# CHAPTER IV.

# POVERTY ASSESSMENT

### 4.1. Dynamics of Main Poverty Indicators

State social policy in Armenia considers the family unit as the subject of social assistance and for these reason it is necessary to know the proportion of poor households. On the other hand, the Poverty Reductions Strategy Paper aims at improving the living standards of each member of society, and for this reason, it is necessary to know the proportion of poor people in the country. In this report, the analysis of poverty indicators is presented in two ways: according to households and according to the population of those households. Here it is assumed that all members of a household have the same living standards and that the living standards of one member is the same as the living standards of the whole household[1]: In addition, it should be noted that when assessing the level of poverty, household consumption was considered taking into account the actual number of days that members of the households were present during the survey month.

As already mentioned, the 2003 survey covered 4,641 households, and the number of individuals residing permanently in those households was 19,232, while the actual number of individuals present during the survey was 18,062 people.

The 2003 survey showed that the poverty level was: 36.3% by households and 42.9% by population. This difference is explained by the fact that households with many members are more likely to have low living standards. This conclusion is confirmed by the numbers indicated in table 4.1.

As already mentioned, the average size of household sampled was 4.14 persons (permanent population), with 4.05 persons in urban and 4.29 persons in rural areas. The poverty level depending upon the average size of household is presented in the table below.

**Table 4.1. Average Household Size and Level of Poverty**
(by permanent population)

| Level of Poverty | Households size (persons) | |
|---|---|---|
| | 2002 | 2003 |
| Total including | 4.14 | 4.14 |
| Not poor | 3.81 | 3.78 |
| Poor | 4.43 | 4.69 |
| Very poor | 4.94 | 5.29 |

As mentioned previously, the population of the country can be divided into three groups according to the level of welfare:

1. **Not poor population -** the sector of population whose average monthly per capita expenditure (consumption aggregate) exceeds the value that determines minimal living standards (here the cost of minimum consumer basket).
2. **Poor -** the sector of the population whose average monthly per capita expenditure (consumption aggregate) is lower than the value that determines minimal living standards but exceed the poverty food line (here the cost of minimum food basket).

[1] *This approach does not consider the possible inequality within a household: To estimate this inequality an equivalency scale should be used which however is no longer defined for Armenia*

3. **Very poor -** the sector of the population whose average monthly per capita expenditures (consumption aggregate) is lower than the poverty food line.

Poverty reduction is a very long process. However, the on-going macroeconomic developments of recent years are being reflected in the changing living standards of the population. A trend in poverty level reduction was first registered in the 2001 survey when it fell to 50.9% from the 55.05% level estimated in the 1998/99 survey data. The 2002 survey data also recorded a reduction to 49.7% and the 2003 survey results indicated a further drop of 6.8 percentage points to 42.9%. The poverty level by household reduced by 7.7 percent points, to 36.3%.

The percentage indicator of poor population – the poverty threshold- is a well known, easy to apply and easily understood indicator commonly used to assess living standards. However, it does not take into account the differences between poor households or between the living standards of the population. It assumes that all the poor have the same living standards. It is not sensitive to poverty depth, e.g. it does not change when those with lower level of living standards below the poverty line become poorer or slightly richer, as long as they continue to be below the poverty line. In order to assess the poverty snapshot more deeply, such indicators as Poverty Gap and Poverty Severity need to be calculated.

**Poverty gap** – The poverty gap is the average distance separating the poor population from the poverty line, it shows how far off households are from the poverty line. It captures the mean aggregate consumption (income) shortfall relative to the poverty line across the whole population. When calculated across the poor population it provides information of the poverty shortfall or deficit, that is how much, in terms of the percentage of the poverty line, the mean consumption of the poor on average falls short of the poverty line. The shortfall multiplied by the number of the poor and usually expressed as percentage of GDP provides an estimate of what would be the minimum cost of eliminating poverty in the society, assuming perfect targeting.

**Poverty severity** (quadratic mean of poverty gap): The quadratic mean of the poverty gap shows the inequality within the poor population. If social support is directed to the poor this indicator decreases and converse applies.

The indicators of poverty threshold, poverty gap and poverty severity belong to in Foster-Griere-Torbeque group of indicators.

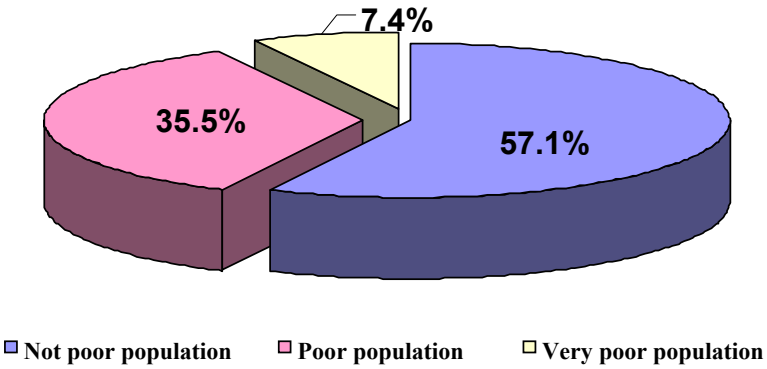
The changes in the main indicators of poverty for Armenia are presented in the table below:

***Table 4.2. Dynamics of the Main Poverty Indicators in the Republic (for population)***

*Percentage*

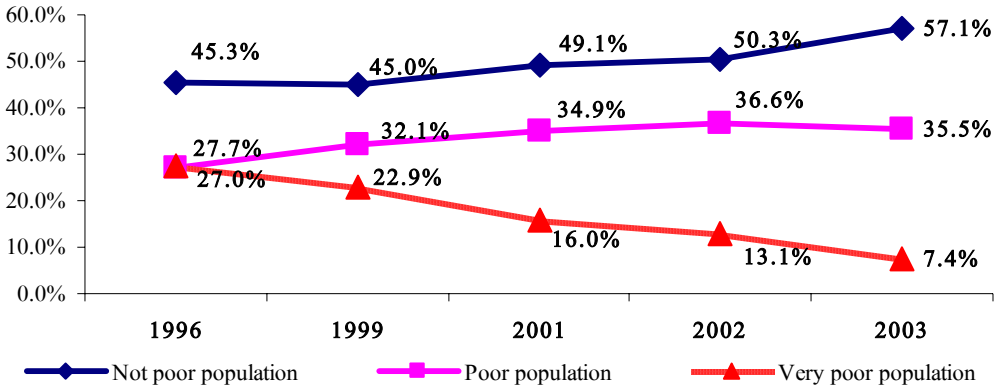
| | **1996** | **1999** | **2001** | **2002** | **2003** |
|---|---|---|---|---|---|
| Not poor population | 45.3 | 44.95 | 49.1 | 50.3 | 57.1 |
| Poor population including | 54.7 | 55.05 | 50.9 | 49.7 | 42.9 |
| Very poor population | 27.7 | 22.91 | 16.0 | 13.1 | 7.4 |
| Poverty gap | 21.5 | 19.0 | 15.1 | 13.5 | 8.9 |
| Poverty severity | 11.1 | 9.0 | 6.1 | 5.2 | 2.8 |

*Exhibit 4.1. Poverty Incidence in 2003.*




*Exhibit*

*4.2. . Dynamics of the Main Poverty Indicators*




The indicators show that the level of the very poor population has decreased more rapidly over the five surveys. This decrease may be explained by both positive and negative factors. Targeted State Social Policy and improved targeting have been positive factors. The negative factor is the low value of the actual food basket that does not provide an appropriate level of living standards. However, in the calculations, this approach leads to quicker reduction in the number of the very poor population.

The degree of unequal distribution of incomes and expenditures among the population is determined by the Gini coefficient. The statistical value of Gini coefficient is between 0 and 1. If all the population of the country had equal incomes then the Gini coefficient would be 0, and if the whole income of the country belonged to only one person then it would be 1.

According to the survey results, the Gini coefficient was 0.438 for current income and 0.334 for consumer expenditures in 2003.

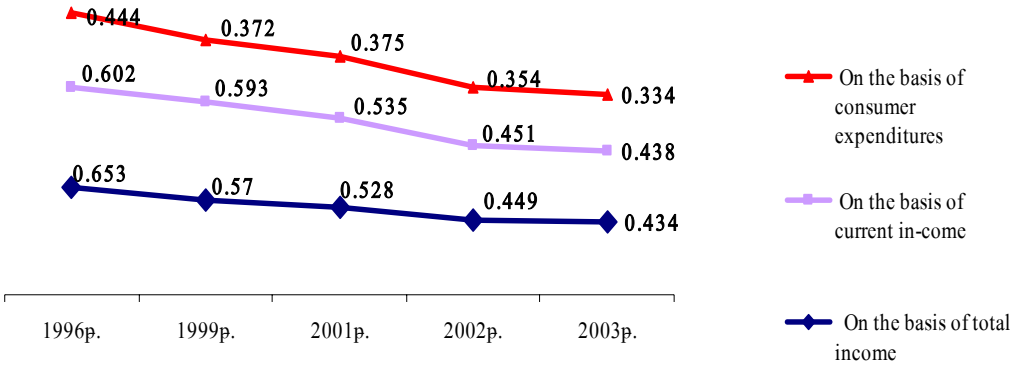
In 2003 there has been a slight reduction in the Gini coefficient (both by consolidated and current incomes); even these indicators prove that disparity and polarization are quite high in society.

*Table 4.3. Polarization of the population According to Gini Coefficient*

| Gini Coefficient | 1996 | 1999 | 2001 | 2002 | 2003 |
|---|---|---|---|---|---|
| • On the basis of total income | 0.653 | 0.570 | 0.528 | 0.449 | 0.434 |
| • On the basis of current income | 0.602 | 0.593 | 0.535 | 0.451 | 0.438 |
| • On the basis of consumer expenditures | 0.444 | 0.372 | 0.375 | 0.354 | 0.334 |
| • On the basis of consumption aggregate | -* | -* | 0.344 | 0.325 | 0.271 |

* This indicator is calculated since 2001.

**Exhibit *4.3. Polarization of population According to Gini Coefficient***



For comparison, the most recent available data on Gini coefficient for several Eastern European countries is presented in the table below.

**Table 4.4. Selected Eastern European Countries Ranked by the Gini Coefficient Calculated on Per Capita Basis**

| Country | Year | Estimation Base | Gini Coefficient |
|---|---|---|---|
| Hungary | 1999 | income | 0.26 |
| Slovenia | 1998 | income | 0.26 |
| Bosnia | 2001 | consumption | 0.27 |
| Macedonia | 1998 | | 0.29 |
| Belarus | 1999 | expenditures | 0.30 |
| Ukraine | 1999 | income | 0.30 |
| Bulgaria | 1999 | income | 0.33 |
| Lithuania | 2000 | consumption | 0.33 |
| Serbia | 2002 | income | 0.33 |
| Croatia | 1998 | consumption | 0.36 |
| Estonia | 2001 | income | 0.38 |
| Russia | 2000 | income | 0.40 |
| **Armenia** | **2003** | **Total income** | **0.43** |

In order to assess possible changes in the level of poverty, a sensitivity analysis of the poverty line was carried out, i.e. the poverty level is assessed for various values of the poverty line.

**Sensitivity analysis of the poverty line**: In transition, the financial state of the population usually fluctuated continuously and as a result, certain groups appear regularly below the poverty line. Although the distribution of households and the population in households is unequal according to the aggregated consumption indicator (which was used to assess the poverty level), a certain concentration of households and/or population is noticed around the poverty line (in 2003 the total poverty line was 12,629 drams). The proportion of population who are always at risk of becoming poor (those whose per capita consumption is slightly higher than the poverty line and is about 13000 drams) is 3.6%. However, the proportion of the population who in fact need state social assistance comprise 46.5% of the total population (the sum of those below the poverty line (42.9%) and those who are at high risk of becoming poor (3.6%)). Sensitivity analysis shows that the proportion of the poor and very poor population is very sensitive to even the slightest changes in the poverty line.

A 10% increase in the poverty line results in an increase in the proportion of poor from 42.9% to 48.8%, which means an additional growth in the poor population by 13.8%.

A 10% reduction in the poverty line results in a decrease in the proportion of poor from 42.9% to 30.4%, which means the poor population decreased by 29.1%.

If the poverty line is increased by 20%, then the proportion of the poor population will reach 56.8% whereas the 20% reduction in the poverty line will result in decrease to 21%, which could be 50% lower than the current level of poverty.

A 25% increase in the poverty line would result in the proportion of poor population reaching 59.8%, while a 25% decrease would result in a decrease of 16.3%.

### 4.2. Territorial and Regional Poverty Indicators

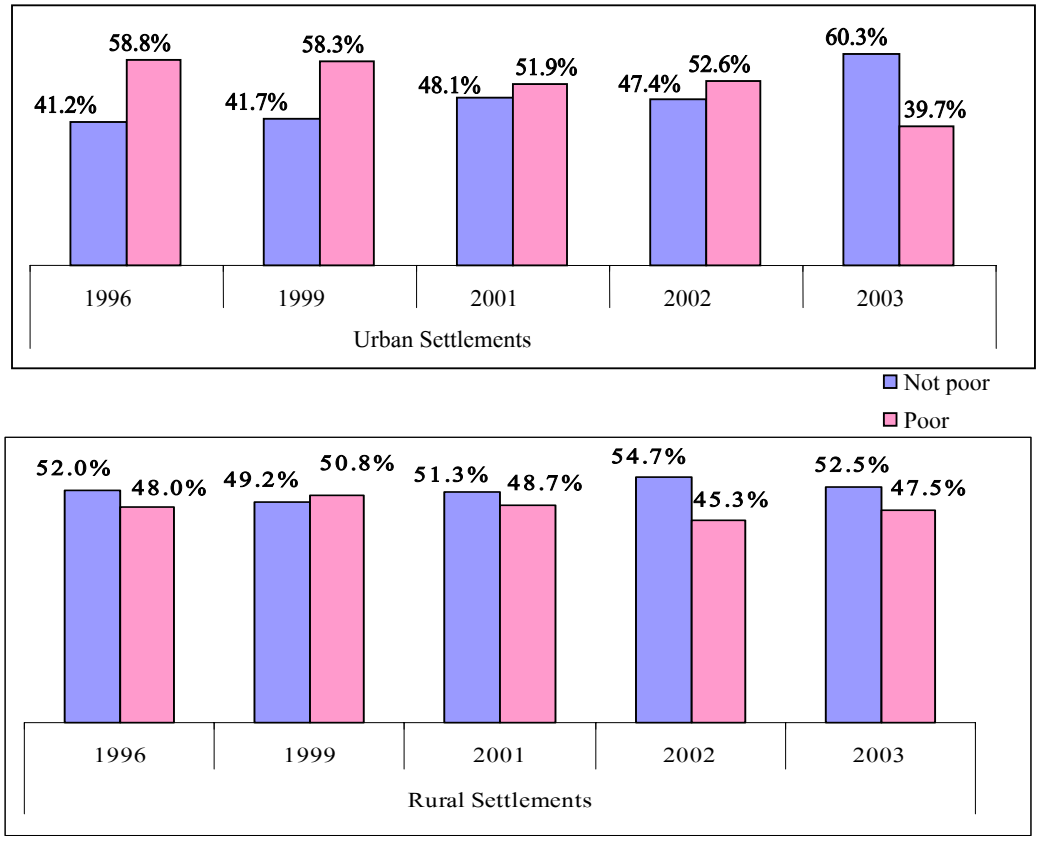
In poor countries, the rural population is invariably poorer than the urban population. However in Armenia this pattern did not occur until last year. Before 2003 the proportion of the not poor population in rural areas exceeded that of the urban population (in 2002 by 7.3 percent points). However the 2003 survey revealed that the regional snapshot of poverty has changed and the proportion of the poor population in rural areas now surpasses the urban population by 7.8 percent points.

*Table 4.5. Poverty in Urban and Rural Areas*

**Percentage**

| | Urban areas | | | | | Rural areas | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1996 | 1999 | 2001 | 2002 | 2003 | 1996 | 1999 | 2001 | 2002 | 2003 |
| Not poor | 41.2 | 41.73 | 48.1 | 47.4 | 60.3 | 52.0 | 49.24 | 51.3 | 54.7 | 52.5 |
| Poor | 29.2 | 35.10 | 33.6 | 37.6 | 31.8 | 23.6 | 28.21 | 37.4 | 35.1 | 40.7 |
| Very poor | 29.6 | 23.17 | 18.3 | 15.0 | 7.9 | 24.4 | 22.55 | 11.3 | 10.2 | 6.8 |

*Exhibit 4.4. Dynamics of Poverty in Urban and Rural Areas*



Despite many problems in the agricultural sector (irrigation, no agricultural machinery, low culture of land cultivation, limited access to loans, etc.) the rural households managing subsistence farming, can feed themselves and sell part of their agricultural products, thus in the context of food provision, the living standards in villages are higher than in cities, which is evident from the proportion of the poor population below the food line (very poor).

It was mentioned above that incomes and expenditures are distributed unequally in villages and in cities A clear example of this is the Gini coefficient, which is presented in the table below:

***Table 4.6. Gini Coefficient for Urban and Rural Settlements***

| Gini Coefficient | Total for the Republic | Including | | |
|---|---|---|---|---|
| | | In Yerevan | In Other towns | In Rural settlements |
| • On the basis of total income | 0.434 | 0.468 | 0.457 | 0.366 |
| • On the basis of current income | 0.438 | 0.479 | 0.458 | 0.366 |
| • On the basis of consumer expenditures | 0.334 | 0.334 | 0.325 | 0.288 |
| • On the basis of consumption aggregate | 0.271 | 0.299 | 0.268 | 0.222 |

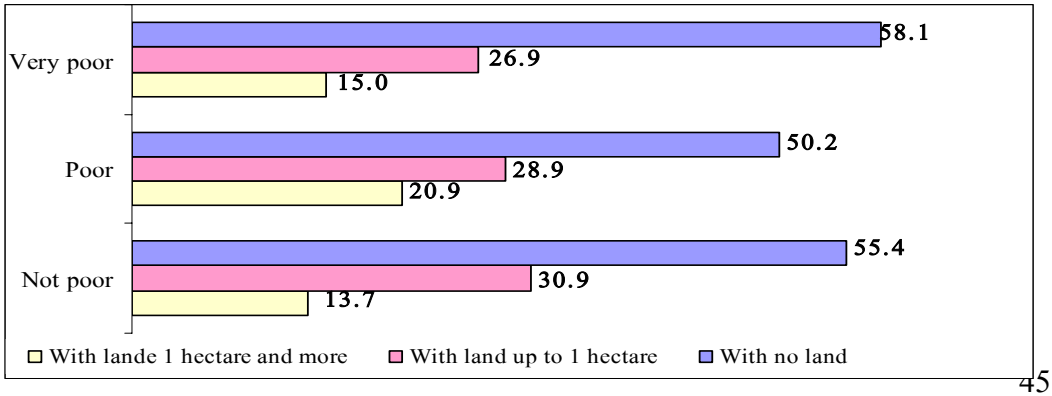
30.1% of households surveyed had less than 1 hectare of land, 16.0% had one or more hectares of land, and 53.9% did not have any land at all. There was a direct correlation between land holding and the incidence of poverty both in rural areas and in the country as a whole.

***Table 4.7. Land Size and Level of Poverty (by all households surveyed)***

**percentage**

| | Total | Not poor | Poor | Very poor |
|---|---|---|---|---|
| With land<br>• Up to 1 hectare | 30.1 | 30.9 | 28.9 | 26.9 |
| • 1 hectare and more | 16.0 | 13.7 | 20.9 | 15.0 |
| With no land | 53.9 | 55.4 | 50.2 | 58.1 |

***Exhibit 4.5. Land Size and Level of Poverty***



Only 4.0% of households surveyed had used loans or borrowed money for their agricultural activities out of which 39% were from banks and 37% from their friends. Only 1.6% of households surveyed received a loan from a bank.

The opportunity of using bank services differs markedly depending on the poverty level. The numbers presented in the table below demonstrate clearly that 72.2% of persons receiving loans are not poor households, and very poor households account for only 4.2% of loans**.**

**Table 4.8. Poverty Level and Use of Bank Credit (in percentage)**

| | Not poor | Poor | Very poor |
|---|---|---|---|
| Obtained credit or borrow money Including: | 54.9 | 39.1 | 6.0 |
| • from banks | 72.2 | 23.6 | 4.2 |
| • from Government project | 61.5 | 38.5 | - |
| • Parents | 20.0 | 53.3 | 26.7 |
| • Friends and relatives | 41.2 | 54.4 | 4.4 |
| • Other sources | 66.7 | - | 33.3 |

Geographical location also has some influence on the living standards of the population in rural areas. According to 2003 survey data, the higher a residence is above the sea level the more difficult are the economic conditions of the population. Plain zones at 1300 meters above the sea level are considered to be favorable for agricultural business. The poverty level of the population in rural areas according to the geographical location of the residence is presented in the table 4.8.

**Table 4.9. Poverty Level of Rural Population by Geographical Situation of the Settlement**

**Percentage**

| Rural population | Total | Including with altitude | | |
|---|---|---|---|---|
| | | Up to 1300 m above the sea level | 1300-1700 m over the sea | 1700m and more above the sea level |
| Not poor | 52.5 | 57.4 | 53.8 | 44.3 |
| Poor | 40.7 | 37.0 | 39.2 | 47.4 |
| Very poor | 6.8 | 5.6 | 7.0 | 8.3 |

### *4.2.1. Poverty Incidence in Urban Settlements*

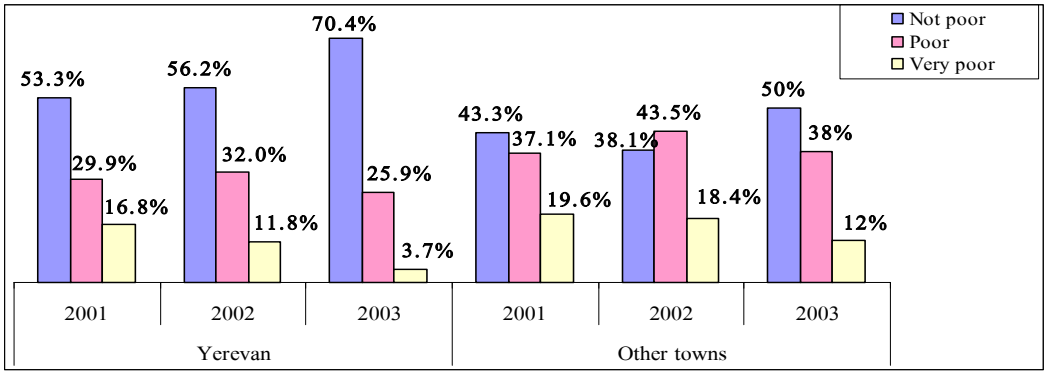
The analysis of the survey data revealed that the poverty reduction process is obvious only in Yerevan city. If in the whole Republic the share of the poor population decreased by 6.8 percent points, in Yerevan the poverty rates decreased 2.1 times more rapidly. It should be noted that the poverty level in other cities also started to decrease rapidly and as compared to the average of the Republic it decreases 1.8 times more rapidly.

*Table 4.10. Poverty Incidence in Urban Settlements*

**Percentage**

| | Urban Settlements | | | Including | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Yerevan | | | Other towns | | |
| | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 |
| Not poor | 48.1 | 47.4 | 60.3 | 53.3 | 56.2 | 70.4 | 43.3 | 38.1 | 50.1 |
| Poor | 33.6 | 37.6 | 31.8 | 29.9 | 32.0 | 25.9 | 37.1 | 43.5 | 37.7 |
| Very poor | 18.3 | 15.0 | 7.9 | 16.8 | 11.8 | 3.7 | 19.6 | 18.4 | 12.2 |

*Exhibit 4.6. Poverty in Yerevan and Other Towns*




### *4.2.2. Poverty Incidence in Marzes*

Although the sample results are representative only for the republic, urban and rural settlements and for Yerevan city, but the sample size is too small to assess the poverty level in marzes precisely. The changes in the poverty level in marzes should be used taking into account the value of the standard error. The data presented in Table 4.11 show that the level of poverty is decreasing in almost all marzes, with the exception of Ghegharkounik marz (59.9% as compared to 47.2 % in the previous year) and Syunik marz (34.6% compared with 32.7% in the previous year). In Yerevan, poverty decreased almost by one third. A comparatively small decrease in the poverty level was noted also in Lori marz (34.0% as compared to 44.6% in the previous year), as well as in Vayots Dzor and Tavush marzes. The poverty level is still high in Shirak and Aragatsotn marzes.

*Table 4.11. Poverty Incidence by Marzes*

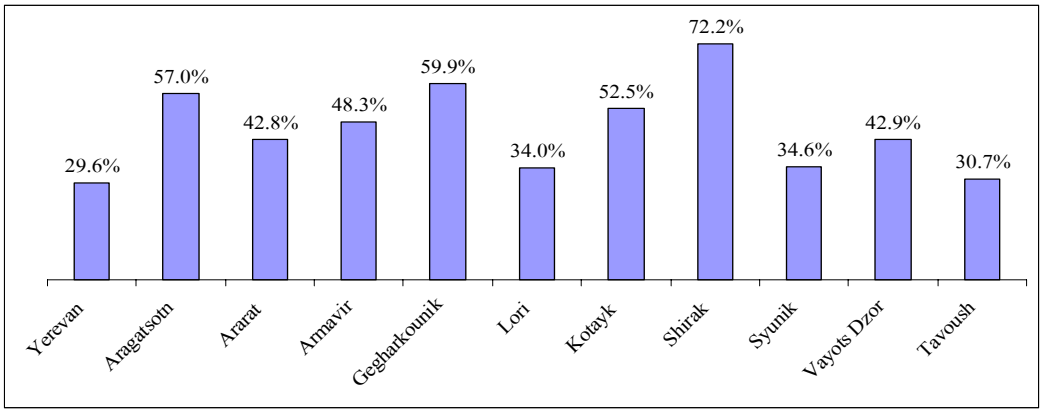
*Percentage*

| Marzes | 2002 | | | | 2003 | | | |
|---|---|---|---|---|---|---|---|---|
| | Poverty Level | Standard error | 95% interval of confidence | | Poverty Level | Standard error | 95% interval of confidence | |
| Total in the Republic | 49.7 | 3.1 | 43.3 | 56.0 | 42.9 | 4.7 | 33.3 | 52.5 |
| Including by marzes. Yerevan | 43.8 | 0.0 | 43.8 | 43.8 | 29.6 | 0.0 | 29.6 | 29.6 |
| Aragatsotn | 72.1 | 17.9 | ...*) | ...*) | 57.0 | 9.8 | 37.2 | 76.9 |
| Ararat | 45.4 | 4.3 | 36.7 | 54.2 | 42.8 | 7.4 | 27.9 | 57.7 |
| Armavir | 51.6 | 4.4 | 42.5 | 60.6 | 48.3 | 3.2 | 41.9 | 54.8 |
| Gegharkounik | 47.2 | 11.2 | 24.2 | 70.2 | 59.9 | 6.5 | 46.7 | 73.1 |
| Lori | 44.6 | 6.2 | 31.9 | 57.4 | 34.0 | 5.1 | 23.6 | 44.4 |
| Kotayk | 55.9 | 8.8 | 38.0 | 73.9 | 52.5 | 9.6 | 33.0 | 72.0 |
| Shirak | 73.6 | 4.8 | 64.9 | 83.6 | 72.2 | 7.1 | 57.7 | 86.7 |
| Syunik | 32.7 | 17.2 | ...*) | ...*) | 34.6 | 7.3 | 19.9 | 49.4 |
| Vayots Dzor | 53.2 | 0.0 | 53.2 | 53.2 | 42.9 | 0.0 | 42.9 | 42.9 |
| Tavoush | 42.2 | 11.1 | 19.5 | 64.8 | 30.7 | 4.6 | 21.4 | 40.0 |

**) The interval of confidence could not be estimated as the standard error is too high.*

The level of poverty with 95% of confidence and according to the average value of two standard errors was 49.7% in 2002 and 42.9% in 2003. In other words, we could state with 95% degree of confidence that the level of poverty was between 43.3% and 56.0% in 2002 and between 33.3% and 52.5% in 2003.

***Exhibit 4.7. Poverty Incidence in marzes in 2003***




### *4.3. Monetary Indicators of Poverty*

To assess poverty by monetary indicators, the indicators of income and consumption are generally used.

We have mentioned already that we used the aggregated indicator of consumption in the current analysis to assess poverty and welfare. Actual consumption shows the welfare level more precisely and it is easier to measure than income. For example, household income in rural areas

has a seasonal nature, and the incomes of the majority of individuals employed in the non-formal sector in cities and towns are usually irregular. It is also worth noting again that the incidence of poverty was estimated by weighting the household's consumption using only the actual days that household members were present during the month surveyed, while the average expenditures of the households was estimated as the arithmetical average of total expenditures.

The matrix of transitions was calculated to examine the sensitivity of the consumption and income indicators: in other words, the population has been divided into decile groups by the consumption and income indicators. Each household is included only in one decile by each indicator. If the households are included in the same decile both by consumption and by income indicators, they appear on the diagonal of the matrix. In cases where their income and consumption appear in different groups, they will not appear on the diagonal of the matrix

*Table 4.12. Population Distribution by Matrix of Income and consumption Indicators*

| Decile distribution of the population by average per capita consumption | Decile distribution of the population by average per capita income | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | I | II | III | IV | V | VI | VII | VIII | IX | X |
| I | 27.7% | 19.2% | 19.9% | 12.1% | 6.3% | 4.2% | 3.0% | 3.6% | 1.9% | 2.1% |
| II | 17.2% | 19.1% | 19.4% | 12.4% | 9.2% | 9.2% | 5.7% | 2.9% | 3.1% | 1.8% |
| III | 13.1% | 15.2% | 11.3% | 13.5% | 13.1% | 9.2% | 7.1% | 7.8% | 5.8% | 3.9% |
| IV | 8.7% | 14.8% | 12.7% | 13.8% | 12.5% | 12.1% | 9.9% | 7.2% | 5.0% | 3.3% |
| V | 9.3% | 8.4% | 11.0% | 13.2% | 14.9% | 11.8% | 10.5% | 8.9% | 7.8% | 4.2% |
| VI | 4.8% | 7.0% | 9.6% | 9.2% | 11.3% | 15.9% | 15.7% | 11.5% | 9.3% | 5.7% |
| VII | 6.3% | 5.5% | 7.1% | 9.7% | 11.6% | 12.2% | 12.3% | 13.5% | 12.8% | 9.0% |
| VIII | 5.0% | 4.4% | 5.9% | 8.1% | 9.2% | 11.0% | 12.7% | 13.4% | 16.9% | 13.4% |
| IX | 3.9% | 4.4% | 1.6% | 5.9% | 6.1% | 8.5% | 12.8% | 19.3% | 17.8% | 19.7% |
| X | 4.0% | 2.0% | 1.5% | 2.1% | 5.8% | 5.9% | 10.3% | 11.9% | 19.6% | 36.9% |

This matrix helps visually to understand which proportion of the population in each decile group has the same level of income and consumption. The table shows that only 27.7% of the population concentrated in the first or poorest decile recorded the same low level of income and consumption, i.e. this group is very poor. At the same time, 36.9% of the population concentrated in the tenth or richest decile recorded the same highest level of income and consumption.

Income is derived from various sources. The main source of income for all groups surveyed is income received from work performed. The proportion of this source of income is between 40-49 percent for all groups. However, earned income alone is not adequate enough to maintain a proper level of welfare, since it forms less than the half of total income. The structure of income by poverty level is presented in the next table:

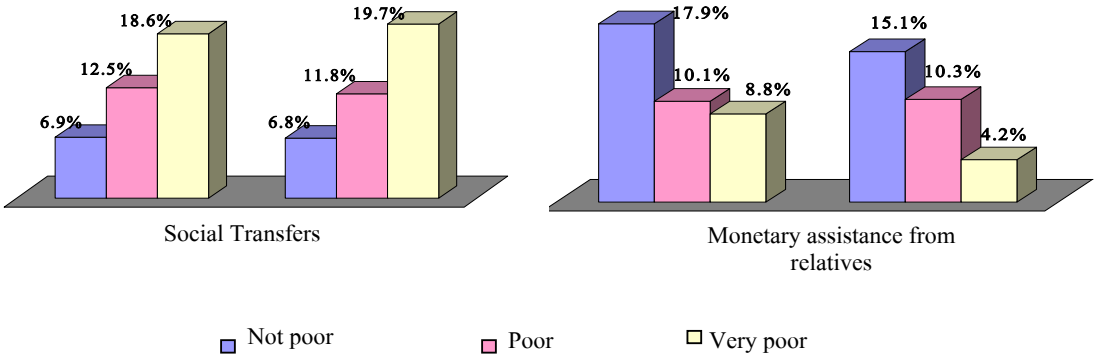
*Table 4.13. Total Income Structure by Level of Poverty in 2003*

Percentage

| | Total | Including | | |
|---|---|---|---|---|
| | | Not poor | Poor | Very poor |
| *Total income* | ***100*** | ***100*** | ***100*** | ***100*** |
| Including from Salaried work, | 46.9 | 49.1 | 40.4 | 47.9 |
| Social transfers | 8.4 | 6.8 | 11.8 | 19.7 |
| Income from sale of agricultural goods | 10.7 | 9.3 | 14.7 | 8.8 |
| Income from sale of real estate | 0.2 | 0.0 | 0.8 | 0.0 |
| Income from sale of valuable goods | 1.1 | 1.3 | 0.7 | 0.1 |
| Income from Property | 0.2 | 0.2 | 0.0 | 0.6 |
| Monetary assistance from relatives | 13.5 | 15.1 | 10.3 | 4.3 |
| Humanitarian assistance | 0.0 | 0.0 | 0.1 | 0.0 |
| Savings | 0.5 | 0.6 | 0.5 | 0.0 |
| Income from the consumption of food of own production | 14.0 | 12.4 | 17.7 | 16.0 |
| Other income | 4.5 | 5.2 | 3.0 | 2.6 |

In addition to income received from salaried work, the proportion of social transfers received from the Government is very essential among the poorest population (19.7%), while for the not poor population group, assistance received from relatives is crucial (15.1%).

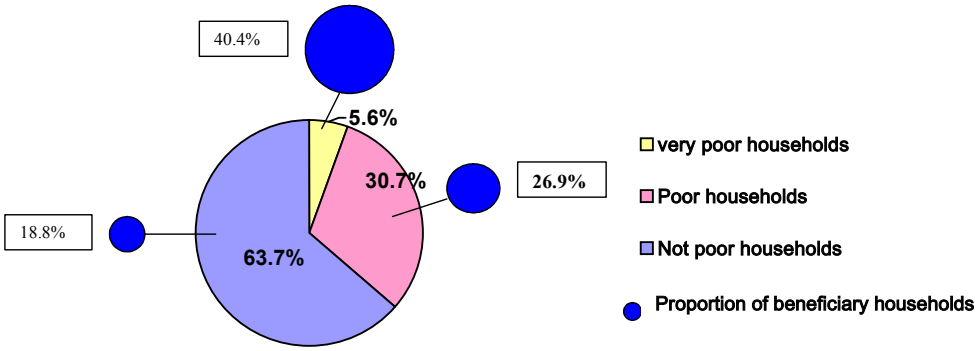
***Exhibit 4.8. Proportion of the monetary assistance received from relatives and state transfers by level of poverty in 2002 and 2003 .***




Social transfers, i.e. pensions, family benefits, etc., form a great part in the incomes of the poor population. Of the total households surveyed, the proportion receiving poverty family benefits is 22.5%, of which, 40.4% are among very poor households, 26.9% are among poor households, and 18.8% are among not poor households (the calculations are based on post-transfer indicators).

These results help to confirm that 40.4% of beneficiary households could not exceed even the Food Line. Only 26.9% of such households managed to surpass it, and 18.8% could overcome the poverty line.

***Exhibit 4.9. Distribution of Beneficiary Households by the level of poverty***




It is also interesting to analyze the changes in poverty incidence if households surveyed did not receive social assistance and/or social transfers. If the sum of social assistance or social transfer is excluded from the consumption aggregate, there would be a different -distributed by level of poverty. The table below demonstrates that the level of extreme poverty would be 9.7% or an increased of 31%, and if households do not receive social assistance then the general poverty level would be 44.2%.

If the payment of pensions is also terminated, together with social assistance, then the level of poverty would increase to 49.9% and the level of extreme poverty would be 16.2% or 2.2 times greater.

**Table 4.14. Post-transfer and Pre-transfer levels of poverty**

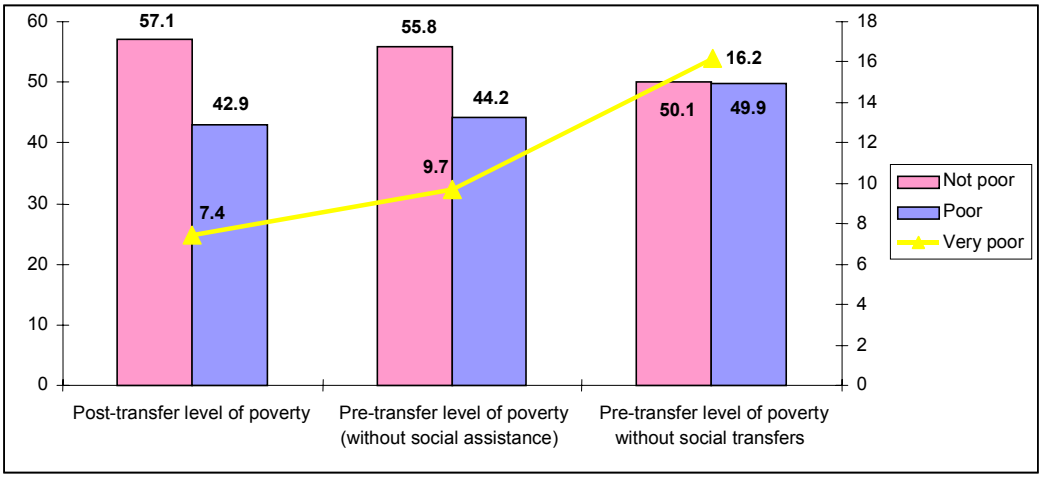
**In percents**

| | **Post-transfer level of poverty (by population)** | **Pre-transfer level of poverty** | |
|---|---|---|---|
| | | **without social assistance*** | **without social transfers**** |
| Not poor | 57.1 | 55.8 | 50.1 |
| Poor | 42.9 | 44.2 | 49.9 |
| including Very poor | 7.4 | 9.7 | 16.2 |

**) social assistance includes compensations for privileges, child benefits and benefits for sing mothers, unemployment benefits, stipendiums and poverty family benefits*

***) social transfers include the above mentioned social assistance and pensions*

**Exhibit 4.10. Post-transfer and Pre-transfer levels of poverty**




Own food production and assistance received from relatives contribute significantly to the income structure of all groups. Equally, the proportion of income received from property and the sale of real estate is very significant. For very poor groups, income received from the sale of real estate equals zero, however records have shown that income was received from the sale of personal property.

Households registered and receiving family benefits are obliged to inform their local social services office about any changes taking place in their families. According to the survey data, 91% of the households have performed this duty on time.

15% of households not registered in the Poverty Family Benefits system consider themselves to be quite well off and 44% find that it is useless to apply. The majority of households (56%) consider the Poverty Family Benefits System to be unfair. At the same time, they believe that almost half of the households receiving family benefits are really vulnerable.

### 4.4. Non-material Poverty

#### *4.4.1. Access to Education*

The first stage of education is pre-school education. According to the survey data 13.2% of children of corresponding age attended pre-school facilities. At the same time, 8-9 out of ten children were not attending pre-school facilities. The most frequently mentioned reasons for not attending pre-school were "mother does not work" (42.6%). 14% of children did not attend because the kinder-garden was closed and for 7.9% it was considered too expensive.

In the transition to a market economy there is a high risk that children of poor families will not be able to receive adequate education for future efficient activity. Because of a decrease in budget funding for the education system, educational expenses are now carried by families. Those attending school comprised 97% of children between the ages of 7-9 years, 99% of 10-14 year old children and 86% of 15-16 year olds. The 14% of this latter group that did not attend schools gave the following reasons: 65% had finished school, 9% had finished their education, 14% did not want to study, 6% were ill, and 2% stated that they had to leave school in order to work or that education was too expensive for them.

Many households have to pay for additional lessons to help educate their children. The survey showed that expenses for private lessons (not counting expenses related to preparations for entering higher educational facilities) equaled 6,200 drams on average. In addition, monthly school expenses averaged 2,700 drams per pupil.

The market economy presents a demand for a qualified labor force. At present, the high costs associated with education make it difficult for poor families to afford adequate education for their children.

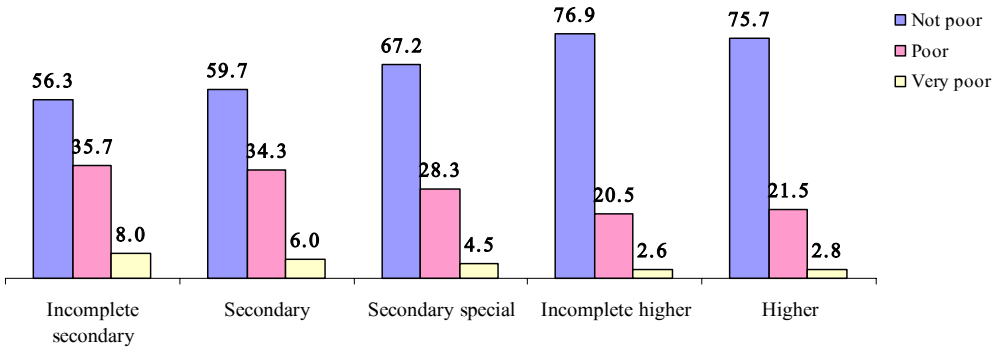
The maximum cost of a preparation course to enter higher educational facilities for the senior pupils surveyed was 860USD compared to 700USD in the previous year. The analysis shows that a high level of education and qualification generally ensures comparably high living standards. 75.7% of households headed by a person with higher education can ensure comparably high living standards, while only 56.3% of households headed by person with incomplete higher education are able to rise above the poverty line.

**Table 4.15. Poverty by Educational Level of the Head of the Household in 2003**

***In percents***

| Education level of 18 and over years aged population | including | | | | | |
|---|---|---|---|---|---|---|
| | Not poor | | Poor | | Very poor | |
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Incomplete secondary | 48.0 | 56.3 | 39.7 | 35.7 | 12.3 | 8.0 |
| Secondary | 49.7 | 59.7 | 37.4 | 34.3 | 12.9 | 6.0 |
| Secondary special | 58.1 | 67.2 | 33.0 | 28.3 | 8.9 | 4.5 |
| Incomplete higher | 68.8 | 76.9 | 22.9 | 20.5 | 8.3 | 2.6 |
| Higher | 71.1 | 75.7 | 22.2 | 21.5 | 6.7 | 2.8 |

*Exhibit 4.11. Poverty by Educational Level of the Head of the Household in 2003*




If the head of the household has received a higher education or even incomplete higher education, then he/she can provide a comparably higher level of welfare for his/her household. However, the data confirms that a high level of education is not always a guarantee for a well-off life.

***Table 4.16.* Poverty Level of Population by Educational Level in 2002-2003**

**In percents**

| **Levels of Education** | **Including** | | | | | |
|---|---|---|---|---|---|---|
| | **Not poor** | | **Poor** | | **Very poor** | |
| | **2002** | **2003** | **2002** | **2003** | **2002** | **2003** |
| Incomplete secondary | 47.0 | 50.1 | 39.6 | 39.9 | 13.4 | 10.0 |
| Secondary | 48.3 | 56.3 | 38.1 | 36.2 | 13.6 | 7.5 |
| Secondary special | 56.5 | 62.0 | 33.6 | 32.5 | 9.9 | 5.5 |
| Incomplete higher | 64.4 | 72.4 | 25.4 | 23.0 | 10.2 | 4.6 |
| Higher | 66.7 | 71.6 | 24.9 | 24.9 | 8.4 | 3.5 |

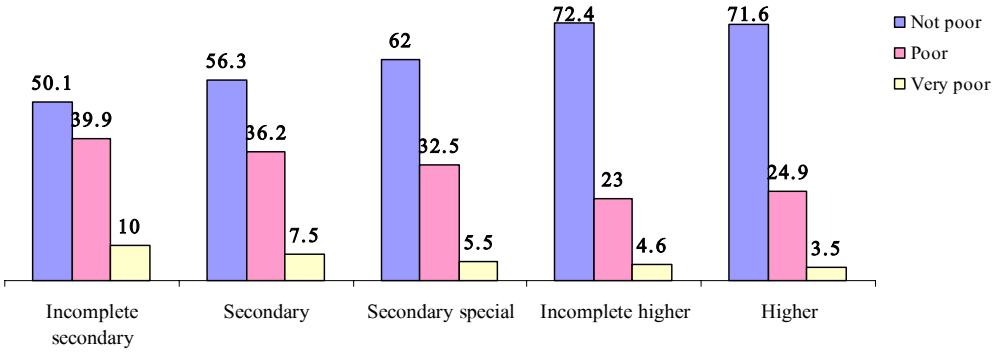


*Exhibit 4.12.* **Poverty Level of Population by Educational Level in 2003**

### *4.4.2. Public Health*

The health care system has changed along with the development of new economic relations. The former system of free medical service that was usual for decades has been replaced with a system where the availability of medical care depends on the ability to pay for services provided at the health facilities. In this situation, the low-income layers of the population, i.e. the poor, have great difficulties. The poor are more likely not to apply for medical assistance as they do not have the appropriate means to pay for it, and many of them cannot even afford to buy necessary pharmaceuticals.

During the 2003 survey, health problems were registered in both rich and poor households. The number of consultations with a doctor (including cases of medical care at hospitals) has increased compared with the previous survey. Even so, this indicator is still rather low, as only one in three with health problems applied to a doctor for medical care.

*Table 4.17. Poverty Level and Frequency of Consulting A Doctor At Polyclinics or At Hospitals*

| | Applied to Polyclinics or Hospital In percents | |
|---|---|---|
| | 2002 | 2003 |
| Total | 34.8 | 36.3 |
| Not poor | 39.9 | 38.7 |
| Poor | 28.4 | 32.6 |
| Very poor | 27.2 | 27.7 |

The very poor population more frequently applies to a primary health care facility - to polyclinics. The proportion of those who apply only to polyclinics among those who consult a doctor or apply to the medical facility by level of poverty is presented in table below:

**Table 4.18. Proportion of Visitors to Polyclinics among Those Who Apply to a Medical Facility By Level of Poverty**

| | Visit to Polyclinics In percents |
|---|---|
| Total | 58.3 |
| Not poor | 56.3 |
| Poor | 60.7 |
| Very poor | 75.0 |

The per capita expenditure of the not poor population, who attended policlinics, was 3.1 times higher than the expenditures of the very poor population, and the expenditures on consultation at hospitals were 1.2 times higher. The very poor population did not apply to diagnostic centers. The per capita expenditures of the not poor population for hospital care were 2.6 times higher than expenditures of the very poor group and 6.9 times that of the poor population.

The per capita average expenditure of the not poor population who apply to a private dental clinic or gynecological clinic or other private doctor is by 1.6 times greater than that of the very poor population and 2.5 times that of the poor population.

The share of expenditures on medications in the total consumer expenditures of the households surveyed was 1%. Households with different living standards have different proportion of spending on medications:

**Table 4.19. Share of Expenses on Medication in Total Expenditures of Households by Level of Poverty**

| | Share of Expenses on Medication In percents |
|---|---|
| Total | 1.0 |
| Not poor | 1.1 |
| Poor | 0.6 |
| Very poor | 0.2 |

The average monthly per capita expenditures on medications of the not poor population was 18 times higher than the expenditures of very poor population

### *4.4.3. Housing Conditions*

Changes in the living standards lead to a redistribution of housing.
The distribution of households by the type of dwelling occupied and poverty level is presented in the table below:

***Table 4.20. Distribution of Households by Type of Occupied Dwelling and Poverty Level***

**In percents**

| Households living in: | **Total** | **Including** | | |
|---|---|---|---|---|
| | | **Not poor** | **Poor** | **Very Poor** |
| - Private house | 50.2 | 48.3 | 55.0 | 45.8 |
| - Apartment | 40.4 | 43.8 | 34.0 | 36.1 |
| - Dormitory | 2.3 | 2.1 | 2.6 | 2.7 |
| - Temporary dwelling | 5.3 | 4.0 | 6.7 | 13.5 |
| - Other | 1.8 | 1.8 | 1.7 | 1.9 |

The proportion of very poor households who live in temporary shelters is very high. It is 3.4 times more than that of not poor households are.

***Exhibit 4.13. Distribution of Households by Type of Occupied Dwelling and Poverty Level***

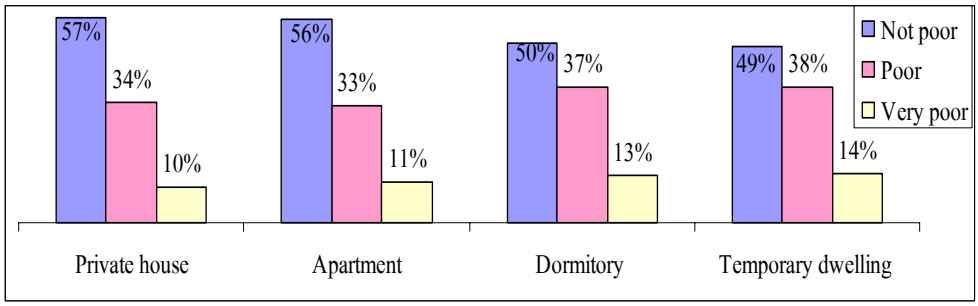



***Table 4.21. Distribution of Households by Number of Occupied Rooms and Poverty Level***

***In percents***

| **Households with rooms in residence** | **Total** | **Including** | | |
|---|---|---|---|---|
| | | **Not poor** | **Poor** | **Very Poor** |
| 1 room | 12.0 | 12.7 | 11.1 | 8.8 |
| 2 rooms | 31.4 | 31.1 | 31.7 | 34.2 |
| 3 rooms | 33.5 | 32.8 | 34.3 | 36.5 |
| 4 rooms | 16.7 | 16.3 | 17.4 | 17.3 |
| 5 rooms and more | 6.4 | 7.1 | 5.5 | 3.2 |

If we consider housing conditions from the regional point of view, it is necessary to note that population density is much higher in Yerevan compared with other cities and rural areas.

The following table presents the distribution of households by occupied living space depending on the place of residence.

***Table 4.22. Distribution of Households by Occupied Living Space and by Location***

| | Average living space of households, $m^2$ | |
|---|---|---|
| | **2002** | **2003** |
| Total | 57.34 | 57.00 |
| Including Yerevan City | 38.65 | 41.55 |
| Other cities and towns | 54.67 | 47.31 |
| Rural settlements | 73.85 | 76.27 |

### 4.5. Poverty Risk Groups

Children and pensioners are considered to be the most vulnerable groups in every country and in countries with a poor economy they become a greater poverty risk. In addition, the poverty risk is high for those households where the head or other members are unemployed.

**Unemployment**

The average annual number of economically active population in Armenia in 2003 was 1232.4 thousand people, of whom 89.9% or 1107.6 thousand people were active in the economy. 10.1% or 124.8 thousand people did not have a permanent job and were registered at the RA "Employment Service" Agency of the RA Ministry of Labor and Social Issues, thus receiving the status of unemployed.

Only 0.9% of the employed applied to "Employment Service" Agency under the RA Ministry of Labor and Social Issues to receive additional work and only 0.04% of pensioners wanted to work.

***Table 4.23. Structure of Officially Registered Unemployed by Gender, Age and Education* in 2003***

***In percents***

| Proportion of unemployed | Total | Including women |
|---|---|---|
| By age: under 18 years of age | 0.2 | 0.1 |
| 18-22 | 5.6 | 5.3 |
| 23-30 | 22.4 | 20.0 |
| 31-50 | 62.5 | 66.3 |
| 51-years of age and over | 9.3 | 8.3 |
| By Education Higher | 13.0 | 12.0 |
| Secondary-special | 25.3 | 23.8 |
| General secondary | 56.3 | 59.9 |
| Incomplete secondary | 5.4 | 4.3 |

- *According to data of the "Employment Service" Agency of RA Ministry of Labor and Social Issues*

In December 2003, the number of unemployed receiving unemployment benefits was 5.9 thousand people in the Republic, and the average amount of unemployment benefit was 3,370 drams.

In the reporting period, 8.3 thousand people received financial assistance and the average amount of that assistance was 1,440 drams.

To obtain comprehensive and linked information on basic indicators of the labor market, i.e. employment and unemployment of the population, each year the NSS conducted also the labor force sample survey in parallel with the household living standards survey. In 2003, a similar survey was conducted among 2,313 households, including 11 marzes of RA.

A total of 5,663 personal questionnaires were filled in, based on answers given by the employed population (16-70 years of age, as well as under 16 and over 70 years of age). 25.8% of this group or 1,446 people refused to participate in the survey for some reason.

The level of officially registered unemployment differs from the one received from the labor force sample survey.

The Labor force sample survey (LFSS) was based on the standard definition of unemployment proposed by the International Labor Organization (ILO), according to which people are considered unemployed in the surveyed period, if they simultaneously match the following three criteria – had no work or profitable occupation in the period surveyed, actively looked for a job and were ready to start working immediately.

The survey showed that the economically active population (those who were occupied or had no work and actively were looking for it during the week surveyed) formed 65.9% of able-bodied population, and has increased by 1.1% as compared to 2002 data. The economically inactive population (those who were not occupied or had no work and for some reason were not looking for it in the week surveyed) formed 34.1% of population surveyed.

Employed people formed 45.3% of the able-bodied population. This indicator has increased by 3.4% as compared to 2002. At the same time the employed population comprised 68.8% of economically active population and this indicator increased by 4.1% compared to 2002 data. This data apparently show a positive development in the labor market, i.e. decrease of economically inactive population, increase of economically active population owing to employment level increase. The level of employment has increased by 1.5% among the 35-39 years age groups and among those 45-49 years of age.

The share of unemployed according to LFSS continues to remain at a high level for both able-bodied (20.6%) and the economically active population (31.2%), but there is positive decreasing tendency in both, by 2.3% and 4.1% respectively as compared to 2002 data.

As opposed to ILO methodology, the RA "Law on Population Employment" and the Employment State Service Agency of the MLSI considered as unemployed those work seekers registered at the Agency who are permanent residents of the Republic, have more than one year's working experience, are able bodied of working age (16-63 years of age), and did not have work or profitable occupation, looked for a job through regional employment centers and were ready to start work immediately within the period defined by the legislation.

According to administrative statistics, the official unemployment rate comprised 10.1% of the economically active population in 2003, i.e. it reduced by 0.7% as compared to 2002 data.

Considering the methodological differences of the two different sources of information on unemployment rate, it can be stated that the level of unemployment according to LFSS was 3.1

times higher than the official unemployment rate in 2003. The difference between these indicators was 3.3 times in 2002 and 3.7 times in 2001.

**Table 4.24. Employment and Unemployment Levels According to Different Sources During 2001-2003**

In percents

| | 2001 | 2002 | 2003 |
|---|---|---|---|
| Administrative Statistics | | | |
| Level of Employment | 89.6 | 89.2 | 89.9 |
| Level of unemployment | 10.4 | 10.8 | 10.1 |
| Labor Force Sample Survey | | | |
| Level of Employment | 61.6 | 64.7 | 68.8 |
| Level of unemployment | 38.4 | 35.3 | 31.2 |

According to the household survey data, the poverty level is high in households headed by an unemployed person. The proportion of poor households in the number of households with an unemployed head is 42.2%.

***Table 4.25. a/ Incidence of Poverty at Households Headed by Unemployed. (by number of households)***

***In percents***

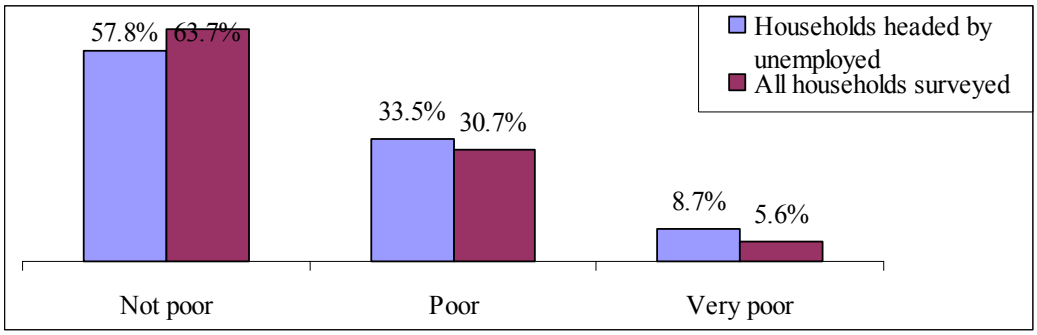
| Households | Households headed by unemployed | | All households surveyed | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 48.0 | 57.8 | 56.0 | 63.7 |
| Poor | 33.9 | 33.5 | 33.4 | 30.7 |
| Very poor | 18.1 | 8.7 | 10.6 | 5.6 |

***b/ Poverty Level of Population At the Households Headed by Unemployed***

***In percents***

| Population surveyed | Population At the Households Headed by Unemployed | | Total Population Surveyed | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 42.2 | 51.1 | 50.3 | 57.1 |
| Poor | 35.0 | 38.0 | 36.6 | 35.5 |
| Very poor | 22.8 | 10.9 | 13.1 | 7.4 |

**Exhibit *4.14. Incidence of Poverty at Households Headed by Unemployed***




**Households with many members**

Large households having three or more children under14 years of age are more vulnerable.

***Table 4.26 .a/ Poverty Incidence at the Households with Many Members (By number of Households)***

***In percents***

| Households | Households with 6 or more members | | All households surveyed | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 39.0 | 45.4 | 56.0 | 63.7 |
| Poor | 41.6 | 43.1 | 33.4 | 30.7 |
| Very poor | 19.4 | 11.5 | 10.6 | 5.6 |

***b/ Poverty Level in Households with Many Members (By number of population)***

| Population | Proportion of population residing in households with many members | | Total Population Surveyed | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 38.3 | 43.0 | 50.3 | 57.1 |
| Poor | 41.9 | 44.6 | 36.6 | 35.5 |
| Very poor | 19.8 | 12.4 | 13.1 | 7.4 |

According to the survey data, only 45.4% of households with many members could overcome the poverty line compared to 63.7% of total households surveyed. The level of poverty is much higher in such households: 43.1% compared to an average of 30.7% for the republic, while the level of extreme poverty was 11.5% compared to the overall average of 5.6%.

The proportion of the poor population living in such households is 57.0% compared to the average of 42.9% for the republic as a whole.

The number of children is higher in households with many members. Regression analysis of factors influencing the level of poverty (section 4.6) shows that each child increases the probability of being poor for members of the household by 2.0%, compared to those households

with no children, while the presence of three or more children under 14 years of age increases the probability of being poor by 11.4 %.

The tables below show that the level of poverty is 50.0% for households with children under 5 years of age compared to 36.3% for the national average. The level of poverty for those residing in such households is 53.9% compared to the overall average of 42.9%.

The poverty level of households with three and more children under 14 years of age is 64.1% compared to the national average of 36.3%. The level of poverty of persons residing in such households comprised 66.1% as compared to 42.9% for the overall average indicator of population poverty.

***Table 4.27 a/ Incidence of Poverty by the Number of Children in Households (by number of households)***

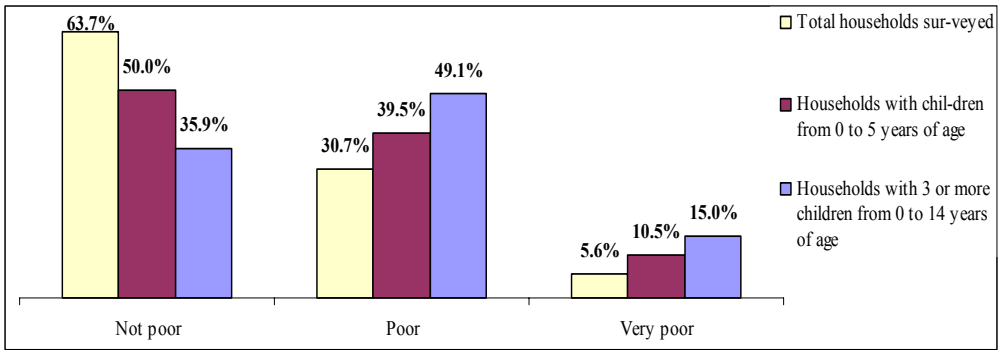
***In percents***

| Households | Households with 3 or more children from 0 to 14 years of age | | Households with children from 0 to 5 years of age | | Total households surveyed | |
|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Not poor | 33.1 | 35.9 | 44.0 | 50.0 | 56.0 | 63.7 |
| Poor | 44.0 | 49.1 | 39.2 | 39.5 | 33.4 | 30.7 |
| Very poor | 22.9 | 15.0 | 16.8 | 10.5 | 10.6 | 5.6 |

***b/ Poverty level of Population By Number of Children in Households (by number of population)***

| Population | Types of Households | | | | Total population surveyed | |
|---|---|---|---|---|---|---|
| | Households with 3 or more children from 0 to 14 years of age | | Households with children from 0 to 5 years of age | | | |
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Not poor population | 32.6 | 33.9 | 41.9 | 46.1 | 50.3 | 57.1 |
| Poor population | 43.6 | 50.2 | 39.9 | 41.9 | 36.6 | 35.5 |
| Very poor population | 23.8 | 15.9 | 18.2 | 12.0 | 13.1 | 7.4 |

*Exhibit 4.15. Incidence of Poverty At Households With Children (by number of households)*




The State social assistance system estimates the level of household vulnerability by considering the number of children under 18 years of age. 62.3% of households surveyed have at least one child. Distribution of households by number of children under 18 years of age and by level of poverty is presented in the table 4.26.

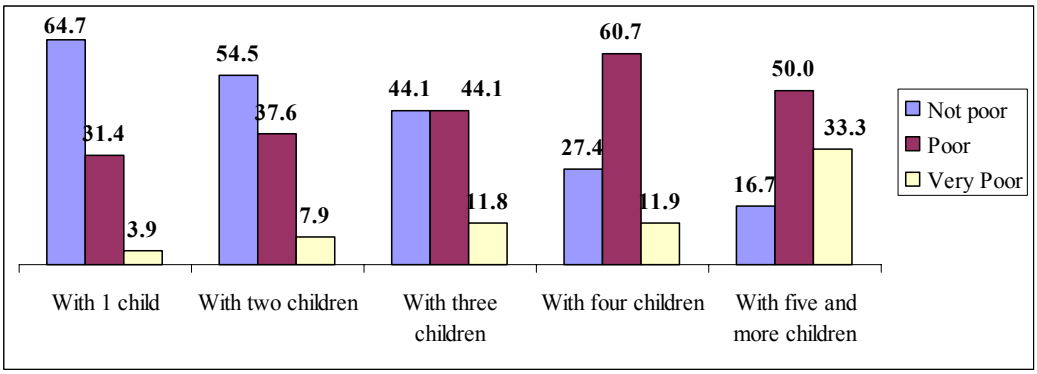
**Table 4.28. Distribution of Households with Children Under 18 Years of Age by Number of Children and By Level of Poverty**

In percents

| | Proportion of households with children under 18 years of age | Including by level of poverty | | |
|---|---|---|---|---|
| | | Not poor | Poor | Very poor |
| Total households with children under 18 years of age<br>Including | 100 | 55.2 | 37.3 | 7.5 |
| With 1 child | 36.2 | 64.7 | 31.4 | 3.9 |
| With two children | 42.9 | 54.5 | 37.6 | 7.9 |
| With three children | 16.9 | 44.1 | 44.1 | 11.8 |
| With four children | 2.9 | 27.4 | 60.7 | 11.9 |
| With five and more children | 1.1 | 16.7 | 50.0 | 33.3 |

The data presented in this table also prove that the households with children under 18 years of age and especially those with three and more underage children, barely overcome the level of poverty but exceed the food line only due to state social assistance.

**Exhibit 4.16. Distribution of Households with Children Under 18 Years of Age by Level of Poverty**




**Female Headed Households**

Although poverty in female headed households is lower than the overall indicator, (34.0% in female-headed households versus 36.3% of total households), the poverty level of those who live in such households is higher than the poverty level for the total population (43.3% versus 42.9%).

***Table 4.29.***

***a/ Incidence of Poverty in Female Headed Households (by number of households)***

***In percents***

| | Female Headed Household | | Total Households Surveyed | |
|---|---|---|---|---|
| | **2002** | **2003** | **2002** | **2003** |
| Not poor | 56.5 | 66.0 | 56.0 | 63.7 |
| Poor | 31.6 | 29.0 | 33.4 | 30.7 |
| Very poor | 11.9 | 5.0 | 10.6 | 5.6 |

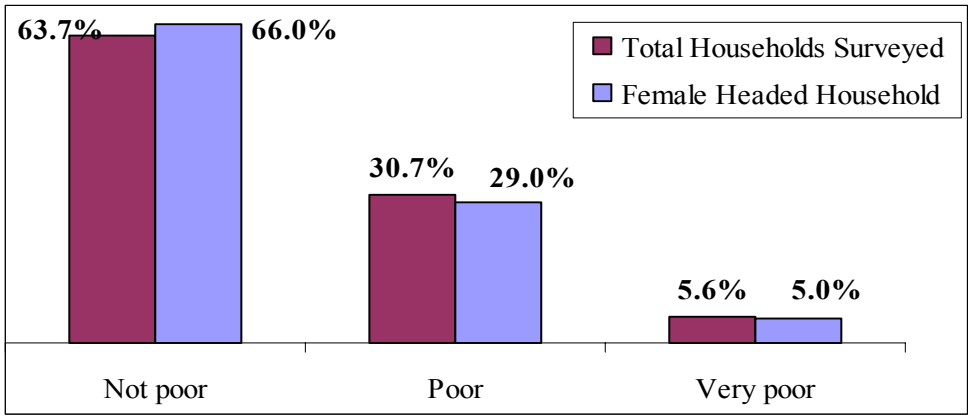
***b/ Level of poverty of Population Residing in Female headed Households (by number of population)***

***In percents***

| | Female Headed Household | | Total Households Surveyed | |
|---|---|---|---|---|
| | **2002** | **2003** | **2002** | **2003** |
| Not poor | 48.6 | 56.7 | 50.3 | 57.1 |
| Poor | 35.7 | 35.2 | 36.6 | 35.5 |
| Very poor | 15.7 | 8.1 | 13.1 | 7.4 |

This difference could be explained by the fact that sometimes among female-headed households some have larger numbers of both children and elderly persons. The social burden per one employed member of female-headed households is 2.4, while the general indicator of the republic is 2.3.

*Exhibit 4.17. Incidence of Poverty in Female Headed Households*




**Pensioners**

The average level of consumption for pensioners is supported by pensions, benefits, humanitarian assistance and free food kitchens where hot food is served as well as by food of own production especially in rural areas.

Among households covered by the survey there were both households with pensioners and households of pensioners and pensioners living alone. The comparison of the living standards of such households with the average living standards of total households shows that the level of poverty is higher for households with pensioners (38.5% versus 36.3% of average poverty level of total households surveyed). This indicator is also high when considering the poverty level of population residing in such households (46.8% versus 42.9% of total average).

However, the picture is different for households with pensioners only and for a pensioner living alone. The poverty level is slightly lower here than the average for the republic. For households with pensioners only, the level of poverty was 22.4% compared to 36.3% for the overall average, while for pensioner living alone this indicator was 18.7%. Perhaps this could be explained by the fact that the total social transfers- pensions, benefits, and other assistance help pensioners to overcome the poverty line. However, it should be mentioned that if the social transfers were reduced or terminated, the probability of such households appearing below poverty line would be increased.

The poverty level of pensioners living in various types of households is presented below

*Table 4.30. The Poverty Level of Pensioners Living in Various Types of Households (by number of households)*

*a/ Households with pensioners*

*In percents*

| | Households with pensioners | | Total households surveyed | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 54.2 | 61.5 | 56.0 | 63.7 |
| Poor | 33.5 | 31.8 | 33.4 | 30.7 |
| Very poor | 12.3 | 6.7 | 10.6 | 5.6 |

*b/ Households with pensioners only*

*In percents*

| | Households with pensioners only | | Pensioner living alone | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 65.9 | 77.6 | 70.8 | 81.3 |
| Poor | 28.1 | 19.1 | 24.6 | 17.3 |
| Very poor | 6.0 | 3.3 | 100 | 100 |

**Exhibit** *4.18. The Poverty Level of Pensioners Living in Various Types of Households in 2003*

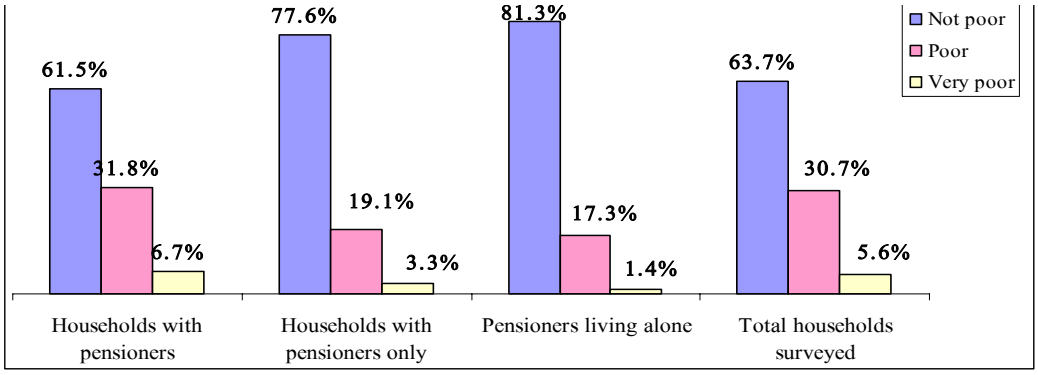


*Table 4.31. Poverty Level of Population Living in Various Types of Households (by number of population)*

*a/ Households with pensioner member*

*In percents*

| | Population in households that have pensioner members | | Population in total surveyed households | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 48.4 | 53.2 | 50.3 | 57.1 |
| Poor | 36.5 | 37.6 | 36.6 | 35.5 |
| Very poor | 15.1 | 9.2 | 13.1 | 7.4 |

*b/ Households with pensioners*

*In percents*

| | Population in households with pensioners | | Pensioner living alone | |
|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 |
| Not poor | 64.1 | 76.3 | 70.8 | 81.3 |
| Poor | 29.2 | 19.7 | 24.6 | 17.3 |
| Very poor | 6.7 | 4.0 | 4.6 | 1.4 |

### 4.6. Regression (Probit) Analysis of Factors Influencing the Poverty Level

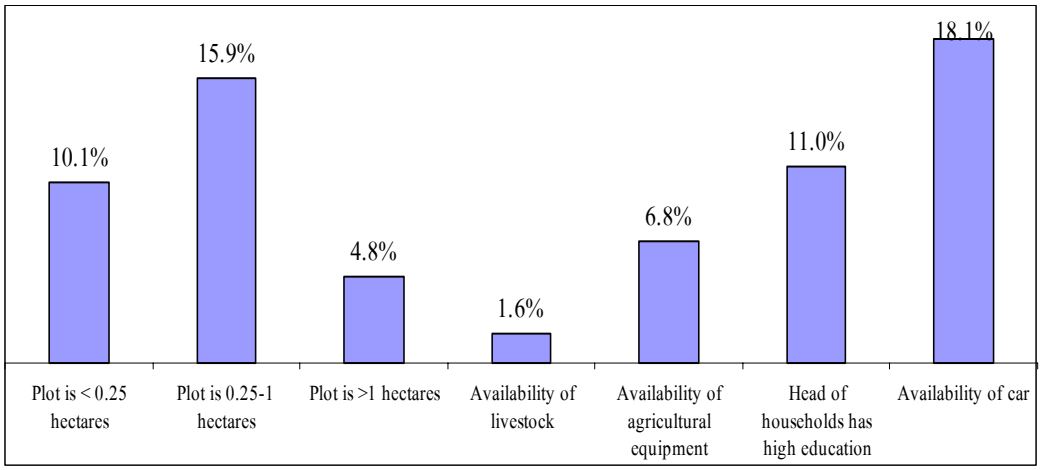
To identify the main factors influencing poverty, the (Probit) regression analysis was done. Probit is the dependent part of the calculation and is a binary (logical) variable, in other words it can have the two values 0 and 1, for example not poor and poor. Characteristics such as social-demographical, agricultural and others are included in the group of independent variables. The analysis of probability of being poor were done on the basis of actual population of households.

**Factors that decrease the probability to be poor all other conditions being equal**:

1. Landholding decreases the probability of being poor depending on the size of the land and its geographical location:
    - If the size of the land is less than 0.25 hectares, the probability of being poor decreases by 10.1 % compared to those who do not own land;
    - If the size of the land is from 0.25 to 1 hectare, the probability of being poor decreases by 15.9%;
    - If the size of the land is larger than 1 hectare, the probability of being poor decreases by 4.8%. This could be explained by the fact that households living beyond the Ararat Valley owned more than 1 hectare of land, and the land fertility is very low in those regions
2. The presence of cattle decreases the probability of being poor by 1.6%.
3. The presence of basic agricultural equipment decreases the probability of being poor by 6.8%.

4. If the head of the household has higher education, the probability of being poor decreases by 11.0 %, compared to those with only secondary education.
5. If the household has a car, the probability of being poor decreases by 18.1%.

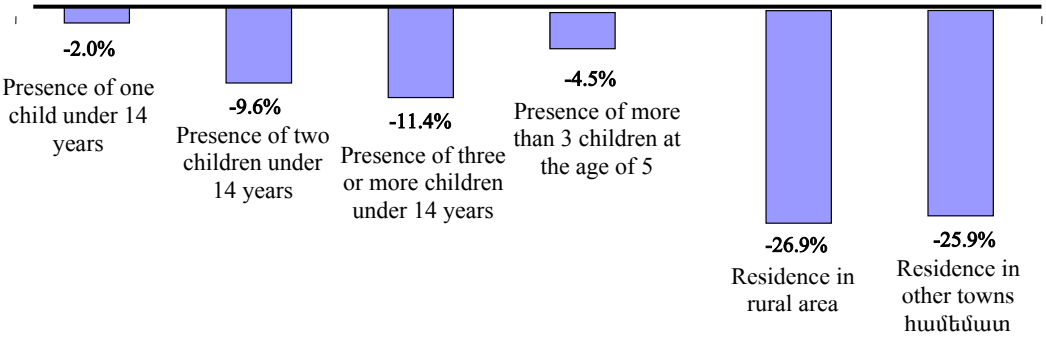
***Exhibit 4. 19.*** **Factors That Decrease the Probability to be Poor in Other Equal Conditions**




**Factors that increase the probability to be poor in other equal conditions**:

1. The presence of one child under 14 years of age in the household increases the probability of being poor for members of the household by 2.0%, compared to those households with no children.
2. The presence of two children under 14 years of age increases the probability of being poor by 9.6 %, compared to those households with no children.
3. The presence of three or more children under 14 years of age increases the probability of being poor for members of the household by 11.4 %,.
4. The presence of more than 3 children at the age of 5 increases the probability of being poor by 4.5%.
5. The probability of being poor for the population of rural areas increases by 26.9% compared to the population of Yerevan city.
6. The probability of being poor increases by 25.9% for citizens of small towns, compared to Yerevan city.

***Exhibit 4.20.*** *Factors that Increase the Probability to be Poor - all Other Conditions being Equal*




### 4.7. Alternative Methods of Poverty Assessment

The poverty indicator is very sensitive and reactive to all modifications introduced during the aggregation of the consumption indicator, the building of the poverty line and the selection of the poverty identification method itself.
As mentioned already, since 1996 the method of absolute poverty has been applied in Armenia to assess the poverty level and it should be noted that the structure of the food basket remains unchanged.
For wider understanding of poverty in the country, along with the absolute method, poverty should be calculated using alternative methods such as the method of minimum norm of daily per capita consumer expenditures.

#### 4.7.1. Conditional consumption expenditures method

Using this approach, the share of the very poor population is estimated according to following three options:

- First option – when the average daily per capita expenditures are defined as 1 US dollar;
- Second option - when the average daily per capita expenditures are defined as 2 US dollars
- Third option – when the average daily per capita expenditures are defined as 4 US dollars.

The analysis was done using the US dollar purchasing power parity defined by the World Bank methodology. According to the World Bank estimations, one US Dollar equaled 164.35 drams in 1999, while in 2002 the purchasing power of one US Dollar was 140.96 drams. The tables below present the changes in incidence of poverty according to this approach.

*Table 4.32 Level of Poverty by Purchasing Power Parity of the US Dollar*

***In 1999 the Purchasing Power Parity of One US Dollar Was equal to 164.35 Drams***

**In percents**

| Per Capita Per Day Expenditures | 1999 | 2001 | 2002 | 2003 |
|---|---|---|---|---|
| 1 US dollar | 7.5 | 3.4 | 2.1 | 0.1 |
| 2 US dollars | 43.5 | 35.9 | 31.9 | 20.2 |
| 4 US dollars | 86.2 | 81.5 | 81.4 | 77.8 |

***In 2002 the Purchasing Power Parity of One US Dollar Was equal to 140.96 Drams***

**In percents**

| Per Capita Per Day Expenditures | 1999 | 2001 | 2002 | 2003 |
|---|---|---|---|---|
| 1 US dollar | 5.1 | 1.5 | 0.8 | 0.0 |
| 2 US dollars | 32.3 | 24.3 | 20.6 | 9.9 |
| 4 US dollars | 80.0 | 74.5 | 73.4 | 66.4 |

When considering poverty reduction, which is a key international issue of the XXI century according to the millennium development goals, many countries develop their strategic plans targeting the reduction of poverty. The World Bank works on the diagnosis of poverty, assessment of the poverty level and improvement of methods to monitor poverty reduction activities. The WB also aims at the development of a network of information sources, authorities and the public in this sphere. Approaches are being designed for structuring the poverty food basket more accurately and making it consistent with the non-food products and services, as well as forming the aggregated indicator of consumption and the scale of equivalency to reflect the poverty level by the composition of households. The new methodology for the poverty level assessment suggested by the World Bank is presented in the Chapter 5 of this report.

**4.8. Main factors that contribute to poverty level reduction**

Summarizing the above analysis on changes in living standards, the following factors could be listed as the main contributors to the reduction in the level of poverty:

- During recent years, a continuous and rapid rate of growth of GDP was recorded in the Republic. The growth rate of GDP for 2003 was 13.9% higher than the previous year. It is worth noting to mention that the growth rate of GDP was especially high for the most important branches of the economy, which are construction with 44.4% growth, industry with 15.4% and tourism and public catering with 14.5%.
- According to the survey results, the average per capita monetary income was increased by 36% resulting in an increase of average monthly salaries of Government employees, non-budgetary and budgetary employees and in the average size of pensions.
- The income received from hired work has increased by 36%, while the income from self-employment has increased by 48%.
- Private transfers received from abroad have increased by 24%.
- New work places were established thus reducing the level of unemployment up to 10.1% according to official estimates and to 31.2% according to LFS.
- The marketable value of agricultural products increased.
- State social assistance mainly addressed the most vulnerable group of the population – children (see chapter VI).