CHAPTER 1. OUTCOMES OF THE HOUSEHOLD SURVEY

The National Statistical Service (NSS) of the Republic of Armenia, guided by the World Bank, conducted two rounds of household surveys, the first between November 15 and December 15, 1996, with a sample of 5040 households, and the second between July 1, 1998 and June 30, 1999, with the sample of 3600 households. Based on the results of these surveys analytical reports on "Social Outline and Poverty in the Republic of Armenia" were prepared.

Based on the experience of collaboration with the World Bank in implementing two household surveys, the NSS conducted an integrated household survey in 2001 using a sample of 4128 households, with 344 households covered each month.

1.1 Sample design

To design the sample, a two-stage random sampling method was applied. The first step included the sampling of settlement areas, i.e. towns and villages, and the second step included the sampling households within the selected settlements. In 2001, the survey was conducted in 19 towns and 28 villages.

The interviews for the the integrated household survey were conducted for 12 months by trained interviewers, with each interviewer conducting 8 interviews per month. In accordance with methods, each household was visited by the interviewer 4 times per month. This was done to ease the burden on respondents and help them complete the diary correctly. Upon the submission of questionnaires and diaries, five supervisors codified responses and exercised logical control, and, if needed, the questionnaire and diary were sent back through the interviewer to the household for clarification. After the entry of the data into the computer, data were cleaned and corrected. This created the database of information about 4037 households.

1.2 Survey tools

To collect characteristic of the living standards of households, the questionnaire and diary were applied in the integrated survey. The questionnaire was composed of 9 sections:
1. household characteristics
2. housing conditions
3. migration

4. education
5. farming
6. monetary and in kind flows between households
7. health
8. savings and debts
9. social assistance.

To estimate the main poverty indicators (such as incomes, expenses, and consumption of households), the integrated survey used the diary of daily expenditures. The main sections of the diary were:
1. purchase of foods and drinks for per capita consumption,
2. consumption of foods at home,
3. consumption of foods outside of home,
4. purchase of goods and receipt of services,
5. household incomes,
6. purchase of durable goods during 12 months, and
7. consumption of food over a year (including purchased, prepared, and household cultivated food).

1.3   Socio-Demographic Characteristics of the Surveyed Population

On October 10, 2001, the population census was completed throughout Armenia. According to the initial on-line data, Armenia's de jure (permanent) population totalled 3210,6 thousand people and de facto (present) population totaled 3000.8 thousand people.

The estimated permanent population based on current statistics in January 1, 2002, had been 3800.0 thousand people.

Of the total permanent population, 26.2% were people under the working age, 59.9% were those of working age, and 13.9% were above the working age. From year to year the share of the population over the working age increases, that is, the population is aging. Aging is not simply a demographic change. All characteristics, including economic, political and, of course, psychological relations change as the population ages. Aging increases the dependency ratio – the number of elderly and children relative to the number of working people. Today, there are about 1000 people of working age for every 700 children and pensioners.

Population growth during the past decade was determined by the natural increase of the population, because the balance of migration was negative. The steady decline in the birth rate reversed the long-term natural increase, and during the past two years net outmigration was larger than the natural increase of the population. Over the ten-year period the number of

live births fell by more than fifty percent – particularly among women with low education levels. This may be affected by several factors:

- Because of socio-economic problems, the number of couples giving birth to third, fourth, or fifth children decreased – and large families had been typical of women with low levels of education, and, as a rule, residing in rural areas;
- under-registration of births, especially among low income families,
- emigration from rural to urban areas,
- the number of women with higher level of education are entering fertile age may be increasing.

Table 1: Births, Deaths and Natural Increase of Armenia's Population

Year	Number			Rate per 1000 Population		
	1999	2000	2001	1999	2000	2001
Born	36 502	34 276	31 971	9.6	9.0	8.4
male	19 758	18 699	17 442	10.7	10.0	9.4
female	16 744	15 577	14 529	8.6	8.1	7.4
Deaths	24 087	24 025	23 869	6.3	6.3	6.3
male	12 335	12 277	12 197	6.7	6.7	6.6
female	11 752	11 748	11 672	6.0	6.0	6.0
Deaths of Infants (under 1 year of age)	572	540	494	15.4*	15.6*	15.8*
male	343	348	318	17.2*	17.4*	18.2*
female	229	192	176	13.4*	13.6*	12.1*
Net Natural Increase	12 415	10 251	8 102	3.3	2.7	2.1
Marriages	12 459	10 986	12 341	3.3	2.9	3.2
Divorces	1 253	1 343	1 782	0.3	0.4	Not available

* per 1000 births

The low birth rate does not even ensure the maintenance of the current population level. This is shown by both gross and net ratios The gross rates and net rates were 1.277 and 1.237 in 1990; 0.798 and 0.780 in 1995, 0.575 and 0.563 in the year 2000 (there is no population regeneration in case the value of the ratio is less than 1

During 2001, the number of registered marriages was 12 341, an increase of 12.3% over 2000 it increased. For every 1000 marriages, there are 144 divorces. The average size of the household was 4.08 persons based on the number of reported residents (including those temporarily absent) and 3.8 persons according to the de facto population.

The average household size in urban and rural areas was practically the same (resident population: 4.04 in towns, 4.18 in villages; and actual

population: 3.8 in towns, 3.9 in villages). The distribution of households according to the number of actual household members is presented below:

Table 2.

Household Size	Percentage of All Households
one member	11.2
two members	15.7
three members	16.5
four members	21.8
five members	17.2
six members	10.4
seven or more members	7.2
Total	100

Compared with 1999 survey data, the share of households with one, two, and three members had increased, the share of households with five, six, seven or more members decreased, and the share of households with 4 members remained the same. While households with four and five members had the largest shares in 1999, households with four members had the largest share in 2001. Slightly over half of households (54%) include children under 16 years of age.

The distribution of households according to the number of children under 16 therein is:

Table 3: Percentage of Total Households with Children

Households with:	Percent of All Households
one-child	20.0
two-children	23.6
three-children	8.6
four-children	1.8
five and more children	0.5
no child	45.5
Total	100

Table 4: Percentage Distribution of Households By Gender of Head of the Household and Place of Residence

	Households		
	All	Urban	Rural
Female headed	28.6	30.8	23.9
Male headed	71.4	69.2	76.1
Total	100	100	100

Each female headed household averaged 0.8 children, and each male headed household 1.1 children.

Table 5: Percentage Distribution of the Surveyed Population By Age and Gender

Surveyed population aged:	Total	Male	Female
Under 1	1.0	1.3	0.9
1-3	3.4	3.8	3.0
4-6	4.1	4.9	3.5
7-16	20.2	22.4	18.4
17-60	56.4	53.9	58.4
61 and over	14.9	13.7	15.8

Among the total surveyed population the share of males is 45.8%, and the ratio of females and males is 100 and 85 accordingly. However, for those under 17 years of age, males accounted for 51.6%. Among people of working age, 43.8% were men and 56.2% women. Among those above working age, the ratio was 100 women for only 73 men.

Inset Births Deaths and Natural Increase of Populations by Marz						
	Births	Deaths	Dead before age of 1	Natural increase	Marriages	Divorces
Republic of Armenia	31971	23869	494	8102	12341	1782
Yerevan	10256	8441	139	1815	4525	946
Aragatsotn	1518	961	13	557	502	47
Ararat	2641	1769	51	872	789	93
Armavir	2750	1821	35	929	1035	73
Gegharkunik	2473	1530	45	943	1008	66
Lori	3068	2552	49	516	1028	130
Kotayk	2751	1665	42	1086	1068	131
Shirak	2849	2383	65	466	1134	147
Syunik	1532	1128	21	404	447	86
Vayots Dzor	664	423	10	241	277	23
Tavush	1469	1196	24	273	528	40

The share of the population of the non-working age (i.e. 0-16) in rural area is higher than inurban areas. However, the share of the working age population is higher in towns than in villages.

1.4   Housing conditions of the population

Households residing in the urban area mainly live in apartments (63.4%), and those residing in the rural area live in private houses (81.0%). About 2% of households live in temporary dwelling places (carriages, domiks). This percentage is higher in the rural area. As a result of housing privatization, 91.7% of households owned their dwelling, and 1.7% of households currently rent housing from private individuals. The distribution

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of households according to the number of rooms in their residence, as well as the average number of people per room is shown in Table 6:

Table 6: Distribution of Households by Number of Rooms

Rooms in Residence	Percentage of All Households	People per room
one room	11.1	2.5
two rooms	29.1	1.7
three rooms	36.7	1.4
four rooms	16.5	1.1
five rooms	4.6	0.9
six rooms	2.0	0.8
All Households	100	1.4

High load (2.5 persons) is observed in one-room apartment. In average, one room accounts for 1.4 persons. The settlement in the country has its peculiarities: there are separate houses with the big dwelling space in the rural area, and apartments in the urban area, as a result of which the rural population is provided with more dwelling space than the urban population.

Table 7: Distribution of Households by Size of Living Unit

	Per household	Per household member
All households	54.6	14.3
Urban Households	46.1	12.2
Rural Households	72.3	18.5

However, the accomplishment of housing resources (availability of a kitchen, cold water, toilet with the draining system, and bathroom) in the village yield to the town. Thus, where on average in the republic 32.8% of households had the mentioned utilities, then that percentage was 14.2% in the rural area, and 41.6% in the urban area.

The important element in the utility accomplishment of housing resources is the availability of heating in the dwelling place. The distribution of households according to the types of heating according to their location is presented below:

Table 8: Distribution of Households by Type of Heating

	Total households	Urban area	Rural area
Total households	100	100	100
Central heating system	7.0	9.7	1.2
Personal heating system	1.7	1.9	1.4
Other (oven, electric stove, etc.)	85.5	79.9	97.2
Not heated	5.8	8.5	0.2

The main energy sources for house heating (for those without the central heating system) are: wood, 56.5% of households; electricity, 17.9%; gas 7.2%; and kerosene, 1.7%.

The household survey studied the important component of utility accomplishment both for housing resources and settlement places, which was the domestic waste disposal. Based on survey results over one third of households (37.4%) dispose the wastes into the garbage piles, and the garbage of 22.9% of households is disposed through trucks, 18.1% households have garbage chutes, 13.5% burn the garbage, and 5.9% landfill it.

Subjective Assessment of Housing Conditions

According to the interviewed households, 39.4% of them considered their housing conditions as normal, 34.9% - not so good, 19.2% - bad, and only 6.5% - good or very good.

Access to Running Water

85% of interviewed households received central water supply. Most of those (79%) had a faucet at home, 19% of those had it in the yard, and 2% used a faucet on the street. However, water supply was not regular. 29% of households received water for only two hours during 24 hours, 30% for 3-4 hours, 11% for 5-6 hours, 5% for 7-10 hours, and only 18% received water for between 21 and 24 hours per day. Urban households were much more likely to have access to central water supplies (94.2% compared with 64.7%). 90.3% of urban households have a faucet in the house, while only 43.9% of rural households.

Only a very small share of households (1%) had their own personal water supply and 7% took water from a well or spring, and 6% used the brought from other places.

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New Housing Construction

During 2001, 470 apartment houses with the total area of 195.3 thousand square meters were constructed, double the amount of construction in 2000.

- *The overwhelming majority of apartment houses (425, or 90.4%%) with the total space of 139.2 thousand square meters were built with private funds, one third of which (36.5%) were in Yerevan.
- *As a result of privatization, 14 apartment houses (3%) with the total area of 19.9 thousand square meters, was put in commission.
- *Humanitarian aid organizations constructed 30 apartment houses (6.4%) with the total (usable) area of 32.5 thousand square meters were put in commission, where:

1.5   Education Attainment

While kindergartens represent an important element in the education system, the shareof children using these is declining – from about 45% in the 1990s to 25% in 2001.

According to the household survey data, only 14% of children below the age of 7 attended preschool institutions. Non-attendance was mainly explained by the unemployment of mothers (49% of responses), high cost (20%), closing the neighboring preschool institution (13%).

While most children aged 7-16 attend one of the three levels of school education, only a very small number can afford to pay for private lessons. The average cost of private lessons was 8.5 thousand AMD per pupil per month–ranging from 2.6 thousand AMD to 111 thousand AMD. A very small number of students pay for coaching to enter higher educational institutions--the average cost is 90 dollars (with a maximum of 500 US dollars).

According to the survey data, the education level of the population aged 6 and over is presented below (in percentages):

Table 9: Educational Attainment of the Population

	Total	including	
		town	village
Iprimary (including not completed) education	15	13	19
Secondary (general, not completed, specialized) education	68	66	73
Higher (including not-completed) education	17	21	8
Total	100	100	100

1.6 Health of the Population

Good health is an important part of human capital, which forms the individual capacities of the person and promotes the economic development. Poor health is also a major cause of poverty. Declining living standards has

caused a revival of "poverty diseases" -- such as tuberculosis. During the past 12 years the number of those registered with new cases of active tuberculosis increases by 2.6 times. As people had to pay for more and more health services and fewer and fewer were eligible for state funded medical aidThe survey showed that less than half (43%) of the sick population sought the services of a physician. The average cost of the consultation with doctor amounted to 9.8 thousand AMD.

5.6% of the total number of patients was treated as in-patients – with an average cost of hospital stay of 110 dollars (with a reported maximum of1000 US dollars).

The major causes of mortality provide an accurate assessment of the population's health status. According to the state statistics, more than half of deaths (54.6%) account for cardiovascular diseases. The average weight of mortality from neoplasms (17.3%) is on the second place and tends to grow.

Table 10: Causes of Death (based on death certificates received from Local Civil Status Act Regional Departments)

	2000		2001	
	Number	Percentage of total	Number	Percentage of total
Total number of deaths,	24025	100	23869	100
cardio-vascular diseases	13198	54,9	13026	54,6
accidents, poisonings, traumas, of which:	1104	4,6	1109	4,7
suicides	61	0,3	57	0,2
homicide	88	0,4	67	0,3
neoplasms	3967	16,5	4124	17,3
respiratory tract diseases	1416	5,9	1193	5,0
disease of the digestive system	783	3,3	890	3,7

Inset

Child mortality

According to state statistics, child mortality decreased over the past ten years. Dynamics of the given indicator is affected by many factors. Since 1995, based on the order of the RA Ministry of Health (No. 776/84, dated 16.08.94) the definition of life-births was put into practice according to the WHO concept. Life-births are referred by the RA Ministry of Health to neonates with over 1000 gram weight, demonstrating life-signs at birth (heart beats, breath, etc.). Neonates with the weight under 1000gram are registered as life-births provided if the neonate lives 7 days and more.

Official statistics of mortality rates must be divided into two periods – before and after the introduction of the WHO definition of life-births in 1996.

Per 1000 life births		
	1990-1995	1996-2000
Total child mortality rate under the age of 1 nationwide	16,8	15,3
urban area	17,6	17,3
rural area	15,8	12,1
Stillbirths	8,5	7,6
Mortality within the first week of life (0-6 days)	6,9	8,0
Mortality during the first month of life (0-27days)	8,4	9,2
Mortality of children aged 0-6 months	7,4	5,0
Mortality of children aged under 5 years	22,6	19,0

These data suggest that the decrease in child mortality rates was due to decreases in rural areas, because the decrease in urban areas was relatively small. In fact, the high child mortality rates in urban areas is the result of how child deaths are reported. Child mortality in the perinatal period, i.e. dead-births and those dead during the first week of life are registered by health facilities, most of which are located in urban areas. Death certificates are recorded according to the location of the health facility. Consequently, this indicator includes the perinatal mortality of rural neonates without specifying their deaths per household. Moreover, the decrease of the rate of dead-births is accompanied with the correspondent increase of the infant mortality rate during the first week and first month of life.

The decrease of children mortality was promoted by:

1. factors independent of the quality of health services;

- 1.1. relative increase of the average level of education that resulted from the out migration of less educated people -- the majority of Azerbaijanis who emigrated at the end of 80s were rural residents with relatively low level of education (usually only elementary education),
- relative majority of Armenian refugees in the same period migrating into Armenia from Azerbaijan were urban residents with comparatively high education levels,
  1.2. reduction of birth rates of children to women in high risk groups.
  - s a result of the sharp deterioration in socio-economic conditions, there was a decrease in the share of births among:
    - women aged under 18,
    - women aged over 30-35,
    - multiple –births, and
    - women with recent deliveries (i.e. small periods between deliveries).

The corresponding increase in the share of total births of the desired child diminishes the risk group in many factors.

2. At the same time, there were significant improvements in the quality of health services:
    - the introduction of "baby friendly hospital" practices in maternity homes reduced hospital-acquired infections (joint stay of the child with mother),
    - breast-feeding program, and
    - ARD/diarrhea program

In the autumn of 2001, "The Demographic Health Survey" (DHS) was implemented in Armenia with a sample size of 6500 households. The main objective of the survey was to reveal the health status of children aged under 5 and women in the reproductive age. Child mortality ratio was calculated based on survey results and revealed the high level of under-registration of infant mortality in the Republic.

Comparison of Infant Mortality Estimates (Neonatal, postneonatal mortality rates for five-year periods preceding the DHS)

Approximate calendar period	Neonatal mortality		Postneonatal mortality		Infant mortality	
	NSS	ADHS	NSS	ADHS	NSS	ADHS
1996-2000	9.1	19.5	6.2	16.7	15.3	36.1
1991-1995	8.0	31.6	8.5	18.9	16.3	50.5
1986-1990	9.1	24.6	13.0	20.9	22.1	45.6

Source: NSS of Republic of Armenia
Note: Postneonatal mortality was computed as the difference between the infant and the neonatal mortality rates. Neonatal mortality estimates are based on deaths within 27 days of birth for NSS rates and within one month for ADHS rates.

Main Causes of Under-registration of Infant Mortality

1. Lack of awareness in the procedure of registration as modified in 1995 and brought closer to the WHO standards;
2. Lack of full compliance of the currently existing rules of prenatal death registration approved in 1995 in Armenia with the WHO standards;
3. In-patient death of the neonate during the first month of life;
4. Home delivery and death.

The percentage of home deliveries especially in rural areas sharply increased in 90s (with the peak in 1994-1996).

Possibility and reality of burial without registration

Except for large towns in the Republic with the existing system of the funeral bureau, in the rest of Armenia the process of burials is under-regulated by the local authorities and, especially in rural areas, the arrangement of funerals in the local cemetery is possible without receiving permission or the mandatory submission of death certificates.

1.7 Incomes, Expenditures and Consumption of Major Foods

One of important indicators of the standard of living of the population is the financial income of households. Financial incomes of households include the sum of monetary means received by household members from wages, earnings from the individual business and entrepreneurial activity (self-employment), pensions, stipends, benefits, interest earnings, dividends, rents and other incomes from the property, earnings from the sale of agricultural products, transfers and other monetary receipts. To assess the standard of living it is important to study both monetary and total income sources. Besides the monetary receipts the indicator of total income includes the value of consumed goods produced by the household as well as foods, industrial goods, and services received free of charge.

The table with monetary and total incomes of households per household member is presented below:

Table 11: Monetary, Non-Monetary and Total Household Income by Source

Income types	Per household member – in AMD	Percent of total income
1. *Money incomes*	11217	81.1
from the salaried work, including in-kind reimbursement	3431	24.8
from self-employment	1317	9.5
state pensions and benefits	1078	7.8
from the production and sale of agricultural products	1754	12.7
from the sale of real estate (house, land, cottage)	45	0.3
from the sale of valuables (car, furniture, other valuables)	378	2.7
from the property (rent, interest rates, dividends)	95	0.7
- transfers:assistance from relatives residing in Armenia	325	2.4
assistance from relatives residing out of Armenia	1705	12.3
humanitarian aid, evaluated in AMD	51	0.4
other income	1038	7.5
2. *Non-financial income*	2616	18.9
cost of consumed foods generated in own household	2483	17.9
cost of goods and services received free of charge	133	1.0
3. *Total income*	13833	100

Exhibit 1

Income Structure
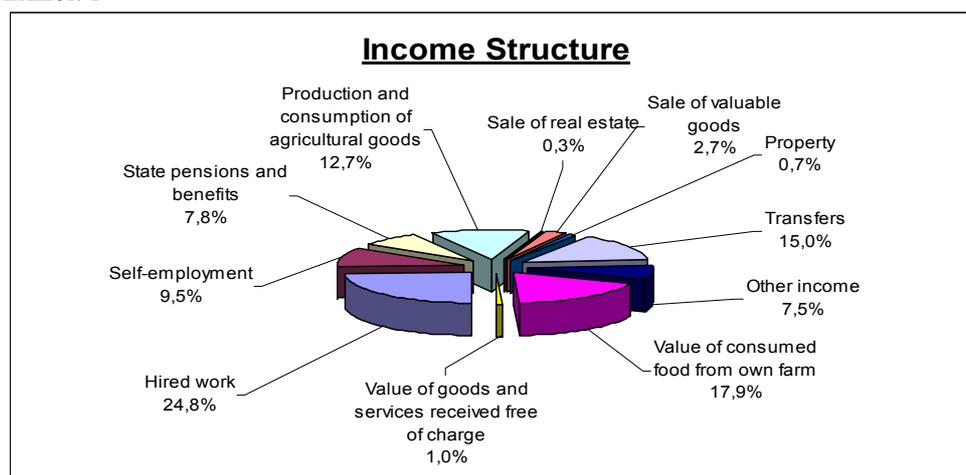
Table 12: Structure of Current Expenditures of Households

	Per household member in AMD	In percentage of the total
Total per capita expenditures	11949	100
Total for Food and Beverages	7719	64.6
Value of foods produced by household	2483	20.8
Food consumed away from home	116	1.0
Alcohol drinks	103	0.9

Tobacco	626	5.2
Total per capita expenditure on non-food items	1749	14.6
Total per capita expenditure on services	1752	14.7
utilities	690	5.8
of which: electricity charges	591	4.9
transport	361	3.0
communication	150	1.3

Food and drink account for 65 % of total expenditures, which suggests low standard of living.

Exhibit 2

Structure of current Expenses

Food 64,6%
Alcohol 0,9%
Tobacco 5,2%
Non foods 14,6%
Services 14,7%
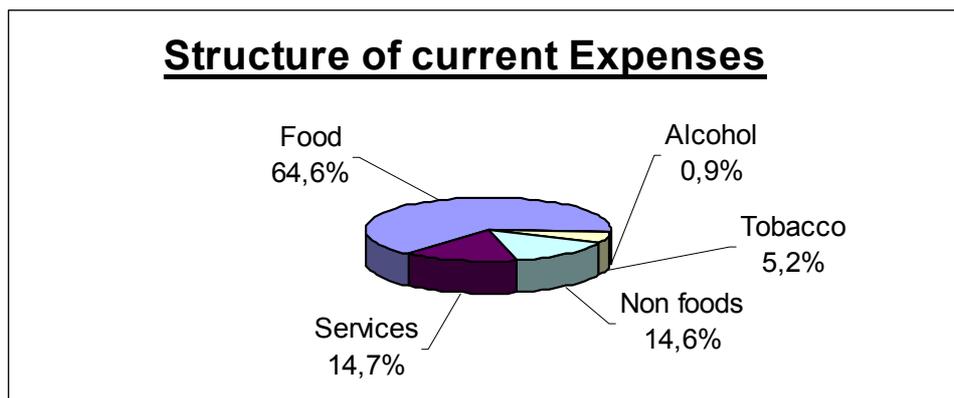
Table 13: Ration of the Richest Quintile to the Poorest Quintile – Measured by Per capita Incomes and Expenditures

BY INCOMES	17.3 times
BY EXPENDITURES	6.7 times

Table 14: Production of foodstuff by households and their consumption (percent of total)

	Total produced	Consumed by the household	Sold
Milk	100	33	21
Cheese	100	56	28
Sour-cream	100	67	22
Yogurt	100	70	27
Butter	100	73	10
Vodka	100	60	12
Wine	100	65	12
Honey	100	29	34
Dried fruits	100	33	37
Smoked fish	100	17	67
Eggs	100	70	23

Table 15: Monthly Consumption of Major Food Items by Household Decile (per household member – in kg)

	Total	Decile									
		I	II	III	IV	V	VI	VII	VIII	IX	X
Grain products	13.8	11.8	12.4	13.1	13.7	14.0	14.4	14.2	14.8	15.3	16.1
Potatoes	3.6	2.9	3.1	3.5	3.6	3.7	3.8	3.7	4.3	4.0	4.4
Vegetables and gourds	5.1	3.3	3.6	4.2	4.8	5.1	5.1	5.8	6.5	6.1	8.0
Fruits and berries	2.7	1.2	1.5	1.9	2.2	2.3	2.6	3.2	3.8	4.1	6.3
Meat foods	1.2	0.4	0.5	0.6	0.8	0.8	1.2	1.4	1.7	2.0	3.2
Milk and yogurt	1.6	0.8	1.0	1.3	1.3	1.5	1.6	1.9	1.8	2.1	2.9
Cheeses	0.6	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.8	1.0
Butter, including melted butter, (liter)	0.5	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7	0.7	0.8
Eggs, pieces	7.2	3.3	4.4	4.9	6.1	7.3	7.5	8.8	9.7	10.2	13.6
Fish products	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.6
Sugar	0.5	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.8
Confectionery	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.9
Butter (liter)	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4

Exhibit 3