFSR), with 17.8 as the all-Union average.

The highest birth rates in the USSR are among the peoples of Central Asia and Transcaucasia (also among gypsies and Jews), the lowest among the Baltic peoples and Russians. Those with high birth rates, however, make up a very small proportion of the total population of the USSR. Far more numerous are the peoples with moderate or low birth rates, particularly the 129 million Russians.

Another determinant of the birth rate structure is of course the sex and age composition of the population. At the beginning of 1973 the male population of the USSR was 115.0 million and the female 133.6 million (a difference of 18.6 million); in 1970, the corresponding figures were 111.4 and 130.3 million (a difference of 18.9 million); in 1959, 94.0 and 114.8 million (20.8 million); before the Second World War there was a surplus of only 8.1 million women and before the First World War (in 1913) only 1 million. In 1970 there were 855 men per thousand women (1,002 in the 44-and-under age group and 547 in the group aged 45 or over), whereas in 1959 the corresponding figures were 819, 932 and 558 men. The number of men per thousand women will continue to increase: gradually the gap between the sexes, which is almost entirely the result of war losses, will narrow and in the space of 25 years it should be practically eliminated.

The picture is quite clear: there is a trend towards equalisation of the sex composition of the population and the establishment of a natural balance in its reproductive structure. The equalisation of the sex composition, particularly in the younger age groups, is contributing to an increase in the birth rate. The increase in the marriage rate and the number of married people (107.2 million in 1970) is having precisely the same effect, in spite of the accompanying increase in divorces (in 1972, 1 for every 3.6 marriages). According to the 1970 census, 72.2 per cent of all males and 58 per cent of all females aged 16 and over were married—the disparity was due to the surplus of 18.9 million women in 1970. Henceforth the proportion of married women in the USSR will grow, the problem of finding a husband will become less acute and in fact there will eventually be a shortage of brides.

What lies ahead? Any number of trends in the birth rate are possible, of course. It could fall to an even lower level. Or there could be a substantial rise: there are already indications that this might occur. What seems most likely, however, is that within the next few years it will increase moderately and then stabilise at a higher level.

Mortality

The death rate in the USSR is among the lowest in the world: from 1960 to 1972 it averaged 8 per thousand, whereas before the Second World War it was between 15 and 20 per thousand and in 1913 as high as

29.1 per thousand, i.e. more than double the level recorded in the advanced countries of the time such as the United States. The lowest death rate was recorded in the USSR in 1964 when it fell to 6.9 per thousand. Since then, with the aging of the population (the increase in the proportion of elderly people), it has risen slightly (7.7 in 1968 and 8.5 in 1972). In 1971-72 the death rate in the 60-64 age group was 18.1 per thousand (28.3 for men and 12.6 for women), while for the 65-69 age group the corresponding rates were 26.8 (40.5 and 20.2) and for the 70-and-over age group, 74.8 (91.6 and 67.9).

Mortality in the rural population (9.4 per thousand) is higher than in the urban (7.6 per thousand), but is decreasing more rapidly. Standardised death rates, which eliminate the influence of the age structure, are 7.9 in the towns (higher than actual rates) and 8.4 in the villages (lower).

Infant mortality in the USSR is declining at a particularly rapid rate; the level is now more than 11 times lower than in 1913 and over 7 times lower than in 1926. Before the First World War mortality among children up to 1 year old accounted for more than half of all deaths as against only 5 per cent now.

The decline in mortality can be explained by the extension of prophylactic action generally: the struggle against all kinds of diseases and above all epidemic diseases; the implementation of a system of free social and health protection designed to improve working and living conditions; and the development of leisure and sports facilities. Free medical care and free accommodation in sanatoria and rest homes, maternity protection, free or low-cost pre-school establishments, lump-sum grants on the birth of a third child and monthly allowances for the fourth and subsequent children, paid maternity leave, cash benefits during pregnancy and confinement, aid for unmarried, divorced or widowed mothers and large families, state pensions and holidays with pay—these are but a few of the many and varied measures designed to improve the health and standard of living of the Soviet people. As a result the average life expectancy is now 70 years (74 for women), or more than double the pre-revolutionary level (32 years).

According to the 1970 census, the population in the 60-and-over age group exceeded 28.5 million, whereas in the 1959 census it had numbered only 20 million and in 1939 fewer than 13 million. The increase in this older population will continue to accelerate. Mortality will rise somewhat as this aging process runs its course, at least in the immediate future, but action to reduce the incidence of cardiovascular diseases (and—in the rather more distant perspective—of some forms of cancer) will eventually lower it again.[1] Further reductions in the death rate are anticipated as a result of minimising infant mortality.

[1] Almost every second death is due to cardiovascular diseases (1,024,500 out of 2,105,400 deaths in 1972) and rather more than one in seven to malignant tumours (321,500).

Socio-economic development and the impact of population growth

The relationship between social and economic factors and population growth is influenced by a great many intermediate factors and becomes apparent only over a fairly long period of time. It is pointless therefore to search for such links on the basis of yearly variations or even variations within a year, as is sometimes done, for the simple reason that there are none. Even such general relationships as the link between population growth and manpower require a time-span of 16 to 18 years from birth to entry into the working-age group. The connection between population growth and its economic and social effects is even less close—and even less direct.

It is impossible to name any socio-economic phenomenon which might be caused by demographic factors alone, without some kind of admixture of other factors. But it is just as difficult to name a phenomenon in the life of the community which is in no way subject to the influence of demographic factors, let alone the influence of the demographic environment. Demographic determinism thus has universal significance. Its manifestations are extremely diverse, and there is no room here to discuss more than its most obvious forms and effects. How are these evinced and in what way are they specific to the USSR?

Social structure

The most graphic example of the correlation between demographic and social development is to be found in the changes wrought in the structure of Soviet society. These are first and foremost changes in the social structure of the population. In the vanguard of socialist society stands the working class, whose status and numerical importance have grown with the development and consolidation of the socialist production relations. In 1913, wage earners and salaried employees, together with members of their families (in the USSR it is customary to include the latter when describing the class composition of the population) accounted for 17 per cent of the total population and by 1924 this proportion had declined even further (to 14.8 per cent); now, according to 1973 figures, this group constitutes 81.3 per cent of the population, with wage earners accounting for 60.3 per cent (in 1913 the proportion was 14.6 per cent and in 1924, 10.4 per cent). Peasant farmers, whose whole mode of life has of course changed radically, today form only 18.7 per cent of the total.

An increasing role in the over-all life of the country is being played by the Soviet intelligentsia, who to an equal extent represent the interests of the working and peasant classes and strengthen the various friendly links between them. In 1973, the number of intellectual workers (not to be confused with the number of educated people) exceeded 33 million (in

1926 they numbered 3 million in all) and if members of their families are included, 52.4 million—about the same as the number of salaried employees.

Other classes (handicraftsmen, whether working in co-operatives or on their own, and individual peasant farmers) play a numerically insignificant part in the present life of the Soviet community; the bourgeoisie, landlords, merchants and kulaks, who still constituted 4.6 per cent of the total population in 1928, have long since ceased to have any importance.

According to the 1970 census, there were 57.6 million wage earners (excluding family members) engaged in production activities (including 41.6 million in industry, construction and transport and 10.0 million in agriculture), and 8.5 million in non-production activities, including 5.3 million in education, science, the arts and public health. Among the salaried employees, 14.6 million were engaged in production and 15.9 million in non-production sectors. Persons engaged in agriculture totalled 28.9 million, including the 10.0 million wage earners just mentioned (most of whom were employed on state farms), 1.4 million salaried employees and 17.2 million collective farmers, not counting the annual equivalent of 5.5 million people working on personal agricultural plots, and 0.8 million urban dwellers regularly enlisted for work on collective farms and state farms.

For 115.2 million people in 1970 the basic means of livelihood was employment in various branches of public production. Individual agricultural plots provided an income for 1.8 million; 32.6 million were in receipt of pensions and other social security benefits (the actual number of pensioners at the time of the 1970 census was greater—40.1 million—but a good many of these were still working and their pensions were only a supplementary means of subsistence); 3.5 million received study grants and 0.3 million had other means of support; 87.9 million (mainly children and old people) did not have independent means of subsistence in 1970, but they were dependants of workers. The dependency burden in the USSR—at 570 per thousand workers [1] in 1973—is the lowest in the world.

Sectoral and occupational change

For a country undergoing rapid technological development, radical changes in the sectoral and occupational distribution of the population are to be expected. Growing industrialisation and the collectivisation of agriculture, technical reconstruction and technological progress, and the practical combination of the advanced achievements of science and technology with the advantages of socialism have led to far-reaching changes in the sectoral distribution of the economically active population. What was until recently a predominantly agrarian country has today

[1] Including persons with independent means.

transformed itself into an advanced industrial power with an overwhelming preponderance of industry over agriculture and with all its industries highly developed, particularly the technically advanced ones such as energetics, mechanical engineering and chemicals. Nowadays (in 1972 to be precise) persons working in industry, construction, transport, etc., represent 45 per cent of the economically active population, and those in agriculture 26 per cent, whereas just before the Second World War these proportions were reversed (28 and 54 per cent respectively) and in 1959 they were approximately equal.

Another typical trend is the growth in the numbers employed in non-production activities, reflecting the increased role of services in public production in the USSR. The proportion of those employed in such activities rose from 11.7 per cent of the total in 1940 to 23.2 per cent in 1972. According to the 1970 census data, for every worker in the services field there were 3.7 workers in production and approximately 10 members of the population. While the number of persons employed in the production field continues to rise, their rate of increase is being outstripped by the growth of those employed in non-production fields and above all in services. Measures taken to provide for such growth include appropriate training of personnel for these sectors and substantially increased capital investment in their development.

These shifts in the sectoral structure are naturally reflected at the occupational level. Many new occupations have emerged and some of the old ones have disappeared. But this is not the only change: radical changes have also taken place in the substance of certain occupations, a new concept has been introduced into the old occupations, there has been a change in prestige and in the attitude to workers in the services field and to occupations which used to be considered " lowly ". An equality between occupations is gradually being established. A person and his work are increasingly judged on the basis not of what he does but of how he does it.

Another feature of this development is the wide choice of different professions available in the USSR, the existence of real opportunities for simultaneously mastering several trades and for free movement from one to another, and the chance for people to have a certain independence, to dominate their work rather than be dominated by it.

Accelerated technical progress in the country is leading to a big increase in the number of skilled persons, and to a reduction in the numbers employed in unskilled manual labour. For example, the number of skilled metal workers in 1970 was 16 times greater than in 1926; the number of engine drivers, 20 times greater; the number of road vehicle drivers, combine harvester and tractor operators, 420 times greater; and the number of chemists, 15 times greater; but the number of cargo handlers had declined by 33 per cent, navvies by 72 per cent and quarrymen by 75 per cent.

Literacy, education and social policy

The USSR is a country of universal literacy. According to the 1970 census, 99.8 per cent of the urban and 99.5 per cent of the rural population (99.8 per cent of the men and 99.7 per cent of the women) were literate, i.e. practically the whole population, whereas in pre-revolutionary Russia three-quarters of the population were illiterate. Illiteracy has been eliminated in all the Union republics and among all the nationalities and peoples of the USSR. Soviet people read a great deal, they display a keen interest in the spiritual and cultural life not only of their own but of all other nations, and constantly strive to improve their education.

On 1 January 1973 there were 107.7 million people with complete or partial higher or secondary education (as against 15.9 million in 1939), i.e. 71.8 per cent of the total labour force employed in the national economy. Of those engaged in intellectual work almost all (96.0 per cent) had the required standard of education, including 27.8 per cent with higher education. Among manual workers 62.4 per cent had the required education. Ten million people, and practically one in ten wage and salary earners, had higher education. The current Five-Year Plan period (1971-75) should see the introduction of full secondary education for all young people. In 1972-73 there were 80.9 million persons undergoing education of one form or another, including 4.6 million receiving higher education. There were 181,000 schools providing general education and 825 establishments of higher education. The network of schools is expanding, their work is increasing in extent and improving in quality, educational techniques and methods are being perfected, and workloads on teachers and instructors reduced.

The Soviet State is pursuing the most effective possible social policy to provide for demographic growth: in 1972 payments and benefits received by the population from public consumption funds amounted to 73,000 million roubles (as against 4,600 million in 1940 and 27,300 million in 1960). This represented 23.3 per cent of the national income and, if the cost of free housing provided to the Soviet population and price subsidies on foodstuffs and consumer goods for children is taken into account, the total comes to more than a third of the national income.

At all stages of socialist construction paramount importance is attached to maternity and child protection, to the development of public health care and to making provision for a secure and tranquil old age. It is generally known that medical care is provided free of charge in the USSR. There were 731,800 doctors in all branches of medicine in 1972, and a total of 2.8 million hospital beds, including 224,000 in maternity wards. In the same year there were 21,300 maternity and child welfare clinics, 5,400 sanatoria, holiday hotels and rest homes (not including non-

residential establishments), and the number of those who underwent treatment or stayed in holiday homes was 11.1 million.

Equal attention is of course paid to keeping the population fit and healthy. In 1972 there were 214,000 physical culture and sporting associations in the country, 46 million gymnasts and more than 3,000 athletic stadiums, etc. In 1972 the State earmarked 10,800 million roubles for the maintenance of physical culture establishments of various kinds as against 1,000 million in 1940 and 5,000 million in 1960; particular attention was devoted to improving the quality of the services provided by these establishments.

Closing the urban-rural gap and equalising population density

The most important social problem which the USSR has succeeded in resolving has been to overcome the disparities between the urban and rural population and to reduce the gap between the level of development in the towns and villages through intensive efforts to improve rural living conditions. A significant contribution to solving this problem has been made by the process of urbanisation and related social development, i.e. regeneration of old towns, the emergence of new towns, new trends in the resettlement of population and its changing economic and social structure, the development of the transport network, etc.

As already pointed out, three-fifths of the population of the USSR are town-dwellers, whereas even as late as 1959 they represented less than half the population (48 per cent); before the Second World War they constituted only a third and in pre-revolutionary Russia a mere 18 per cent of the total. Between 1959 and 1970 alone the urban population increased by 36 million and it has risen by a further 10 million in the last three years. The size of the urban population is growing under the combined effect of natural increase, the reclassification of rural settlements as towns, and the movement of population from village to town in search of urban employment. The actual increase in urban population is substantially in excess of the natural increase, whereas in the villages—where the natural increase is higher than in the towns—the population is decreasing: from 1959 to 1970 it declined by 3.1 million, but between 1970 and 1972 alone it dropped a further 3.2 million. As agricultural mechanisation and productivity increase, the number of agricultural workers (but not the rural population) will tend to fall.

In 1973 there were 1,978 towns, including 201 with from 100,000 to 500,000 inhabitants, 24 with more than 500,000 and 11 with more than a million inhabitants. These towns with 100,000 or more inhabitants accounted for almost a third of the total population of the USSR—83 million as against 9.5 million in 1926 and 48.6 million in 1959.

Socialism affords a practical demonstration of the possibility of resettling people. In the USSR many of the remote regions have lost their

air of desolation and wildness. New towns are springing up and a great number of new cultural and industrial centres have emerged—Bratsk, Ust-Ilim, Norilsk and others. Gradually the unnecessary concentration of population in the big cities and the European regions is being reduced and the extreme shortage of people in Siberia and the Far East is being overcome. Shortages of manpower in the big cities and regions with low density of population and some of the surpluses in the small towns and rural areas with high population density are being systematically eliminated. Problems of human resettlement will in future be resolved in increasingly close conjunction with industrial development and environmental problems.

Another phenomenon that can be of great practical significance in the future is international migration within the framework of the CMEA [1] countries, the development of which was provided for in the Comprehensive Programme for Socialist Economic Integration adopted in 1971. A number of administrative measures will also have a considerable impact, particularly the ban on the establishment of new enterprises in the big cities, with the exception of communal services. New factories and plants will be built in small and medium-sized towns, the construction of rural roads expanded, and the development of the infrastructure in the sparsely populated areas of Siberia and the Far East speeded up.

[1] Council for Mutual Economic Assistance, formerly known as COMECON.