# CONSEIL DE L'ATLANTIQUE NORD NORTH ATLANTIC COUNCIL 

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AC/127-WP/469

## ECONOMIC COMNITTEE

POPULATION TRENDS IN RUMANIA
Note by the French Delegation
I. THE GENERAL PICTURE

1. Jatural movement of the population

The population of the Rumanian Socialist Republic rose from 15,791,000 inhabitants at 1st July, 1948 to 21,029,000 inhabitants at 1st July, 1974; the contribution of migratory movenents to this rise of $33 \%$ in 26 years was negligible.
2. The development of the annual natural growth rate can be divided into three phases. The first, which ended in 1958, saw a high level of growth due to the high birth rate (around $25 \%$ ) together with a big drop in the death rate, which declined from $15 \%$ plus to somewhere in the region of $10 \%(1)$. . During the second beriod, there was a big falloff in growth, which reached an all-time low in 1965 and 1966 ( $0.60 \%$ ); the already very low mortality was not sufficient to offset the sharp drop in the birth rate, from 22.9\% in 1957 to 14.3\% in 1966 , i.e. a drop of $38 \%$ in 10 years (2). After 1967, the sharp rise in the birth rate increased the growth rate, which now seems to be stable at around $1 \%$.
3. For the last twenty years or so, the general demographic trend in Rumania has been determined essentially by the birth rate, since the death rate has reached a level where its variations have very little effect on population growth.

This document includes: 1 Annex
(1) The very rapid reduction in infant mortality (164\% in 1946 and $70 \%$ in 1958) was an important contributory factor.
(2) Part of this drop is attributable to the smaller proportion of women between 20 and 29 years of age in the overall number of wonen in the reproductive period. The proportion went from $33.2 \%$ in 1956 to $23.8 \%$ in 1966.
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2. Fertility
(i) Current index
4. The fertility rates by age groups elininate the effects which age and sex distribution exercises on the crude birth rate. In Table I these rates are shown by groups of five years, from - 1956 to 1974 .
5. To obtain a more general view of the fertility trend durine the period, use has been made of the sum of the rates for each calendar year available plus an estimate for the period 1948 to 1955 (see Annex).

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Table I: RUMANIA - General fertility rate

| Year | 15-49 <br> years | $15-19$ | $20-24$ | $25-29$ | $30-34$ | $35-39$ | $40-44$ | $45-49$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | 89.9 | 52.5 | 180.4 | 155.9 | 103.5 | 53.8 | 23.8 | 2.7 |
| 1957 | 83.7 | 54.3 | 180.1 | 145.4 | 92.8 | 54.6 | 17.2 | 2.2 |
| 1958 | 81.9 | 55.9 | 176.7 | 136.8 | 84.2 | 48.2 | 14.0 | 1.8 |
| 1959 | 77.1 | 59.4 | 168.4 | 125.8 | 73.9 | 42.6 | 14.4 | 1.6 |
| 1960 | 73.9 | 59.1 | 164.1 | 121.2 | 67.6 | 39.0 | 14.5 | 1.4 |
| 1961 | 63.4 | 62.6 | 155.4 | 110.1 | 60.1 | 32.4 | 13.2 | 0.9 |
| 1962 | 63.5 | 58.4 | 147.4 | 105.0 | 54.9 | 29.5 | 11.4 | 0.8 |
| 1963 | 61.9 | 61.5 | 144.0 | 102.9 | 53.1 | 28.2 | 10.7 | 0.7 |
| 1964 | 59.9 | 56.3 | 144.0 | 102.6 | 52.2 | 26.2 | 9.5 | 0.8 |
| 1965 | 57.3 | 52.4 | 140.7 | 99.8 | 53.5 | 25.1 | 8.9 | 0.8 |
| 1966 | 55.7 | 51.7 | 143.0 | 98.2 | 53.4 | 25.1 | 8.3 | 0.9 |
| 1967 | 105.5 | 79.3 | 251.8 | 198.1 | 124.1 | 59.7 | 16.6 | 1.2 |
| 1968 | 102.9 | 82.4 | 241.4 | 193.9 | 126.5 | 63.9 | 17.3 | 1.2 |
| 1969 | 89.6 | 72.6 | 215.7 | 171.7 | 108.0 | 54.7 | 15.0 | 1.0 |
| 1970 | 81.2 | 65.7 | 201.4 | 151.6 | 94.9 | 48.8 | 13.8 | 0.9 |
| 1971 | 75.3 | 62.1 | 190.9 | 138.1 | 82.7 | 44.3 | 13.1 | 0.8 |
| 1972 | 72.7 | 61.3 | 185.9 | 131.6 | 76.9 | 40.7 | 12.0 | 0.8 |
| 1973 | 70.4 | 60.6 | 182.4 | 124.2 | 71.6 | 37.6 | 10.3 | 0.6 |
| 1974 | 79.3 | 69.3 | 202.3 | 142.9 | 78.3 | 40.2 | 10.7 | 0.7 |

Source: "Anuarul Statistic al Republich Socialiste Romania, 1975"
6. The cumulative fertility rates provide a good indication of fertility at a particular time. For a given year they represent the average number of children which would have been born to a woman if all her fertile life were to be spent in exactly the same conditions as those obtaining during the year in question. Fig. 2 shows how the inder moved between 1948 and 1974.

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7. The fertility rate of Rumanian women remained high and arelatively stable until 1955, when it plunged steeply. In 1961 the replacement rate went right down(1). To counter this trend,皿estrictions on abortion were introduced (2) and the irdex rose 플amatically in 1967. But the effects of the new legislation were onot lasting and three years later the figures were back to the 1956 Çand 1957 levels, partly, in all probability, because Rumanian couples Thad adjusted to a situation in which the legal termination of Mpregnancies could no longer be used as a common means of birth control. OIn the last few years, however, it seems that the drop has been halted at a healthy replacement rate and at a yearly growth rate of just over 1 .
(1) The net reproduction rate fell below 1.
(2) Decree of October 1966.

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## (ii) Net final progeny

3. The level and trend of the net final progeny of women, which in the last analysis determines the growth and long-term chances in the population structure, can differ greatly from the fluctuations of the index referred to above, since the latter is affected by whether families are ahead or behind in the constitution of their progeny. The data available on Rumania do not allow a precise estimate to be made of how the situation developed in this sphere during the period in question.
4. However, there are several factors which all go to indicate that the final number of children born to women of the post-1930 generations is well below what it was for earlier generations:

- a sustained drop in the current index over a relatively long period is often accompanied by a fall-off in the intensity of the trend;
- the proportion of births in the higher age groups has gone dow gradually throughout the perjod;
- a comparable development has been recorded in neighbouring countries: Bulgaria (from 2.5 children for the 1920-21 generations to 2.05 children for the 1930-31 generations), Yugoslavia (from 3.25 children to 2.7) and Hungary (from 2.15 to 2.0)(1).

10. It is much more difficult to explain the significance of the recent rise in the current index. To interpret it as corresponding to a basic change in behaviour would be dangerous. It has to be remembered that social, economic and legal measures often affect only the rate at which the family grows and not its final size.

## 3. Sex and age distribution of the population

11. Noteworthy features of the Rumanian population pyramid at 1st July, 1974 were:

- the decline in births during the two world wars: "shrinkage" at the top and in the middle of the pyramid, corresponding to the 1916-1919 and 1941-46 generations;
- the contradictory development of the birth rate after 1956: 3rd "shrinkage" between 10 and 20 years and big rise in levels of the 1967, 1968 and 1969 generations due to the "accident" in 1967;
(1) See C. Blayo and P. Festy: "La fécondité à l Ouest et à I'Est de l'Europe", Population, No. 4-5, 1975.

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- the base of the pyramid records the recent pick-up in the birth rate.

FIG. 3 - RUMANIA - Population by age and sex at the 1966 and 1st July 1974 censused

12. The development of the three big age groups ureveals a slow but constant process of population ageing which, although it began later in the industrialised countries, is developing with greater intensity. The main reason for this is the long-term decline of fertility.


Table II: JUMANIA - Percentage distribution of the population by najor age groups at the 1930, 1948, 1956, 1966 and 1st July, 1974 censuses

| Year | Age group |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $0-14$ | $15-59$ | 60 and over | Total |
| 1930 | 33.5 | 59.1 | 7.4 |  |
| 1948 | 28.9 | 61.9 | 9.2 |  |
| 1956 | 27.5 | 62.6 | 9.9 |  |
| 1966 | 26.0 | 61.7 | 12.3 |  |
| 1974 | 25.1 | 60.7 | 14.2 |  |

Source: - "Recensamintul Populatei din 15 Martei 1966", Directia Centrala de Statistica, Bucarest, 1969,

- "Anuarul Statistic al Republich Socialiste Romania, 1975"


## 4. Projections

13. The first projection shown is that of the Rumanian Na.tional Demosraphic Commission(1). It is based on an optimistic assessment of the effects of the measures taken during the projected period, particularly regarding fertility. In the present paper this will be referred to as the "high assumption". Table III shows the assumptions used.

Table III: RUMANIA - Gross reproduction and fertility rates (Yearly averages)

| Age groups | $1970-1975$ | $1975-1980$ | $1980-1985$ |
| :--- | :---: | :---: | :---: |
| - years |  |  |  |
| Gross |  |  |  |
| reproduction | 1.27 |  |  |
| rete. |  |  |  |
| Fertility | 59.1 | 64.7 | 66.0 |
| rate: | 184.3 | 198.4 | 207.5 |
| $15-19$ | 138.4 | 150.6 | 156.0 |
| $20-24$ | 85.6 | 92.4 | 96.9 |
| $25-29$ | 43.2 | 41.8 | 50.5 |
| $30-34$ | 12.4 | 13.5 | 14.2 |
| $35-39$ | 0.9 | 0.9 | 0.9 |
| $40-44$ | $45-49$ | Published in The Population of Rumania", National |  |
| (1) Penographic Comnission, Editions Iéridiane, Bucharest, 1974. |  |  |  |

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1\%. The assumption predicts a constant rise in fertility throurhout the period. If the figures for 1970-1075 are cormatible with the data studied, the predicted level for 1980-1985 presupposes a return to the figures obtaining in the early 150 s (index oscillating around 3 children per woman), which seems highly unlikely.
15. For the death rate, an increase in life expectancy of a little over one year in eacl five year period is predicted, wich means that it should rise from 65.1 years in 1970 to 63.15 years in 1985 for men and from 69.5 years to 72.25 years in 1985 for woren. These assumptions are plausible given the present level and trend of the death rate in Rumania. Tables IV and $V$ show respectively the development of the nain population indices deduced from the fertility rate and life expectancy assumptions and the results of the projection.

RUMAIIA - Main population indices derived from the 1970-1985 projection

|  | 1970-1975 | 1975-1980 | 1980-1985 |
| :---: | :---: | :---: | :---: |
| 1. Live births <br> (Thousands) <br> - Yearly averagc | $\begin{array}{r} 2000 \\ 400 \end{array}$ | 2285 457 | 2435 487 |
| 2. fiumber of deaths (Thousands) <br> - Yearly average | $\begin{array}{r} 1055 \\ 211 \end{array}$ | $\begin{array}{r} 1115 \\ 223 \end{array}$ | $\begin{array}{r} 1165 \\ 233 \end{array}$ |
| 3. Natural grovich (Thousands) <br> - Yearly average | 945 189 | $\begin{array}{r} 1170 \\ 234 \end{array}$ | $\begin{array}{r} 1270 \\ 254 \end{array}$ |
| 4. Birth rate (\%o) | 19.3 | 20.9 | 21.1 |
| 5. Death rate (\%) | 10.2 | 10.2 | 10.1 |
| 6. Matural growth rate (\% ) | 9.1 | 10.7 | 11.0 |
| 7. Mean annual rate of increase (\%) | 1.0 | 1.1 | 1.1 |

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Tajle V: RUMANI - Development of the ace and sex distribution of the population (in thousands) according to the socalled "high assumption". Period 1970-1985.

16. The second projection used is part of the series dram up by the United States Department of Commerce on the East European countries(1). Use has been made of the $C$ series, which will be referred to as the "low assumption" and which would scom to correspond to the minimum development of the Rumanian population in the short and medium term.
17. For the death rate, the assumptions are not very different from those for the "high assumption". For fertility, on the other hand, it is expected that the gross reproduction rate will decline between 1972 and 1982 and then level off. On the basis of 1.06 in 1972 it should have gone down to 1.00 ten years later. This assumption has already been partly disproved by the facts, since 2.1 revealed that the sum of the fertility rates increased in 1974. However, the gap is small and could well be offset in future years.
(1) US Department of Commerce: MProjections of the population
of the Communist countries of Eastern Europe, by age and sea: 1972 to 2000" - International Reports, December 1972.

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13. If the two projections are compared, it will be seen that for the 15-59 age group and the 60 and over age croup, the differences are neclicible. There will be about 13,400,000 persons between 15 and 59 in 1930 and 14,000,000 in 1935, i.e. an increase over 1974 of 640,000 and 1,240,000 respectively. For the age group 60 and over, which had 2,905,000 persons in 1974, the increase vill be practically nil in 1900 and around 300,000 persons in 1985.
19. For the ace group $0-1 /$, the results are very different:

- if the "high assumption" should prove correct, in this group there would be 6,070,000 persons in 1980 and 6,355,000 in 1985, i.e. by comparison with 1974, an increase of 780,000 and 1,070,000 respectively;

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- in the case of the "low assumption" the increase would be 360,000 persons in 1980 and 154,000 in 1985.

20. The fulfilment of one or the other of these projections would entail very big differences in the rate of investment in education during the next ten years.
21. Ethnic distribution
22. The ethnic distribution of the population of Rumania. is shown in the following table.

Table VII: RUMANIA - Population breakdowm by nationalities at the 1930, 1956 and 1966 censuses

| Ethnic croups | 1930 |  | 1956 |  | 1966 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Numbers } \\ & \text { (in } \\ & \text { thousands) } \end{aligned}$ | \% | $\begin{aligned} & \text { Numbers } \\ & \text { (in } \\ & \text { thousands) } \end{aligned}$ | \% | $\begin{aligned} & \text { Numbers } \\ & \text { (in } \\ & \text { thousands) } \end{aligned}$ | $\%$ |
| Total | 14,281 | 100.0 | 17,489 | 100.0 | 19,103 | 100.0 |
| Rumanians | 11,118 | 77.8 | 14,996 | 85.7 | 16,747 | 87.7 |
| Hungarians | 1,423 | 10.0 | 1,588 | 9.1 | 1,620 | 8.5 |
| Germans | 663 | 4.4 | 385 | 2.2 | 383 | 2.0 |
| Others | 1,106 | 7.7 | 521 | 3.0 | 354 | 1.8 |

Source: Recensamintul Populatei din 21 Februarei. Directia Centrala de Statistica, Bucarest, 1959.
Recensamintul Populatei din 15 Martei 1966. Directia Centrala de Staitistica, Bucarest, 1969.
22. The predominant position of the Rumanians in the population pattern increased during the period under survey. The comparative decrease in the other ethnic groups may be due both to enigration to join families abroad and to a lower fertility rate.
6. Geographical distribution of the population.
23. The salient feature of the geographical population pattern in Rumania over the last 40 years is the constant advance of urbanization.

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Table VIII: RUNAZIA - Tow/country population at the 1930, 1948, 1956, 1966 and 1st July, 1974 censuses.

|  | Population (in thousands) |  | Proportion of <br> urban <br> population (\%) |  |
| :--- | :---: | :---: | :---: | :---: |
| Dato | Total | Town |  | 21.4 |
| 1939 | 14,281 | 3,051 | 11,229 | 23.4 |
| 1943 | 15,872 | 3,713 | 12,159 | 31.3 |
| 1953 | 17,489 | 5,474 | 12,015 | 38.2 |
| $196 ;$ | 19,103 | 7,306 | 11,797 | 42.7 |
| 1974 | 21,028 | 8,979 | 12,072 |  |

Sources: -"The Population of Rumania", National Demographic
Commission. Ditions Méridiane, Bucherest, 1974
-Anuarul Statistic al Republich Socialiste, Romania, 1975.

The urban population has almost doubled during the period under consideration; most of the changes took place after 1948.
24. The figures in Table IX give further detai: 3 of these movements.

Table IX: RUNAIA - Urban population breakdown by size of cities at the 1956 and 1966 censuses


Source: "Recensamintul Populatei din 21 Februarei 1956".
"Recensamintul Populatei din 15 Martei 1956".
25. The population movement has been mainly towards the towns in the 100,000 to $1,000,000$ and 20,000 to 50,000 inhabitants bracket. The number of towns in these two categories has alnost doubled in the space of ten years. In 1966 they accounted for half the urban population as against only one-third in 1956.

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7. Demographic policy
(i) Birth rate
26. State allowances for children have existed in Rumania since 1956. They are calculated on the basis of the parents' income (with an upper limit which, in 1974, was 4,000 lei per month), the number and age of the children (no allowances are payable after 16) and the place of residence of the parents (town or country). Since 1972, they have been extended to members of the agricultural co-operatives. The total funds allocated by the State for this purpose rose from 1,726 million lei in 1960 to 2,715 million in $1965,4,230$ million in 1970 and 6,800 million in 1973.
27. Since 1965, Rumanian women are entitled to 112 days ${ }^{\prime}$ naternity leave, during which they receive the equivalent of 60\% of the average pay packet. During the same year, mothers may be given leave to look after a sick child up to the age of three years. They receive up to $55 \%$ of the average wage. Expectant mothers in their sixth month and those breast-feeding their babies may not be employed on night work or in dangerous or incommodious premises. They are also entitled to a rest period of two hours a day until the child is nine months old.
28. The decree of October 1966 introduced two different types of measures:

- a maternity benefit became payable as from the third child (1,000 lei in 1972);
- the regulations governing abortion, which was a common form of birth control in Rumania, becane much more restrictive;
- no terminations were allowed after the first three months and they had to be carried out by a gynaecologist in a hospital or a surgery. Authorization to terminate a pregnancy is granted only for medical reasons when there is a danger of abnormality, on the grounds of age (over 45), when there are four or more children, and in a case of rape or incest.
(ii) Senior citizens

29. The basis of the current policy is the old age pension which is part of the state social welfare system. It is granted to all nale wage-earners of sixty who have worked for at least twenty-five years and to all female wage-earners of fifty-five who have worked for twenty years. The pension is calculated as a percentage of salary and the lower the salary the higher the percentage. Pensionable age can be reduced if the working conditions are unpleasant or incommodious and women who have had three, four or five children may receive their pensions one, two or three years earlier.

## II. HORLING POPULATION

1. The working population as a proportion of the total population
2. Table X Gives a general idea of the changes which have taken place between 1956 and 1966.
3. The total population increased by 1,615,000 persons over the period under consideration whereas the working population dropped by 87,000 , with the result that the general activity rate ceclined from 59.4: to 54.2, This is explained mainly by the drop in the activity rate for the younger age- 5 roups ( 14 to 19 and 20 to 24) because of the creater number of youngsters who receive secondary and, to a lesser degree, higher education, as well as by the drop in the rate for the upper age groups ( 60 and over), wich is often linked with the cradual movement from agriculture to the industrial sectors.
4. The ectivity rate for the adult age groups (25-59) siovs a big rise because of the sreater number of women working. Bearing in mind that the social and econonic factors underlying this development (expansion of secondary and higher education, industrialization, working women) have continued to make therselves felt and will probably continue to do so in the future, it may be assumed that the two major trends observed have become more pronounced sjince the last survey and that they will continue to cetermine for some years yet the development of the working population in Rumania. The case of Czechoslovakia and Poland would seen to go some way towards bearing out this prediction.
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Table X: RUMANIA - Working population by sex and age at the 1956 and 1966 censuses

| Age Group | 1956 Census |  |  |  |  |  | 1966 Census |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Numbers in thousands |  |  | Activity rate (\%) |  |  | Numbers in thousands |  |  | Activity rate (\%) |  |  |
|  | Total | Men | Women | Total | Men | Women | Total | Men | Women | Total | Men | Women |
| $\begin{aligned} & \text { All } \\ & \text { ages } \end{aligned}$ | 10,449 | 5,714 | 4,735 | 59.4 | 67.2 | 52.7 | 10,362 | 5,675 | 4,687 | 54.2 | 60.7 | 48.1 |
| 14-19 | 1,447 | 751 | 696 | 68.7 | 64.9 | 72.4 | 806 | 400 | 406 | 41.5 | 40.3 | 42.8 |
| 20-24 | 1,378 | 761 | 617 | 86.3 | 94.5 | 78 | 1,048 | 581 | 467 | 82.6 | 90.8 | 74.3 |
| 25-29 | 1,341 | 766 | 575 | 85.9 | 97.6 | 74.2 | 1,368 | 757 | 611 | 87.9 | 97.2 | 78.5 |
| 30-39 | 1,900 | 1,031 | 869 | 85.1 | 98.2 | 73.5 | 2,730 | 1,522 | 1,208 | 88.5 | 98.3 | 78.6 |
| 40-49 | 1,929 | 1,045 | 884 | 86.1 | 97.8 | 75.4 | 1,879 | 989 | 890 | 86.5 | 97.4 | 77.0 |
| 50-59 | 1,424 | 795 | 629 | 82.4 | 95.4 | 70.3 | 1,637 | 906 | 731 | 77.8 | 91.9 | 65.3 |
| 60 <br> and <br> over | 1,029 | 565 | 464 | 59.3 | 77.5 | 46.1 | 885 | 516 | 369 | 37.9 | 50.5 | 28.2 |

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Table XI: Econonic activity rate by sex and certain age grouns in Czechoslovalia and Poland

| Age <br> Group | Czechoslovakia <br> (1970) |  | Poland <br> (1973) |  |
| :--- | :---: | :---: | :---: | :---: |
| $15-19$ | 34.7 | 41.3 | 32 | 26.5 |
| $20-24$ | 30.2 | 78.7 | 37.5 | 74.5 |
| $25-29$ |  | 79.3 |  | 79.0 |
| $30-34$ |  | 79.0 |  | 80.0 |
| $35-39$ |  | 81.1 |  | 82.3 |
| $40-44$ |  | 80.2 |  | 81.6 |
| $45-49$ |  | 77.6 |  | 79.0 |
| $50-54$ |  | 70.2 |  | 74.4 |
| $55-59$ | 35.3 | 35.9 | 37.3 | 64.7 |
| $60-64$ | 32.7 | 17.9 | 76.2 | 4.4 |

Sources: -"The Population of Poland", Polish Academy of Bciences. Commitice for Demographic studies, Warssava, 1974.
-"La Population de la Tchécoslovaquie" CICRED, serics, Paris 197\%.

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2. Classification of the rorking population by branch of activity
33. Table XII gives the classification of the working population by branches(1) during the period 1950-1974.

Pable -II: RUNANIA - Classification of the working population by branch of activity

| Total working population | 1950 | 1960 | 1965 | 1970 | 1974 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Industry | 12.0 | 15.1 | 19.2 | 23.0 | 29.6 |
| Construction | 2.2 | 4.9 | 6,3 | 7.8 | 8.1 |
| Agriculture | 74.1 | 65.4 | 56.5 | 49.1 | 39.8 |
| Forestry | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Transport | 1.9 | 2.4 | 3.1 | 3.7 | 3.9 |
| Communications | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 |
| Distribution | 2.5 | 3.4 | 4.0 | 4.3 | 5.4 |
| Local authorities Housing service | 0.7 | 1.5 | 2.1 | 3.0 | 3.2 |
| Teaching, cultural affairs, arts | 2.3 | 2.7 | 3.5 | 3.7 | 3.9 |
| Science and scientific affairs | 0.2 | 0.4 | 0.5 | 0.5 | 0.7 |
| Health, social welfare | 1.1 | 1.6 | 2.0 | 2.3 | 2.5 |
| Administration | 1.7 | 1.2 | 1.0 | 0.7 | 0.7 |
| Other branches | 0.8 | 0.8 | 1.0 | 1.1 | 1.3 |

Source: "Anuarul Statistic........ 1975".
34. Agriculture still holds pride of place in spite of a bif decline during the last 25 years ( $74.1 \%$ in 1950 , $39.0 \%$ in 1974). Industry cones second and has made substantial progress ( $12 \%$ at the beginning of the period as against almost $30 \%$ at the end). Except for the Administration, all the other branches have followed the same trend of growth at the expense of asriculture. Figure 4 gives a clearer picture of this trend.
(1) Vorking population less salaried members of political organizations, national servicemen and prisoners. Most of the tables given in Rumanian publications relate to "the gainfully occupied population".

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FIG. 4 - RUMAINIA - Trends in the working population by branch of activity $(1950=100)$

35. The local authorities, building, science and scientific affairs, comunications, health and social welfare, distribution and transport and teaching, in that order, made very substantial progress.
36. During the most recent period shown on the chart (1970-1974) a number of differences appeared in the development of the branches. The srowth rate of local authorities and in construction seems to have decreased but the communications, industrial, distribution and, above all, science and scientific affairs branches (which had fallen behind somewhat during the five previous years) increased their rate of expansion. Health and social services, transport and teaching continued to expand in the same vay as during the preceding five-year period.

## 3. Occupational training

37. No statistical breakdown is available showing the level of cualification in the different economic branches. Nevertheless, the following table shows the number of persons who completed their studies during the period 1950 to 1970, by level of training and gives a good general picture of the trend in the field of education.

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Table XIII: RUIMIIA - Number of certificates awarded at different educational levels, 1950-1970

| Educational level | 1950-1955 | 1956-1960 |  | 1961-1965 |  | 1966-1970 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\|\begin{array}{c} \text { Numbers } \\ \text { (in } \\ \text { thousands) } \end{array}\right\|$ | $\begin{aligned} & \text { Numbers } \\ & \text { (in } \\ & \text { thousands } \end{aligned}$ | $\begin{gathered} \text { Variation } \\ \text { from } \\ \text { precedingt } \\ \text { period } \end{gathered}$ | Numbers (in <br> thousands | $\begin{aligned} & \text { Variation } \\ & \text { from } \\ & \text { precedingt } \\ & \text { period } \end{aligned}$ | $\begin{aligned} & \text { Numbers } \\ & \text { (in } \end{aligned}$ <br> thousands | $\begin{aligned} & \text { Variation } \\ & \text { from } \\ & \text { preceding } \\ & \text { period } \end{aligned}$ |
| Total | 727.9 | 787.5 | + 8.2\% | 855.6 | + 8.6\% | 995.6 | + $16.4 \%$ |
| $\begin{aligned} & \text { Training } \\ & \text { schools } \end{aligned}$ | 195.5 | 140.9 | -27.9\% | 257.3 | + 82.6\% | 348.6 | + 35.5\% |
| Secondary education | 227.7 | 179.9 | -21.0\% | 377.3 | +209.7\% | 510.5 | + 35.3\% |
| Higher education | 57.0 | 57 | 0.0\% | 66.9 | + 17.4\% | 115.6 | + $72.8 \%$ |

Source: "The population of Rumania".
38. During the period 1956-1960, the overall advance of $8.2 ;$ compared with the previous period would seem to be attributable exclusively to progress in primary and general education since awards of professional and secondary certificates and diplomas declined and awards of higher education diplomas and degrees remained at the same level.
39. Over the succeeding ten years a big effort must have been made, firstly, at the occupational training and secondary levels ( $+82.6 \%$ and $+209.7 \%$ respectively for the period 1961-1965) and then in the field of higher education ( $+72.8 \%$ for the period 1966-1970).

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|  | ANNEX to AC/127- |
| :---: | :---: |
| RUYANIA - Sum of fertility |  |
| rates by age |  |
| Year | Sum of rates (for one woman) |
| 1948 | 2.89 |
| 1949 | 3.34 |
| 1950 | 3.17 |
| 1951 | 3.03 |
| 1952 | 3.00 |
| 1953 | 2.88 |
| 1954 | 3.00 |
| 1955. | 3.09 |
| 1956 | 2.89 |
| 1957 | 2.73 |
| 1958 | 2.59 |
| 1959 | 2.43 |
| 1960 | 2.34 |
| 1961 | 2.17 |
| 1962 | 2.04 |
| 1963 | 2.01 |
| 1964 | 1.96 |
| 1965 | 1.91 |
| 1966 | 1.90 |
| 1967 | 3.66 |
| 1968 | 3.63 |
| 1969 | 3.19 |
| 1970 | 2.89 |
| 1971 | 2.66 |
| 1972 | 2.55 |
| 1973 | 2.44 |
| 1974 | 2.72 |

RUMANIA - Trend in the gross birth and death rates

| Year | Birth rate <br> $\%$ | Death rate <br> $\%$ | Natural growth <br> $\%$ |
| :---: | :---: | :---: | :---: |
| 1946 | 24.8 | 18.8 | 0.60 |
| 1947 | 23.4 | 22.0 | 0.14 |
| 1948 | 23.9 | 15.6 | 0.83 |
| 1949 | 27.6 | 13.7 | 1.39 |
| 1950 | 26.2 | 12.4 | 1.38 |
| 1951 | 25.1 | 12.8 | 1.23 |
| 1952 | 24.3 | 11.7 | 1.31 |
| 1953 | 23.8 | 11.6 | 1.22 |
| 1954 | 24.8 | 11.5 | 1.33 |
| 1955 | 25.6 | 9.7 | 1.59 |
| 1956 | 24.2 | 9.9 | 1.43 |
| 1957 | 22.9 | 10.2 | 1.27 |
| 1958 | 21.6 | 8.7 | 1.29 |
| 1959 | 20.2 | 10.2 | 1.00 |
| 1960 | 19.1 | 8.7 | 1.04 |
| 1961 | 17.5 | 8.7 | 0.88 |
| 1962 | 16.2 | 9.2 | 0.70 |
| 1963 | 15.7 | 0.3 | 0.74 |
| 1964 | 15.2 | 8.1 | 0.71 |
| 1965 | 14.6 | 8.6 | 0.60 |
| 1966 | 14.3 | 8.2 | 0.61 |
| 1967 | 27.4 | 9.3 | 1.81 |
| 1968 | 26.7 | 9.6 | 1.71 |
| 1969 | 23.3 | 10.1 | 1.32 |
| 1970 | 21.1 | 9.5 | 1.16 |
| 1971 | 19.5 | 9.5 | 1.0 |
| 1972 | 18.8 | 9.2 | 0.96 |
| 1973 | 18.2 | 9.8 | 0.84 |
| 1974 | 20.3 | 9.1 | 1.12 |

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