

PART 3. ARMENIA.
NON - MATERIAL POVERTY

Chapter 7. Health and Poverty

A healthy population is crucial not only for a country's socioeconomic development; it is also an important precondition for the well-being of households and individuals.

Armenia has managed to sustain certain healthcare outcomes, despite of relatively low level of public expenditures as compared to many other countries in the Europe and Central Asia. In 2016, the share of consolidated budget expenditures on healthcare sector amounted to 6.0%, which is the same as in 2015 (Table 2.4).

In 2016, life expectancy at birth was 71.6 years for men, which is higher than in many other countries in Europe and Central Asia, and 78.3 years for women. Both indicators exceeded the levels of 1996 and 2006, which were 67.3 and 74.5 years in 1996 respectively, and 69.8 and 76.0 years in 2006.

According to the civil status records of the Ministry of Justice, which serve as a source for statistical data on mortality, there has been a declining trend in infant mortality among the age group below 1 year old. In 2016, there were 352 cases of under-one infant deaths, and infant mortality rate per 1.000 live births was 8.6 per mille, as compared to 15.5 per mille in 1996 and 13.9 per mille in 2006.

In 2016, under-five mortality rate (per 1.000 live births) was 10.1 per mille, as compared to 19.5 per mille in 1996 and 15.8 per mille in 2006.

Maternal mortality rate (per 100.000 live births) was 29.6 per mille in 2016, as compared to 20.8 per mille in 1996 and 26.6 per mille in 2006.

Box 7.1

Information on Measures Taken by the Ministry of Health in 2016 Aimed at Reduction and/or Mitigation of Poverty

I. Maternal and Child Health Care

Maternal and child health, reproductive health problems and further programmatic priorities are embodied in a number of strategic documents adopted and / or approved by the Government of Armenia. The priorities and strategic provisions set out in the conceptual and program documents are reflected annually in the state healthcare targeted programs and the state budget health expenditures. In particular, they are presented in the form of a maternity and child health care program consisting of two interconnected parts:

- Organization of children's medical care;
- Provision of obstetrics and gynecological care.

In accordance with the State Program on Maternal and Child Health Protection, children's and women's health care services have been provided under the state order.

The following quantities were carried out during 2016:

1. Prenatal care of over 70 000 pregnant women in the framework of the program "Obstetrics and Gynecological Care", 40 000 births, hospital examination and treatment of 18 000 high-risk group pregnant women;
2. About 60 000 cases of hospital treatment of children in the framework of the program "Children's Health State Certificate";

3. Provision of obstetrician-gynecological, pediatric, and neonatological services to provincial medical facilities through outgoing rapid response services, including service of 783 calls, of which 700 with transportation of patients, which contributed significantly to successful outcomes;
4. Continuous implementation of the RA Government Resolution N 568, dated May 27, 2015 aimed at overcoming the problem of infertility of socially vulnerable families, about 120 infertile couples were examined and treated under the state order;
5. Implementation of the Resolution of the Government of the Republic of Armenia No 1528-N, dated December 24, 2015 "On the Provision of Medical Aid and Service by the State Using Reproductive Auxiliary Technology for a Group of Residents of Border Rural Communities in 2016", under which medical examination and in vitro fertilization treatment was provided to 35 infertile couples;
6. About 74 000 PAP tests conducted in the framework of Non-Communicable Disease Prevention and Control Project, in particular, under cervical cancer prevention program;
7. 1014 cases of inpatient rehabilitation treatment in the framework of the program "Child Restorative Treatment", 265 children with disabilities and chronically ill, including 12 children with autism, received sanatorium / rehabilitation treatment at specialized centers and health resorts (most of them with caregivers);
8. More than 24 000 outpatient visits in the framework of "Assessment and Restorative Treatment Services for Children with Intellectual, Mental, Physical, Motor, and Other Disorders";
9. Continuous implementation of neonatal screening programs.

Due to the implemented strategies and program activities, significant positive developments have been registered in the field of maternal and child health care in recent years.

II. Emergency and Urgent Medical Care Services

1. For the purpose of ensuring accessibility, quality and effectiveness of emergency and urgent healthcare services for the population throughout the Republic of Armenia, the RA Government approved the Protocol Resolution №14, dated April 15, 2016 on "Approval of the Strategy of Emergency Medical Care and Service of the Population of the Republic of Armenia for 2016-2020".
2. Drafting and approval by the RA Government Protocol Resolution N 37, dated September 22, 2016 of the "Action Plan for Implementation of the Strategy of Emergency Medical Care and Service of the Population of the Republic of Armenia for 2016-2020";
3. Approval of the "2016-2020 Program for Control of the Most Common Non-Communicable Diseases" by the RA Government Protocol Resolution N4, dated February 4, 2016;
4. For the purpose of developing a unified management system for preventing non-communicable diseases, an interagency committee coordinating issues related to prevention of non-communicable diseases was established under the RA Prime Minister's Decree N 661-A of July 25, 2016, with leadership of the RA Prime Minister and participation of the heads of concerned agencies.

III. Medicines Policy and Medical Technologies

In 2016-2017 free supply of medicines by diseases looks like follows:

- 1) Mental illnesses (psychotropic drugs), number of registered patients - 55000, medicine provision - 100%;

- 2) Epilepsy (anti-inflammatory drugs)- number of registered patients - 8500, according to classical treatment schemes, the medicine provision is 100 percent;
- 3) The number of patients with non-diabetes mellitus is 255, the medicine provision is 100%;
- 4) Periodic disease (colchicine and / or equivalent) - number of registered patients - 3240, medication provision- 100%;
- 5) Chronic renal insufficiency (number of patients enrolled in cases of renal transplantation and (or) program hemodialysis (erythropoietin), number of registered patients – 780, medication coverage is 100 percent, number of medicines purchased – 1 title;
- 6) Malignant neoplasms (anesthetic medicines, drugs, cyclosporine and hemorrhagic drugs) - number of registered patients - 39590, medication coverage is 70 %, number of medicines purchased - 9 titles;
- 7) Phenylketonuria (baby food that does not contain phenylalane) - number of registered patients – 72, medication coverage is 100 %, 3 titles of food obtained;
- 8) Tuberculosis antituberculous and antiviral drugs - number of registered patients – 47215, medication coverage is 100 %;
- 9) Premature infants' respiratory disorder syndrome (medications with hereditary active ingredients)- number of registered patients – 100 medication coverage is 100 percent;
- 10) The Ministry of Health of the Republic of Armenia obtained about 56.7% of the total list of medications procured in 2016-2017 through centralized procurement directly from international pharmaceutical companies, and about 5% (medicines for psychotropic drugs and periodic illnesses) - from local pharmaceutical companies.

Box 7.2

Description and Basic Indicators of Healthcare System

In 2016, in-patient treatment services were provided to the population by 129 hospitals, 65.1% of which operated under the Ministry of Health. The Ministry also managed operations of 358, or 70.9% ambulatory/polyclinic facilities from 505 ambulatory/polyclinic facilities operated under the Ministry of Health. Healthcare facilities and medical potential are mainly concentrated in the major towns of the country (primarily in Yerevan with 70% of physicians, 41.1% of in-patient facilities, 63.4% of hospital beds, and 29.1% of ambulatory/ polyclinic facilities).

Main Indicators of Healthcare System, 2012-2016

		2012	2013	2014	2015	2016	
Number of physicians of all specialties (person)	Total	12 938	12 664	12 896	13 117	13 148	
	Per 10 000 inhabitants	42.7	42.0	42.8	43.7	44.0	
Population headcount, per physician (person)		233.9	238.6	233.7	228.6	227.1	
Number of paramedical personnel (person)	Total	18 784	18 426	18 053	17 632	17 464	
	Per 10 000 inhabitants	62.1	61.1	60.0	58.8	58.5	
Number of hospital facilities (unit)		127	129	130	132	129	
Number of hospital beds (unit)	Total	12 241	12 268	12 514	12 532	12 493	
	Per 10 000 inhabitants	40.4	40.7	41.6	41.8	41.8	
Number of hospitalized patients (person)	Total	375 316	373 069	406 552	393 540	399 734	
	Per 100 inhabitants	12.4	12.3	13.5	13.1	13.4	
Average annual bed occupancy rate (day)		236	236	246	240	240	
Average duration of in-patient treatment (average number of bed-days per patient) (day)		7.7	7.8	7.5	7.6	7.6	
Number of ambulatory/polyclinic facilities (unit)	Total	513	514	509	505	505	
	Per 10 000 inhabitants	1.7	1.7	1.7	1.7	1.7	
Number of physicians in ambulatory/		Total	5 022	4 928	4 746	5 142	5 142

polyclinic facilities (person)	Per 10 000 inhabitants	16.6	16.3	15.8	17.2	17.2
Number of paramedical personnel in ambulatory/ polyclinic facilities (person)	Total	7 784	7 596	7 410	7 852	7 852
	Per 10 000 inhabitants	25.7	25.2	24.6	26.3	26.3
Number of junior medical personnel in ambulatory/ polyclinic facilities (person)	Total	1 083	1 058	1 021	1 046	1 046
	Per 10 000 inhabitants	3.6	3.5	3.4	3.4	3.5
		2012	2013	2014	2015	2016
Capacity of ambulatory/polyclinic facilities (number of visits per one shift)	Total	39 444	39 089	39 861	39 451	39 503
	Per 10 000 inhabitants	130.3	129.3	132.3	131.3	132.0
Number of visits to ambulatory/ polyclinic facilities	Total (thousand)	11 531.9	11 656.1	11 676.5	12 002.8	12 174.1
	Per inhabitant	3.8	3.9	3.9	4.0	4.1
Number of pediatric and maternity welfare clinics, independent clinics, facilities with pediatric and maternity welfare departments (unit)		375	380	378	447	453
Number of beds for pregnant and parturient women (unit)	Total	1 295	1 269	1 293	1 295	1 265
	Per 10.000 women of fertile age	15.9	15.9	16.4	16.7	16.5
Number of beds for child patients (unit)	Total	1 189	1 184	1 523	1 532	1 515
	Per 10.000 children	20.8	20.6	26.1	26.0	25.5
Emergency aid	Number of emergency aid stations (unit)	108	108	104	101	74
	Number of emergency aid calls (unit)	423 109	469 833	480 136	489 911	501 764
	Number of physicians (per 100.000 population, person)	7.4	7.5	7.0	5.0	5.0

Indicators of Health Care System, by the RA Provinces and in Yerevan, 2016

	Number of hospitalized patients (per 100 inhabitants)	Number of hospital beds (per 10.000 inhabitants)	Average duration of inpatient treatment (day)	Average annual bed occupancy (day)	Number of ambulatory/ polyclinic facilities (per 10.000 inhabitants)	Number of visits to ambulatory/ polyclinic facilities (per person)
Yerevan	26.0	73.7	7.3	257	1.4	5.0
Aragatsotn	4.2	15.6	5.2	139	1.9	2.9
Ararat	5.3	18.3	8.4	228	2.3	3.6
Armavir	5.0	13.4	5.2	197	2.3	3.5
Gegharkunik	5.3	32.5	17.4	284	1.7	3.4
Lori	8.3	22.0	6.3	242	1.9	3.9
Kotayk	6.0	26.4	8.8	200	1.9	3.6
Shirak	8.6	36.1	7.3	177	1.3	3.6
Syunik	7.7	30.9	8.8	221	1.2	3.9
Vajots Dzor	3.9	16.9	4.7	108	1.6	3.8
Tavush	6.5	20.7	4.7	146	2.2	3.1
Total for RA	13.4	41.8	7.6	240	1.7	4.1

Number of Physicians and Paramedical Personnel, by the RA Provinces and in Yerevan, 2016

Person

	Number of physicians		Number of paramedical personnel	
	Total	Per 10 000 inhabitants	Total	Per 10 000 inhabitants
Total for RA	13 148	44.0	17 464	58.5
Of which, in the system of the Ministry of Health				
Yerevan	9 504	88.3	8 654	80.4
Aragatsotn	241	18.8	633	49.3
Ararat	460	17.8	1 005	38.9
Armavir	403	15.2	975	36.7
Gegharkunik	316	13.7	941	40.8
Lori	514	23.2	1 167	52.8
Kotayk	550	21.8	1 104	43.7
Shirak	543	22.7	1 401	58.5
Syunik	285	20.5	796	57.3
Vajots Dzor	104	20.7	228	45.3
Tavush	228	18.3	560	45.0

In 2016, 70.9% of 505 ambulatory/polyclinic facilities operated under the Ministry of Health.

Types of Ambulatory/ Polyclinic Facilities, by the RA Provinces and in Yerevan, 2016

Unit

	Independent				Dispensaries	Dental clinics		Divisions within hospital system	Other Total	Other Total
	For adults	For children	Health centers	Rural ambulatories		For adults	For children			
Yerevan	23	2	45	-	5	23	5	34	10	147
Aragatsotn	-	-	1	16	-	1	-	6	-	24
Ararat	-	-	1	50	-	3	-	6	-	60
Armavir	1	-	1	52	-	4	-	3	-	61
Gegharkunik	2	-	-	30	-	2	-	6	-	40
Lori	4	-	6	17	1	7	1	6	-	42
Kotayk	2	-	5	30	1	3	-	6	-	47
Shirak	7	-	-	12	3	1	1	8	-	32
Syunik	-	-	-	10	1	1	-	5	-	17
Vajots Dzor	-	-	-	5	-	-	-	3	-	8
Tavush	1	-	1	18	-	-	-	7	-	27
Total for RA	40	2	60	240	11	45	7	90	10	505

Activity of hospitals. In 2016, 393 734 patients were admitted for in-patient treatment, which comprised 133.6 persons per 1.000 inhabitants. Among the admitted patients, 19.1% were children aged 0-14 years. Average bed occupancy rate was 240 bed-days, and average duration of in-patient treatment was 7.6 bed-days.

Statistics recorded implementation of 128 586 surgical operations, of which 10.1% for children aged 0-17 years, including 86.0% for children aged 0-14 years. 7.6% of surgeries were done using endoscopic method. The number of operated patients was 121 769, of which 11 055 (9.1%) were children aged 0-14 years, and 1 705 (1.4%) were children aged 15-17 years. 515 people died from surgeries, including 10.3% of children aged 0-14 years. During 2016, 393 385 persons (98.4%) were discharged from hospitals, and 5 509 persons (1.4 %) died.

Types of Hospitals, by the RA Provinces and in Yerevan, 2016

	Independent hospitals	Merged hospitals	Health center	Maternity hospitals without antenatal clinic	Maternity hospitals with antenatal clinic	Dispensaries with in-patient facilities	Total
Yerevan	19	25	-	3	2	4	53
Aragatsotn	-	4	2	-	-	-	6
Ararat	1	4	1	1	-	-	7
Armavir	1	3	-	-	-	-	4
Gegharkunik	1	4	1	1	-	-	7
Lori	1	5	1	-	-	1	8
Kotayk	4	4	1	-	1	1	11
Shirak	6	4	3	1	-	2	16
Syunik	1	5	-	-	-	1	7
Vajots Dzor	-	2	1	-	-	-	3
Tavush	-	4	3	-	-	-	7
Total for RA	34	64	13	6	3	9	129

Surgeries Performed in Hospitals, by Surgery Types, 2016

	Surgery	Of which, persons aged 0-17 years old		Endoscopic method, unit	Number of the deceased due to operation (person)	Of which, persons 0-17 years old	
		Total	Including, 0-14 years old			Total	Including, 0-14 years old
Nervous system	1 321	228	214	54	56	11	11
Endocrine system	1 286	3	2	3	-	-	-
Optical organs	8 852	378	364	-	-	-	-
Otolaryngologic organs	9 763	584	315	49	2	-	-
Respiratory organs	7 786	4 669	4 444	236	42	5	5
Cardiac	6 021	122	113	1 943	44	9	9
Vessels	5 277	47	16	825	38	1	1
Abdominal cavity organs	19 194	2 598	2 074	2 570	221	11	11
Kidneys and ureters	4 063	364	316	702	6	-	-
Prostate	1 626	28	-	776	6	-	-
Female genital organs	10 073	83	52	1 691	3	-	-
Obstetrical	29 678	57	1	154	-	-	-
Musculoskeletal system	10 917	2 628	2 302	515	60	-	-
Breast	1 709	8	7	-	1	-	-
Skin and hypodermic	4 031	731	578	-	4	-	-
Other	6 989	463	369	192	32	16	16
Total	128 586	12 991	11 167	9 710	515	53	53

Basic Indicators of Emergency Aid Service, 2012-2016

		2012	2013	2014	2015	2016
Number of emergency aid stations, unit		108	108	104	101	74
Number of emergency aid stations, unit		423 109	469 833	480 136	489 911	501 764
Number of physicians per 100.000 inhabitants, person		7.4	7.5	7.0	5.0	5.0
Number of teams, unit	General profile	399	403	221	160	160
	Specialized	25	28	19	19	19
	First-aid	81	69	39	35	35
Number of patients served by emergency calls, person	Total	428 831	476 585	486 110	507 519	507 519
	Per 1 000 inhabitants	141.8	157.7	161.3	165.1	169.6

7.1. Affordability of Healthcare Services

According to data from the ILCS 2016, subjective assessment of health status has the following distribution: 88.8% of population described their health as satisfactory, good and very good, while 11.2% describe it as bad or very bad. With regard to poverty profile of subjective assessment of health status, 10.2% of the non-poor, 9.7% of the poor and 23.4% of the extremely poor population are sick. According to data from the ILCS 2016, 14.5% of the respondents were ill during the month preceding the survey.

In 2016, 37.7% of sick people applied to a primary healthcare facility for medical advice or treatment, including residents of other urban (40.9%) and rural (42.7%) communities, who had such consultations more often than residents of Yerevan (31.2%). Compared to the preceding year, patients applied for medical advice or treatment more often, both nationwide and in provinces (the relevant indicators in 2015 were, respectively, 40.5%, 44.2%, 43.5% and 35.1%). The proportion of people applying for treatment differs across poverty levels. While 42.3% of the sick non-poor applied for medical advice or treatment, only 27.3% of the poor (excluding the extremely poor) and 17.4% of the extremely poor did so.

In case of sickness, people visited primary healthcare facilities for advice or treatment on average 1.56 times per month; the non-poor did it 1.63 times, the poor (excluding the extremely poor) – 1.27 times, and the extremely poor – 1.18 times per month. The distribution of population by the type of medical specialists visited for some reasons as of the last interview within the survey month is presented below (data is calculated for all the responses).

Table 7.1. Armenia. Visits to Primary Healthcare Facilities, by Type of Medical Specialists and by Poverty Status, 2016 (as of the Last Interview within the Survey Month)

Types of medical specialists	<i>(Percent)</i>			
	Non-poor	Poor (excluding extremely poor)	Extremely poor	Total
Family doctor	32.1	41.2	50.0	34.1
Pediatrician	8.0	9.6	9.2	8.3
Obstetrician/ gynecologist	1.6	1.2	0.0	1.5
Therapist	28.3	19.9	6.9	26.4
Narrow specialist	20.4	18.2	33.9	20.1
Dentist	2.2	2.9	0.0	2.3
Private physician	1.6	0.5	0.0	1.4
Diagnostic center	2.0	1.0	0.0	1.8
Emergency aid	1.3	5.0	0.0	2.0

Other	2.5	0.5	0.0	2.1
Total	100	100	100	100

Source. *ILCS 2016*

In case of sickness, 26.4% of patients applied for consultation to a therapist, 34.1% – to a family doctor, 20.1% – to a narrow specialist, and only 1.4% consulted a private physician.

Table 7.2. Armenia. Visits to Primary Healthcare Facilities, by Type of Medical Specialists and by Place of Residence, 2016 (as of the Last Interview within the Survey Month), 2016

(percent)

List of medical specialists	Yerevan	Other towns	Villages	Total
Family doctor	9.3	43.6	48.2	34.1
Pediatrician	13.2	8.0	4.3	8.3
Obstetrician/ gynecologist	1.8	1.7	1.1	1.5
Therapist	29.7	22.0	27.1	26.4
Narrow specialist	31.0	18.9	11.6	20.1
Dentist	1.9	2.1	2.9	2.3
Private physician	2.8	0.5	0.8	1.4
Diagnostic center	3.9	0.3	0.9	1.8
Emergency aid	4.4	0.7	0.9	2.0
Other	2.0	2.2	2.2	2.1
Total	100	100	100	100

Source. *ILCS 2016*

In case of illness the population of Yerevan more often applied to the narrow specialist for consultation, whereas the population of other towns and villages applied more often to family doctors.

Table 7.3. Armenia. Distribution of Population Payments for Primary Healthcare Services, by Type of Medical Specialists, 2015 (as of the Last Interview within the Survey Month), 2016

(percent)

Types of medical specialists	Total payments	Including		
		To a personnel member, based on price list	Gifts or services	Consultation-related payments (X-ray / Laboratory Research)
Family doctor	100	24.0	14.8	61.2
Pediatrician	100	57.8	3.4	38.8
Obstetrician/ gynecologist	100	64.8	2.4	32.8
Therapist	100	41.5	1.1	57.4
Narrow specialist	100	56.8	0.9	42.3
Dentist	100	97.6	0.2	2.2
Private physician	100	79.5	0.0	20.5
Diagnostic center	100	76.8	0.0	23.2
Emergency aid	100	84.1	15.9	0.0
Other	100	69.7	3.4	26.9
Total	100	74.8	1.1	24.1

Source. *ILCS 2016*

As of the last interview within the survey month, the costs incurred by patients having applied for assistance to the specialists of polyclinic facilities were as follows: 74.8% were payments to personnel by price-list, 1.1% were gifts, and 24.1% of the expenses were made for X-ray or laboratory examination payments.

The amount of payments differed by poverty status. On average, payments made in polyclinics by non-poor patients were 4.3 times higher, than those made by poor patients.

Payments made to personnel by non-poor patients for consultancy (X ray, laboratory examination) were 1.1 times higher than those made by poor patients.

42.4% of patients who applied to medical specialists of polyclinics had hypertension. As of the last interview, 33.8% of patients underwent electrocardiography and 28.0% were checked for the level of cholesterol.

The main reasons for not applying to primary healthcare facilities were self-treatment (51.6%) and lack of finance (21.2%). The table below presents the share of the population who did not apply for medical advice or treatment, by reasons and by the place of residence.

Table 7.4. Armenia. Main Reasons for Not Applying to Primary Healthcare Facilities, by the Place of Residence, 2016 (as of the Last Interview within the Survey Month)

(Percent)

	Total	Yerevan	Other towns	Villages
Total, including	100	100	100	100
Self-treatment	51.6	55.5	48.6	48.5
Could not afford (financially) to be treated	21.2	18.1	22.5	24.4
Remoteness	0.6	0.5	0.2	1.0
Problems was not serious	9.0	4.4	15.3	10.4
Medical aid was not required	10.2	12.1	8.7	9.1
Relative or friend was a physician	4.5	6.1	2.6	3.6
Other	2.9	3.3	2.1	3.0

Source. *ILCS 2016*

Breakdown of reasons for not applying for medical advice or treatment by the place of residence looks as follows: self-treatment was reported by 55.5% of surveyed population in Yerevan, 48.6% in other urban communities, and 48.5% in rural communities; lack of finance was reported by 24.4% in rural communities, 22.5% in other urban communities, and 18.1 % in Yerevan. Lack of finance was reported as the second major reason in all types of communities.

During the 12 months of the 2016 survey sick population visited hospitals 2.8 times on average. 54.6% of patients stayed at night in hospital and average stay in hospital per patient was 8.3 days.

Breakdown of patients treated in hospitals (by the duration of their stay) was the following: 64.9% – less than 1 week, 25% – from 1 to 2 weeks, and 10.1% – more than 2 weeks.

Table 7.5. Armenia. Distribution of Population Who Applied for Hospital Care as of the Last Visit during the Month Surveyed, by Payment Method* and Medical Professionals, 2016

(Percent)

	Total	Including			
		Payment to hospital cashier	Out-of-pocket payment to personnel (physician, nurse, etc.)	Gifts (food, etc.) or service rendered to personnel members	Other payments, including for laboratory and X-ray examination or medications
Surgeon	100	89.9	3.2	0.1	6.8
Resuscitation specialist	100	72.6	11.1	0.0	9.7
Therapist	100	68.7	12.0	0.4	18.9
Cardiologist	100	92.9	1.7	0.3	5.1
Obstetrician/ gynecologist	100	56.6	23.1	7.1	13.2
Urologist	100	85.3	0.5	0.4	13.8
Gastroenterologist	100	56.0	19.9	1.2	22.9
Oncologist	100	75.9	7.1	0.3	16.7
Endocrinologist	100	59.3	6.5	0.3	33.9
Neurologist	100	62.6	10.2	0.0	27.2
Other	100	75.2	6.6	1.0	17.2
Total	100	85.3	4.8	0.5	9.4

Source. *ILCS 2016*

*related to patients who made some payments

As one can see from the table above, 85.3% of the total amount paid by each patient was paid to the hospital cashier, 4.8% was paid directly to the medical personnel, the cost of gifts constituted 0.5%, and the share of other payments (for laboratory and X-ray examination, or medicaments) was 9.4%. Thus, 85.3% of patients' expenses in hospitals were paid to the cashier. The share of services provided by surgeons, urologists and cardiologists was the largest in cashier payments. As to payments made directly to the medical personnel, obstetrician/ gynecologists and gastroenterologists had the largest share. With regard to payments made for laboratory and X-ray examination or medications, the largest share was paid to neurologists, gastroenterologists and therapists.

According to ILCS 2016 data, health expenses comprised 5.2% of household consumption expenditures or on average 2 308 AMD per member available per month (Table A6.1 of Annex 3), 0.1% or AMD 16 in case of the extremely poor, 0.4% or AMD 88 for the poor (excluding the extremely poor), and 0.6% or AMD 3 236 in case of the non-poor households.

According to ILCS 2016 data, the share of health expenses in the total household expenditures on services was 15.2% (Table A6.1 of Annex 3).

In Armenia, availability of free health benefit package for poor households is critical. Hence, given that such package would depend on entitlement to family benefit, it is crucial not only to improve the targeting, but also to increase enrollment of poor and extremely poor population into it. Only 9.0% of population was eligible to be treated under the state order. The breakdown by poverty status shows that the state order arrangement was available for 9.5% of the extremely poor, 8.5% for the poor (excluding the extremely poor), and 9.2% for the non-poor population.

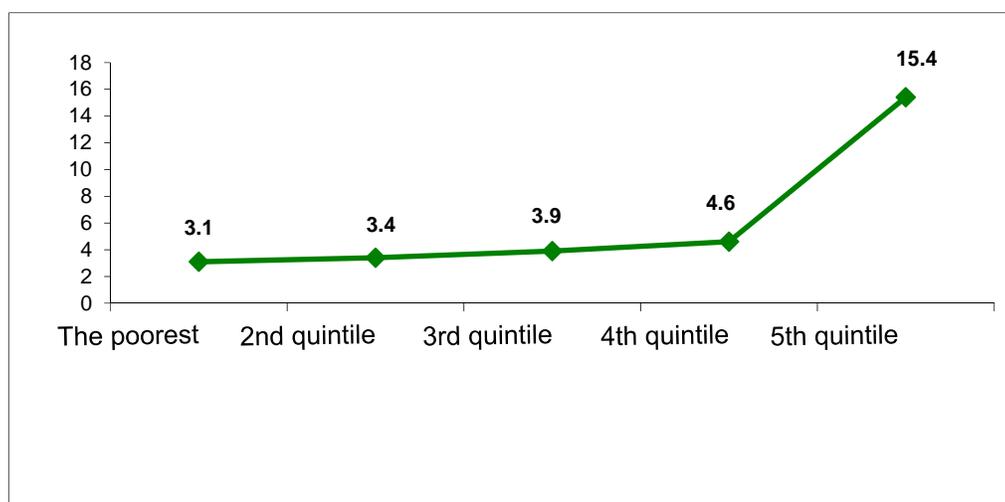
Only 15.5% of households receiving family benefit, including 13.8% of the extremely poor, 15.1% of the poor (excluding the extremely poor), and 16.8% of the non-poor population, were eligible for that package.

As to the households not registered in the family benefit system, 8.0% were eligible for the state order, including 7.9% of the extremely poor, 6.6% of the poor (excluding the extremely poor), and 8.5% of the non-poor population. At the same time, 1.5% of households were not aware about their eligibility for the health care services under the state order or not; i.e. there is a lack of awareness issue.

Figure 7.1 presents the distribution of health care expenditures in total consumption by quintile groups. The share of healthcare expenditures in the total consumption aggregate was higher in the richest quintile group than that in the poorest quintile group (15.4% versus 3.1%). As clearly seen in Table A3.9 of Annex 2, expenditures on healthcare services in the poorest quintile were 6 times lower than the average expenditures on those services, whereas for the richest quintile this indicator was 4 times higher than the average.

Figure 7.1. Armenia. Share of Spending on Healthcare Services in Total Household Consumption Aggregate, by Quintile Groups, 2016

(Percent)



Source . *ILCS 2016*

Not less important is the distance of the nearest medical facility from the household residence. According to ILCS 2016, such data were collected on rural communities only. According to those data, 75.8% of rural households responded that the nearest healthcare facility was within 1 km from their residence. At the same time, 0.1% of households responded that the distance to the nearest healthcare facility was more than 10 km away from their residence. Table 7.6 presents relevant data by quintile groups of consumption. Accessibility of healthcare facilities in rural areas was different across quintiles. The share of households reporting that the nearest healthcare facility was more than 10 km away from their residence was 0.3% in the fourth quintile.

Table 7.6. Armenia. Accessibility of Healthcare Facilities in Rural Communities, by Consumption Quintiles, 2016

(Percent)

Distance	Quintiles					Total
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile	
0-1 km	81.8	74.8	76.3	71.6	76.4	75.8
1-3 km	15.3	21.8	19.5	23.3	19.2	20.1
4-5 km	1.7	1.6	2.7	4.2	4.1	3.0
6-10 km	1.2	1.8	1.5	0.6	0.3	1.0
>10 km	-	-	-	0.3	-	0.1

Source . *ILCS 2016*

The share of spending on medications was equal to 4.4% of total expenditures of surveyed households. Monthly expenditures per capita on purchase of medications amounted to AMD 1956, ranging from AMD 2463 for the non-poor, AMD 762 for the poor, and AMD 407 for the extremely poor population. Monthly per capita expenditures on medications of non-poor households were 3.2 times higher than those of the poor and 6.1 times higher than those of the extremely poor households.

While in urban communities pharmacy network is quite developed, rural communities face accessibility problems. According to ILCS 2016 data, 38.7% of rural households responded that the nearest pharmacy was up to 1 km far from their residence and 16.8% responded that the distance to the nearest pharmacy was more than 10 km. Table 7.7 presents relevant data by quintile groups. Pharmacy accessibility for the richest fifth quintile was different than the access for the poorest first quintile (12.3% versus 18.8%, respectively). The share of households, which reported that the nearest pharmacy was more than 10 km away from their village, ranged among consumption quintiles from 12% to 21%.

Table 7.7. Armenia. Access to Pharmacies in Rural Communities, by Consumption Quintiles, 2016

(Percent)

Distance	Quintiles					Total
	1st quintile	2nd quintile	3rd quintile	4th quintile	5th quintile	
0-1 km	33.8	31.8	41.3	37.1	48.7	38.7
1-3 km	14.6	18.4	13.8	14.6	14.4	15.0
4-5 km	12.1	11.8	10.1	11.5	9.4	11.0
6-10 km	20.7	17.0	17.9	21.2	15.2	18.5
>10 km	18.8	21.0	16.9	15.6	12.3	16.8

Source . *ILCS 2016*

36.9% of households having children under 5 years took them to polyclinics for regular examination or post-natal consultancy during the month preceding the survey. The reasons for not visiting polyclinics were distributed as follows (relative to responses): services were not needed – 95.7%, inadequate quality of medical services – 0.6%, healthcare facility was too far – 0.5%, services were too expensive – 0.6%, and healthcare facility was closed down – 0.0%. 38.8% of households responded that their child was vaccinated, 96.7% said that the weight of the child was measured, 95.7% told that the height of the child was measured, 95.9% received consultancy on the child's growth and development, and 28.6% reported examination of blood.

Chapter 8. Education and Poverty

Education can help people to overcome poverty. Education opens doors to employment and serves as a guarantee for getting loans. Education provides knowledge and skills, which are necessary for increasing income and enhancing employment opportunities. When education is widely available and affordable for the poor, women, and vulnerable groups of population, it also has the potential for broader redistribution of economic growth. On the other hand, poverty forces parents to take their children out of school and send them to work, as they are not solvent.

Almost entire population of Armenia is literate. The results of Census 2011 showed that only 0.3% of the population was illiterate. Access to general education is universal for both boys and girls, but not equally. During the academic year 2016/2017, gender equality index (correlation coefficient of gross enrollment rate of girls to gross enrollment rate of boys) was 1.03; at elementary school it was 1.00, at basic school - 1.01, and at high school - 1.21.

In contrast to basic education, enrollment in upper secondary and in tertiary education is relatively low, with rather visible differences between the poor and the non-poor. High costs of tertiary education and particularly its affordability, low probability of getting high salaries after having been educated are the main reasons explaining why young people of the respective age from poor households stay out of the educational system after completing basic education and, particularly, graduating from general secondary school.

The share of spending on education in consolidated budget expenditures decreased in 2016 as compared to 2008 (from 13.7% to 11.0%). In the sectorial composition of expenditures, the main emphasis is on secondary education.

Box 8.1**Information on Education Sector Performance in 2016**

The key objective of the education sector is to improve the quality of education. The top priority in education sector is to enhance the quality of education ensuring effective functioning of the system and equal access of people to education corresponding to their aspirations and abilities.

For the purpose of enhancing access to preschool education and providing equal start opportunities, the Ist and IInd phase works on establishment of new preschool education facilities were completed in 24 communities of Armavir, Tavush, and Lori provinces, which had signed grant agreements under the World Bank supported “Education Improvement” credit project. The areas of the newly constructed preschool facilities were improved, facilities were provided with new furniture, educational and methodological materials, toys, stationary supplies, etc. All the 24 facilities function well and enroll 750 children. At the same time 55 tutors of the 24 preschool facilities were trained. In the newly established facilities a special attention is paid to effective preparation of pre-school age children for elementary education.

Activities in 2016 were aimed at improvement of quality and effectiveness of general education. “Education Improvement” credit project financed design and cost estimation works of 12 high school premises. All these design and cost estimation documents are at the stage of coordination with the World Bank.

The RA Government Decree N1295-N, dated December 15, 2016 approved the process of introducing the "Araratyan Bachelor's" educational program developed in the framework of the national education excellence program in public education institutions of RA provinces. At the same time it was established that the admission examinations of the graduates of the educational institutions implementing the Ararat Bachelor program were implemented within the targeted places allocated to the Ararat Bachelor's degree. It was planned that the program of introducing "Araratyan Bachelor's" educational program in public educational institutions of RA provinces will be developed and submitted to the Government of Armenia within six months.

Taking into consideration the necessity to complete the program of "National Song and Dance" subject for 5th-7th grades, the appropriateness of implementing a full scope training of school teachers on the 5-7th grades curriculum, as well as the recommendation of the Board of Trustees of the National Song and Dance Academy, the program has not been expanded in 2016-17 academic years and is

implemented only in 113 schools where it had been already included.

There was a plan to introduce in 2016 the subjects of information technology, telecommunication basics and microelectronics in 10 high schools. However, due to lack of funds the process is planned to be implemented in 5 schools only.

In 2016 consideration was given to the importance of improving the educational base and professional development of the staff in the national minority schools.

Works have been carried out to ensure development of primary vocational (technical) and secondary vocational education in the Republic of Armenia and integration into the European professional educational space. In order to ensure continuous development of higher and postgraduate professional education, activities have been undertaken to ensure continued implementation of the principles of the Bologna process. Within the framework of the Innovation Competitiveness Fund, implementation of innovative projects has been carried out by 6 higher education institutions (Armenia National Polytechnical Institute, Yerevan State Medical University, Armenia National Agrarian Academy, RA Public Administration Academy, Armenian National University of Architecture and Construction, and Yerevan State University) according to the agreements signed in December 24, 2015. The programs will be completed in December of 2017.

The 6 activities of the RA Ministry of Education and Science envisaged by the RA Government Action Plan for 2016 were implemented within the defined deadlines.

In 2017, the RA Ministry of Education and Science will continue to pursue public access to public expenditure budget and expenditure reports in secondary education institutions, financing of medium-sized and under-loaded schools, drafting of school development program, ensuring access to video-lessons on natural sciences and mathematics for 7-8th grades, inclusion of business and financial education elements in educational programs, final formulation of the national curriculum with inclusion of Araratian Bachelor's and National Education Excellence Program, introduction of inclusive education, expansion of schools meals program, establishment of intact foundations aimed at improvement of tertiary education funding, ensuring collaboration between tertiary education establishments and research institutes, as well as the issues of increasing the effectiveness of supervision in the field of education.

Box 8.2**Preschool Education Facilities**

In 2016 there were 721 community, public, and non-public preschool education facilities (PSEF) operating in the country, including 575 kindergartens, 113 nursery-kindergartens, and 33 school-kindergartens. Within the total number of PSEFs, 654 operated under community, 15 under public, and 52 under non-public administration. Enrollment of children under PSEF (out of age group 0-5 years) constituted 28.9%, including 35.6% in urban communities and 17.2% in rural communities. The average number of children per group was 27, and the actual occupancy rate was 85.8%. The average attendance rate per PSEF was 100 children, and the average child/teacher ratio was 12. The total area of the related premises was 731.0 thousand square meters. The adjacent (auxiliary) area had a surface area of 557.9 thousand square meters.

Indicators of PSEF Activities, by Provinces and in Yerevan, 2016

	Number of PSEFs (unit)	Including by working regime		Number of groups (unit)		Number of seats (unit)	Number of children (person)	
		Five days	Six days		Of which, groups for children 3 years old and over		Total	Of which, girls
Yerevan	219	216	3	1 157	1 035	35 940	32 587	15 805
Aragatsotn	28	28	-	81	78	2 014	1 980	967
Ararat	78	78	-	218	204	8 404	6 420	3 170
Armavir	56	56	-	180	162	6 476	4 791	2 825
Gegharkunik	42	42	-	108	103	3 867	3 081	1 495
Lori	66	66	-	151	144	4 887	4 289	2 110
Kotayk	52	52	-	234	202	7 313	6 290	3 051
Shirak	50	50	-	169	148	4 756	4 131	1 937
Syunik	55	55	-	181	152	5 020	4 316	2 081
VayotsDzor	17	17	-	40	39	1 257	1 080	496
Tavush	58	58	-	137	119	4 291	3 321	1 649
Total in RA	721	718	3	2 656	2 386	84 225	72 286	35 586

Preschool Education Enrollment, by Age and Gender, by Provinces and in Yerevan, 2016

person

	Under 1.5 years		1.5 - 3 years		3 - 5 years		6 years		7 years	
	Total	Of which, girls	Total	Of which, girls	Total	Of which, girls	Total	Of which, girls	Total	Of which, girls
Yerevan	20	10	3 451	1 763	21 712	10 576	7 389	3 448	15	8
Aragatsotn	-	-	138	62	1 007	448	670	375	165	82
Ararat	-	-	441	209	4 116	2 076	1 858	883	5	2
Armavir	24	15	405	237	3 053	1 925	1 309	648	-	-
Gegharkunik	-	-	136	61	1 815	844	1 079	555	51	35
Lori	-	-	247	108	2 930	1 433	1 112	569	-	-
Kotayk	-	-	619	286	3 576	1 760	2 014	950	81	55
Shirak	-	-	437	200	2 326	999	1 328	709	40	29
Syunik	-	-	631	294	2 387	1 142	1 294	642	4	3
VayotsDzor	-	-	15	13	774	340	291	143	-	-
Tavush	2	1	299	157	1 919	956	1 072	524	29	11
Total in RA	46	26	6 819	3 390	45 615	22 499	19 416	9 446	390	225

Preschool Education Enrollment, by Gender and Age Group (0-5 Years), 2012-2016

%

		2012	2013	2014	2015	2016
Girls	Total	29.6	28.3	29.9	30.3	30.4
	In 0-2 yearsold population	8.1	6.5	6.6	6.4	5.8
	In 3-5 yearsold population	52.1	49.7	52.9	54.2	55.2
Boys	Total	26.4	26.4	27.7	27.2	27.6
	In 0-2 yearsold population	7.4	6.1	5.8	5.4	5.2
	3-5 yearsold population	46.4	46.3	49.2	48.9	50.0
Total		27.9	27.3	28.7	28.6	28.9
Of 0-2 yearsold population		7.8	6.3	6.2	5.8	5.5
Of 3-5 yearsold population		49.1	47.9	50.9	51.4	52.4

General Education Institutions
Key Indicators of General Education, 2016-2017 Academic Year

Number of schools (unit)	Number of pupils (persons)		Pupil gross enrollment indicator, % ¹			Number of persons awarded graduation certificates in 2015 (persons)		Number of teachers, (persons)	
			Total	Including by education level					
	Total	Ist grade		Elementary	Basic	High ²	Basic education		Secondary education
1 432	364 868	40 360	86.0	91.2	90.7	65.1	29 304	22 655	38 273

Quantitative Distribution of General Education Schools

1 432 institutions implementing general education programs (here in after *schools*) operated in 2016/2017 academic year.

Number of General Education Schools, by Provinces and in Yerevan, 2016/2017 Academic Year

	Total	Including		Urban communities			Rural communities		
		Public	Non-public	Total	Including		Total	Including	
					Public	Non-public		Public	Non-public
Yerevan	259	220	39	259	220	39	-	-	-
Aragatsotn	122	122	-	13	13	-	109	109	-
Ararat	112	112	-	21	21	-	91	91	-
Armavir	123	121	2	28	26	2	95	95	-
Gegharkunik	126	126	-	27	27	-	99	99	-
Lori	166	166	-	62	62	-	104	104	-
Kotayk	105	104	1	39	39	-	66	65	1
Shirak	169	165	4	56	52	4	113	113	-
Syunik	118	118	-	33	33	-	85	85	-
VayotsDzor	50	50	-	10	10	-	40	40	-
Tavush	82	81	1	19	18	1	63	63	-
Total in RA	1 432	1 385	47	567	521	46	865	864	1

¹ Gross enrollment rate is the percentage share of the total number of pupils in all grades of the educational system to the total number of resident population of the officially determined age group in that educational system.

² Enrollment in high school was low because 14.5% of population of the relevant age group upon graduation from the basic school continued studies at preliminary vocational (technical) and secondary vocational education institutions.

Number and Distribution of Pupils

During the 2016/2017 academic year the total capacity (number of available seats) in general education schools was 682 328, the number of pupils was 364 868, of which 47.4% were girls. Gross enrollment rate in schools constituted 86.0%, including 91.2% in elementary, 90.7% in basic and 65.1% in high schools. Net enrollment rate was 89.1% in elementary and 89.6% in basic schools. “Adjusted net enrollment” rate totaled 89.5% in elementary and 89.9% in basic school. Gender equality index was 1.03; it comprised 1.00 in elementary, 1.01 in basic and 1.21 in high school.

Number of Pupils in General Education Schools, by Provinces and in Yerevan, 2016-2017 Academic Year

person

	Public schools			Non-public schools			Total		
	Girl	Boy	Total	Girl	Boy	Total	Girl	Boy	Total
Yerevan	53 681	58 337	112 018	3 121	3 773	6 894	56 802	62 110	118 912
Aragatsotn	7 848	9 258	17 106	-	-	-	7 848	9 258	17 106
Ararat	15 673	17 124	32 797	-	-	-	15 673	17 124	32 797
Armavir	15 468	18 038	33 506	240	232	472	15 708	18 270	33 978
Gegharkunik	13 169	15 524	28 693	-	-	-	13 169	15 524	28 693
Lori	14 176	15 255	29 431	-	-	-	14 176	15 255	29 431
Kotayk	16 721	18 249	34 970	32	43	75	16 753	18 292	35 045
Shirak	14 156	15 874	30 030	101	156	257	14 257	16 030	30 287
Syunik	7 898	8 475	16 373	-	-	-	7 898	8 475	16 373
VayotsDzor	2 952	3 361	6 313	-	-	-	2 952	3 361	6 313
Tavush	7 707	8 108	15 815	63	55	118	7 770	8 163	15 933
Total in RA	169 449	187 603	357 052	3 557	4 259	7 816	173 006	191 862	364 868

Pupils Drop-Outs (Incomplete Education), by Reasons, Provinces and in Yerevan, as of the Beginning of 2016-2017 Academic Year

person

	Total	Including, by reason							
		Poor social-economic conditions	Parents do not send (do not allow to go) to school	Disability			Multiple disabilities	Transferred to penitentiary institution	Deceased
				Visual impairment	Mobility problems	Mental disability			
Yerevan	61	43	9	5	-	1	-	-	3
Aragatsotn	24	20	4	-	-	-	-	-	-
Ararat	21	16	2	-	-	-	-	-	3
Armavir	51	44	6	-	1	-	-	-	-
Gegharkunik	16	6	10	-	-	-	-	-	-
Lori	17	9	4	-	-	1	-	-	3
Kotayk	12	2	9	-	-	-	1	-	-
Shirak	42	24	13	-	-	1	-	4	-
Syunik	10	6	2	-	-	-	-	-	2
VayotsDzor	1	-	1	-	-	-	-	-	-
Tavush	5	4	1	-	-	-	-	-	-
Total in RA	260	174	61	5	1	3	1	4	11

**Gross Enrollment Rate of Pupils in Public and Non-Public General Education Schools, by Gender,
2012-2016**

%

	Total	Girls	Boys
2012	89.2	91.7	86.9
2013	87.9	90.5	85.7
2014	87.8	89.9	85.9
2015	86.4	88.3	84.6
2016	86.0	87.5	84.7

Index of Gender Equality (Correlation Coefficient of Gross Enrollment Rate of Girls to Gross Enrollment Rate of Boys) in General Education Schools by Level of General Education Programs, by RA Provinces and in Yerevan, 2012-2016

	Elementary school	Basic school	High school	Total
2012	1.02	1.02	1.21	1.06
2013	1.01	1.02	1.22	1.06
2014	1.01	1.01	1.22	1.05
2015	1.00	1.01	1.20	1.04
2016	1.00	1.01	1.21	1.03

Preliminary Vocational (Technical) Education

In 2016/2017 academic year there were 43 public educational institutions implementing preliminary vocational (technical) education programs, of which 25 institutions provided preliminary vocational (technical) and 18 institutions provided secondary vocational education. Students were trained under basic and secondary education curricula. The number of students totaled 6 251, of which 28.1% were females. 99.8% of students were enrolled under free education system and 0.2% - under paid system. The gross enrollment rate of students was 8.1% (4.9% for females and 10.9% for males), and gender equality index (correlation coefficient of gross enrollment rate of girls to gross enrollment rate of boys) was 0.45.

Number of Students Admitted to Educational Institutions under Free Education and Paid Education Systems, by Provinces and in Yerevan, 2016/2017 Academic Year

person

	Number of Admitted Students		Including			
	Total	Of which female	Free education system		Paid system	
			Total	Of which female	Total	Of which female
Yerevan	1 114	353	1 109	350	5	3
Aragatsotn	72	33	72	33	-	-
Ararat	60	5	60	5	-	-
Armavir	35	2	35	2	-	-
Gegharkunik	267	74	267	74	-	-
Lori	256	63	256	63	-	-
Kotayk	358	116	358	116	-	-
Shirak	604	256	604	256	-	-
Syunik	238	94	238	94	-	-
VayotsDzor	48	18	48	18	-	-
Tavush	109	44	109	44	-	-
Total in RA	3 161	1 058	3 156	1 055	5	3

Number of Students in Educational Institutions in Free and Paid Systems, by Provinces and in Yerevan, 2016/2017 Academic Year

	Number of institutions (unit)		Number of students (persons)		Including			
	Preliminary vocational (technical)	Secondary vocational	Total	Of which, women	Free education system		Paid system	
					Total	Of which, women	Total	Of which, women
Yerevan	7	3	2 322	655	2 317	652	5	3
Aragatsotn	2	-	227	98	227	98	-	-
Ararat	-	1	156	15	156	15	-	-
Armavir	1	-	98	9	98	9	-	-
Gegharkunik	1	3	498	94	498	94	-	-
Lori	2	2	530	121	527	121	3	-
Kotayk	5	3	688	184	687	184	1	-
Shirak	5	-	989	369	989	369	-	-
Syunik	1	3	401	115	401	115	-	-
VayotsDzor	-	1	87	30	87	30	-	-
Tavush	1	2	255	68	254	68	1	-
Total in RA	25	18	6 251	1 758	6 241	1 755	10	3

**Number of Graduates of Educational Institutions in Free and Paid Education Systems, by RA Provinces
and in Yerevan, 2016**

person

	Number of graduates		Including			
	Total	Of which, female	Free system		Paid system	
			Total	Of which, female	Total	Of which, female
Yerevan	701	257	701	257	-	-
Aragatsotn	109	31	109	31	-	-
Ararat	53	5	53	5	-	-
Armavir	34	-	34	-	-	-
Gagharkunik	211	58	211	58	-	-
Lori	193	43	189	43	4	-
Kotayk	275	107	274	107	1	-
Shirak	440	175	425	170	15	5
Syunik	176	81	176	81	-	-
VayotsDzor	54	24	54	24	-	-
Tavush	113	41	113	41	-	-
Total in RA	2 359	822	2 339	817	20	5

Secondary Vocational Education

In 2016/2017 academic year 8 329 students (of which, females 53.2%) were admitted to 93 public and non-public secondary vocational education institutions (SVEI), the number of students constituted 23 193 (of which, females 53.6%), and the number of graduates was 7 677 (of which, females 57.7%). The training was based on basic and secondary education curricula. The gross student enrollment rate was 11.1% (12.5% for females and 9.8% for males), gender equality index (correlation coefficient of gross enrollment rate of girls to gross enrollment rate of boys) was 1.29.

Student Dynamics in Secondary Vocational Institutions by Type of Learning, by Provinces and in Yerevan, 2016-2017 Academic Year

	Number of SVEI (unit)	Admitted (person)		Number of students, (person)		Graduated in 2016, (person)	
		Total	Female	Total	Female	Total	Female
Yerevan	32	4 095	2 191	11 852	6 672	4 312	2 567
Aragatsotn	1	102	64	210	108	76	44
Ararat	4	597	347	1 302	670	467	262
Armavir	6	510	263	1 369	714	289	182
Gagharkunik	8	456	271	1 181	687	383	200
Lori	9	602	338	1 650	913	512	310
Kotayk	6	503	205	1 346	519	318	151
Shirak	12	676	357	2 091	1 100	660	353
Syunik	7	442	216	1 246	607	343	204
VayotsDzor	2	76	47	196	119	68	49
Tavush	6	270	132	750	332	249	111
Total in RA	93	8 329	4 431	23 193	12 441	7 677	4 433

Tertiary Professional Education

Educational Institutions Implementing First Degree Education Programs in Tertiary Education.

In 2016/2017 academic year 63 public and non-public higher education institutions (HEI) and 12 branches provided professional education at the first degree of higher education under Bachelor's programs. 17 649 students (of which, females 52.1%) were admitted to these institutions, the number of students was 81 648 (of which, females 53.8%), and the number of graduates – 19 036 (of which, females 56.0%). The gross enrollment rate was 54.1% (60.0% for females and 48.6% for males), the gender equality index (correlation coefficient of gross enrollment rate of girls to gross enrollment rate of boys) constituted 1.24.

Student Enrollment Dynamics in Higher Education Institutions by Types of Learning, by RA Provinces and in Yerevan, 2016/2017 Academic Year

	Number of tertiary institutions (units)	Number of branches (unit)	Admitted (person)		Number of students (person)		Graduated in 2016, person	
			Total	Of which, females	Total	Of which, females	Total	Of which, females
Yerevan	51	-	14 924	7 681	68 987	36 654	15 637	8 730
Armavir	2	-	41	-	159	6	44	7
Gegharkunik	2	-	217	110	1 327	679	421	206
Lori	2	2	846	530	3 414	2 168	879	526
Kotayk	1	-	18	6	213	120	46	25
Shirak	3	5	800	466	3 857	2 321	1 173	748
Syunik	2	2	383	172	1 749	880	424	190
VayotsDzor	-	1	21	14	204	132	59	38
Tavush	-	2	399	217	1 738	966	353	194
Total in RA	63	12	17 649	9 196	81 648	43 926	19 036	10 664

Educational Institutions Implementing Second Degree Education Programs in Tertiary Education.

In 2016/2017 academic year 34 public and non-public higher education institutions and 9 branches, as well as 4 scientific institutions provided professional education at the second degree of higher education under Master's programs. 6 401 students (of which, females 62.4%) were admitted to these institutions, the number of students was 10 910 (of which, females 59.9%), and the number of graduates constituted 6 507 (of which, females 64.5%). The gross student enrollment rate was 13.1% (15.4% for females and 10.7% for males), and the gender equality index (correlation coefficient of gross enrollment rate of girls to gross enrollment rate of boys) was 1.44.

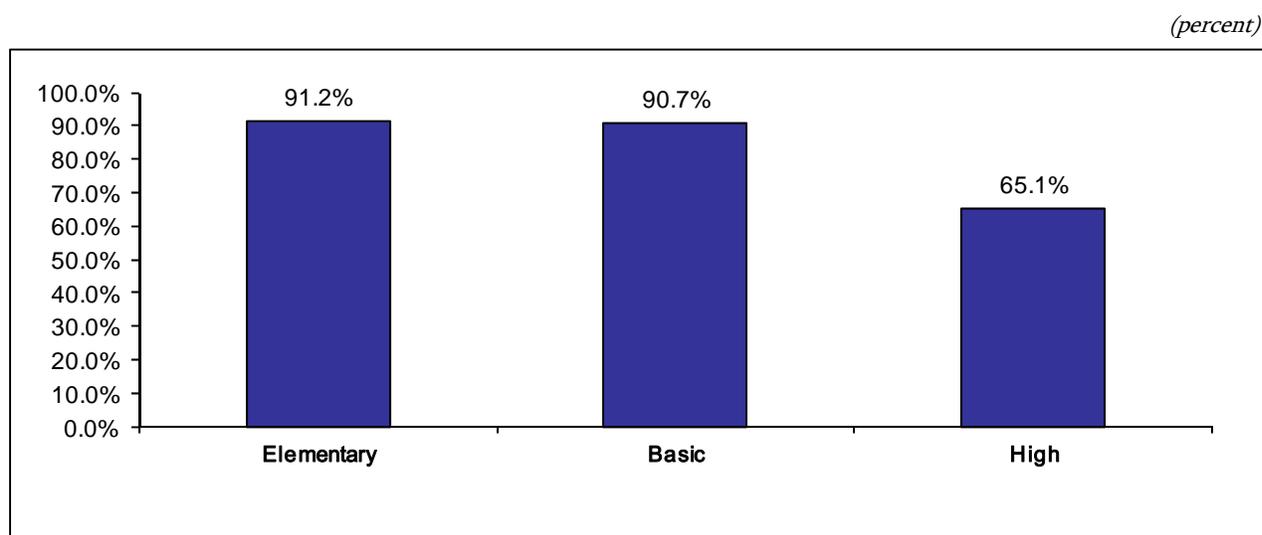
Enrollment Dynamics in Second-Level of Tertiary Education and Scientific Institutions, by RA Provinces and in Yerevan, 2016/2017 Academic Year

	Number of tertiary institutions (units)	Number of branches (unit)	Number of scientific institutions (unit)	Admitted (person)		Number of students (person)		Graduated in 2016, person	
				Total	Of which, females	Total	Of which, females	Total	Of which, females
Yerevan	29	-	3	5 643	3 491	9 837	5 831	5 788	3 687
Armavir	1	-	-	27	-	37	-	18	-
Gegharkunik	1	-	-	92	55	124	66	75	53
Lori	2	2	-	165	107	209	113	178	125
Shirak	1	5	1	349	268	483	378	301	235
Syunik	-	1	-	95	57	162	119	119	82
VayotsDzor	-	1	-	30	16	58	30	28	14
Total in RA	34	9	4	6 401	3 994	10 910	6 537	6 507	4 196

8.1. Enrollment in Education System

Gross enrollment rates in general education schools in 2016/2017 academic year, by educational programs, are presented in Graph 8.1¹.

Graph 8.1. Armenia. Gross Enrollment Rate of Pupils in General Education Schools, by Educational Programs, 2016/2017 Academic Year



Source. RA NSS 2016

According to administrative statistical data, in 2016 enrollment in preschool education facilities (children of age 0-5 years) totaled 28.9%, including 35.6% in urban communities and 17.2% in rural communities. Enrollment of 3-5 years old children in preschool education facilities in 2016 made more than half (52.4%).

According to ILCS data, gross enrollment in preschool facilities (children of age group 0-6 years) constituted 32% and varies depending on poverty level. Particularly, enrollment among non-poor households was 34%, among poor households (excluding the extremely poor) – 29%, and among extremely poor households – 27%. Gross enrollment in preschool facilities (out of children under 6) varied by quintile groups of the consumption aggregate. Thus, it was 25% in the first quintile, 37% in the second quintile, 34% in the third quintile, 29% in the fourth quintile, and 37% in the fifth quintile.

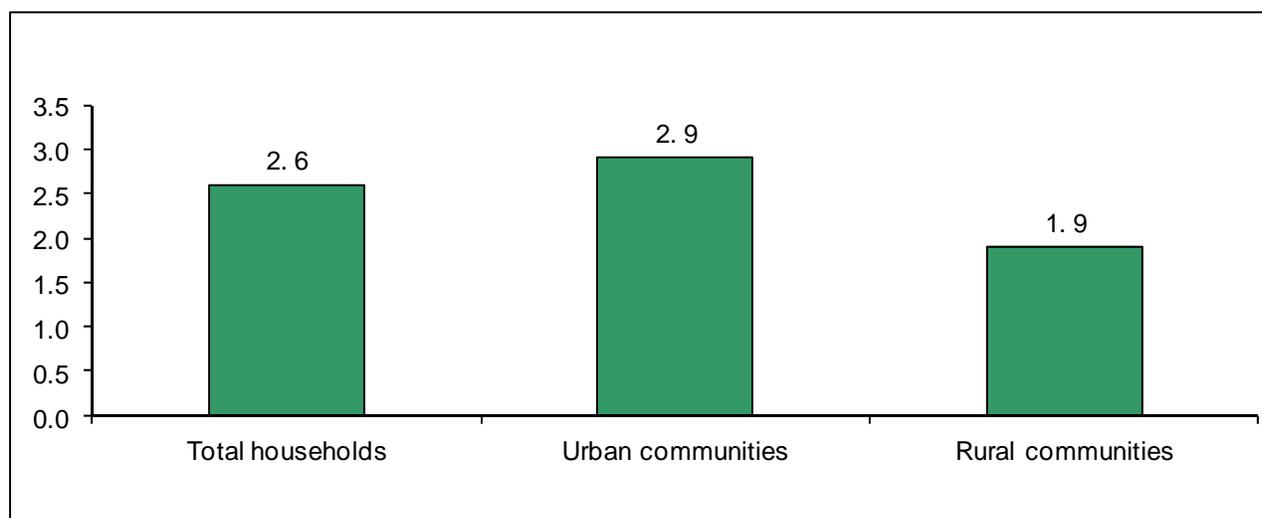
Household Spending on Education

According to ILCS data, the share of spending on education in 2016 amounted to 2.6% of total household expenditures on non-food products and services (Table A6.1; Graph 8.2).

¹Enrollment rates in the education system are estimated on the basis of data received from administrative registers and may differ from those obtained through the ILCS.

Graph 8.2 Armenia. Share of Spending on Education in the Total Household Expenditures on Non-Food Products and Services, 2016

(percent)



Source. *ILCS 2016*

In 2016, according to ILCS data, seven out of ten children under 6 did not attend a preschool facility. As indicated by respondents, the reasons for non-attendance were as follows: the mother did not work – 63.8%, there was no kindergarten – 4.0%, the services were too expensive – 2.6%, or the preschool facility was closed 1.1% (Table 8.1).

Table 8.1. Armenia.Reasons for Non-Attendance to Preschools, 2016

(percent)

	Quintile					Total
	1 st	2 nd	3 rd	4 th	5 th	
Very expensive	4.1	2.7	3.1	1.8	0.5	2.6
Poor feeding	0.3	-	-	1.0	-	0.2
Working hours not suitable	-	1.4	0.1	-	-	0.3
Risk of infectious diseases	0.7	0.5	0.7	1.1	-	0.6
Preschool facility closed down	2.0	0.6	0.9	0.3	1.5	1.1
Low quality of services	-	0.5	0.4	1.3	-	0.5
Non-working mother	65.5	63.5	61.6	60.7	66.8	63.8
No kindergarten	6.9	2.3	3.6	6.2	0.5	4.0
Already attending school	0.8	0.6	-	0.4	0.4	0.5
Other	19.7	27.9	29.6	27.2	30.3	26.4
Total	100	100	100	100	100	100

Source. *ILCS 2016*

There is a difference between the poorest and the richest quintile groups. 4.1% of respondents in the poorest quintile reported that preschool education was too expensive, while the same reason was reported by 0.5% of respondents in the richest quintile (Table 8.1).

The distance to the closest preschool facility from the household's location is considered as one of the key indicators of accessibility. According to ILCS 2016 data, 57.5% of rural residents reported that the preschool facility was up to 1 km away (55.6% and 59.5% of the poorest and the richest quintiles, respectively). Meanwhile, 4.3% of all households responded that it was at the distance of 10 km. 2.4% of the richest and 6.8% of the poorest quintiles responded that the nearest preschool facility was more than 10 km away. Table 8.2 presents these findings by quintile groups.

Table 8.2. Armenia. Accessibility of Preschool Education in Rural Communities, 2016

(percent)

Rural communities	Quintile					Total
	1 st	2 nd	3 rd	4 th	5 th	
<i>Distance to the closest preschool facility</i>						
0-1 km	55.6	61.9	55.8	55.1	59.5	57.5
1-3 km	21.5	21.0	23.1	25.3	24.2	23.0
4-5 km	7.5	6.8	5.1	5.4	6.4	6.2
6-10 km	8.6	7.0	12.5	9.2	7.5	9.0
>10 km	6.8	3.3	3.5	5.0	2.4	4.3
To	100	100	100	100	100	100
<i>Transportation means used to reach the preschool facility</i>						
Car	7.4	19.0	19.2	20.1	18.9	16.9
Bus	26.6	13.7	15.7	13.1	8.5	15.7
Taxi	0.7	0.3	0.2	0.2	-	0.3
Walking	65.3	67.0	64.9	66.6	72.6	67.1
Bicycle	-	-	-	-	-	-
Total	100	100	100	100	100	100

Source. ILCS 2016

Elementary School (1-4 grades)

According to ILCS data, gross enrollment in elementary education (1-4 grades) in 2016 constituted 95% and did not significantly vary by poverty level. Gross enrollment in elementary education system for non-poor households was 94%, and for poor households (excluding extremely poor households) and extremely poor it was 97%. Gross enrollment in the first poorest quintile was 98%, in the second quintile – 93%, in the third quintile – 94%, in the fourth quintile – 91%, and 99% - in the fifth quintile.

In 2016, the average monthly per pupil expenditures of households with children in elementary school were in the amount of AMD 2 908, of which 32.2% was spent on textbooks, 45.4% – on other expenses, 5.6% – on tuition fees, and 16.8% - on private lessons. If the average monthly per pupil expenditures of households with children in elementary school were in the amount of AMD 2 908, for non-poor households the amount was AMD 3 412, for poor (excluding the extremely poor) it was AMD 1 990, and for extremely poor - AMD 1 591.

Middle School (5-9 grades)

According to ILCS data, the gross enrollment in middle school (5-9 grades) in 2016 constituted 100.2%. Gross enrollment in middle school for non-poor households was also 100%, for poor households (excluding the extremely poor) it was 99%, and for extremely poor households it was 105%. Gross enrollment in middle school (5-9 grades) in the first and fifth quintiles was 97%, while in the second, third, and fourth quintiles the enrollment amounted to 100 % and more in each.

The households, who in 2016 had children in the middle schools (5-9 grades), spent on average AMD 3 230 per pupil/per month, of which 40.1% was spent for textbooks, 15.8% for private lessons, 1.1% -for tuition fee, and 43.0% for other education expenditures. If the households with pupils in the middle schools (5-9 grades) spent on average AMD 3 230 per pupil/per month; non-poor households spent AMD 3 555; the poor (excluding extremely poor) spent AMD 2 558, and extremely poor households spent AMD 2 564.

After completing basic education (comprised of elementary and middle school), certain part of children of the relevant age drops out of education system.

As mandatory education in Armenia is free-of-charge, schooling expenses for elementary and secondary education are not a major problem for households. However, even this category of expenses is a burden, which is more significant for households with pupils at higher grades.

High School (10-12 grades)

According to ILCS data, enrollment in high school (15-17 age group) in 2016 gross constituted 64%. In high schools the gross enrollment for non-poor households was 69%, for poor households (excluding the extremely poor) it was 54%, and for extremely poor households - 61%.

In 2016, average monthly per pupil expenditures of households with children in high school totaled AMD 5 946, of which 42.2% was spent on private lessons, 23.8% was spent on textbooks, 3.5% on tuition fees, and 30.5% – on other expenses. The average monthly per pupil expenditures of households with children at high school were distributed by the level of poverty as follows: for the non-poor – AMD 7 370, of which on private lessons- 47.9%, for textbooks - 20.6%, for tuition fee - 4.2%, and for the other expenditures- 27.3%. For the poor (excluding the extremely poor) – AMD 2 995, of which 40.3% was spent on textbooks, 47.8% – on other expenses, and 11.9% – on private lessons; and for the extremely poor – AMD 2 041, of which 46.4% was spent on textbooks, 45.5% – on other expenses, and 8.1% - for private lessons.

Information collected through the ILCS 2016 shows that 12.0% of individuals of 15-17 years old did not attend any educational establishment. The majority of them, 97.0%, told that they had completed their schooling or studies, 0.3% noted that they did not attend school because of poor health; 0.1% was not willing to continue to study, and 0.6% reported that educational services were too expensive for them and they have left their studies. The rest did not attend school for other reasons.

Tertiary Education

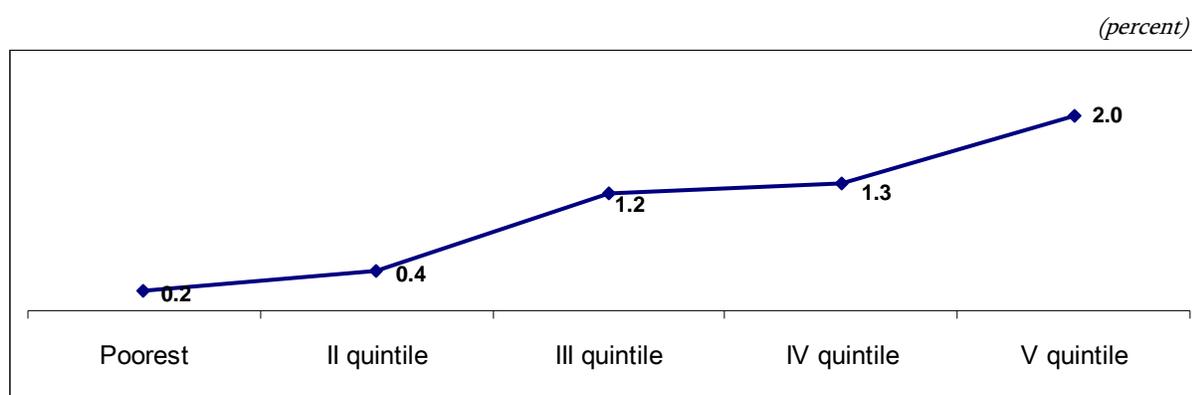
In contrast to basic education, enrollment in upper secondary school and in tertiary education is relatively low, with rather visible differences between poor and non-poor households. High costs of tertiary education and specifically its affordability, relatively low probability of getting high salaries after having been educated are the main reasons explaining why children from poor households drop out of the educational system after completing basic education and, particularly, general secondary education.

According to ILCS data, gross enrollment in tertiary education (18-22 years old group) in 2016 constituted 44%. Gross enrollment in tertiary education institutions was 50% for non-poor households, 34% for poor households (excluding the extremely poor), and 17% for extremely poor households. Gross enrollment in tertiary education in the poorest quintile was 29%, in the second quintile – 43%, in the third quintile – 41%, in the fourth quintile – 52%, and in the fifth – the richest – quintile it was 64%.

Average monthly per student expenditures of households with children in higher education institutions made AMD 28 550, of which 84.7% was spent on tuition fees, 5.8% – on textbooks, 1.2% – on private lessons, and 8.3% – on other expenses.

Graph 8.3 presents the share of spending on education in the population's total consumption, by quintile groups. The data presented in Table A3.9 of Annex 2 suggests that the average expenditures on education services for the poorest quintile were 19 times lower than the average (AMD 49 and AMD 909, respectively), whereas the same indicator for the fifth quintile was 2.9 times higher than the average (AMD 2 594 and AMD 909, respectively).

Graph 8.3: Share of Spending on Education in Total Consumption by Quintile Groups, 2016



Source. ILCS 2016

According to ILCS data, 75.9% of students in tertiary education institutions were from non-poor households, 23.4% – from poor households (excluding the extremely poor), and around 0.7% – from extremely poor households.

9.3% of household members going in for studies reported that during the current and previous academic years they were requested to **give a gift to a teacher or a lecturer**. 17.1% of studying members

of households reported that they gave a gift to the teacher or the lecturer at their personal initiative or by others' request.

One of the most important indicators of **education institution accessibility** is the distance from the household to the closest school. According to ILCS 2016 data, 71.8% of respondents in rural communities reported that the secondary school was up to 1 km away. Meanwhile, 2.6% of households responded that it was 4 and more km away, including 0.1% of households who reported that the distance to the closest secondary school was more than 10 km. Table 8.3 presents these findings by quintile groups.

Table 8.3. Armenia. Distance to Closest Secondary School and Transportation Means to Get There, 2016
(percent)

Rural communities	Quintile					Total
	1 st	2 nd	3 rd	4 th	5 th	
<i>Distance to the closest secondary school</i>						
0-1 km	75.6	73.8	72.2	70.8	65.8	71.8
1-3 km	23.1	24.3	23.8	26.1	31.5	25.6
4-5 km	0.9	1.6	2.6	1.1	2.5	1.7
6-10 km	0.4	0.3	1.4	1.6	0.2	0.8
>10 km	-	-	-	0.4	-	0.1
Total	100	100	100	100	100	100
<i>Vehicle to get to the school</i>						
Car	7.0	18.1	13.1	12.3	16.7	13.3
Bus	4.5	2.1	5.3	2.7	1.6	3.3
Taxi	-	0.1	0.1	0.2	-	0.1
Walking	87.6	79.6	81.5	84.8	81.7	83.1
Bicycle	0.9	0.1	-	-	-	0.2
Total	100	100	100	100	100	100

Source. ILCS 2016

For both boys and girls within the age group of 16-20 years, the **main reason why they did not continue education** was that they completed the secondary school (56.9% and 57.1%, respectively). Around 5% of both boys and girls said that education was expensive. The data by quintile groups is presented in Table 8.4.

Table 8.4. Armenia. Reasons for 16-20 Years Old Individuals for Not Continuing Education, by Gender 2016

(percent)

	Quintile					Total
	1 st	2 nd	3 rd	4 th	5 th	
Boys						
Disease	2.1	4.7	-	-	6.8	2.8
Have to work	-	-	-	-	-	-
Transportation problems	-	-	-	-	-	-
Expensive	2.2	5.4	-	13.2	4.4	4.5
I don't want to study	-	-	-	-	6.5	1.0
I do not attend temporarily, but I will continue	-	4.3	-	-	-	1.0
Family reasons	1.3	1.9	-	-	-	0.8
I have graduated from the basic school (9 th grade)	20.5	5.1	26.8	2.8	14.7	14.5
I have graduated from the secondary school (12 th grade)	52.4	49.9	60.0	67.6	62.6	56.9
I have completed my education	21.5	28.7	13.2	12.9	5.0	18.0
Other	-	-	-	3.5	-	0.5
Total	100	100	100	100	100	100
Girls						
Disease	-	-	-	-	-	-
Have to work	-	-	-	-	-	-
Transportation problems	-	-	-	-	-	-
Expensive	7.0	-	5.6	7.5	-	4.8
I don't want to study	-	-	-	-	-	-
I do not attend temporarily, but I will continue	-	-	-	-	-	-
Family reasons	-	-	-	-	-	-
I have graduated from the basic school (9 th grade)	3.4	19.0	6.0	5.1	-	7.7
I have graduated from the secondary school (12 th grade)	54.2	55.7	56.5	64.5	65.6	57.1
I have completed my education	35.4	25.3	30.1	22.9	34.4	29.9
Other	-	-	1.8	-	-	0.5
Total	100	100	100	100	100	100

Source. ILCS 2016

8.2. Trainings for Those Not Attending Educational institutions (For 14 years old and over)

The 2016 ILCS data illustrate, that only 0.7% of persons 14 years old and over, who were not enrolled in an educational institution, had attended some courses within the 12 months preceding the survey. The courses by duration were as follows: up to two weeks – 43.5%, from two weeks to one month – 6.8%, one month – 9.1%, more than one month – 40.6%. If the last year's payment for the courses was covered by the state / community (50.3%), in 2016 the households mostly paid themselves for the courses - 43.1%. The main objective of the courses was training – 48.2%, advanced training – 39.6%, and retraining – 12.2%. The following courses were most often attended: computer – 16.2%, foreign languages – 10.2%, accounting – 6.9% and handicraft – 6.8%. During the last 12 months the average monthly per course expenses of households amounted to AMD 92 thousand (with a minimum AMD 6 thousand and a maximum AMD 240 thousand).

Chapter 9. Social Transfers in Armenia and Their Impact on Poverty Reduction

9.1. System of Social Transfers in Armenia

Social transfers include pensions and monetary social assistance. Pensions are an important source of income for the population, especially for pensioners, who often have it as the only source of income; therefore, general welfare of this group of the population is dependent on the size of pension (Table A9.1 of Annex 4 presents the number of pensioners in Armenia by pension types). The largest program in the field of monetary social assistance in the Republic of Armenia is the family benefit program. It is the largest program in terms of population coverage, as well as of the funds allocated for this purpose from the RA State Budget.

9.2. Impact Assessment of Social Transfers on Poverty Reduction

Although expenditures on social transfers from the consolidated budget increase year after year, they still remain at a rather limited level as a share of GDP (8.0% in 2016). Nevertheless, social transfers considerably contribute to the reduction of poverty. If payments of all social transfers (including pensions and social assistance benefits) were to be stopped and households would not be compensated for the loss due to lack of sufficient resources, the poverty rate would significantly increase, the total poverty rate would increase by 12.7 percentage points or by 43% (from 29.4% to 42.1%), and also the poverty gap and severity would be higher. The situation would deteriorate especially for the population receiving social transfers.

The social transfers have a significant poverty reduction effect on beneficiary households, and although not all the beneficiaries manage to overcome the poverty burden after they receive monetary assistance, both poverty gap and poverty severity significantly reduce among them.

Pensions, as the biggest component of social transfers, have more significant impact on poverty reduction than monetary social assistance. However, the role of monetary social assistance, and particularly the role of the family benefit program, is considerable, albeit decreasing with respect to previous years. While the Family Benefit (FBP) program's coverage of the population is stable (13.6 percent of the population in 2016), the coverage of the poorest quintile is lower in 2016 (35.3 percent compared to 38.9 in 2015) and the coverage of the upper three quintiles increased from 15.7 to 19.9 percent). These distributional changes in the coverage are also reflected by the deteriorated targeting accuracy measured by the share of FBP benefits and beneficiaries accruing to the poorest quintiles of the pre-FBP consumption distribution. In 2016, 73 percent of FBP beneficiaries belonged to the bottom two quintiles compared to 74.2 percent in 2015; similarly, 72.5 of all benefits went to the poorest two quintiles in 2016 down from 75.2 in 2015. . More than in the past, there is a need to further improve the FBP's coverage of the poor as 75.7% of the poorest 20% of the population is not covered by poverty-targeted Even considering the whole social assistance system including child

benefits and other non-contributory benefits, the coverage gap in the poorest quintile is considerable, as 56.6 percent do not receive any type of monetary social assistance.

Methodology

The impact of social protection programs on poverty in the country is assessed through the Integrated Living Conditions Survey. The analysis covers two main programs of social assistance – pensions and state monetary assistance, which include all types of monetary social assistance. With the exception of family benefit (FB), all other types of state benefits are allocated to very narrow groups of the population; therefore, these beneficiaries have very small share in ILCS, which is not enough to draw statistically significant conclusions.

Assessment of poverty impact of social transfers (pensions and state monetary assistance) was based on the following methodology: poverty indicators observed in the survey (“post-transfer” poverty rate) are compared with those that would be obtained if the transfers would not have been paid (“pre-transfer” poverty rate). The assessment methodology is as follows: “pre-transfer” consumption aggregate for households is calculated by subtracting the amount of social transfers (pensions, monetary social assistance, or both) from the observed total consumption aggregate, assuming that the total amount of social transfers is consumed by the household (a situation that is very typical for low-income countries like Armenia). This methodology is especially important for the improved targeting of social assistance. The population that should be targeted by social assistance is “pre-transfer” poor, since some poor households move out of poverty after they receive social assistance; therefore, “post-transfer” population, as a target group for observation, would constitute rather significant inconsistencies.

The impact of pensions on poverty was estimated comparing the “pre-transfer” poverty rate with the poverty rate after receiving pensions, i.e. with “post-pension”, but without “pre-social assistance” poverty rate¹.

9.3. What is the Impact of Social Transfers on Poverty Rate in Armenia?

In 2016, AMD 405.1 billion or 8% of GDP (as compared to AMD 207.9 billion or 5.8% of GDP in 2008 and AMD 391.0 billion or 7.8% of GDP in 2015) was allocated to social benefits and pensions from the state budget of Armenia. The largest social transfers are pensions that include age, military and social pensions.

Social transfers in 2016 constituted 16.0% of the gross average monthly per capita income of Armenian households (16.5% in 2008, and 16.7% in 2015) (Table 6.1). Social transfers made up 21.1% of the average monthly income per adult household member in the bottom consumption quintile, whereas for households in the top consumption quintile they made up 10.2% only (Table A.3.10, Annex 2). Looking across the types of communities, it’s evident that social transfers were an important source of income for 17.1% mainly urban households outside Yerevan, whereas for

¹ Findings of the survey provide the picture of Armenian population with certain statistical error (deviation). “Pre-transfer” and “post-transfer” poverty rates also contain such statistical error. The impact of social transfers on poverty rate is statistically significant if the confidence intervals related to the average “pre-transfers” and “post-transfers” poverty rates do not overlap.

households in Yerevan and in rural communities they made up 13.2% and 13.1% of the average monthly income, respectively (Table A.3.10, Annex 2).

According to the ILCS, transfers through the family benefit program were considered a source of income by 13.6% of household members in 2016; pensions were indicated as a source of income by 52.4% of household members; childbirth and childcare allowances – by 1.3%, and other benefits, including privileges were considered a source of income by 2.7% of respondent households (Table 9.1).

Table 9.1. Armenia. Share of Household Members Considering Social Transfers a Source of Income, 2008-2016

	<i>(Percent)</i>								
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pension	50.5	51.9	52.5	53.3	53.9	53.7	55.2	54.0	52.4
Family benefit	15.3	12.2	13.4	10.2	13.5	12.2	13.3	13.5	13.6
Unemployment benefit	0.6	1.1	1.3	1.2	0.5	0.4	0.0	0.1	0.0
Childbirth and childcare allowances	0.5	0.7	1.1	1.1	1.4	1.0	1.3	1.7	1.3
Other benefits	3.7	4.2	3.1	3.2	2.6	1.6	2.3	2.1	2.7

Source. 2008-2016, ILCS

Based on the 2016 survey findings, one can conclude that social transfers, although constituting a small share of GDP, still remain an important tool for the poverty reduction. If payments of social transfers (pensions and monetary social assistance) are stopped and the poor are not able to compensate for this loss from other sources, poverty and extreme poverty rates will increase significantly (Table 9.2). Poverty would increase from 29.4% to 42%; and the poor would become even poorer, because the poverty gap, i.e. the shortfall of their average consumption relative to poverty line, would increase from 4.3% to 17.7%, poverty would become more severe, and poverty severity index would increase from 1.1% to 12.9%. Such unfavorable effect would be more significant for extremely poor households. If payments of social transfers (pensions and monetary social assistance) are stopped and the extremely poor are not able to compensate for this loss from other sources, the extreme poverty rate will increase from 1.8% to 17.3%; the extremely poor would become even poorer, because the poverty gap, i.e. the shortfall of their average consumption relative to extreme poverty line, will increase from 0.2% to 9.7%. Poverty would become more severe and poverty severity will increase from 0.0% to 11.1%.

Table 9.2. Armenia. Poverty Mitigation Impact of Social Transfers, 2016

	Poor			Extremely poor		
	Poverty rate	Poverty gap	Poverty severity	Poverty rate	Poverty gap	Poverty severity
Post-transfer (post-pension and post-social assistance)	29.4	4.3	1.1	1.8	0.2	0.0
Pre-transfer (pre-pension and pre-social assistance)	42.0	17.7	12.9	17.3	9.7	11.1
Prior to payment of pensions (pre-pensions and post social assistance)	40.2	15.1	10.2	14.1	7.3	8.2

	Poor			Extremely poor		
	Poverty rate	Poverty gap	Poverty severity	Poverty rate	Poverty gap	Poverty severity
Prior to payment of all social assistance (pre-family benefits and other social assistance, post-pensions)	30.6	6.4	2.5	4.6	1.1	0.7
Prior to payment of family benefit (pre-family benefits, post-pensions and other social assistance)	30.2	5.8	2.0	3.8	0.7	0.2

Source. 2016, ILCS

Pensions, as a larger component of social transfers, have a stronger impact on poverty reduction. However, the role of social assistance, and particularly the role of family benefits is not small either. For example, if payments of only the family benefits were to be terminated, extreme poverty would increase by 2.0 percentage points (from 1.8% to 3.8%), and the poverty rate would increase by 0.8 percentage points (from 29.4% to 30.2%). The poverty gap and severity would increase by 1.5 and 0.9 percentage points, respectively, whereas the extreme poverty gap and severity would increase by 0.5 and 0.2 percentage points, respectively (Table 9.2). These figures prove that family benefits have especially essential impact on extreme poverty. Observations of poverty rate impact of social transfers over 2010-2016 demonstrate the vital importance of social transfers. Non-payment of social transfers in 2010 would result in increase of poverty by 51.4% or 18.4 percentage points and in 2016 - by 42.9% or 12.6 percentage points (Table 9.3). Extreme poverty would double if FB is not paid, in 2010 and 2016 .

Table 9.3. Armenia. Poverty Mitigation Impact of Social Transfers, 2010 and 2016

(percent)

Status	Poverty rate		Extreme poverty rate	
	2010	2016	2010	2016
Post-transfer (post-pensions and post-social assistance)	35.8	29.4	3.0	1.8
Pre-transfer (pre-pension and pre-social assistance)	54.2	42.0	20.9	17.3
Prior to payment of pensions (pre-pension and post-social assistance)	51.9	40.2	17.3	14.1
Prior to payment of all social assistance (pre-family benefits and other social assistance, post-pension)	39.4	30.6	6.8	4.6
Prior to payment of family benefit (pre-family benefits, post-pensions and other social assistance)	38.8	30.2	6.5	3.8

Source. 2010 and 2016, ILCS

Table 9.4 presents pre-transfer and post-transfer poverty indicators only for the households receiving social transfers. Non-payment of social transfers would worsen the living conditions of those households significantly. Obviously, the situation in this case will look much worse than the

impact of non-payment of social transfers assessed for the whole population in the previous table. If pensions are not paid, and households cannot compensate the loss from other sources, the level of poverty among pensioners would considerably increase from 32.5% to 53.1%, while the share of extreme poverty among pensioners will increase from 1.3% to 18.6%. Poverty rates among households receiving family benefits are much higher than the average poverty rate in the country even after receiving FB; it comes to 48.5% as compared to 29.4% of average rate. Termination of payment of family benefits to such households would lead to increase of poverty rate from 48.5% to 54.8%, whereas the share of extremely poor households would increase from 4.1% to 48.7%.

Table 9.4. Armenia. Poverty Reduction Impact of Social Transfers on Households Receiving Pensions and/ or Other Social Assistance, 2016

(percent)

	Extremely poor	Poor	Poverty gap (P1/P0)	Poverty severity
<i>Households receiving pension</i>				
After receipt of pension	2.5	32.5	4.9	1.3
Prior to receipt of pension	26.0	53.1	25.5	18.6
<i>Households receiving social assistance</i>				
After receipt of social assistance	3.9	46.1	8.0	2.3
Prior to receipt of social assistance	20.2	53.2	20.5	10.5
<i>Households receiving family benefit</i>				
After receipt of family benefit	4.1	48.5	8.4	2.5
Prior to receipt of family benefit	18.7	54.8	19.5	8.7

Source. *ILCS 2016*

Note. Poverty gap (P1/P0) indicates the average shortfall of consumption of the poor or extremely poor population relative to the total or food poverty line.

Termination of monetary assistance would not only increase the number of households below the poverty line, but also would lead to intensification of poverty gap and severity. Hence, the social transfers have a significant poverty reduction effect on beneficiary households, and although not all the beneficiaries manage to overcome the poverty burden after they receive monetary assistance, both poverty gap and poverty severity significantly reduce among them.

Looking at the poverty reduction impact of family benefit across provinces also highlights its importance, especially for the extremely poor population. The extreme poverty reduction impact of family benefit remains significant in Yerevan and in all provinces. If family benefits are not paid and households cannot compensate the losses from other sources, extreme poverty rate will increase by 0.1-8.2 percentage points. Family benefits are quite vital for the extremely poor population in Shirak, Lori, Tavush, and Vayots Dzor provinces of Armenia, as the proportion of the extremely poor population will increase by 1.3-8.2 percentage points in case of non-payment of family benefit.

Non-payment of family benefits would lead to an increase of total poverty rate in Lori province by 3.6 percentage points, in Shirak province by 2.0 percentage points, and in Vayots Dzor by 1.3 percentage points (Table 9.5).

Table 9.5 Armenia. Poverty Reduction Impact of Family Benefit, by provinces, 2016

(percent)

	Post-transfer level (pensions and social assistance paid)		Prior to payment of family benefit (pre-FB, post- pension and other social assistance)		Impact of non-payment of family benefit, change, percentage point	
	Extreme poverty rate	Poverty rate	Extreme poverty rate	Poverty rate	Extreme poverty rate	Poverty rate
Yerevan	1.9	24.9	3.0	25.0	1.0	0.2
Aragatsotn	0.6	15.7	0.9	15.8	0.3	0.1
Ararat	1.0	26.9	1.5	27.0	0.4	0.1
Armavir	1.5	29.9	2.7	30.7	1.1	0.8
Gegharkunik	1.0	28.5	2.7	28.9	1.8	0.4
Lori	2.7	35.6	6.9	39.2	4.1	3.6
Kotajk	1.3	35.4	3.2	35.4	1.9	0.0
Shirak	3.7	45.5	11.9	47.5	8.2	2.0
Syunik	1.1	24.2	1.2	26.0	0.1	1.8
Vayots Dzor	1.2	18.5	2.5	19.9	1.3	1.3
Tavush	1.9	33.8	4.4	35.6	2.5	1.7
Total	1.9	24.9	3.0	25.0	1.0	0.2

Source. *ILCS 2016*

9.4. Effectiveness of Social transfers

Who are beneficiaries of social transfers? In order to estimate the effectiveness of social transfers based on the findings of the household survey, inclusion of the “pre-transfer” poor, extremely poor, as well as non-poor population in social assistance programs has been examined. The higher is the coverage of poor and extremely poor population and the lower is that of non-poor population, the more effective is the social assistance and the better is targeting of the most vulnerable population.

Results of the analysis of the family benefit system show that the coverage of the extremely poor by the FB system has changed; in 2016, only 67.2% of the “pre-FB” extremely poor households received family benefit, as compared to 77.5% in 2008 (Table 9.6). At the same time, in 2016, 8.8% of the “pre-FB” non-poor households received family benefit, which was 1.4 percentage points lower than during the compared period (7.4% in 2008).

It should be noted that pensions in contrast to family benefits, are paid to all eligible individuals irrespective of their poverty status. Therefore, there is no coverage issue in this field. As to family benefit program, it has this challenge.

Table 9.6. Armenia. Beneficiaries of Social Transfers in 2008 and 2016

(percent)

	Prior to receipt of social assistance		Prior to receipt of family benefit		Prior to receipt of pension	
Coverage of "pre-transfers" population by pension and social assistance programs						
	2008	2016	2008	2016	2008	2016
Poor	37.6	21.6	33.8	18.6	70.9	54.5
Extremely poor	79.3	75.1	77.5	67.2	95.4	96.6
Non-poor	11.2	11.5	7.4	8.8	36.5	41.1

Source. 2008 and 2016, ILCS

Note. Coverage of poor and extremely poor is higher than that of non-poor.

Inequality of Social Transfers. ILCS assessments show that social transfers also contribute to the reduction of disparity between consumption distribution. Pre-transfer Gini coefficient of consumption aggregate distribution in 2016 reduces from 0.362 to 0.302, when the consumption aggregate is added by pensions; in case of adding all social transfers the inequality of consumption reduces to 0.286 (Table 9.7).

Table 9.7. Armenia. Impact of Social Transfers on Inequality of Consumption Aggregate Distribution (Gini Coefficients of Consumption Aggregate) in 2008-2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pre-transfer (prior to receipt of pension and social assistance)	0.316	0.346	0.359	0.357	0.359	0.354	0.377	0.375	0.362
Prior to receipt of social assistance (pension amount added, without social assistance)	0.258	0.272	0.282	0.280	0.282	0.282	0.289	0.292	0.302
Post-transfer (after receipt of all social transfers)	0.242	0.257	0.265	0.267	0.269	0.271	0.277	0.279	0.286

Source. 2008 - 2016, ILCS

9.5. Family Benefit

In 2016, 13.0% of households applied for family benefit and 94% of the applicants were found eligible.

According to 2016 Integrated Living Conditions Survey, 12.2% of Armenia's households applied to the family benefit program, were assessed as vulnerable and receive family benefits. 0.5% of households were registered in the FB system but did not receive the benefit, and a further 0.3% is registered in the system and receives emergency assistance. The beneficiary households were grouped as follows according to the duration of receiving benefits: 12.3% of households have been receiving FB for one year, 10.6% of households have been receiving FB for two years, 10.8% - for 3 years, and the rest - for a longer period. Among households entitled to emergency assistance over the last 12 months, 23.9% of households received such assistance twice a year, 20.3% - 1 time a year, 33.4% - three times a year, and 22.4%-four times.

The share of households considered ineligible for social assistance in 2016 was low (around 1%), 85.3% of them were verbally informed about the termination/denial of the benefit eligibility; at that, the reasons for termination/denial were clear for 34.1%, but 5.1% appealed the decision,

whereas such reasons were not clear for 29.1% and they sought clarification. 47.8% of households indicated that it was not easy to get all the necessary documents for registration. 13.2% of households made payments to get the documents.

The vast majority of households (87%) never applied for FB; among reasons one could hear: “Anyway, I would not achieve anything” - 50.8%, while 19.9% believed they were well-off.

93% of registered households are fully or partially satisfied with the services of social inspectors. Only 27.2% of households reported the changes which occurred in the family after registration, 63.8% of the respondents did not have any changes, therefore they did not report.

FB system was considered fair only by 23.2% of households, while 15.7% found it to be unfair, 24.7% were not sure that it was fair, and 36.4% felt hard to express any view.

As to the question on the proportion of really vulnerable households among FB beneficiaries, the majority of households, 47.2%, felt hard to answer; opinions of the others were distributed as follows: 13.7% believed that almost all beneficiaries were poor, 10.1% thought that more than half were poor; 11.9% answered that less than half of the beneficiaries were poor; and 6.2% thought that only a very small part of the beneficiaries were poor.

Table 9.8 presents the coverage rate of the FBP by quintiles of the pre-social assistance benefits consumption distribution and for people below the upper poverty line in 2016 and 2015. The coverage of the FBP in 2016 is similar to 2015, about 13.6 percent of the total population. Nevertheless, the coverage of the poor is low and could be improved. Only one out of 4 poor (defined as those below the upper poverty line) are covered by the FBP. The coverage of the poor worsen since 2015, while the coverage of the upper three quintiles increased from 15.7 to 19.9 percent between 2015 and 2016. By contrast, the coverage of the poor and poorest quintiles of the combined social assistance benefits including the FBP, child benefits and “other social assistance benefits” improved, mainly due to the increase coverage of “other social assistance benefits”.

Table 9.8. Armenia. Coverage of Family Benefit and All Social Assistance across “Pre-Social Assistance” Consumption Quintiles

(percent)

	Total	Quintile					
		Bottom	II	III	IV	Top	Poor
<i>Family benefit</i>							
2015	13.5	37.9	13.8	7.8	4.8	3.1	27.5
2016	13.6	35.3	12.9	10.3	6.4	3.2	24.3
<i>Social assistance (FB included)</i>							
2015	15.2	38.7	15.5	9.2	6.7	6.0	27.8
2016	17.1	43.4	15.6	11.6	8.2	6.5	30.0

Source: ILCS 2015 and 2016.

Table 9.9 presents the distribution of the FB budget and the FB beneficiaries by “pre-FB” consumption quintile groups, based on the ILCS findings. The data clearly show that in 2016, 73.0% of the beneficiaries were in the lowest two “pre-FB” consumption quintiles getting 72.5% of the FB

budget. The factual “leakage” of FB funds is the resources distributed to the beneficiaries in upper consumption quintiles (the richest two quintiles), i.e. 12.9% of the beneficiaries getting 12.5% of the FB budget are not vulnerable. This is indicative of the need for further improvement of program targeting.

Table 9.9. Armenia. Distribution of Family Benefit and Other Social Assistance Recipients and Resources across Consumption Quintiles, 2016

(percent)

	Quintile				
	Bottom	II	III	IV	Top
<i>Family benefit based on “Pre-FBP” consumption quintiles</i>					
Resources	49.6	22.9	14.9	8.9	3.6
Beneficiaries	50.6	22.4	14.2	9.2	3.7
<i>Social assistance (FB included) based on “Pre-Social assistance” consumption quintiles</i>					
Resources	51.3	20.5	14.1	9.0	5.1
Beneficiaries	45.4	22.2	14.8	10.7	6.8

Source. *ILCS 2016*

Which groups of the population are more likely to be included into or excluded from the FB system? According to the ILCS estimates, households with 4 and more children and with no working member or income from hired employment have higher poverty risk (Table 9.10).

Table 9.10. Armenia. Poverty Rate and “Pre-FB” Coverage, by Specific Groups of Households, 2008 and 2016

(percent)

Household type	Extreme poverty rate		Poverty rate		Coverage of the “pre-FB” poor	
	2008	2016	2008	2016	2008	2016
HH with 4 and more children	23.1	16.8	56.7	65.5	76.7	88.9
HH with no working member	11.6	7.9	43.6	34.6	71.1	76.6
HH with no income from hired employment	8.3	7.1	37.6	32.8	69.4	75.7
Rural landless HH	4.0	4.0	28.3	29.1	65.8	63.4
HH with no migrant member	4.8	3.3	31.1	25.2	68.3	42.7

Source. *ILCS 2008 and 2016*

Likelihood to receive the family benefit. In order to identify the factors that matter for the likelihood of a particular household to receive the family benefit, parameters of a statistical model were estimated (for regression model results are in Table A9.2 in Annex 4). The examined factors with a potential impact on the potential eligibility for family benefit are the following: characteristics of the household, i.e. size of the household, age, gender and education of the household head; economic characteristics of the household, i.e. employment status of household

members and consumption per adult equivalent; as well as other characteristics such as housing conditions (apartment, house, temporary dwelling etc.), and car and land¹: These factors are used as independent explanatory variables in the probit model, where inclusion in the social assistance system is a dependent variable.

Children, as compared to other age categories, have the highest probability to receive FB. The larger the share of children in the household (keeping the real household size constant), the higher is the probability that the household receives FB relative to the reference age category (the share of adults between 45 and 60). Household members aged 0-5, 6-14, and 15-18 years have a positive effect on the likelihood of receiving FB (by 9.1, 9.2, and 8.8 percentage points, respectively). In case of other equal conditions, female-headed households are more likely to receive FB (by 2.3 percentage points) than male-headed households.

Households with heads having tertiary education have, on average, much lower probability of receiving FB than those with heads having primary education.

Employment status of the household head is tightly associated with the eligibility for FB. If the household head is unemployed, the likelihood of receiving FB for such household is higher (by 7.7 percentage points) than the reference category, i.e. households with an employed head.

Another surveyed factor conditioning eligibility for FB is car ownership. Availability of own car reduces the likelihood of receiving family benefit (by 6.4 percentage points).

Living in a temporary dwelling increases the likelihood of receiving FB (by 12.1 percentage points).

¹ Most of these factors are included in the household vulnerability assessment formula.

Chapter 10. Housing Conditions

Integrated Living Conditions Survey (ILCS) provide a unique opportunity to collect data on housing conditions of households, accessibility of utility services, and other housing-related issues. This chapter presents a comparative analysis of the main indicators of housing conditions for the period of 2008-2016 collected from ILCS data.

10.1. Housing Conditions

In 2016 most of the households in Armenia (91.3%) owned their homes. In urban areas 72.0% of households live in multi-apartment buildings, whereas in rural communities private houses prevail (92.2%) (Table 10.1). In 2016 people lived in hostels in urban communities only. The proportion of urban and rural residents of hostels, temporary and other types of dwellings in urban and rural communities was 1.1% in was 2.5%.

Most of the people living in temporary dwellings were poor and belonged to the first quintile group.

Table 10.1. Armenia. Distribution of Households by Type of Dwelling, Residence Location, Poverty Rate, and Consumption Quintile Group, 2016

	Total	Including by types of dwelling				
		House	Apartment	Dwelling	Temporary dwelling	Other types of dwelling
<i>By residence location</i>						
City	100	26.9	72.0	0.2	0.9	-
Including Yerevan	100	24.2	75.5	0.3	-	-
Other city/town	100	29.6	68.4	0.1	1.9	-
Village	100	92.2	5.3	-	2.4	0.1
Total	100	49.6	48.8	0.2	1.4	0.0
<i>By poverty level</i>						
Non-poor	100	47.9	50.7	0.2	1.2	-
Poor	100	56.0	42.3	-	1.6	0.1
Extremely poor	100	37.0	51.7	-	10.1	1.2
<i>By quintile groups of consumption aggregate</i>						
First	100	55.0	42.1	-	2.6	0.3
Second	100	50.9	47.5	0.1	1.5	0.0
Third	100	51.6	47.2	0.1	1.1	-
Fourth	100	48.1	49.9	0.4	1.6	-
Fifth	100	44.3	55.0	0.2	0.5	-

Source. ILCS 2016

Dwelling occupancy is a serious problem in the country. According to 2016 survey, the occupancy rate of one-room apartment was 2.21 persons. Thus, according to survey data, occupancy rate of 1-room apartments in the bottom quintile was 1.4 times higher than indicator recorded in the top quintile. In 2016, this occupancy rate for the bottom quintile was 2.65 persons per household and 1.90 persons - for the top quintile. 568 (as compared to 877 in 2008 and 558 in 2015) out of 1000 households living in a 1-room apartment had registered 2 or more habitants. In 2016 rural households were much better secured in terms of their living area than urban population (Table 10.2). At the same time, in terms of the availability of necessary amenities, urban housing was in a much better situation than the rural one. Only 9.6% of rural households reported simultaneous availability of in-house (functional) kitchen, cold water supply, flooded toilet, and bathtub, whereas in urban communities such households comprised 90.4%.

Table 10.2. Armenia. Availability of Total Area per Household, 2016

	<i>(m²)</i>
Total	25.2
Including, urban	22.2
rural	30.6

Source. *ILCS 2016*

The Survey collected also information on households' subjective assessments of their housing conditions (Table 10.3). In 2016, most of the households, particularly 61.7%, assessed their dwelling conditions as satisfactory (as compared to 60.2% in 2008 and 63.8% in 2015). 18.6% of households rated their housing conditions as bad, and 3.7% – as very bad. Only 16.0% considered their housing conditions to be good or very good (as compared to 12.2% in 2008 and 15.4% in 2015). The subjective assessments of housing conditions were considered according to the place of residence, poverty status, and quintile groups of consumption aggregate. In 2016, urban households were more satisfied with their housing conditions than similar rural households (Table 10.3).

The poorest households in the lowest quintile groups were more dissatisfied with their housing conditions than the non-poor, and the level of satisfaction in upper quintiles was higher. In the bottom consumption quintile 35.5% of households assessed their housing conditions as bad or very bad, whereas in the top quintile such assessment was provided by 13.1% of households.

Table 10.3. Armenia. Households' Subjective Assessment of Housing Conditions, 2016

	Total	Household subjective assessments of their housing conditions				
		Very good	Good	Satisfactory	Bad	Very bad
<i>By residence location</i>						
City	100	0.6	18.0	62.8	15.0	3.6
Including in Yerevan	100	0.6	13.7	66.2	16.0	3.5
Other city/town	100	0.5	22.7	59.1	14.0	3.7
Village	100	0.2	10.7	59.8	25.4	3.9
Total	100	0.5	15.5	61.7	18.6	3.7
<i>By poverty level</i>						
Non-poor	100	0.6	17.6	63.4	16.0	2.4
Poor (excluding	100	-	9.3	57.4	26.8	6.5

extremely poor)						
Extremely poor	100	-	5.0	42.9	28.1	24.0
By quintile groups of consumption aggregate						
First	100	-	9.1	55.4	27.1	8.4
Second	100	0.4	12.8	60.2	22.4	4.2
Third	100	0.2	15.7	61.0	20.2	2.9
Fourth	100	0.7	15.5	65.8	15.1	2.9
Fifth	100	0.9	21.9	64.1	11.6	1.5

Source. *ILCS 2016*

Housing conditions are relatively worse in poor and especially extremely poor households. While in general 18.3% of poor households participating in the survey were not satisfied with the size of their living space, the share of the essentially dissatisfied respondents was 30.1% among the poor and 39.2% among the extremely poor (Table 10.4.): Similarly, the main problems for the extremely poor were poor heating, dilapidated walls and floor, as well as broken frames and doors, humidity, leaking roofs, poor lighting, and water supply.

Table 10.4. Armenia. Household Complaints about Housing Conditions in 2016, by Poverty Rate

(percent)

	Non-poor	Poor	Extremely poor
Total	100*	100*	100*
Insufficient living space	18.3	30.1	39.2
Noisy neighbors and surroundings	4.6	3.8	1.5
Poor lighting	9.0	17.0	21.2
Poor heating	40.7	56.7	62.3
Humidity	26.4	35.9	42.2
Leaking roofs	12.0	18.1	28.1
Dilapidated walls and floor	17.2	37.1	59.0
Broken roofs and floor	15.2	33.1	53.5
Broken frames and doors	3.3	1.7	2.6
Industrial emissions	2.3	3.1	1.3
Frequent breakdowns of elevator	3.3	1.8	4.1
Poor water supply	12.6	16.2	17.3
Poor garbage disposal	15.6	23.0	17.1
Poor maintenance of public areas and yards of multi-apartment buildings	17.3	18.1	25.6
Lack of green zones	33.0	35.0	30.6
Other	5.6	8.1	12.2

Source. *ILCS 2016*

*Note: The total amount exceeds 100% as the households might have chosen several responses

In 2016, only 1.8% or 14.3 thousand households were able to renovate their dwelling during one previous year; most of them, particularly 81.7%, were non-poor households, whereas the share of poor households was 18.3% only, and none of the extremely poor households were able to renovate their dwelling.

10.2. Access to Drinking Water, Sewerage, and Garbage Disposal

Access to drinking water. According to 2016 survey data, the vast majority of households, who participated in the survey, had access to a centralized water supply system. (100% of urban communities, and 94.0% of rural communities) (Table 10.5).

Among the households with centralized water supply, 95.5% had in-house water supply, 3.8% had a water tap in the yard, and the remaining 0.7% used a tap on the street.

Table 10.5. Armenia. Access to Water Supply, Comparison of 2008 and 2016 Data

(percent)

Main source of water	Total in the country		In urban residential areas		In rural residential areas	
	2008	2016	2008	2016	2008	2016
Centralized water supply	97.1	97.9	99.5	100	92.4	94.0
Up to 1 hour	0.7	0.0	0.1	0.0	1.9	0.1
1-5 hours	31.3	10.3	31.2	4.6	31.4	21.7
6-12 hours	28.6	14.9	32.6	12.9	20.5	18.6
13-23 hours	5.7	8.2	5.9	8.0	5.3	8.6
24 hours	33.7	66.6	30.2	74.5	40.9	51.0
Water well, spring	1.2	0.5	0.1	-	3.1	1.4
Own water supply system	0.5	1.1	0.1	-	1.3	3.2
Water brought from elsewhere	1.1	0.1	0.2	-	3.0	0.4
Other sources	0.1	0.4	0.1	-	0.2	1.0

Source. *ILCS 2008 and 2016*

Access to a centralized water supply system did not necessarily ensure appropriate water supply services. In 2016, water was available to households for about an average 19.1 hours daily. Only 66.6% of households with centralized water supply systems reported to have 24-hour supply. While this was an obvious improvement as compared to 2008, still 10.3% of households had water for only 1- 5 hours daily. Moreover, not all communities in the country had water supply on a daily basis. During a month households had water supply on average for 30 days.

In 2016, 0.1% of urban households had monthly water supply for 1-7 days, 0.03% – for 2 weeks, and 1.7% – for 3 weeks.

In rural communities, 0.4% of households had monthly water supply for 1-7 days, 1.1% of households had water supply for 2 weeks, and 1.6% – for 3 weeks.

Countrywide, 0.2% of households had monthly water supply for 1-7 days, 0.4% – for 2 weeks, and 1.7% – for 3 weeks.

Table 10.6. Armenia. Availability of Water Supply Services, by Quintile Groups of Consumption Aggregate, 2008 and 2016

(percent)

	First quintile		Second quintile		Third quintile		Fourth quintile		Fifth quintile	
	2008	2016	2008	2016	2008	2016	2008	2016	2008	2016
Centralized water supply	96.6	96.9	96.4	96.8	96.0	97.9	97.8	98.8	98.2	98.8
Up to 1 hour	1.1	0.0	1.0	0.0	0.5	0.0	0.5	0.1	0.5	0.1

1-5 hours	35.5	12.1	33.8	12.5	28.6	10.0	30.1	8.9	29.4	9.1
6-12 hours	24.0	14.9	26.9	13.2	28.2	15.3	32.7	17.5	30.3	13.0
13-23 hours	4.5	6.6	6.5	7.4	6.2	10.6	5.1	9.2	6.1	6.5
24 hours	34.9	66.4	31.8	66.9	36.5	64.1	31.6	64.3	33.7	71.4
Water well, spring	1.6	0.6	1.2	0.5	1.1	0.6	1.4	0.5	0.6	0.3
Own water supply system	0.5	1.9	0.7	2.2	0.8	1.2	0.3	0.3	0.5	0.3
Water brought from elsewhere	1.0	0.1	1.7	0.2	2.0	0.1	0.3	0.1	0.7	0.1
Other sources	0.3	0.5	-	0.3	0.1	0.2	0.2	0.3	0.0	0.5

Source. *ILCS 2008 and 2016*

In 2016, availability of centralized water supply in households did not significantly differ across quintiles of consumption aggregate and was in the range of 97-99%.

Nevertheless, 12.6% of non-poor households, 16.2% of poor households, and 17.3% of extremely poor households reported poor water supply services (Table 10.4).

Centralized sewerage system. In 2016 there was an increase of the share of households who had access to a centralized sewerage system, as compared to 2008 (69.7% and 66.7%, respectively) (Table 10.7).

Table 10.7. Armenia. Access to Centralized Sewerage System, 2008 and 2016

	<i>(percent)</i>									
	Urban residential areas		Yerevan		Other cities		Rural residential areas		Total	
	2008	2016	2008	2016	2008	2016	2008	2016	2008	2016
Centralized water sewerage system	91.1	96.1	96.5	96.6	85.5	95.4	19.0	20.3	66.7	69.7
Non-operating centralized water sewerage system	0.2	0.0	0.1	0.0	0.3	0.1	1.3	0.2	0.6	0.1
Lack of sewage system	8.7	3.9	3.4	3.4	14.2	4.5	79.7	79.5	32.7	30.2

Source. *ILCS 2008 and 2016*

With respect to access to a centralized sewerage system, differences between urban and rural areas were significant. Residents of Yerevan had almost universal access to a centralized sewerage system (96.6%). In other urban communities the access to centralized sewerage systems was available for 95.4% of households, whereas in rural communities only 20.3% benefited from the centralized sewerage system. This is an important issue since availability of a sewerage system is critical for proper sanitary conditions and healthcare.

Data on availability of a centralized sewerage system broken down by quintile groups of consumption aggregate (Table 10.8) demonstrates that the richest fifth quintile group had better access to such systems than the poorest first quintile group (73.8% versus 65.8%).

Table 10.8. Armenia. Availability of Centralized Sewerage System, by Quintile Groups of Consumption Aggregate, 2016

(percent)

Availability of water sewerage system	Quintile groups of consumption aggregate				
	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
Centralized water sewerage system	65.8	71.5	69.0	67.5	73.8
Non-operating centralized water sewerage system	-	-	0.3	-	0.1
Lack of sewage system	34.2	28.5	30.7	32.5	26.1

Source. *ILCS 2016*

Garbage disposal. In 2016, the share of households using centralized garbage disposal services (garbage collector system, disposal by truck, garbage piled up for disposal) increased in comparison with 2008 (86.6% versus 80.9%) (Table 10.9). Garbage disposal services performed better in urban communities and, in particular, in Yerevan than in rural communities, where households often had to burn or bury their garbage. A part of the households, particularly 17.1% of the extremely poor, 23.0 % of the poor, and 15.6% of the non-poor complained about bad provision of garbage disposal services (Table 10.4).

Table 10.9. Armenia. Garbage Disposal, 2008 and 2016

(percent)

	Urban areas		Yerevan		Other cities		Rural areas		Total	
	2008	2016	2008	2016	2008	2016	2008	2016	2008	2016
Garbage collector system, disposal by truck, garbage piled	98.0	98.7	99.5	99.2	96.5	98.2	47.4	63.6	80.9	86.6
Burnt	0.8	0.8	0.1	0.0	1.5	1.6	31.9	28.5	11.3	10.4
Buried	0.4	0.0	0.1	0.0	0.6	0.0	10.4	6.7	3.8	2.3
Other	0.8	0.5	0.3	0.8	1.4	0.2	10.3	1.2	4.0	0.7

Source. *ILCS 2008 and 2016*

10.3. Heating

Households both in urban and rural communities heated their houses during the survey year. The share of households who heated their houses in 2016 was 97.5% (Table 10.10).

For heating purposes households used natural gas – 41.3% (as compared to 57.1% in 2010), wood – 37.2% (as compared to 25.8% in 2010), electricity – 15.1% (as compared to 11.7% in 2010) etc.

Compared with the previous year, the share of households using electricity for heating purposes decreased from 18.5% to 15.1%, respectively, while the share of households using wood for heating purposes increased from 35.9% to 37.2%. The share of households using other types of energy

for heating decreased from 5.3% to 5.7%. As of 2016, 99.8 of households had electricity supply, and 85.5% had centralized supply of natural gas.

Table 10.10. Armenia. Heating Options, 2010 and 2016

(percent)

	Urban residential areas		Yerevan		Other cities		Rural residential areas		Total	
	2010	2016	2010	2016	2010	2016	2010	2016	2010	2016
Total	100	100	100	100	100	100	100	100	100	100
Not heated	1.7	3.6	2.4	5.7	1.1	1.3	0.5	0.5	1.3	2.5
Heated. Of which, by types of energy used	98.3	96.4	97.6	94.3	98.9	98.7	99.5	99.5	98.7	97.5
Centralized heating	0.4	0.2	0.1	0.4	0.7	0.0	-	0.0	0.3	0.1
Oil, diesel fuel	-	0.0	-	0.0	-	0.0	0.1	0.0	0.0	0.0
Electricity	17.2	22.9	23.2	28.6	11.0	17.1	1.0	0.9	11.7	15.1
Gas	69.4	58.2	70.1	63.3	68.7	52.9	33.2	12.4	57.1	41.9
Wood	12.0	17.8	6.0	7.3	18.2	28.6	52.5	72.2	25.8	37.2
Other	1.0	0.9	0.6	0.4	1.4	1.4	13.2	14.5	5.1	5.7

Source. ILCS 2010 and 2016

In 2016, the main source of heating for the majority of households was natural gas (41.9%). Natural gas remains to be the main source of heating both in Yerevan and in other urban communities (Table 10.10). Wood remains the main source of heating in rural areas.

As to the types of devices used for heating (Table 10.11), in 2016 population most often used both home-made (42.0%), as well as factory production stoves (22.0%).

Population in urban communities preferred factory-made ovens (29.8%), while in rural population gave preference to home-made ovens (85.1%).

Table 10.11. Armenia. Types of Devices Used for Heating, 2016

(percent)

	Urban residential areas	Yerevan	Other cities	Rural residential areas	Total
Electric tile	10.4	15.6	5.0	0.4	6.8
Electric heater	12.2	12.5	12.0	0.4	8.0
Gas oven	1.5	2.0	1.0	0.1	1.0
Home-made stove	18.3	7.7	29.2	85.1	42.0
Factory production stove	29.8	25.8	33.7	7.9	22.0
Local individual boiler	27.2	35.4	18.8	6.0	19.7
Local collective boiler for the entire building	0.1	0.1	0.1	0.0	0.1
Centralized heating	0.2	0.4	0.0	0.0	0.1
Other	0.3	0.5	0.2	0.1	0.3
Total	100	100	100	100	100

Source. ILCS 2016

In general, spending on utilities amounted to 14.0% of the average monthly household consumption expenditures, whereas spending on natural gas and electricity in 2016 was respectively,

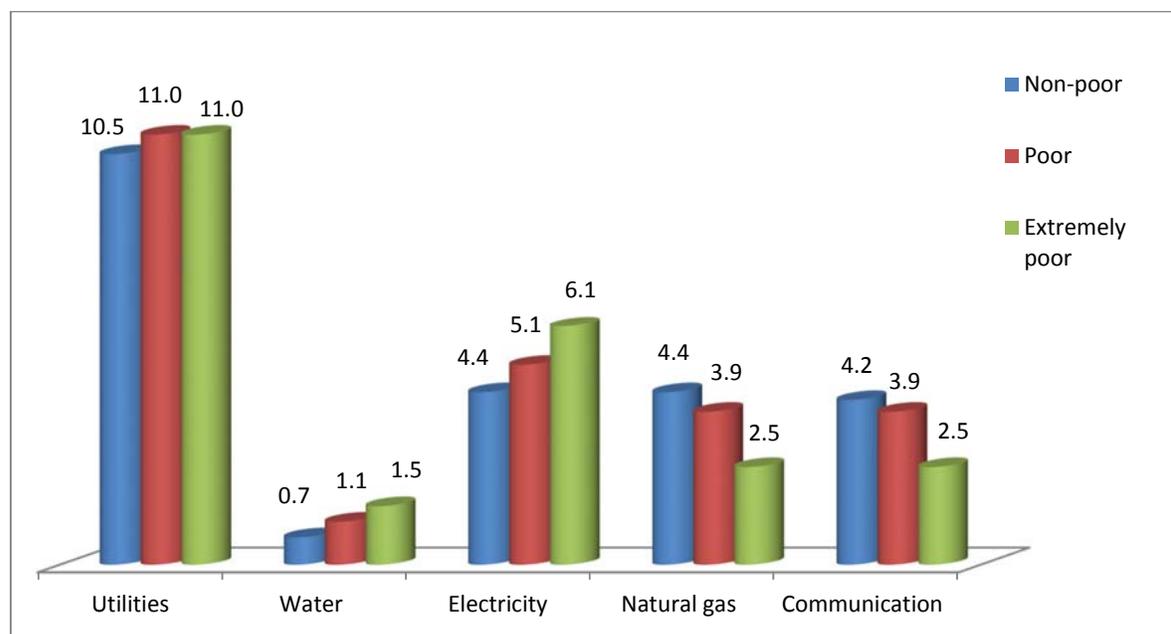
5.7% and 6.0% totaling 83.6% of all utility expenses (Table A6.1 of Annex 3). Communication expenses comprised 5.4% in the average monthly consumption expenditures of households.

Figure 10.1 compares the shares of expenses for different services in the average monthly consumption expenditures of non-poor, poor and extremely poor households.

In 2016, expenditures incurred by non-poor households on utility services (monthly average per capita) were 4.3 times higher, than those of extreme poor households; and expenditures on natural gas were 6.8 times higher than those expenditures of extremely poor households. In the same period, expenditures of the non-poor households on communication services (monthly average per capita) were 7.4 times higher than those of extremely poor households.

Average monthly per capita spending on natural gas only amounted to AMD 3 102 for non-poor households, AMD 1.171 - for poor households and AMD 454 - for extremely poor households.

Figure 10.1. Armenia. Share of Expenditures on Different Services in the Total Consumption Expenditures, by Poverty Level, 2016



Source. *ILCS 2016*

*) *Expenses on communication services include payments for telephone, telegram, and Internet access*

10.4. Availability of Durable Goods

Armenia households indicated that majority of durable household appliances were acquired long time ago. Almost all households, regardless of place of residence, have a TV set, and most of them have a refrigerator, mobile phone, gas stove, and washing machine.

In 2016, the most frequently purchased durables were refrigerators, washing machines, TV sets, mobile phones, gas ovens, and computers.

Table 10.12. Armenia. Availability of Durable Household Appliances per 100 Households, 2008 and 2016

(pieces)

	Total		Urban		Rural	
	2008	2016	2008	2016	2008	2016
TV set	98	99	99	99	98	99
Refrigerator	91	97	94	98	85	95
Washing machine	79	93	82	93	73	93
Vacuum cleaner	46	69	52	73	33	63
Sewing machine	42	48	41	46	45	51
Gas oven	86	92	89	93	80	90
Satellite antenna	7	22	6	16	9	32
Mobile phone	72	97	75	97	68	97
Video camera	3	7	3	6	1	7
Photo camera	22	28	21	27	23	31
Computer	10	67	14	72	2	60

Source. *ILCS 2008 and 2016*

In 2016, 96.7% of households had mobile phones, 51.9% had stationary phones (89.4% in urban areas, and 10.6 % - in rural).

During the recent years the share of households with mobile phones has sharply increased, especially in rural communities, where the share of such households in 2016 reached 96.6%. According to the statistical data of communication service providers, the number of active subscribers to mobile communication services reached 3 434.6 thousand in 2016, which was a 0.9% increase from the respective indicator of 2015. The number of Internet access subscribers in 2016 was 2 411.5 thousand, of which 2 116.5 or 87.8% - through mobile connection.

Table 10.13. Armenia. Accessibility of Computer and Internet Connection for Any Household Member over the Last 3 Months, 2016

(percent)

	2016		
	Total	Urban	Rural
Total number of households	100	100	100
Including			
Availability of computer for any household member, anywhere	73.7	76.3	68.8
Including at home	67.3	71.7	59.6
Availability of Internet access for any household	74.7	77.9	68.7

	2016		
	Total	Urban	Rural
member, anywhere			
At home, permanently or not always	61.2	66.2	52.5
Elsewhere*	17.1	17.9	15.8
Including			
At work	2.3	2.8	1.5
At an educational institution	1.2	1.0	1.6
At others' home	1.5	1.2	2.0
At a (free) Internet access center	0.0	0.0	...
At a (paid) Internet access center	0.1	0.1	0.0
Via mobile phone or elsewhere via mobile device	15.2	16.1	13.5

Source. ILCS 2016

* The amount is bigger than the total, since a household member might be using computer both at home and elsewhere.

According to survey data, the share of households owning a personal computer was 67.3%, including 71.7% of urban households and 59.6% of rural households. Internet access in 2016 was available to a member of 74.7% of households (Table 10.13), including 77.9% in urban communities, and 68.7% in rural. Internet access was available both from home and from other places. Particularly, 61.4% of households had permanent or non-permanent Internet connection at home.

The main findings on accessibility of Internet connection for household members, by gender and age of the household member, are presented in table 10.14. In 2016, 64.3% of household members, including 65.5% of males and 63.4% of females, had access to Internet connection (Table 10.14). Internet connection was more accessible to 15-24 years old individuals (81.9%).

Table 10.14. Armenia. Accessibility of Internet Connection to Household Members over the Last 12 Months, by Gender and Age of the Members, 2016

(percent)

	Total population	Gender		Age			
		Male	Female	<5	5-14	15-24	25+
Household members use Internet	64.3	65.5	63.4	25.0	68.4	81.9	64.2
At home, permanently or not always	61.2	62.3	60.3	24.8	65.8	76.1	61.2
Որևէ այլ տեղում	17.1	18.2	16.3	1.9	12.3	34.1	14.9
Including							
At work	2.3	2.2	2.5	-	-	1.3	3.2
At an educational institution	1.2	1.3	1.1	-	3.4	5.4	0.2
At others' home	1.5	1.5	1.5	0.6	2.3	2.3	1.2
At a (free) Internet access point	-	-	-	-	-	-	-
At a (paid) Internet access point	0.1	0.1	0.1	-	0.1	0.1	0.1
Everywhere, via mobile phone	13.2	14.1	12.4	1.3	9.7	31.2	11.9
Everywhere, via mobile device	2.0	2.2	1.7	0.3	1.8	2.7	2.7

Source. ILCS 2016