

Point 3. Users and uses of projections

HOUSEHOLD SURVEY RESULTS

Supporting paper submitted by the Department of Statistics of Armenia for the session on Household Projections

The Department of Statistics, State Register and Analysis of the Republic of Armenia with the World Bank technical support carried out the Household survey during one month (November-December 1996). The main purpose of the survey was to study the current population living standards in Armenia and to produce a Poverty Profile for the country to analyse who are the poor, the reasons of the poverty, as well as, if it is possible, to find the ways how to alleviate the poverty and to make households projections.

The present appraisal of the poverty level is based on the results of the Household survey, conducted with a new methodology corresponding to international standards.

A self-weighting sample was created, by which all households have equal probability to be included in the sample. The sample size was 5,040 households, while 100 villages and 28 towns were covered by the survey. In each rural settlement 20 households were selected, in 12 small towns the number of households selected was 40, in the remaining 10 towns the number of selected households was depending on the number of population. In total, information was received from 4920 households: 3015 from urban settlements and 1905 from rural settlements.

From the total number of surveyed households, 25% (or 1260) made notes in the daily diaries on their expenses and consumption of food. The questionnaire on living standards consisted of 13 parts, through which information was received on households' incomes, type of activity, transfers and expenses, including the expenditures on food, goods, services, expenses for business and other expenses. In addition, information was collected on the population subjective assessment of the current economic situation of the family and the expectations for the future.

1. Poverty. The current decrease of production, together with the increasing inequality of income distribution caused sharp extension of poverty. To estimate the poverty, first of all it is necessary to give its definition. There is neither a simple definition of poverty nor an ideal method to determine the characters of poverty.

For the present analysis, the definition of poverty was formulated as following: "the poverty" is the inability to maintain the minimal consumption. There is not an official line for poverty in the Republic. With the help of the World Bank experts, the methods for poverty estimation were selected and the relevant calculations were produced to determine:

- a) the comparative line of poverty

- b) the absolute line of poverty
- c) the subjective assessment of households on the current economic situation and their expectations.

Absolute Line of Poverty

The estimations of the Absolute Line of Poverty are based on expenditures on foodstuffs.

Food Line of Poverty. To produce the Food Line of Poverty, 24 kinds of most frequently used foods by all decile groups were selected. As the main part of the poor population was fixed in 3-7 decile groups, the actual consumption of food was calculated by per capita consumption in that groups. Consumption comprised 2100 kcal. per capita per day.

To estimate the minimal Food basket value, the average prices by regions from the questionnaire were used. Its value was calculated at the regional as well as the national level, using average arithmetic values weighted by the number of households in the marzes.

The value of the actual Food basket (Food Line of Poverty) at the Republic level comprised 6612 drams per capita monthly.

Box. Minimal Food basket.

The decrease of the average per capita incomes and the unfavourable leaps of food prices during the last few years determined a decrease of the consumption of food products and, in general, a deterioration of the food intake. One third of the rural population in the Republic used mainly food products of own production. The urban population, which comprised two thirds of the total population of the Republic, makes seasonal stocks of foods for the winter. These occurrences are reflected in the Households survey data.

According to the results of the survey on the structure of the current expenses, 50% of the expenditures are on food. For poor people the percentage is 73% and for rich people is 31%. The households with low income are characterised by low availability of food and by sharp food unbalance.

The most frequently used food products were bread and bakery products, potatoes, oils and fats. The consumption of meat, meat products, milk and dairy produce, fruits and vegetables, was very low.

The minimal consumption basket was calculated on the basis of the actual consumption of foods at the reported period.

According to this, the minimal consumer basket on the basis of which the Food line was determined comprised 2100 kcal, about 65% of which were covered by bread and bakery products.

The structure of the consumer basket, like the budget of survival, is characterised by the consumption of low price products (bread, potatoes) in spite of the high price ones (meat, milk, fruits).

General Line of Poverty. To calculate the General Line of Poverty, the coefficient of the household expenses on goods and services was received according to the actual structure of expenses of the selected households.

On the basis of the Food basket and the coefficient of expenses on goods and services, the actual minimal Food basket was calculated, the value of which is considered as the Poverty line.

The actual minimal consumption basket per capita (Poverty line) was determined at 10,784 drams at the Republic level.

The households for which the average per capita current expenses were lower than the Food line were considered as very poor households; those for which the average per capita expenses were lower than the Poverty line were considered as poor households.

According to the results of the survey, the sample population was divided into 3 groups at the Republic level:

- a) non-poor households (45,3%)
- b) poor households (27%)
- c) very poor households (27,7%)

According to this distribution, about 2 millions people in the Republic were poor, 1 million of which were very poor.

Other poverty indicators. The calculation of specific indicators of poverty was done:

- Depth of Poverty ($P\alpha_1$).
- Severity of Poverty ($P\alpha_2$).
- Gap of poverty.

The depth of poverty was 21,5% and the sharpness of poverty was 11,1%. They both indicate that the largest share of the poor population is far from the Poverty line.

2. The territorial structure of the poverty.

The urban population, which comprised 67% of the total population of the Republic, was in the worst economic situation: 29,2% were beyond the Poverty line and 29,6% were very poor, which average per capita expenses were lower than the Food line.

The poverty of the urban population was caused by the closing-down of enterprises and by mass dismissals. Many enterprises were standing idle, the wages were paid with great delay, the number of staff, as well as the volume of the production were decreased at the industrial enterprises.

In 1996, in comparison with 1991, the number of employees engaged within the economy of the Republic was decreased by 39% (excluding employees at peasant farms).

In rural settlements the population was in better conditions. One of the first reforms in Armenia was the privatisation of land, which encouraged the agricultural production both for own consumption and for sale.

However, even with more favourable economic conditions (each peasant household has separate allotment of land as an ownership), in rural settlements 23,6% of the population was poor and 24,4% was very poor.

The poverty was explained by:

1. different size of land allotments owned by peasants in different regions
2. fertility of the land
3. effectiveness of running the farm
4. characteristics of the irrigation systems.

The altitude of the rural settlement has an influence on the economic situation of the rural population.

The rural settlements are divided into 3 territorial zones by altitude level:

Level 1- altitude up to 1300 m. (39% of the rural population)

Level 2- altitude from 1300 to 1700 m. (26% of the rural population)

Level 3- altitude 1700 m. and higher (35% of the rural population).

The higher is the rural settlement, the worse is the economic conditions of the population.

As it was mentioned above, the share of poor population is high in rural areas as well as in urban areas and on average for the all Republic. In the plain regions the conditions for farming are more favourable and effective, and the share of non-poor population is relatively high. In fact, the share of non-poor population, which is 52,0% for the rural population, is 54,3% for the population living in areas of altitude up to 1300 meters. The share of very poor rural population is on average 24,4%, but at the Level 1 of altitude is 21,6%, at Level 2 is 25,8% and at Level 3 is 26,8%.

| | Households | | | Population | | |
|-----------|------------|-------|-------|------------|-------|-------|
| | Altitudes | | | Altitudes | | |
| | 1 | 2 | 3 | 1 | 2 | 3 |
| Non-poor | 58.6 | 57.1 | 53.0 | 54.3 | 51.6 | 49.6 |
| Poor | 23.0 | 20.6 | 22.5 | 24.1 | 22.5 | 23.6 |
| Very poor | 18.4 | 22.3 | 24.5 | 21.6 | 25.8 | 26.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

The very poor population is mainly concentrated in the earthquake zone and bordering zone, i.e. in the economically not active regions. The very poor people, who are 27,7% at the Republic level, in the earthquake zone are 30%. In the urban areas the situation is even worse. The very poor population of bordering zone is the 29,2% and they mainly concentrated in the rural areas. This is because of the impossibility of cultivating the land.

3. The current demographic processes

The current economic crisis has a negative impact on the main demographic indicators. The marriage rate has constantly decreased. During the period of independence from 1991 to 1996 the marriage rate has decreased sharply.

In the same period, the birth rate has decreased from 21,6 per 1000 to 12,8. The birth rate in the Republic does not provide the reproduction of population. In 1994-1995 the net coefficient of birth was 0,768 for the total population of the Republic, 0,688 for the urban population and 0,953 for the rural population. For a long time the reproduction of the population was guaranteed by the rural population. Now, even in the villages there is no reproduction of population.

Accordingly, the total fertility rate also decreased, in 1995-1996 it was 1,598, 1,434 for urban women and 1,960 for rural women.

The crude mortality rate, as well as the infant mortality rate, is difficult to summarise. The crude mortality rate increased from 1991 to 1993 and then decreased from 1994 to 1996.

In this situation, the most vulnerable were the men in the active age. From the total number of died men, one third were in the active age. The main causes of their deaths were diseases of the circulatory system, accidents, cancers, diseases of the digestive and respiratory systems. As a result of

the strained socio-economic situation, from 1991 to 1995 the suicide rate has increased (from 4,3 to 7,2 per 100 thousand).

The budget limitations lead to sharp shortage of financial, material and technical resources, which had an effect on the functioning of the health care system.

Various diseases characteristic of poverty are observed. During 1991-1996 the deaths caused by infections and parasitic diseases for men in active age increased, while for women an increase of deaths was observed in 1992-1995.

The growth of deaths caused by mental affections for men in active age was also observed (1,8 times).

At the same time, as the socio-economic conditions worsened, a decrease of infant mortality was noticed. The main causes of deaths were diseases of respiratory system, infections and parasitic diseases.

It is also possible that the decrease of the infant mortality rate was caused by statistical inaccuracy. Only in 1996 the increase of infant mortality in comparison with the previous year was observed. It should be noted that the number of infants with weight lower than 2,5 kg. has increased (from 66,9 per 1000 live births in 1991 up to 74,7 in 1996).

The number of invalid children is also increased. During the period 1991-1996 the number of invalid children was increased from 4859 to 7048.

4. Who are the poor people?

The groups of population that more frequently are poor are:

1. Members of large families with many children.
2. Unemployed persons.
3. Retired and invalid people.
4. Persons with low education.

Household size and children.

The risk to be poor depends on the composition of the household and the number of dependants. The households with children smaller than 7 years old, or have 3 or more children, as well as the large households have higher probability to be poor. If the average household size in the sample population was 3,9 people, it was 4,1 among the poor households and 4,5 among the very poor households. The very poor households have many children (on average 1,55 against 1.07 for not poor households). The very poor households are 20,7% of the households with one child, 19,5% of the households with 2 children and 27,3% of the households with 3 or more children.

Very sharp poverty was observed among households with 8 and more members: 40,2% of such households are very poor, 23,4% are poor and only 36,4% are not poor.

The households with children smaller than 7 years old are more frequently (33%) very poor. The regression analysis shows that the arrival of one child in a family increase the deepness of poverty by 6,9%, in comparison to the family without children.

Box. Household size and children.

For many years the birth rate in Armenia has been higher than the average for the USSR but lower than in Azerbaijan and Middle Asia. However, in the last years the decrease of the living conditions of the population was accompanied by the tendency to decline of the birth rate.

Survey data on health care show that in 1996 the expenses on childbirth was on average 20 thousand drams, when the birth care services had to be free of charge. The high expenditures associated with childbirth lead to the decrease of the birth rate.

As the table below shows, since 1990 the absolute number of births, as well as the birth rate, was steadily decreasing in the Republic. The marriage rate in 1996 was 2 times lower than in 1990. In comparison with the previous two years, in 1996 the infant mortality rate has increased.

| Years | Rate of birth | | Infant mortality | |
|-------|--------------------------------|-------------|------------------|----------------------|
| | Absolute number of live births | Births rate | Absolute data | Per 1000 live births |
| 1985 | 80306 | 24.1 | 1987 | 24.8 |
| 1988 | 74707 | 21.6 | 1911 | 25.3 |
| 1989 | 75250 | 21.6 | 1534 | 20.4 |
| 1990 | 79882 | 22.5 | 1465 | 18.5 |
| 1991 | 77825 | 21.6 | 1404 | 17.9 |
| 1992 | 70581 | 19.2 | 1336 | 18.5 |
| 1993 | 59041 | 15.8 | 1048 | 17.1 |
| 1994 | 51143 | 13.7 | 772 | 14.7 |
| 1995 | 48960 | 13.0 | 697 | 14.2 |
| 1996 | 48134 | 12.8 | 747 | 15.5 |

The systematic decline of births lead to a reduction of the absolute number of children aged from 0 to 14 years, as well as its share in the total population:

| Years | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Average size of population aged from 0 to 14, thousands | 1051.0 | 1082.1 | 1097.4 | 1110.4 | 1111.5 | 1096.8 | 1074.9 | 1049.1 |
| Proportion of population aged from 0 to 14 | 30.2 | 30.5 | 30.4 | 30.1 | 29.8 | 29.3 | 28.6 | 27.8 |

With the decline of the living standards, the allowances for children were adopted as a support to families. But the amount of allowances was too small (1200 drams or 18% of Food line of Poverty), and it was symbolic. The weights of children aged from 2 to 5 years living in very poor families were lower of those living in not poor families.

Unemployment

Unemployment is closely connected with the poverty. The official registered unemployment rate was 10,1% by the end of 1996 at the Republic level. Recently the absolute number of unemployed people has systematically increased and by the end of 1996 it was 3 times bigger than in 1992.

According to the survey results, 28,3% of the economically active population were unemployed. The living conditions of unemployed people were worse than those of employed people: 36% of unemployed were very poor, against only 21% of employees. The non poor were 53,5% of the employees and 36% of the unemployed. The regression analysis shows that the presence of an unemployed member in the family aggravated the depth of poverty by 6,5%.

The allowances for unemployment were 2192 drams, 33,2% of Food line of Poverty and 20,3% of Poverty line.

Many unemployed people are involved in the informal sector. The survey shows that 3,9% of unemployed were self-employees, with a prevalence of men over women.

The impact of unemployment upon the welfare of unemployed and their families depends on its duration. The lasting unemployment is a serious social and economic problem. According to the survey data, the average duration of unemployment (weighted by the number of unemployed) is 19,5 months. 14,4% of unemployed had no job for less than 6 months, 41,3% for more than 12 months.

In addition, the existence of a job does not mean not to be poor. Among the employees 21% were very poor and they were employees of the budgetary sphere¹. The average annual wages in budgetary sphere in 1996 comprised 5122 drams, which is 22,5% lower than the Food line of Poverty and more than 2 times lower than the Poverty line. Moreover, wages are currently paid with great delay, which also brings the employees beyond the Poverty line.

For those who receive a fixed income, the liberalisation of prices and inflation are causes of problems.

Pensioners and invalids.

The transition period is accompanied by decrease of births, migration of population in active age and, as additional result, ageing of the population. If during 1991-1996 the whole population has increased by 5,8%, the population elder than the active age has increased by 22,9%. The rate of increase for this category of population was about 4 times higher than the rate of increase of the total population. The share of persons older than the active age has increased from 12,5% by 14,6%. The growth of the size of this category of population lead to the growth of the number of pensioners by age. In addition, even higher was the rate of increase of disabled pensioners.

By the end of 1996 there were 748,9 thousand pensioners and persons who get allowances in Armenia. The average pension was 3152 drams. The minimal pension was 2275 drams (as of 01.07.96). The average pension for disability since childhood was 2435 drams and for invalid children (up to 16 year old) was 2640 drams.

The state pensions and allowances for pensioners and invalids were 2-2,5 times lower than the Food line of Poverty. However, other different factors have an impact on the living standards of the pensioners and invalids. The pensioners who live with their families were comparatively poorer than single pensioners and invalids, because the latter were under the "Paros" social protection programme. Among single pensioners, the share of poor was 37%, this is lower than the average for the Republic (54,7%). The level of poverty for single pensioners differs in connection with the place of residence. The risk to be poor was higher for single pensioners in Yerevan City (48,5%), relatively lower in other cities of the Republic (39,4%) and much lower in rural areas (28%). Poverty was a more extensive

¹ Paolo: I don't know what does "budgetary sphere" means.

phenomenon for not single and unemployed pensioners. In this category of population the poor were 60,6% approximately near to the rate of unemployed.

It seems that the factor of employment can alleviate the material situation of pensioners, but most of the employed pensioners (80,6%) remain below the Poverty line.

Persons with low education.

The higher and secondary-specialised education give an opportunity to avoid poverty, because having such an education it is easier to find a highly paid work. This was testified by the survey results: 53,9% of people with high education were non poor. For the population with lower level of education the share of not poor was the lowest (41,5%), a percentage which was lower than the average for the Republic (45,3%).

The table below shows the relation between the education level and the risk of poverty:

| | Level of education | | | | | | | |
|-----------|--------------------|--------|-----------------------|--------|-----------|--------|-------------------|--------|
| | Tertiary | | Secondary specialised | | Secondary | | Primary and lower | |
| Non poor | 1407 | 53.9% | 1682 | 48.0% | 2469 | 43.1% | 445 | 41.5% |
| Poor | 647 | 24.8% | 954 | 27.2% | 1547 | 27.0% | 312 | 29.1% |
| Very poor | 558 | 21.4% | 870 | 24.8% | 1716 | 29.9% | 314 | 29.3% |
| Total | 2612 | 100.0% | 3506 | 100.0% | 5732 | 100.0% | 1071 | 100.0% |

5. Household Projections.

At present, the Ministry of Statistics is conducting an integrated survey on Households. The main purpose of this survey is to define the living standards of the population.

The integrated survey should be conducted for 12 month, with monthly rotation of the settlements, as well as of the households. The sample size is 3600. This survey method levels the impact of seasonality and gives an opportunity to get a more real picture of the consumption.

The survey was started on 1 July 1998 and will be completed by 30 June 1999.

By the end of 1999 the results of the survey will be processed and new data on the population living standards will be available. The results of Household Survey are used on macro level for the Households projections.