



REPUBLIC OF ARMENIA

# **RIO+20 NATIONAL ASSESSMENT REPORT**



Yerevan 2012



**REPUBLIC OF ARMENIA**

**“RIO+20”  
NATIONAL ASSESSMENT REPORT**

**YEREVAN 2012**

**The report is developed within the frame of preparation of the Republic of Armenia to the UN Conference on Sustainable Development Rio + 20 in Rio de Janeiro, June, 2012.**



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REPUBLIC OF ARMENIA

Yerevan, 4 June, 2012



The Earth Summit on sustainable development held in Rio de Janeiro in 1992 was the first high-level forum for Armenia where our country participated as a newly-independent state striving to establish democracy and predominance of universal values. Despite geopolitical issues inherited from past and difficulties typical to the transition economies, in the course of its further 20-year modern history Armenia was always guided by Rio principles and fundamental concepts in the process of elaboration of future country programs and strategies. The Rio process became a turning point for modern global civilization.

In 2002, a National Council on Sustainable Development was established in Armenia that ensured important contribution to the process of elaboration of state programs and implementation of legislative reforms.

Rio goals aimed at sustainable development, the implementation and application thereof, required and still do require close cooperation among and collective efforts by the international community. Natural resources are not evenly distributed among nations and states. Some enjoy these resources in abundance, while others have to strive for their everyday survival. All of us have to realize that this planet is our common home, and we all have to use and multiply its resources for the future generations. Unfortunately, in the modern world natural resources are ruthlessly exploited, guided by narrow selfish and perishable interests, at the expense of universal interests of humanity. From this standpoint, Rio+20 Conference can significantly contribute to all the countries in the world, since it can reveal their recorded achievements and challenges faced during the past 20 years, meanwhile allowing to compare the paths they have passed.

The international community already acknowledges that a mere consumer approach is devastating for the future of humanity and may result in irreversible consequences. I am confident that Rio+20 Conference on Sustainable Development will give renewed impetus to the process that commenced 20 years ago, and will equip the citizens of Earth with new solutions in order to jointly establish a “green economy” and a “green planet”, where everybody will have equal opportunities and equal responsibilities.

**SERZH SARGSYAN**  
**PRESIDENT OF THE REPUBLIC OF ARMENIA**

# STRUCTURE

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## Introduction

It is well acknowledged that 1992 was a breakthrough year for the modern history of humanity. Building upon the results of the United Nations workshop held in 1972 in Stockholm and devoted to environmental issues, 1992 Earth Summit in Rio de Janeiro laid foundation for the shift of the modern civilization toward sustainable (harmonious, balanced, concomitant) development at all levels – global, regional, national, and local.

The “Rio+10” (Stockholm+30) 2002 World Summit on Sustainable Development organized in Johannesburg by the United Nations assessed achievements and problems recorded in the preceding decade in the areas of sustainable production and consumption, harmonization of economic development with social equity and environmental security. At the World Summit, plans for the near future were specified, and years 2005-2015 were declared as the Decade of Education for Sustainable Development (DESD).

The newly independent Republic of Armenia actively participated in the 1992 Summit, and throughout the subsequent twenty years, in harsh conditions of transition and blockade, the country put forth efforts toward meeting, to the extent possible, its commitments, and introducing sustainable development principles in the country.

In June 2012, United Nations “Rio+20” (Stockholm+40) Conference on Sustainable Development will be held in Rio de Janeiro with a focus on two main themes:

- Green economy for sustainable development and eradication of poverty;
- Strengthening the institutional framework for sustainable development.

Summit objectives include the following:

- to secure renewed political commitment to sustainable development;
- to assess progress towards internationally agreed goals on sustainable development and the gap between the agreements and implementation thereof;
- to describe and address new and emerging challenges.

In order to ensure the country’s decent participation in the World Summit, a National Steering Committee responsible for the preparatory work was established by the Republic of Armenia (RA) Prime Minister’s Decree No. 685-A (July 19, 2011). The Committee is co-chaired by the Ministers of Foreign Affairs and Nature Protection.

The task of the Committee, comprised of representatives of state agencies, civil society and academia, was to ensure implementation preparatory activities related to the participation of the Republic of Armenia in “Rio+20” World Summit.

Elaboration of a National Report is an important component of the preparatory activities carried in Armenia; the Report will focus on the assessment of the country’s achievements toward sustainable development and existing problems/challenges that raise concerns. Taking into account the main themes of Rio Summit, the current report specifically highlights national level issues related to the mentioned themes.

By a decision of the Steering Committee, an editorial board and thematic working groups on sustainable development aspects were established. The thematic working groups, co-chaired by representatives of governmental bodies and the non-governmental sector, elaborated the respective chapters of the National Report focusing on the assessment of processes underway in the last decade, since in 2002 a “Rio+10” National Assessment Report was already presented to the public inside and outside of the country.

As a result of taking into consideration comments and recommendations voiced during wide and rather intense public debates and discussions in the framework of the National Council on Sustainable Development chaired by the RA Prime Minister, the current report was elaborated. The Report content proves that in the transition period for Armenia the main focus was on priorities of restoring the economy and ensuring economic growth, often to the detriment of the environment. Nevertheless, the necessity to apply sustainable development principles has gradually become a priority; this process was also reinforced by the country’s accession to a number of international conventions and agreements as well as by active collaboration with United Nations agencies, such as UN Development Programme and UN Environment Programme.

The sustainable development principles were specifically reflected in legislation and programmes aimed at socio-economic development and environmental protection adopted in the country in recent years. These processes were vigorously supported through activities carried out by the National Council on Sustainable Development; the local civil society played an extremely important role as well.

The group of authors of the “Rio+20” National Assessment Report has put efforts to develop a document of utmost objectivity and is confident that the upcoming World Summit will live up to the innumerable and multifaceted expectations of the humanity, will fulfil its mission of a platform of consensus on the ways and criteria of the civilization’s sustainable development, and the Republic of Armenia will have its decent contribution to that extremely important process.

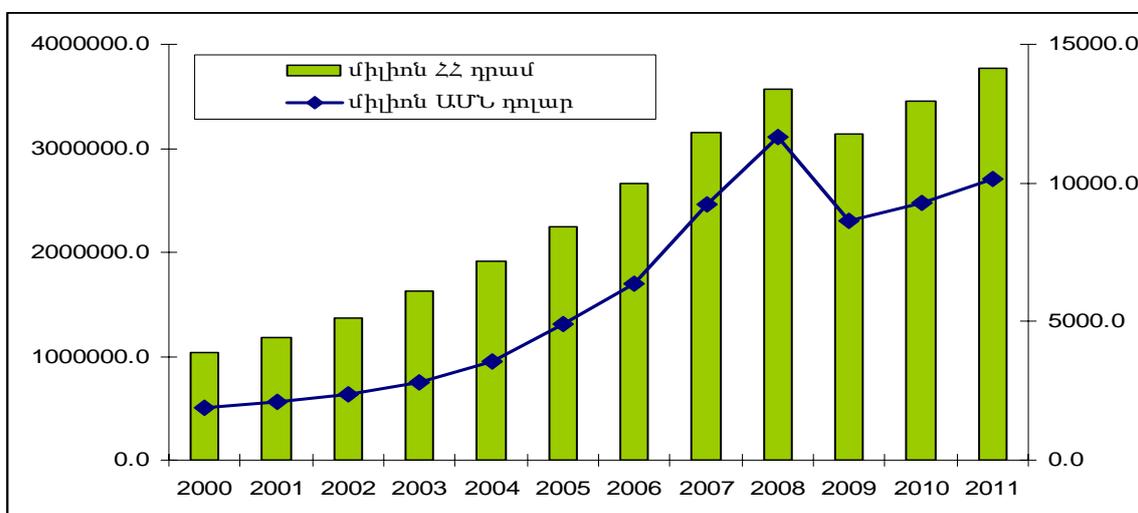
# 1. Initiatives undertaken during the last decade toward ensuring sustainable development

## 1.1 Socio-economic situation

### 1.1.1. Trends of the development of economy. Changes in GDP and GDP structure

The first decade of the 21st century was a period of high rates of economic growth in Armenia. Significant growth in almost all sectors of the economy contributed to two-digit increases in gross domestic product (GDP) in the course of 2004-2008; in average – 11.6 percent (Annex 1). The global economic crises, however, seriously jeopardized the country's economic stability. The crisis was clearly reflected in the economic figures for the last quarter of year 2008. In 2009, a 14.1 percent decline of the economy was recorded, higher than the 11 percent decline forecasted by the World Bank. Despite the fact that in 2010 a 2.1 percent GDP growth was recorded in comparison with the previous year, a number of leading sectors of the Armenian economy were still in deep crisis. It has to be noted that the mentioned figure was higher than forecasted due to the impact of the Government's set of anti-crisis measures.

**Graphic 1.1. GDP trends**



**Legend:** million Armenian drams; million US dollars

In 2011, compared with the previous year, a 5.9 percent increase in the **indicator of economic activity** (IEA)<sup>1</sup> was recorded. It is noteworthy that all sectors of the economy, except construction, contributed to economic activity in the country. Processes of post-crisis rehabilitation point out that the Armenian model of economic growth has been enhanced and will continue changing in the coming years. In particular, the construction sector, which kept growing up until 2008 due to the inflow of private remittances from abroad, will gradually lose its leading position to more exportable sectors of the economy. The latter currently act as one of the driving forces behind economic restoration, mainly influenced by the high rates of growth in the mining sector.

Nevertheless, there is still a lot to be done in terms of enlargement of export base, which is especially important from the viewpoint of securing external stability. The above mentioned proves that the macroeconomic policy implemented since 2009 up to nowadays has been reasonable for the absorption of external shocks and ensuring macroeconomic stability.

In the course of recent years **consumer prices** mainly have remained stable and have not exceeded the range of 4+/-1.5 percent. Perhaps the only exception was year 2010 when the end-of-year 12-month inflation rate (December 2010 in comparison with December 2009) reached 9.4 percent. The high inflation rate was mainly due to factors affecting supply: particularly, the agricultural sector was in a collapse, which caused unprecedentedly

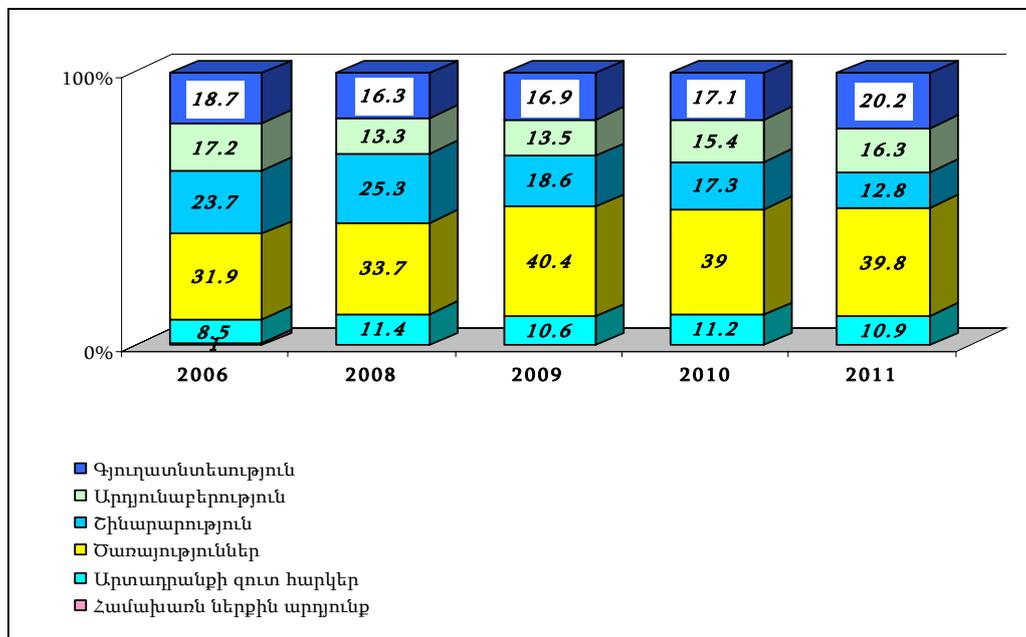
<sup>1</sup> Starting from 2011, the National Statistical Service of the Republic of Armenia has shifted from the calculation of monthly GDP to IEA measurement. In contrast to the GDP figure calculated using the methodology of national accounts (on quarterly and annual bases), the monthly indicator of economic activity describes the change in the production volumes of goods and services in an economy, rather than the change in value added tax. In addition, monthly indicator of economic activity does not include net taxes on products and financial intermediation services indirectly measured (FISIM), which are included in quarterly and annual GDP calculated using the production method.

high prices for agricultural products. In 2012-2014 the forecasted 12-month inflation rate is expected to maintain the target level of 4 percent (+/-1.5 percent) within the allowed range of fluctuations.

As a result of economic and foreign exchange policies implemented in 2002-2008, main indicators of the **current account** of Armenia considerably improved, but this was followed by negative impacts of the global financial crisis that caused reduction of private remittances and factor incomes inflowing the country as well as external demand for goods produced in Armenia. Consequently, in 2009 the current account deficit reached 15.8 percent of the GDP, thus exceeding the highest level recorded in 2000. In the framework of anti-crisis measures, the Government of Armenia policy aimed at export promotion brought about positive results since 2010: the improvement of the external sector of the economy was reached faster than expected (Annex 1).

Uneven development of sectors of the economy has caused significant structural shifts in the GDP structure (Annex 1). A very high rate of **growth in construction** was especially evident, which secured 39.1 percent of the GDP growth in 2008, and the ratio of the construction sector in GDP structure has increased comprising 25.3 percent. In contrast to this, in 2009 the major decrease (41.6 percent) in construction levels has caused 74.5 percent of the GDP reduction, while its ratio in GDP structure has decreased down to 18.6 percent. In 2010, in comparison with 2009, the growth rate in construction reached 3 percent; its ratio (17.2 percent), however, remained lower than the 2008 rate (25.3 percent).

**Graphic 1.2. Structure of Gross domestic product, percent**



**Legend:** Agriculture; Industry; Construction; Services; Net taxes on products; Gross domestic product

In 2006-2008 the national currency, Armenian dram, continued depreciation against US dollar and other foreign currencies; this was, among other reasons, due to increasing volume of foreign currency inflow (in the form of private remittances, state subsidies and foreign direct investments), while in 2009-2010 Armenian dram appreciated as a result of decrease in the volume of private remittances in 2009 and foreign direct investments in 2009-2010. Along with the economic decline, the level final consumption in the economy, calculated as share of GDP, has increased (94.0 percent in 2010, compared with 81.8 percent in 2008). In 2010, the average monthly inflation rate was 8.2 percent.

In 2010 economic growth was recorded in the **industrial sector** as well – 10.5 percent, compared to 6.5 percent decrease in 2009, which contributed, by 1.4 percentage points, to the GDP growth in 2010. On the contrary, in the **agricultural sector**, where the situation in 2009 was comparatively normal, economic decline was recorded (15.7 percent), which was caused by unfavourable climate and weather conditions. This decline, in turn, had its adverse impact, by 2.7 percentage points, on the GDP increase.

A certain level of stability and growth can be observed in the leading industrial area – mining (see the table below, and for more details please refer to Annex 1). These phenomena are more apparent in the sector of mining of nonferrous materials and precious metals. In case of non-metal resources, particularly some types of construc-

tion minerals (stones, sand, etc.), decline trends still continue.

In terms of exporting, growth rates of exports of a number of nonferrous materials and non-metal minerals (except, e.g., molybdenum concentrate, pearlite, etc.) were maintained.

**Table 1.1. Mining volumes of a group of solid minerals and losses in the process of mining**

	2008		2009		2010		2011	
	Extraction	Losses from exhausted supplies, percent						
Gold, kg	720.5	4	498.7	4.0	1946.1	3.3	2735.7	4.9
Silver, kg	44321.8	2.3	10794.5	4.2	21892.4	4.8	25205.1	6.8
Copper, t	28280.3	2.4	32920.4	1.8	40946.1	2.2	43093.7	2.1
Zinc, t	8468.8	4	7238.5	3.2	8971.8	5.8	10492.2	7.9
Copper molybdenum ore, thousand t	13245.8	2	13745.0	1.8	15882.6	1.8	16497.1	1.5
Molybdenum, t	5594.7	2.1	5311.6	1.8	5408.0	1.9	5745.1	1.5
Basalt, cub. m	165276.8	18.7	138497.2	16.7	196222.6	14.0	176688.9	13.3
Tuff, cub. m	154735.5	32.7	115820.2	22.8	118864.6	17.7	122503.4	20.7
Marble, cub. m	468.9	89.5	330.4	87.1	531.0	83.4	83.0	90.0
Travertine, cub. m	38742	19.5	44375.2	19.8	45578.6	23.8	55403.6	11.8
Pearlite, cub. m	129700	19	84142.0	18.7	74200.0	19.0	74627.0	19.0

**Table 1.2. Volumes of a number of minerals exported from and imported to the Republic of Armenia, tonne**

	2008		2009		2010		2011	
	Export	Import	Export	Import	Export	Import	Export	Import
Copper ore, concentrate	67,715.2	-	81,401.9	-	115,964.3	40.1	118,332.5	0.042
Molybdenum ore, concentrate	783.1	501.1	1,192.6	53.9	300.0	160.5	860.0	136.4
Oil and oil products (petrol, black oil, oil, diesel fuel, engine and other oils)	-	399,543.0	571.0	344,487.4	127.8	377,686.1	97.1	357,306.1
Natural and liquid gas	22,989.1	1,587,344.5	22,286.1	1,226,743.7	51,703.4	1,295,882.5	55,807.7	1,504,699.6
Granite, basalt, porphyry, sandstone	4,648.2	1,273.9	4,432.4	783.8	5,670.8	781.5	6,117.5	1738.4

**Agriculture** is one of the key sectors of the economy of the Republic of Armenia. According to 2008-2010 data, around 17 percent of the country's gross domestic product was produced in the agricultural sector, and if combined with agro processing, the figure would reach 21.7 percent.

Taking into account the important role of agriculture in ensuring viability of and economic stability in the country, immediately after the declaration of independence the Armenian Government adopted a policy of privatization of land and other means of agricultural production, supporting infrastructures, and organizations engaged in processing and selling agro produce. Consequently, currently a free economic system regulated by market rela-

tionships is formed in the sector of agricultural food production, which involves more than 340 thousand rural households, commercial organizations engaged in agriculture, numerous private companies engaged agricultural support services, in processing and selling of agro produce.

According to 2008-2010 aggregate data, the volume of gross production in agriculture reached AMD 606 billion (Annex 1), where 63 percent was produced in the subsector of crop farming, and 37 percent - in the subsector of animal breeding. Around 45 percent of the total employed population in the country is engaged in agriculture. Among 915 communities in the Republic of Armenia, 866 communities are rural. Currently the private sector ensures the production of the largest portion of gross agricultural product in Armenia.

In the structure of the country's foreign trade turnover, according to 2008-2010 data, the ratio of products of vegetable and animal origins comprised 17.9 percent.

A considerable portion of incomes of the population living in rural areas is created through agricultural production and paid labour in agriculture. This is the reason why the level of poverty in rural communities is highly dependent upon economic growth in the agricultural sector.

According to data from the **national food balance** of the Republic of Armenia, the level of self-sufficiency in terms of the most important types of food products, calculated on the basis of their energy value, is 58-60 percent. A high level of self-sufficiency in the country is maintained in case of potato, various types of crops and melons, fruits, grapes, milk, meat of small cattle, eggs, while in case of wheat, several types of legumes, bird meat and pork the level of self-sufficiency is still low.

Gradually, contractual relationships are formed among companies producing and processing agricultural materials and small and medium size enterprises; these relationships provide prerequisites for the increase in the production of tomato, fruits, grapes and milk.

During the previous decade, in 2001-2008, a certain level of economic growth was achieved in the agricultural sector. With regards to years 2009-2010, economic decline was recorded in the agricultural sector; the decline was especially serious in 2010 when the gross product of the sector, compared to the previous year, decreased by 13.6 percent, mainly because of unfavourable climate and weather conditions. In order to implement a well structured policy in the agricultural sector, in November 2010 the RA Government has adopted the "Republic of Armenia Strategy for Rural and Agricultural Development". The Strategy defines 17 groups of objectives that include, in particular, introduction of anti-crisis mechanisms, development of agricultural co-operatives, ensuring food security, improvement of the productivity of land use, development of organic farming and other priority directions of the sector.

In the **energy sector** ensuring energy security, energy conservation and development of alternative energy sources were emphasized. One of the major goals of the national policy in the energy sector is defined as improvement of energy conservation and further development of sources of renewable energy. A series of key documents regulating the system have been elaborated and adopted.

In particular, the RA "Law on the Construction of **New Nuclear Energy Unit(s)** in the Republic of Armenia" (adopted in 2009), the RA Government decree on "Energy Sector Development Strategy in the Context of Economic Development in Armenia" (adopted in 2005), the Action Plan of the Ministry of Energy Developed Based on Provisions of the RA National Security Strategy, the Republic of Armenia National Program on Energy Conservation and Renewable Energy, seven standards on energy consumption and energy efficiency in multi-apartment buildings and buildings of public use, specified by the European Committee for Standardization have been localized and synchronized with the Republic of Armenia Program on Strategic Development of Hydro Energy Sector.

It is noteworthy that ensuring the Republic of Armenia energy security is based on the following: Sustainable Development Global Action Plan adopted by 1992 Rio Conference, Sustainable Development principles specified by Johannesburg Summit, the "Green Paper: A European strategy for sustainable, competitive and secure energy" adopted by the European Commission, and commitments taken under a number of other international environmental conventions ratified by the Republic of Armenia.

Due to measures taken in the sector it was feasible to assess consequences related to the possible shutdown of the Armenian Nuclear Power Plant (NPP) and evaluate justifications for the necessary substituting power capacities aimed at ensuring energy independence and security for the country, assess options for meeting the Republic of Armenia energy demand in case the Armenian NPP operation is ceased, ensure accurate forecasts of demand for natural gas depending upon the timeline of the Armenian NPP shutdown, and in that case the issue of increasing natural gas volumes imported via Iran-Armenia gas pipeline in order to meet the demand for natural gas, elaborate economically optimal plan for the development of the energy sector and define the roles of nuclear

and renewable energy sub-sectors in the country's economic development. Currently Iran-Armenia gas pipeline is operational; an automated system for the calculation and control of electric power, a system for an programmed management of the electric power system (Supervisory Control And Data Acquisition, SCADA) have been introduced; as a result of optimization of operating regimes of power producing stations, maintaining a minimum possible cost of electric power production has been achieved; construction of the second electricity transmission line has been completed, and construction of the third transmission line has started; activities toward modernization of 220 kW power substations of the energy system are close to completion.

Through private investments, in the course of 2004-2011, 111 small hydro power plants with a cumulative installed capacity of around 160 MW were constructed and put into operation (in total, electricity produced in the Republic of Armenia by hydro power plants amounts to approximately 35 percent of the total electricity produced in the country, and the ratio of small hydro power plants constitutes around 7 percent; the first network wind power station in the Caucasian region was put into operation with a capacity of 2.6 MW; a new energy production unit based on steam and gas hybrid cycle and with 240 MW power production capacity was put into operation in Yerevan Thermal Power Plant; the construction of the 5th energy unit with 440 MW power capacity of Hrazdan Power Plant equipped with a gas turbine was completed and put into operation; (electric) hybrid cycle-based energy cogeneration stations with a total nominal capacity of 6.1 MW were constructed.

In the period of 2002-2011, the Republic of Armenia foreign trade turnover has increased in average by 17.8 percent (Annex 1). As a consequence of adverse effects of the global financial crisis, in 2009 the RA foreign trade turnover, compared with the previous year, has decreased by 26.5 percent: both import and export volumes have reduced by 32.8 and 25 percent respectively. Decrease in the level of imports was mainly due to the reduction of incomes of the population, and partly caused by a sharp depreciation of the national currency, Armenian dram, in March 2009. Nevertheless, starting from 2010, as a result of revitalization of the global as well as Armenian economy, the foreign trade records have improved and have demonstrated growth trends. The improvement of export figures was positively affected also by the targeted policy of the Government; exporters receive financial and non-financial support under that policy.

In 2011, the Republic of Armenia foreign trade turnover, compared to the previous year, has increased by 14.4 percent; both import and export figures, in US dollar terms, have increased: exports have grown by 27.7 percent (amounting USD 1,329.5 million), and imports have increased by 10.7 percent (amounting USD 4,151.5 million). The increase in the volume of exports was mainly caused by growth in exports of the following product groups – “Mining industry products,” “Precious stones and metals” and “Food products,” which have contributed to the 27.7 percent increase in exports by 8.8, 6.0 and 5.1 percentage points respectively. The growth of import volumes was mainly due to growth in imports of the following product groups - “Mining industry products” and “Precious stones and metals,” which have contributed to the 10.7 percent increase in imports by 4.2 and 1.5 percentage points respectively. The major trade partners of the Republic of Armenia are the following countries: Russia, Germany, Iran, the Netherlands, United States, Georgia, Belgium, Bulgaria and China.

The GDP share of credits provided in 2002-2011 by **commercial banks** to residents and non-residents has significantly increased. Interestingly, even in the period of crisis this figure has not declined; an important factor ensuring this was the financial assistance provided in the framework of state anti-crisis measures by the Government to key “backbone” enterprises as well as small and medium-size enterprises engaged in exports and substitution of imports.

Deposits attracted in 2002-2011 by commercial banks from residents and non-residents have also increased. According to 2011 end-year results, deposits attracted by commercial banks, in comparison to the previous year, have increased by around AMD 267 billion, or by 38.1 percent<sup>2</sup> and constituted 25.1 percent of GDP. Forecasts for 2012-2014 envisage that credits provided and deposits attracted by commercial banks will continue growing.

In the period of 2002-2011 the RA **state budget revenues/GDP** ratio in average was 20 percent and demonstrated tendency for continuous growth. In year 2011 the state budget revenues comprised 22.5 percent of GDP, and tax revenues, including mandatory social security payments, amounted to 20.1 percent of GDP.

In the period of 2002-2011 the RA **state budget expenditures/GDP** ratio in average was 22.1 percent, while in year 2009, caused by the policy to address the impact of the global financial and economic crisis, this figure raised up to 29.6 percent.

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<sup>2</sup> Accrued interest is not included in this figure. The figure on credits includes transactions of factoring and leasing, and repurchase agreements.

In the period of 2002-2008 the ROA **state budget deficit** in average amounted to 1.0 percent of GDP. As a result of the global financial and economic crisis, the volume of collected revenues shrank, and, coupled with the necessity to protect the most vulnerable and insecure groups of the population, these factors brought about a situation where the Government was forced to attract external financial resources to fund the budget deficit, and in 2009 this caused the **state budget deficit/GDP** ratio to reach the level of 7.6 percent.

Since year 2010, the main direction of state sector policy is aimed at effective debt management and gradual reduction of the state budget deficit. Instead of increasingly expansionary (loose) fiscal and budgetary policies implemented in 2009, in the following years (deflationary) tight fiscal and budgetary policies are being implemented.

The Republic of Armenia **total public debt/GDP** ratio consistently decreased from 49 percent in 1999 to 16.4 percent in 2008, while the **nominal total public debt** increased from USD 0.9 billion in 1999 by USD 1 billion. In the same time period public and publicly guaranteed debt (PPG) increased from USD 0.87 billion and reached USD 1.58 billion, while domestic debt increased five times – from USD 0.06 billion to USD 0.66 billion. The Republic of Armenia public debt/GDP ratio gradually decreased from 47.8 percent in 2008 to 16.3 percent in 2008 (a progress reflecting high rates of economic growth), and later, caused by the global financial and economic crisis, this figure increased up to 40.4 percent (2010). Such a steep growth of debt volume was mainly attributable to the increase in the country's international reserves and budget deficit with an aim to protect the real sector of the economy, as well as due to appreciation of the Armenian dram. During that period the Government was forced to attract loans from external sources; part of these financial resources was channelled to the private sector through crediting transactions. In 2010 the main factor affecting the debt was the primary deficit, as it was the case during years preceding the crisis.

It should be mentioned that for the period from 2000 to 2008 domestic financing of the deficit, which has decreased in 2009 (11 percent), has increased (from 6 percent to 16 percent). Nevertheless, it is expected that in future this figure will grow due to reforms being implemented in the areas of pensions and insurance.

Results of debt stability analysis in general testify that, as a consequence of macroeconomic forecasts laid in the basis of the Medium-Term Expenditure Framework (MTEF) of Armenia and due to measures envisaged under fiscal and budgetary policies, serious threats of disruption of debt stability are less likely, and indicators characterizing debt burden will remain in manageable scopes. Stress tests conducted in the framework of debt stability analysis, however, also indicate that external debt stability is rather sensitive toward sharp decline of the exchange rate, while in fiscal stability is highly affected by low economic growth. Consequently, as the basis for the macroeconomic framework of MTEF, the Government has adopted such a strategy for debt management, which would not limit economic growth, and the latter would mitigate risks of depreciation of the exchange rate.

### 1.1.2. Social snapshot and poverty

The political situation in the region, blockade, acute fuel and energy crisis right after the independence of Armenia, entirely collapsed the economy of the country, and the poverty level of population dropped to 55 percent. Due to implemented economic reforms, Armenia saw sustainable economic growth, which was maintained before getting involved in the global financial economic crisis in the end of 2008. In 2009, economic decline of 14.1 percent was recorded in the country followed by slow rehabilitation with variable trends.

**Table 1.3. Poverty level in Armenia in 1996-2010**

	1996	1998/99	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Poverty level in Armenia according to the methodology of 1996	(54.7)*	55.1	50.9	49.7	42.9	39.0	---	---	---	---	---	---
Methodology of 2004	---	56.1	---	---	---	34.6	29.8	26.5	25.0	23.5	28.7	28.9
Methodology of 2009	---	---	---	---	---	53.5	---	---	---	27.6	34.1	35.8

\* Integrated Household Living Conditions Survey 1996 was conducted during one month. Since then, in 1998/99 and starting from 2001, it is conducted on an annual basis.

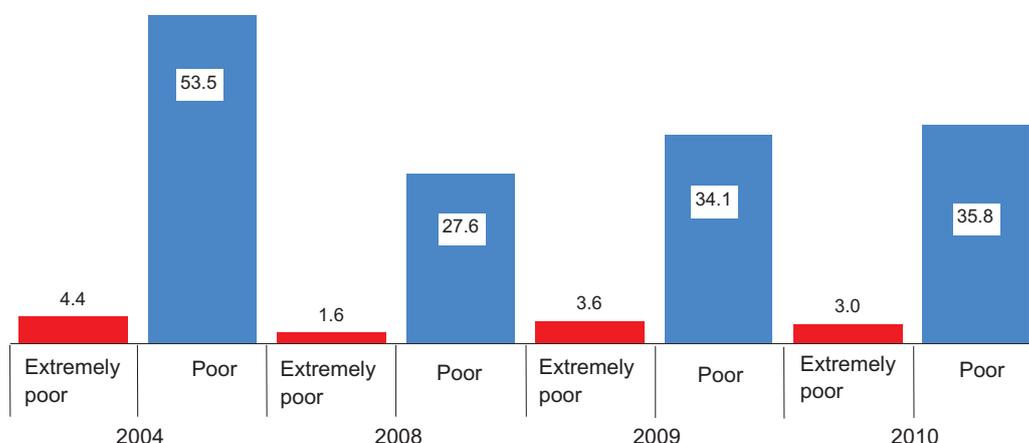
**Source:** RA NSS, IHLCS

Stable development of the economy in early 2000s resulted in an increase in wages, stabilization of employment levels and increased budget expenditures channelled to social sectors. All of these, alongside with growing flow of private remittances, contributed to a significant reduction of the poverty level.

As a result of global financial and economic crisis, the macroeconomic processes, targets and forecast indicators stated in the Sustainable Development Programme became unrealistic.

Within the period of economic growth preceding the crisis (in the period of implementing the Poverty Reduction Strategic Program - PRSP), according to the summary results recalculated according to 2009 methodology of annual Integrated Household Living Conditions Survey conducted by the RA National Statistical Service (RA NSS IHLCS, Annex 1), reduction of poverty in Armenia was recorded, from 53.5 percent in 2004 (extreme poverty – 4.4 percent) to respectively 27.6 percent in 2008 (extreme poverty – 1.6 percent). The impact of implemented social protections systems on the level of poverty is also assessed with the help of these surveys. It's worthwhile noting, that poverty in 2010 is not much different for urban (35.7 percent) and rural (36.0 percent) populations.

**Graphic 1.3. Extreme poverty and poverty in Armenia**  
(As per the World Bank 2009 methodology)

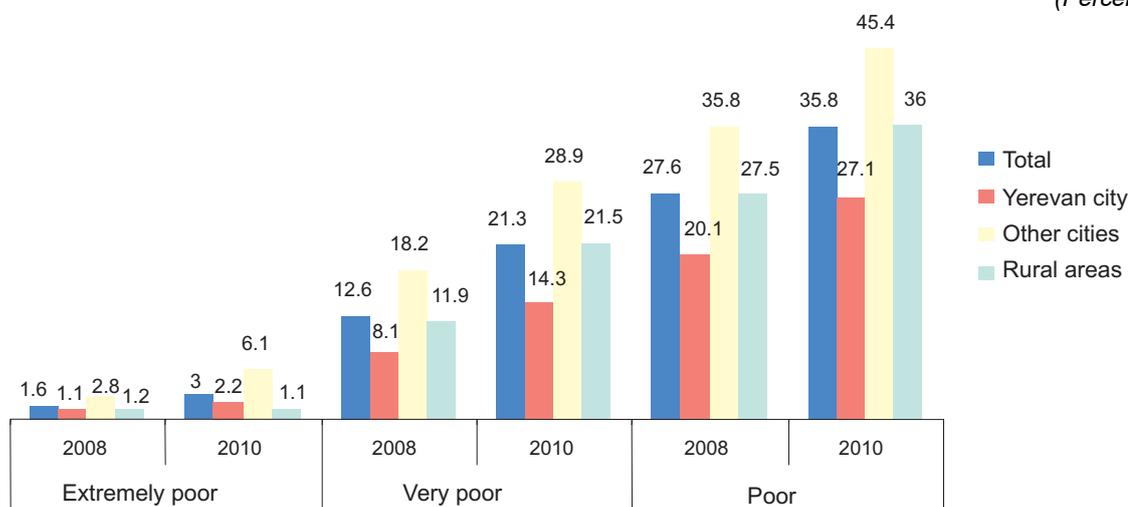


Source: RA NSS, IHLCS, 2010

If no social protection program were implemented, then the **poverty level** for those years would have been 44.8 percent in 2004 (extreme poverty - 15.4 percent) to respectively 39.5 percent in 2008 (extreme poverty - 19.6 percent). Henceforth, the impact of social protection programs on the level of poverty totalled 10.2 percentage points (extreme poverty - 9 percentage points) in 2004, and in 2008 respectively 16 and 16.5 percentage points.

**Graphic 1.4. Poverty indicators by regions for 2008 and 2010**

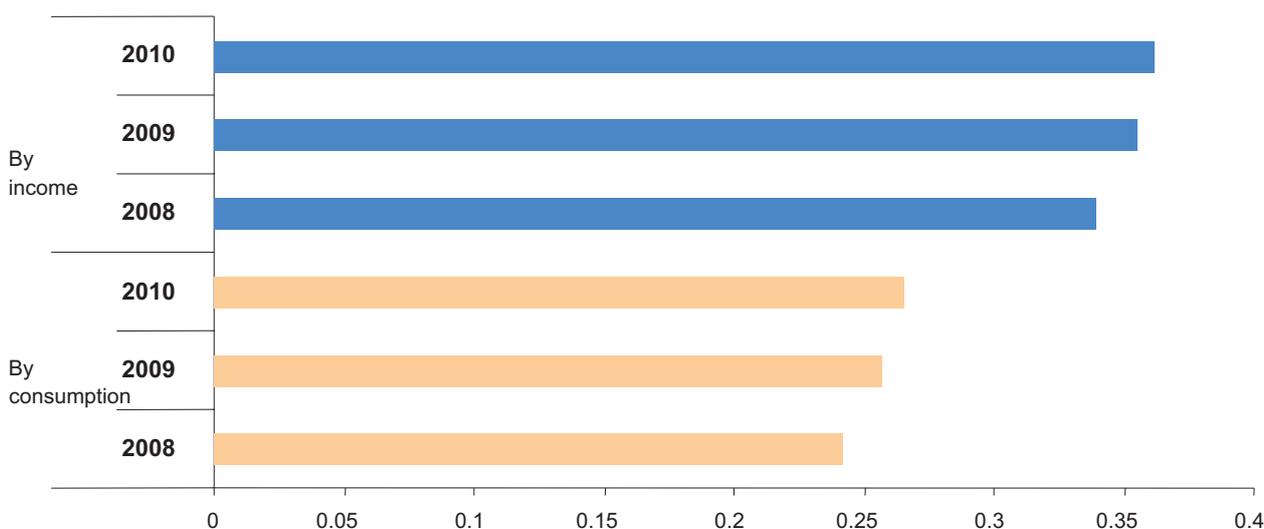
(Percentage)



Source: IHLCS 2008 and IHLCS 2010

In the result of new phase of global economic crisis, the country evidenced increase in poverty level in 2009: the level of poverty and extreme poverty were respectively 34.1 percent and 3.6 percent, and in 2010 - 35.8 percent and 3.0 percent (Annex 1). The poverty gap estimated at 8.1 percent indicates that once the country were to mobilize for each individual (both for poor and non-poor individuals) resources equivalent to the poverty line of 8.1 percent and these resources were allocated to the poor, poverty theoretically would be eliminated, assuming that the assistance addressed to the poor was entirely allocated to them. If calculated as per the poor population only, the poverty gap indicates poverty deficit, i.e. it shows how much the average income (or consumption) of the poor falls short of the poverty line. The severity of poverty indicates inequality among the poor. It takes into account that consumption by some poor persons is further away from the poverty line, while some have consumption much closer to it. The severity of poverty was 2.5 percent in 2010. Gini co-efficient has been significantly increased.

**Graphic 1.5. Gini co-efficient**



*Source: RA NSS, IHLCS from 2008-2010*

Over 2008-2010, the most important factor behind the increase of poverty level in Armenia was the deep recession of economy of 14.1 percent. In 2010, Armenian economy witnessed modest growth as compared to the previous year; however, the increase totalled only 2.1 percent. Along with the increasing inequality in population income, deep economic recession contributed to decreased consumption of population. As IHLSC 2010 figures indicate, the average monthly real consumption of the entire population decreased by 8 percent as compared to 2008. Such decrease was observed in all quintiles of consumption, except for the richest 5th quintile, where consumption growth was registered.

It has to be noted, that certain aspects of the lifestyle of population were significantly changed. In particular, food consumption dropped (31.5 percent), expensive food products were substituted by cheaper ones (59.2 percent), less or no purchase of non-food products (48.3 percent), less use of entertainments (66.1 percent) and gatherings with friends (64.6 percent) etc.

To overcome poverty in 2010, estimates show, that Armenia would need AMD 105.9 billion or 3 percent of GDP in addition to the resources already allocated for social assistance, assuming that such assistance would be efficiently targeted to the poor only. Eradication of extreme poverty would require about AMD 2.7 billion, or 0.1 percent of GDP, in addition to social assistance already channelled to the extremely poor and ensuring efficient targeting. International experience proves that perfect targeting of social assistance is highly unlikely; therefore, the actual resources needed to overcome poverty are, in reality, significantly higher. In countries with liberal economies, the minimum resources required to overcome poverty should be at least doubled given the resources needed to ensure efficient targeting.

To have a complete picture of poverty, let us observe the change trends of **non-income poverty** (poor health, low level of education or illiteracy, social isolation, etc). Their brief description is presented below based on the RA NSS *IHLCS Summary Results* (more fully discussed in further sections of the present report).

Armenia inherited a good **healthcare** system from former USSR and was able to ensure good healthcare indicators.

**Table 1.4. Key indicators of Armenian healthcare system**

	2005	2006	2007	2008	2009	2010
<b>Number of doctors of all specialties per 10,000 population</b>	38.2	38.4	37.9	39.9	40.6	41.7
<b>Number of paramedical personnel per 10,000 population</b>	57	57.6	57.6	57.4	57	57.2
<b>Number of hospital facilities (unit)</b>	145	140	135	130	127	130
<b>Number of hospital beds per 10,000 population</b>	44.6	44.3	40.6	38.2	37.1	37.3
<b>Number of doctors in ambulatory/ polyclinic facilities per 10,000 population</b>	14.4	14.4	14.4	15	15	15.2
<b>Capacity of ambulatory/ polyclinic facilities (number of visitors within one shift) per 10,000 population</b>	121.9	122.9	117.7	120.4	119.6	120.6
<b>Number of maternity welfare facilities (women's consultations), paediatric polyclinics, independent clinics, healthcare facilities with maternity and paediatric departments (unit)</b>	246	237	301	329	359	363
<b>Number of beds for pregnant and parturient women per 10,000 women of fertile age (15-49 years old)</b>	18.1	17.7	14.4	12.9	12.7	13.1
<b>Number of beds for sick children (unit) per 10,000 children</b>	25.3	26	23.8	21.4	20.8	20.2

However, utilization of healthcare services by population is still rather low, especially in rural communities and among poor population. According to 2010 IHLCS data, personal assessment of health condition shows that 88.4 percent of population describe their health as satisfactory, good and very good, while 11.6 percent describe it as bad or very bad. Poor health condition was indicated by 12.3 percent of non-poor, 10.1 percent of poor and 11.6 percent of extremely poor population. Approximately two of five persons (37.9 percent) who reported being sick, consulted a doctor for advice or treatment. Compared to previous year, patients, particularly from rural communities, have more often addressed for medical advice or treatment. While 41.6 percent of non-poor consulted a doctor for advice or treatment, only 30.0 percent of the poor and 24.1 percent of the extremely poor did so. It has to be noted, that approximately one third of patients (32 percent) addressed therapist for consultation, each fourth addressed sub-specialty consultants (23.6 percent) and 22 percent addressed family doctors, while only 4 percent contacted private doctors. 35.6 percent of patients paid to sub-consultants and 21.4 percent to physician against the received health services (RA NSS, IHLCS, 2010).

The main reasons for not addressing polyclinic or acute care centres were self-treatment (52 percent) and financial (24 percent). Hospital costs for patients are rather high - AMD 67,863 average per patient. Each patient paid to hospital teller AMD 43,113 in average, out-of-pocket payments to staff totalled around one third of this amount (AMD 15,395), besides, cost of gifts was equal to AMD 927 and other payments totalled AMD 8,428. Highest out-of-pocket payments were made to surgeons and oncologists. Most expensive gifts were given to resuscitation specialists and obstetrician-gynaecologists.

The share of expenditures made for purchase of pharmaceuticals totalled 4 percent of total costs of surveyed households.

According to the summary data of the RA Census, almost 99 percent of population in Armenia is **literate**. **Public education** is accessible for everyone. In contrast to general education, enrolment in upper grades of secondary and high schools and vocational educational institutions is comparatively low, with rather visible differences between the enrolment of poor and the non-poor. High costs related to **higher education** and especially its affordability, finding respective job after the graduation, lower chances for getting high salary are among the main

reasons to explain why the population of respective age from poor households drop out of the system after completing basic education and, particularly, general secondary education.

In 2010/2011 academic year, there were 44 public educational institutions with preliminary vocational (craftsmanship) program, of which 28 preliminary vocational (craftsmanship) and 16 middle vocational. 25.1 percent of students were women. 90.8 percent of students were enrolled on a fee-free basis. Students were trained on the basis of general and secondary education curriculum.

In 2010/2011 academic year, 11,666 students (of which 57.2 percent were women) entered public and private vocational institutions, total number of students was 29,575 (of which 60.8 percent were women), number of graduates totalled 8,382 (of which 71.1 percent were women). Students were mainly trained on the basis of general and secondary education curriculum.

In 2010/2011 academic year, 26,443 students (of which 47.6 percent were women) entered public and private higher educational institutions (HEI) and their 12 branches, total number of students was 111,003 (of which 52.8 percent were women), number of graduates totalled 23,935 (of which 56.2 percent were women).

Enrolment of children in preschool educational facilities in 2010 was 25.3 percent, including 32.7 percent in urban and 12.4 percent in rural communities.

School enrolment constituted 90.1 percent, including 96.8 percent in elementary, 92.6 percent in general and 84.4 percent in high school.

**Table 1.5. Enrolment of pupils and students (in public and private general vocational, middle and higher educational institutions), by percentage of the number of population of respective age:**

<b>2001</b>	69.1
<b>2002</b>	68.8
<b>2003</b>	71.7
<b>2004</b>	69.0
<b>2005</b>	70.9
<b>2006</b>	72.0
<b>2007</b>	72.1
<b>2008</b>	73.0
<b>2009</b>	72.8
<b>2010</b>	72.0

The results of Integrated Household Living Conditions Survey show, that in 2010 approximately eight out of ten children of the age 0-6 years did not attend a preschool institution. According to the respondents, main reasons for non-attendance included “unemployed mother of the child” – 62 percent, “there is no kindergarten” – 19 percent, “the services are expensive” – 7 percent, “the preschool institution was closed down” – 4 percent.

During 2010, 11.5 percent of teens aged 15-16 years did not attend any educational institution. The majority of them, 74.9 percent, justified that they had graduated from school, 2.4 percent mentioned they had completed their education, 9.4 percent were not willing to study anymore, 3.5 percent stated poor health as a reason for not continuing their education, and for 1.3 percent educational services were too expensive and that is why they left the school. The rest did not attend the school for other reasons.

The average weight of students in higher educational institutions is drastically different by the level of poverty: enrolment among non poor households was equal to 20.3 percent, poor – 8.7 percent and extremely poor – 4.5 percent.

### **Housing conditions of population**

In 2010, the majority of households in Armenia (90.2 percent) owned their homes. In urban communities the households mostly dwelt in multi-apartment buildings - 69.4 percent, whereas in rural communities the share of private houses with 90.1 percent in total dwelling dominated. As of 2010, the majority of households dwelling in dormitories lived in Yerevan city. The proportion of both rural and urban residents living in dormitories, temporary dwellings and other abode is about 4 percent each. Most of the people living in temporary dwellings were poor and pertained to the first consumption quintile.

There are still serious difficulties in purchasing a house (dwelling) for a significant number of people. These include, particularly, higher prices, inaccessible conditions for mortgage services, and inadequate conditions of state regulation in the area.

### 1.1.3. Social Protection Sector

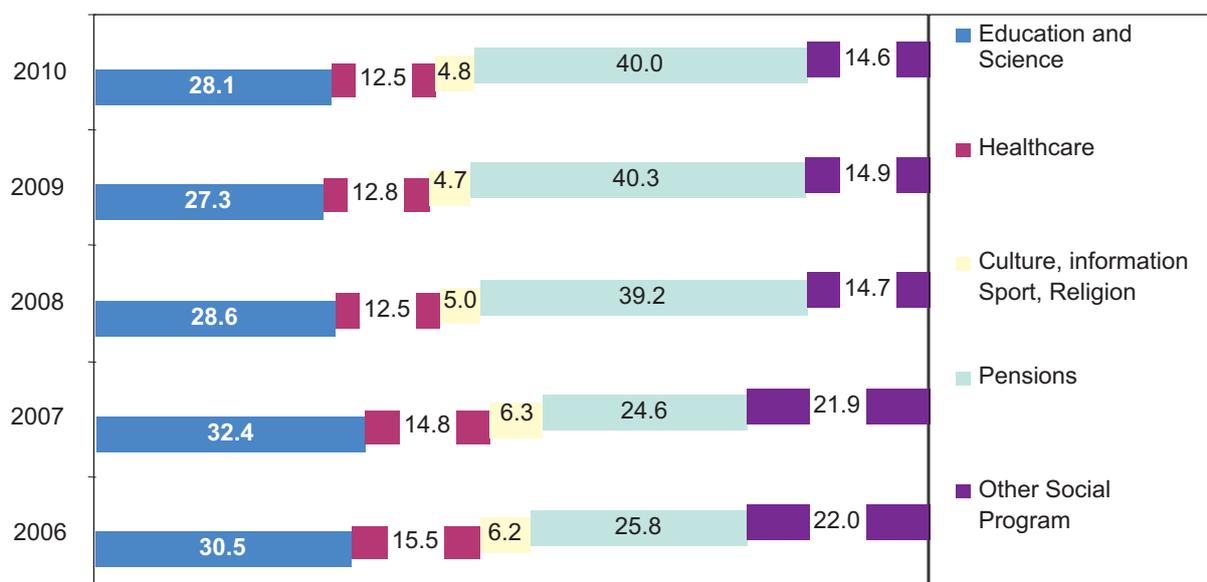
The anti-crisis policy for the **social protection sector** implemented by the RA Government was channelled at maintaining the social expenditures at least on the same level.

Although expenditures on social transfers from the consolidated budget increase every year, they still remain at a rather limited level as a share of GDP (7.0 percent for 2010).

Nonetheless, social transfers considerably contribute to the reduction of poverty. If payments of social transfers were to be terminated and households were not able to compensate this loss due to lack of sufficient resources, poverty rate would significantly increase: thus, general poverty rate would increase by 18.4 percentage points or 51 percent (from 35.8 percent to 54.2 percent), while poverty gap and severity would also considerably increase. The situation would become severe especially for the population receiving social transfers.

In that period, the RA Government was able to channel more resources to social sectors for poverty reduction strategy priorities. As a result, the share of social sectors in total consolidated budget expenditures increased to 47.9 percent in 2008. As a result of the economic crisis, the above-mentioned expenditures decreased in 2009 and the share in consolidated budget expenditures totalled 46.9 percent.

**Graphic 1.6. Actual Expenditures from Consolidated Budget on Social Sectors, 2006-2010**



The anti-crisis policy for the **social protection area** implemented by the RA Government was channelled at maintaining the social expenditures at least on the same level.

State policy on **employment sector** is focused on creating conditions for ensuring dignified, full and efficient employment, mitigation of tension in labour market, enhancing the competitiveness of job seekers, efficient placements of vacancies with the employers, assisting in provision of youth employment, including rural youth, groups of uncompetitive people in the labour market, in particular for persons with disabilities. State employment policy within 2000-2011 can be characterized as a period of legal reforms in the employment sector, institutional regulation of the state employment service system. The priority directions of 2006-2011 and further years were the development and introduction of program increasing competitiveness of youth, persons with disabilities in the labour market, promoting employment of rural population.

Based on the trends of the **RA labour market development** over the recent decade (2002-2011), it can hardly be unequivocally described as a developing or declining segment of economy. Both the domestic social, economic and political situation in the country, as well as the external economic-political challenges had their impact on the development of that segment.

**Table 1.6. Key indicators of the RA labour market, 2002-2011**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Employed, in thousands persons</b>	1,106.4	1,107.6	1,081.7	1,097.8	1,092.4	1,101.5	1,117.6	1,089.4	1,104.8	1,120.8
<b>Of which in the private sector, percent</b>	74.2	76.7	78.9	80.2	80.4	80.7	81.1	80.9	81.1	82.1
<b>Unemployed*, in thousands persons</b>	133.7	124.8	114.8	98	88.9	82.8	74.9	81.4	83.3	73.9
<b>Unemployment level, percent</b>	10.8	10.1	9.6	8.2	7.5	7.0	6.3	7.0	7.0	6.2
<b>Average monthly nominal wage, AMD</b>	27,324	34,783	43,445	52,060	62,293	74,227	87,406	96,019	102,652	115,4511

\* Source: State Employment Service Agency of the RA Ministry of Labour and Social Issues

Throughout the first 5 years of the decade (2002-2006), 1,097.2 thousand people in average were economically active. In general, over that period, 1.3 percent decline in employment indicator was evidenced or 14 thousand people lost their jobs for various reasons. In the second five-year period (2007-2011) there were 1,106.8 thousand people in average economically active or 0.9 percent more than in 2002-2006. The third five-year period saw 1.8 percent growth in employment, that is 19 thousand people found jobs in this or that sector of economy or independently created jobs.

To describe the current state of labour market, let us present several characteristics below:

- In 2010 **labour resources totalled 2.4 million persons** or 76 percent of current population of Armenia, dropping by 2 percentage point compared to 2009.
- **1.4 million persons of labour resources were economically active**, thus establishing labour market of the country, while **1.0 million economically inactive population** did not have any participation in the labour market.
- **1.2 million** persons, of 1.4 million labour forces, **were employed**, including 81 percent on a permanent basis, thus recording 6 percent growth compared to the previous year.
- **278 thousand persons were unemployed**, of which 62 percent have lost their job for various reasons, while 32 percents never had a job.
- While 54 percent of the employed were male, the unemployed were predominantly female, totalling 52 percent.
- Agriculture continues to be the priority area ensuring jobs (39 percent or 457.4 thousand persons), of which 31 percent were temporary jobs.
- Around **5 percent of the employed had a second job**, of which 91 percent in the agricultural sector.
- Classification of the employed by age shows that the majority were 45-54 years old (27 percent), while among the unemployed the majority were 20-29 years old (36 percent). Average age of the employed was 43.2 and the unemployed 36.3.
- A prevailing part of the employed and unemployed population – 42 percent, had general secondary education.
- The youth (15-29 years old) constituted 21 percent of the employed and 42 percent of the unemployed population.
- The majority of labour force was the population residing in Yerevan making 29 percent of the employed and 52 percent of the unemployed population.
- **50.4 percent** of current jobs **were estimated as informal**, dropping by 3.3 percent over the previous year. 79 percent of informal jobs were in the agricultural sector and 21 percent in non agricultural sectors.
- **1.5 percent of the employed and 5.3 percent of the unemployed were assessed as extremely poor**. 29.6 percent of the employed and 43.3 percent of the unemployed were assessed as poor.
- Average weekly work hours of 37 percent employed population was higher than statutory 40 hours, whereas for 23 percent it was less than 40 hours. Subsequently, **average weekly actually worked hours per employed person totalled 36 hour**.

- Labour market was characterized by long-term unemployment: the duration of job-search by 51 percent of the unemployed exceeded 1 year period. The average duration of job-search consequently made 23.5 months.
- While **average monthly net earnings in 2010 were equal to AMD 72,425**, growing by 7.6 percent over 2009, however, 55 percent had income up to AMD 60,000. Male/female average monthly earnings ratio was 1.7.
- During 2007-2010, **60 percent of persons involved in migration processes were labour migrants**, of which 89 percent worked and (or) were looking for job outside the country, while 11 percent were internal migrants.
- Average age of labour migrants was 37.4 years.

*Source: RA NSS, IHLCS, 2011*

The privatization process initiated in the last decade was continued, though in smaller scales, due to which private sector of economy has the share of over 82 percent of the employment today.

The growth of **average wage** was more dynamic over the last decade. Thus, average monthly nominal wage in 2006 exceeded the indicator of 2002 for 2.3 times, and those for 2011 exceeded the 2007 indicator 1.6 times. As a whole, the average wage in 2011 was 4.4 times higher than in 2002 (baseline year).

The unemployment indicators evidenced the opposite trends. Although due to scarce jobs, within 2002-2011 Armenia witnessed one of the highest levels, average 8 percent, of unemployment, among the transition countries, nonetheless, the 9.2 percent of unemployment registered from 2002-2006, decreased by 2.5 percent and totalled 6.7 percent during 2007-2011.

In view of the fact, that the aftershocks of the global financial economic crisis did not overpass Armenian labour market, however, the data reflect certain stability, progress of the labour market dynamics.

**The programs within the social protection sector** enabled to add not only the volumes of cash allowances, a priority of expenditure policy, but also the scope of the social services. Despite the fact, that the Government regularly increases the resources addressed to pensions – the pensions, they not only fail to act as a replacement for lost income and to ensure adequate living standards for the pensioners, but rather in certain cases do not meet their minimum survival requirements. Thus, the average replacement rate in the pension system (the ratio of average occupational pension to the monthly average wage) made around 25 percent in 2008, 26.8 percent in 2009 and 26.3 percent in 2010. Furthermore, taking into account the method of pension calculation, where the individual replacement rate (the ratio of person's occupational pension to the monthly wage) is much lower for persons with higher income, while for those earning minimum wages it can reach and exceed 100 percent ceiling.

**Temporary disability benefits** fully or partially compensate the wages (income) of hired employees, private entrepreneurs and notaries that they received or could have received otherwise, lost as a result of temporary disability. Pregnancy and delivery benefits have also been included among the temporary disability benefits given for the whole period of maternity leave (140 days, for complicated pregnancy and delivery – 155 days, for two and more children born – 180 days).

**State benefits** are a separate form of cash allowance envisaged under the Republic of Armenia “Law on Social Assistance,” Article 10, in compliance with the provisions specified by the Republic of Armenia “Law on State Benefits.”

The respective procedures and peculiarities of assigning and paying state benefits, as well as its size, are established by the RA Government. State benefits are entirely financed through the RA State Budget resources.

The largest and socially significant program in the state benefits system is the program of family benefits as they are directed to the alleviation of poverty. Family benefits are eligible for those poor families where the vulnerability score is higher than the threshold determined by the Government. The vulnerability of families is determined by an indirect method of poverty assessment, i.e. taking into account indirect indicators describing family's (household's) social- economic vulnerability (poverty), including the social group of each household member, the number of household members not capable to work, the domicile, dwelling conditions, the income, the fact of having a car for family use, of entrepreneurship activity and payment of customs duty by one of the household members, the average amount of monthly consumption of electricity in summer, telephone bills, and the conclusion of social worker referring to the social-economic conditions of the given family.

Before and including 2003, the size of family benefits did not bear any relation to the level of family vulnerability. All activities addressed to the increased targeting of the system enabled to distinguish the sizes of benefits by the level of family vulnerability. Moreover, the size of the benefits is dependent on the increment given to the children. Since 2005, a procedure was adopted and applied up to day, whereby the size of the benefit is distin-

guished by the vulnerability score of the family, place of residence (borderland or high mountainous), number of children in the family (4 children and more).

Legislative regulation of relationships in regard to the provision of **lump-sum child birth allowance**, among other measures, contributed to the increase in child birth rate over 2009-2010 in Armenia. Furthermore, along with other circumstances, it also had to do with a large number of young people entering fertility age. However, starting from 2011, there is a decline in child birth rates observed again.

The introduction of benefits with differentiation for every third and next child born in the family can be singled out as one of the supporting factors.

It has to be noted, that increase in the number of parents eligible for benefit for care of up to 2 years old child can partly be explained by the economic crisis, as it particularly allows avoiding from redundancy cuts (parents on leave cannot be cut for at least three years).

**Social protection is mainly aimed at meeting the vital needs of the most vulnerable groups of the population.** Among targeted social assistance programs, different initiatives are directed towards satisfaction of social needs of single older persons, people with disabilities, homeless people, children with special needs and other social groups are particularly important. The policy to support to children in especially difficult circumstances is aimed at the strengthening of the system for child care and protection, deinstitutionalization of entities providing child care and protection, prevention of the flow of children to such institutions, integration of children under care into the society, introduction of alternative services for care.

Since 2007, funds from the Republic of Armenia state budget were allocated to specific non-governmental and benevolent organizations for the implementation of projects aimed at deinstitutionalization of **orphanages and boarding institutions** providing child care and protection. In the framework of these projects inflow of dozens of children into institutions providing child care and protection, and each year several dozens of children return from such institutions to their biological families. The state support program envisages provision of apartments to young people graduating from orphanages but in 2009-2011 this process ceased because of absence of respective financial resources.

The last decade can be considered a period of development of the area of social assistance to **elderly and people with disabilities**. More attention was paid to the issues of ageing and disability, as well as to social and legal protection of elderly people and people with disabilities as the most vulnerable groups of the population. The quality of social services provided to elderly people has significantly improved, and the range of services has expanded.

During the recent decade more attention was paid to social issues faced by **veterans of World War II, people who became disabled while defending the Republic of Armenia**, as well as families of deceased military servants. In particular, in the course of the last decade sizes of monthly financial assistance provided for specific advantages increased around 14 times.

Social policy implemented with regards to people with disabilities and in the respective area is aimed at social protection of people with disabilities in all aspects (legal, economic, environmental, etc.), ensuring that people with disabilities are provided with opportunities equal to those of other citizens of the country, creating equal conditions and securing equal opportunities for them in all the spheres of life. Among projects of social assistance to people with disabilities, establishment of social enterprises is emphasized; these enterprises are aimed, on the one hand, at solving social and welfare problems of people with disabilities and ensuring maximum equal conditions for them, and on the other, at utilizing their labour potential for the benefit of the society.

Large-scale efforts are made toward implementation of activities for people with **special education needs** and expansion and improvement of inclusive education in the country. In 2002 individual programs for the rehabilitation of people with disabilities were introduced; through these programs, the process of rehabilitation of people with disabilities becomes more targeted and effective.

A lot of work has been done to help overcome the existing **obstacles to communication by people with disabilities**. People with hearing disability receive hearing equipment, while Braille textbooks, Braille books (fiction, poetry, etc.), audio books and "The Bulletin" magazine were published for people with vision disabilities/ impairments.

While elaborating state police in the area of labour and employment, requirements put forward by the Council of Europe on synchronization of social sector legislation with European standards, as well as provisions of a number of conventions adopted by the International Labour Organization and ratified by the Republic of Armenia were taken into consideration.

In 2010, a number of centres were established for **professional orientation of young people and restoration of employment for people with disabilities**, where activities are carried out for job seekers to acquire new specializations, participate in professional training, receive consultancy and become integrated into the society.

Efforts toward **shaping a middle class**, albeit slowly, are underway.

#### 1.1.4. Demographic situation and migration processes.

The socio-economic and political processes that took place in the Republic of Armenia during the years following the 1990s resulted in steep changes in the demographic situation, i.e. deterioration of major demographic factors (birth rate, mortality rate, emigration) affecting the population size and the gender and age composition thereof. The primary demographic challenge is the decline of birth rate: despite some growth recorded in recent years, the birth rate is insufficiently low. It is noteworthy that while in year 1990 the number of births was around 80,000, this figure shrank twice in 2001 when the number of recorded births was 32,065 (see Table 1). Because of this decline the **total fertility rate** (average number of children that would be born to a woman over her fertile lifetime, age 15-49) dropped to 1.6 children, while for net replacement it is necessary that this rate is not lower than 2.1 children per woman.

**Table 1.7. Birth distribution by order of birth (persons)**

	1990	1995	2000	2001	2002	2005	2006	2007	2008	2009	2010	2011
<b>Births, of which by birth order</b>	79882	48960	34276	32065	32229	37499	37639	40105	41185	44413	44825	4330
<b>First</b>	29996	19408	15637	15660	16638	19286	19601	20525	21292	22472	21954	...
<b>Second</b>	25660	18058	11115	10325	10370	12953	13271	14277	14270	15431	15881	...
<b>Third</b>	18005	8058	5085	4210	3665	4014	3758	4263	4520	5289	5683	...
<b>Fourth</b>	4641	2465	1637	1220	1027	858	705	708	761	849	929	...
<b>Fifth and higher</b>	1540	971	762	650	529	388	304	332	342	372	378	...

The second major demographic challenge is the trend of growing mortality rate: in 1990, when the country's population size was more than 3.5 million, 22 thousand deaths were registered (6.2 deaths per 1,000 persons), while in 2011 the number of recorded deaths was 28,030 (8.6 deaths per 1,000 persons). In the structure of mortality death cases caused by the following reasons were predominant: diseases of blood circulatory system (47.9 percent), malignant neoplasm (20 percent), diseases of the digestive system (6.2 percent), diseases of the respiratory system (6.1 percent), and accidents, poisonings and injuries (4.8 percent)

**Table 1.8. The components of changes in population number**

(thousand persons)

Year	Population number (at the beginning of the year)	Total increase/decrease (+, -)	Natural increase	Net migration	Population number (at the end of the year)	Annual increase/decrease, percent
1990	3514.9	59.6	57.9	1.7	3574.5	1.70
1991	3574.5	58.8	54.4	4.4	3633.3	1.64
1992	3633.3	-169.6	44.7	-214.3	3463.7	-4.67
1993	3463.7	-107.0	31.6	-138.6	3356.7	-3.09
1994	3356.7	-96.4	26.5	-122.9	3260.3	-2.87
1995	3260.3	-11.5	24.1	-35.6	3248.8	-0.35
1996	3248.8	-2.8	23.2	-26.0	3246.0	-0.09
1997	3246.0	-7.8	20.0	-27.8	3238.2	-0.24
1998	3238.2	-6.1	16.2	-22.3	3232.1	-0.19
1999	3232.1	-5.2	12.4	-17.6	3226.9	-0.16
2000	3226.9	-11.6	10.3	-21.9	3215.3	-0.36
2001	3215.3	-2.4	8.1	-10.5	3212.9	-0.07

2002	3212.9	-2.6	6.6	-9.2	3210.3	-0.08
2003	3210.3	1.9	9.8	-7.9	3212.2	0.06
2004	3212.2	3.6	11.8	-8.2	3215.8	0.11
2005	3215.8	3.4	11.1	-7.7	3219.2	0.11
2006	3219.2	3.7	10.4	-6.7	3222.9	0.12
2007	3222.9	7.2	13.3	-6.1	3230.1	0.22
2008	3230.1	7.9	13.8	-5.9	3238.0	0.26
2009	3238.0	11.5	16.8	-5.3	3249.5	0.36
2010	3249.5	13.1	16.9	-3.8	3262.6	0.40
2011*	3262.6	11.7	15.4	-3.7	3274.3	0.36

\* - The data are still calculated on the basis of Population Census 2001. According to the preliminary summary results of Population Census 2011, the preliminary operational indicator of de facto population of the Republic of Armenia equals 2,871,509 persons. The rest of the indicators are in calculation process.

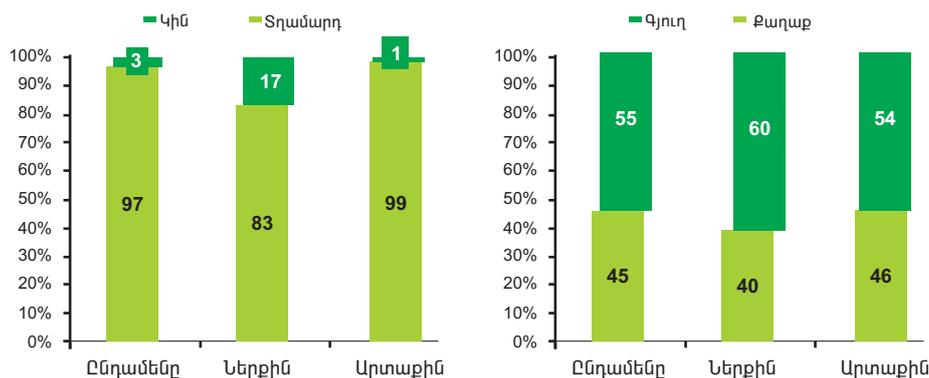
After gaining independence, one of the most serious demographic challenges facing the Republic of Armenia remains migration. According to the results of 2010 Integrated Household Living Conditions Survey (IHLCS), since January 1, 2007, 10.9 percent of household members of age 15 years and above have been involved in external and internal migration movements, and the main reasons for migration were the need to work, lack of work, family circumstances, other.

**Table 1.9. Household members of age 15 and above engaged in migration processes since January 1, 2007, by reasons for leaving and by Location, 2010 (percent)**

Main reason for leaving	Have left to							Total
	Yerevan	Marzes (regions) of Armenia	Russian Federation	Other CIS country	European country	USA and Canada	Other	
1. Work	0.0	0.3	90.1	2.9	1.4	1.5	3.8	100
2. Search of work	1.9	1.0	86.2	4.0	6.9	0.0	0.0	100
3. Lack of work	0.0	1.6	89.9	2.7	3.5	1.8	0.5	100
4. Current economic crisis	0.0	1.9	92.4	0.0	0.9	0.0	4.8	100
5. Seasonal worker	0.0	0.0	98.2	1.8	0.0	0.0	0.0	100
6. Staying was pointless	0.0	0.0	96.6	2.6	0.0	0.8	0.0	100
7. Family circumstances	3.3	5.3	76.3	7.5	6.1	1.3	0.2	100
8. Visiting friends/ relatives	1.7	0.8	59.0	8.5	6.5	6.3	17.2	100
9. Vacation	0.0	0.0	6.4	35.4	35.6	0.0	22.6	100
10. Other	4.8	11.6	18.6	2.6	6.5	2.7	53.2	100
Total	1.3	2.7	74.1	4.1	3.9	1.8	12.1	100

It has to be mentioned that the predominant figures for labour migration in the total number of migrants still causes concerns.

**Graphic 1.7. Labour migrants by gender and type of residence, 2010**  
*Percentage against the total figure for a respective group*



Source: RA NSS, IHLCS 2010

Legend: women, men, total, internal, external, village, city

## 1.2 Environmental protection

Key objective of the national environmental policy is to ensure environmental security, including the assessment, projection, and prevention of risks associated with adverse effects on the environment, as well as protection of environment, sustainable use of natural resources, and availability of environmental information, with a view to ensuring sustainable development in country.

During 10 years following the World Summit in 2002, the Republic of Armenia has made progress in the nature protection sector: the national legislation on nature protection is being amended in conformity with sustainable development rules; the geographical scope of environmental cooperation is being enhanced; a series of environmental strategies and programs, among them National Environmental Action Programmes (NEAP 2008-2012 is in process of implementation), five-year projects for implementation of environmental conventions (currently the 3<sup>rd</sup> 5-year project is under implementation), have been elaborated and approved by the RA Government. Effective 2012, Armenia has signed and ratified 22 international environmental conventions and protocols thereof (14 whereof were signed and ratified in the last decade) (Annex 4), which are essential prerequisites for elaboration of the national environmental policy, strategies, and concepts, in compliance with sustainable development approaches. The country is actively engaged in international environmental processes and cooperation with international environmental agencies, including donor organizations, foundations, and individual states. Thanks to this cooperation, multiple environmental projects, aimed at resolution of environmental issues both at national and regional level, have been and are being implemented.

Great importance is attached to public awareness on environmental issues and activities, as well as involvement of the public in environmental issues resolution processes.

### 1.2.1. Water Resources

#### ❖ Rivers and lakes

The territory of the Republic of Armenia is distinguished with developed, although non-homogeneous hydrographical net, peculiar to mountain lands. There are 9480 small and medium rivers of 23000 km length. The length of 379 thereof is 10km and more. The density of hydrological net in the territory of the country is of wide range: from 0 up to 2.5 km/km<sup>2</sup>, the average comprising about 0.8 km/km<sup>2</sup>.

The average total annual flow in the Republic of Armenia comprises 7190 million m<sup>3</sup>, with account of tributaries from transboundary rivers Araks and Akhuryan. In the Republic of Armenia, the volume of water annually consumed from transboundary rivers Araks and Akhuryan comprises 940 million m<sup>3</sup>.

In terms of size and national economic use, Lakes Sevan and Arpi have more important role in the territory of the country. In addition, there are over one hundred small lakes, a part whereof periodically dries up during the dry season of the year.

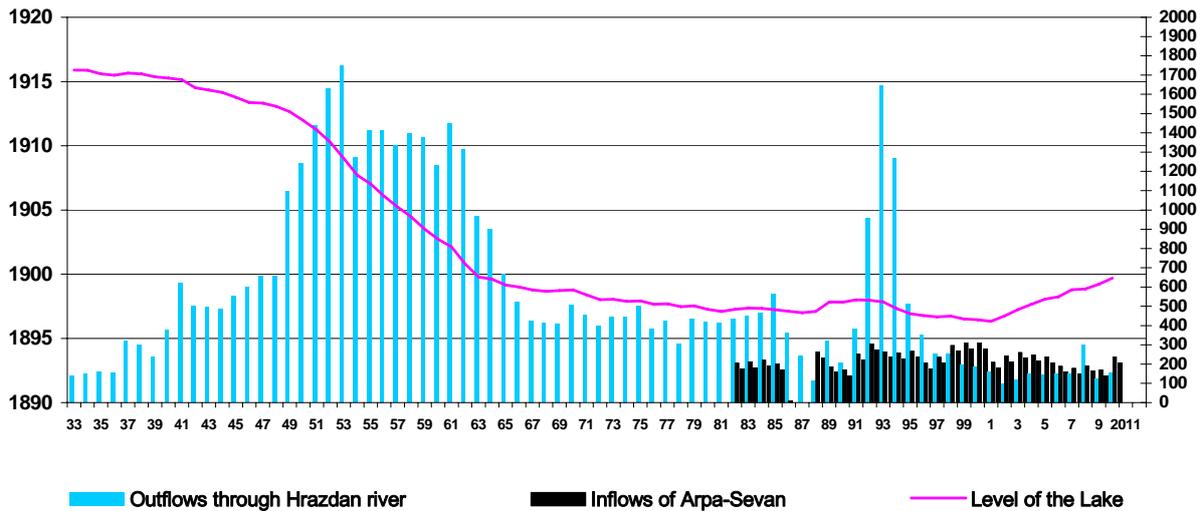
### ❖ Lake Sevan issue

The state of Lake Sevan, the biggest alpine lake in the Caucasus, is a major ecological concern in Armenia. The lake waters and the natural resources of the basin are considered as one of the cornerstones for the development of Armenian economy. The catchment basin of the Lake occupies one sixth of the total territory of Armenia and includes major water resources of the country, which attach geographical, as well as economic and strategic relevance to the Lake.

Due to ecologically unacceptable and voluminous exploitation, Lake Sevan ecosystems and resources have been in a sorry plight for decades. The water system management with application of water-ecosystem approach had its significant and positive impact on restoration of Lake Sevan ecosystems, to the extent possible.

The diagram on Lake Sevan water use and level fluctuation (Picture 1) fully reflects the abovementioned:

**Graphic 1.8. Lake Sevan Water Level and Discharge in 1933-2011**



In December 2008, a Presidential Committee on Lake Sevan Issues was established by a decree of the RA President, in view of the fact that Lake Sevan has an invaluable role in ensuring the national security of Armenia. The core function of the Committee is to elaborate and coordinate the implementation of activities related to conservation, restoration, reproduction, outgrowth, and use of Lake Sevan ecosystem.

Thanks to intense efforts of various ministries and agencies, performed under Committee’s guidance, diverse steps were taken towards improvement of legal framework, as well as operational resolution of Lake Sevan issue and its catchment basin.

**The Government has consistently proceeded with its efforts towards restoration, conservation, reproduction and use of Lake Sevan ecosystem.**

In 2010, the RA Government adopted Decree No. 876-N on “Approval of the schedule of actions designed in compliance with 2009 Action Plan of the Presidential Committee on Lake Sevan issues and furnished in letters of the Presidential Committee on Lake Sevan Issues,” providing for allocation of more than 44 billion Armenian drams received from different funding sources for the implementation of 43 activities, to resolve issues of restoration, conservation, reproduction and use of Lake Sevan ecosystem in coming years.

On April 28 2011, the RA Government adopted a decision on the “Establishment of a foundation for restoration, conservation, and development of Lake Sevan.”

Activities were implemented towards conservation and restoration of biological resources of the Lake. The Comprehensive Recovery Program for Sevan Industrial and Endemic Fish Species was elaborated and adopted by the RA Government in 2010. The Program includes practical measures for conservation of industrial and endemic species, as well as facilitation of natural and artificial reproduction.

Activities of drafting a new procedure for industrial fishing in Lake Sevan are currently underway. It is planned to establish new forest belts in the surroundings of Lake Sevan.

The following have been approved within the scope of implementation of activities aimed at urban regulation of littoral areas of Lake Sevan:

- “Amended design of the layout of Lake Sevan catchment basin” (RA Government decision No 143-N adopted on February 18, 2010),
- “Design for zoning of areas designated for building on the central zone of Lake Sevan” (RA Government decision No 177-N, adopted on March 3, 2001);
- “Main scheme for allocation of landfills in the basin of Lake Sevan” (approved in Protocol decision adopted at RA Government session No 22, on June 10 2011).

Major challenges with regard to resolution of Lake Sevan problems are bad social conditions of the population and, consequently, the overuse of biological resources; non-existence of state registration and state cadastre of biological diversity; absence of monitoring and database; scarcity of financial resources for implementation of nature-conservancy measures; low level of cooperation between different sectors of economy, absence of efficient coordination of actions, etc.

Major efforts towards settling Lake Sevan issues focus on consistent emersion of Lake Sevan level; the prevention of inefficient use of water resources in the catchment basin of the Lake; the improvement of the system for control over the terms of actual water consumption; melioration of the water quality in the catchment basin of the Lake; conservation and restoration of biological resources; resolution of issues related to waterlog in coasts of Lake Sevan; and the improvement of waste management.

#### • **Level of Lake Sevan**

Recent years were marked with increase of Lake Sevan level, as follows: 55 cm in 2007; 6 cm in 2008; 38 cm in 2009; 47 cm in 2010; 23 cm in 2011. As of December 31, 2011, the level of the Lake totalled 1,900.13 meters. **The fact, that for the first time, the level of Lake Sevan exceeded 1,900 meters as of the end of the year, thus matching with the level of Lake Sevan in 1963, is unprecedented.**

All in all, since 2001, the level of Lake Sevan has increased by over 3.6 meters.

#### • **Quality of Lake Sevan Water**

Monitoring of Lake Sevan water composition – modification in the water-chemical behaviour of biogenic substances, has been in process. Monitoring results revealed that the permeability of the Lake has increased compared to previous years, thus totalling 6-11 meters. The structure of heavy metals did not undergo substantial modification; and this is a positive trend.

Under Lake Sevan Environmental Project funded by the European Bank for Reconstruction and Development (EBRD), water treatment plants are constructed in towns of Gavar, Martuni and Vardenis. It is planned to conclude these works in 2012.

Cleaning of waterlogged timber stands in Lake Sevan has been carried out at the expense of budgetary funds. All in all, more than 1,231 hectares of waterlogged timber stands were cleaned during 2007-2011.

As of December 31, 2011, 345 facilities out of 528 objects located on a level lower than 1,900.25 meters were dismantled in the littoral sites of Lake Sevan.

#### • **Replenishment of Lake Sevan Fish Stock**

Within the process of fish stock replenishment financed from the RA state budget 2007-2011, the fish stock in Lake Sevan was replenished. Because of this process, more than 1,290.0 thousand young Gegharquni (type of fish) and summer trout species were let out into the Lake.

According to the data of NAS **Institute of Hydro-ecology and Ichthyology**, the pan trout fish is in a rather good position. Their growth rate, as well as the saturation level, comes to prove this.

#### • **Public beaches**

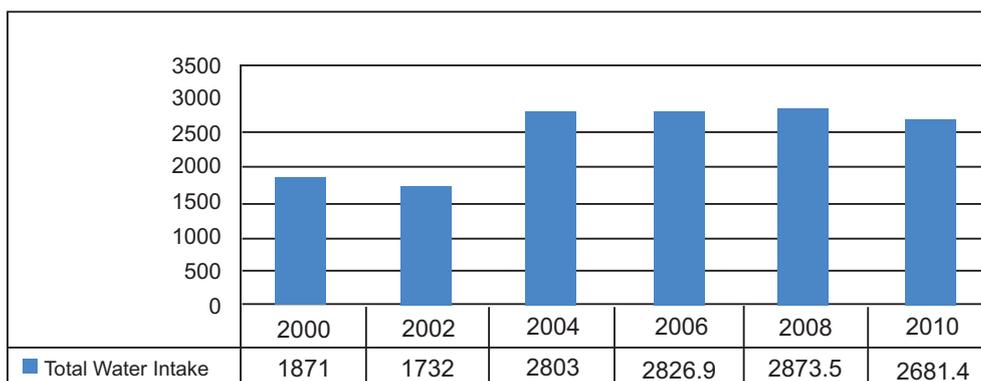
Pursuant to an instruction by RA President, five public beaches were set in the littoral zone of Lake Sevan, with a view to ensuring more efficient use of Lake Sevan recreational resources.

The process of setting up new public beaches will proceed in 2012.

#### ❖ **Water Use**

The annual volume (million cubic m) of water intake in the country for purposes of water consumption is specified in the Graphic 1.9.

**Graphic 1.9. Water Intake in 2000-2010**



As shown in the Diagram above, the volume of water intake has drastically grown in 2004, as compared to 2002. This was conditional upon formalisation of the right for water use in Armenia, in compliance with the provisions of the RA Water Code, and that process commenced in 2003. Starting from 2004, the volume of water intake has not been exposed to substantial modification, which evidences for the fact, that such indicators are characteristic for the economic growth in the country during the specified period.

Given the tremendous hydro potential of the country's rivers, a significant water intake has been registered during past ten years within water use for hydro energy needs. At present, water intake is 3.3 billion cubic meters a year. This is about 50 percent of surface water flow within the country, mainly conditioned upon consecutive and multiple use of water flows of such resources.

- **Potable water supply**

Undertaken measures contributed to the growth of the index of potable water accessibility year in year out. In 2001, the average duration of potable water supply was 15 hours, with an increase of 1 hour as compared to 2010. For comparison, it is worth noting that this index was 6 hours in 2004.

- **Drainage**

In all towns of the Republic of Armenia, industrial and household wastewaters (in average – 1.8-2.0 billion m<sup>3</sup>) are collected (drained) through sewerage collectors and networks. The existing drainage system serves to collect (drain) approximately 70-80 percent of wastewaters in urban areas, whereas the rural areas, in their prevailing majority, have no draining systems.

Some 30-40 years back, around 20 wastewater treatment plants (WTP) were constructed in the country's various residential areas, which deteriorated in the aftermath, due to lack of funds needed for investments and operation. All of them are currently inoperable. Only the "Aeration" water treatment plant in Yerevan is operational, carrying out mechanical treatment.

Due to efforts undertaken in the last 3-4 years, the French Government allocated funds for the rehabilitation of "Aeration" WTP in Yerevan, and the restoration of a number of sewerage pipelines. It is planned to conclude these works in 2015. Apart from the above, treatment plants will be constructed in towns of Gavar, Martuni and Vardenis, within the scope of "Lake Sevan Environmental Project" funded by the European Bank for Reconstruction and Development (EBRD).

Armenia has adopted new water quality standards. The quality of water flows from Armenia to neighbouring states complies with accepted standards.

- ❖ **Improvement of legislation**

The past decade was marked with substantial achievements in the Republic of Armenia water resource management sector in terms of legislative reforms. The reforms are mainly focused on introduction and application of comprehensive principles of water resource management in the country.

The Water Code of the Republic of Armenia, adopted in 2002, is the principal document governing issues of management and conservation of water resources in Armenia. The document contains the principle of integrated basin management; promotes supply-based rather than demand-based decisions with regard to water distribution; serves as a basis for the accomplishment of the institute of state water cadastre; enforces information-based

issuance of water use permits, and provides opportunities for the deployment of economic leverage in the process of water resource management and cost coverage.

Today, water sector reforms are in a most important transitional phase, associated with the decentralization of water resource management functions (from the central authority to water basin management units).

In this regard, it is worth mentioning a series of RA Government decisions, among them decisions on “Defining standards for water quality assurance in each basin management area, depending upon the characteristics of the site”, “Defining measures for employment of modern technologies, improvement of water resource monitoring, reduction and prevention of pollution”; “Implementation of underground freshwater hydrological studies and development of basin management plans”, “Demand for potable household water and agricultural water in accordance with water basin sites of the Republic of Armenia”, and “Defining the procedure for assessment of environmental discharges.” The enforcement of these procedures will contribute to conservation of national water resources, help to meet the water demand of the population and economy through efficient water resource management, contribute to environmental sustainability, as well as assist in the development of basin management plans.

The success of reforms is mainly conditional upon the policy implemented by the RA Government, which is in line with the missions of various international and donor organizations - the WB, USAID, UNDP, GEF, EU Water Initiative (EUWI), UNECE, OECD, and others.

Special attention should be paid to the Model Guidelines for River Basin Management Plans developed in 2006-2008 on the example of the Meghri river basin example, within the scope of USAID Program for Institutional and Regulatory Strengthening of Water Sector in Armenia.

Within the framework of the EU Water Initiative for Eastern Europe, Caucasus and Central Asia (EECCA), with support from UN ECE, UNDP and OECD, and in accordance with the RA Water Code and EU Water Framework Directive, starting from 2008 a Model plan for water basin management on the example of Marmarik pilot river basin had been developed, and approved by the RA Government on February 3, 2011. The Model Plan incorporates basic description of the basin, anthropogenic and biogenic impacts (including climate change) on water resources and assessment thereof, indication of current and desired prospective scenarios of water use, financial estimation for implementation thereof, and other aspects.

In addition to the aforementioned activities, upon initiative of the RA Ministry of Nature Protection and for inclusion in the model plan of the water basin management, within the framework of the EU Water Initiative (EECCA) and through international consulting, starting from 2011 a pilot research/project has been conducted on payments for the services of ecosystems and water resources, based on the example of River Marmarik.

The Ministry of Nature Protection of RA contemplates using the findings of the research to complete the Model Plan for the water basin management approved by the RA Government, which will later be used as a guideline document for the development of water basin management plans for 6 water basins in the country.

As of today, legislative and other progressive amendments are acceptable for reputable experts and organizations on regional, as well as international level.

#### ❖ **Water basin management**

In recent years, legislative and institutional reforms associated with the management of water resources in the country have been implemented in harmony with integrated water management principles. Some of the critical steps in the reform process are the establishment and strengthening of water basin management units, the development and implementation of water basin management plans, as a critical step towards decentralization and reasonable management of water resources.

Effective 2005, the system of water basin management was introduced in the Republic of Armenia, and currently water resource management is carried out through 6 water basin sites (Northern, Akhuryan, Araratian, Sevan, Hrazdan and Southern) (see Annex 5), which coincide with the natural hydrological river basins.

The RA National Water Programme, as well as the RA Water Code, renders the territorial water management units as key players in the integrated water resource management. According to the aforementioned, these units are empowered to “plan”, “monitor”, “analyse”, and “supervise”, whereas the Water Resource Management Agency of the RA Ministry of Nature Protection shall be responsible for the overall management.

Hence, the territorial water management units are responsible for ensuring the conservation of water resources in water basins, performing water intake registration and oversight, defining water intake modes and pro-

portions, ensuring the enforcement of conditions of water use, set forth in the water use permits, as well as drafting prospective plans for management, utilization, and conservation of basin water resources.

One of the prerequisites for decentralization of water resource management functions is the development of water basin management plans, to become the primary document for the territorial water basin management units.

In spite of concluded activities, there is still a long way forward to decentralized management of water resources in Armenia in terms of institutional strengthening; improvement of water permits and enforcement procedures; reformation of monitoring plans for surface and ground water resources; universal management of water resources, as well as decision-making on the basis of reliable information.

#### ❖ **Contemporary issues**

A critical prerequisite for proper management of water resources is the assessment and classification of water resources and water stock in the country, which in its turn will allow for decisions aimed at increasing strategic water storages and regulation of the river flow. A critical domain is the development of integrated water resource management plans, where to it will be essential to draft new programs for monitoring of surface and ground water resources, based on the river basin management approach.

Key problems associated with the management of water resources in the country refer to the implementation of Lake Sevan water resource management plan, as well as the hydro geological studies of ground water resources in Ararat valley. Finally, a critical problem with regard to integrated management of water resources is the determination of water ecosystems conservation zones (of sanitary preservation, flow formation, conservation of ground waters, water protective zones, ecotone, etc.) and their protection.

Another important strategic issue is the improvement of water system management. In this regard, one of the most urgent issues is the improvement of water supply and water removal services (reduction of leakages of potable water supply and irrigation systems; introduction of water saving technologies; improvement of water supply services; restoration of wastewater treatment plants and construction of new ones; development of irrigation systems and improvement of irrigation culture, with application of advanced agro-technical measures and irrigation modes in agriculture, etc.). Special attention should be paid to ensuring the safety of hydro-technical structures.

### **1.2.2. Biological diversity**

Being an essential ecological surrounding for human habitation, the biological diversity of Armenia has major environmental relevance. It is an essential factor for the formation of country's climate; the regulation of thermal and water regimes; the cleanup of hazardous gases and other substances; the protection from soil erosion, and ensuring good sanitary and hygienic conditions of the environment.

Biological resources are a key supportive factor for the country's economy, mostly in terms of supplying the agricultural, food and other sectors with raw materials, and furthering recreation thereof.

In spite of its small territory, there are around 3600 species of phanerogams, and over 17500 animal species, among them 536 are vertebrates. The following have served as key prerequisites for the formation of such rich diversity:

- Armenia, as part of Armenian Highland, is located at the junction of lands having crucial relevance for the formation of flora and fauna in the region;
- Armenia is a transit route crossroad for migrating animals and birds;
- Due to great altitudinal variation (from 375 meters up to 4095 meters from the sea level), 7 landscape climatic zones with distinct flora and fauna are formed in a relatively small terrain.

Armenia's biodiversity is rich in economically valuable, rare and endemic species. Out of useful plants of special importance are the native plants of agro biodiversity group, a key constituent whereof are congeners of hemerophytes. Armenia is considered to be a global centre for types of wild-growing wheat, rye, barley, and aegilops, wherefrom many types spread all over the world later. Wild-growing congeners of a number of domestic animals are still sustained in the territory of the Republic of Armenia.

Biodiversity conservation in Armenia is mainly implemented in specially protected nature areas (SPNA). 60-70 percent of the country's flora and fauna species is sustained in these sites, inclusive of the prevailing portion of rare, relict, endangered and endemic species, as well as wild genetic resources.

The total network of SPNAs covers around 360,000 ha, or 12 percent of the total area of the country /around 7 percent of the total area of the country, if considered without the surface of Lake Sevan/. 54 percent of these areas /91 percent, if considered without the surface of Lake Sevan/ are occupied by forest ecosystems.

Based on surveys and inventory of more valuable territories of the country, "Lake Arpi", "Arevik" national parks and "Zangezur" state sanctuary were established in 2009. "Zikatar" state sanctuary was established in 2010 by decisions of Armenian Government. In 2011, based on a decision of the RA Government, the territory of "Khosrov" reserve was extended by establishing a protection mode at "Gilan" state sanctuary.

The list of nature monuments of Armenia, inclusive of 230 nature objects, was approved in 2009.

The Government of Armenia approved the management plans for "Sevan" and "Dilijan" national parks (2007), "Khosrov Forest" state reserve (2009), and "Lake Arpi" national park (2011).

In 2007-2010, a comprehensive survey of the flora and fauna of Armenia; an assessment of the status of species in line with international standards was carried out. In addition, the Red Book of Armenia was republished. 452 plant species (12.5 percent of total flora) and 308 animal species (2 percent of the fauna), which are in more critical state, were included in the Red Book of Armenia.

Indication of major achievements may include the improvement of regulatory framework and institutional structures; the registration of biodiversity in the territories of existing and planned SPNAs; the development of management plans for protected areas; the initiation of introduction of the monitoring system; the creation of new protected areas; the improvement of the status of some constituents of biodiversity in critical situation (panther, Bezoar goat, Armenian mufion, birds of prey, etc.), and republication of the second edition of the Red Book.

It should be pointed out, that the enforcement of environmental legislation has deficiencies and gaps with regard to the control system, mainly associated with the number of staff members and the lack of funds.

Major risks for the biodiversity are directly or indirectly associated with anthropogenic impacts. Major threats are the loss and modification of nature surroundings, utilization of biological resources, nature pollution, and impact of introduced alien species, climate change, and other factors.

Impacts of anthropogenic influence are more tangible in the forests; semi-deserted, grassland ecosystems, as well as in Lake Sevan water ecosystem. The conservation mode is not completely complied with in SPNAs.

### **1.2.3. Forest conservation**

#### **• Current status**

As per data for 1993, forest lands in the Republic of Armenia cover 459.9 thousand ha, where timberlands comprise 334.1 thousand ha (11.2 percent of the country's territory), including 283.6 thousand ha of natural forests, and 50.5 thousand ha of artificial forests. However, large-scale deforestation in the last two decades has brought about crucial negative qualitative modifications; in particular, the level of forest integrity has dropped, and unacceptable modifications in the composition of species take place.

According to forest resource registration data from 1993, the average productivity indicator for Armenian forests (bonitet) is III-6, the average integrity is 0.55, the average timber stock is 125 m<sup>3</sup>/ha, and the average annual growth is 1.3 m<sup>3</sup>/ha. The total timber stock of all forests comprises 41,740 thousand m<sup>3</sup>. 13 percent of forest cover is found in the south-eastern, 2 percent in the central Armenia, and 29 percent in the north-southern part of Armenia.

Forests in Armenia are marked with rich natural resources and abundant biodiversity. There are 274 aboriginal trees and shrubs; including 25 species of endemic and 32 species of relict trees and shrubs. The main forest forming tree species are the beech, the oak, the hornbeam, and the pine. These four tree species comprise 89.1 percent of the timberlands and 97.2 percent of forest reserves in the country.

The secondary or minor tree species in Armenian forests are represented by the maple, linden, elm, ash and other trees. Their productivity is 36 percent less than that of primary forest forming tree species."Sunny" forests are represented mainly by thin juniper forests. The integrity of such forests is 0.3-0.4, i.e. uncovered surfaces prevail. (These figures do not cover modifications in the forest fund in recent years.)

According to the forest management plans, forest resources attached to "Hayantar" SNCO comprise 344167ha, whereof 277134ha are timberlands.

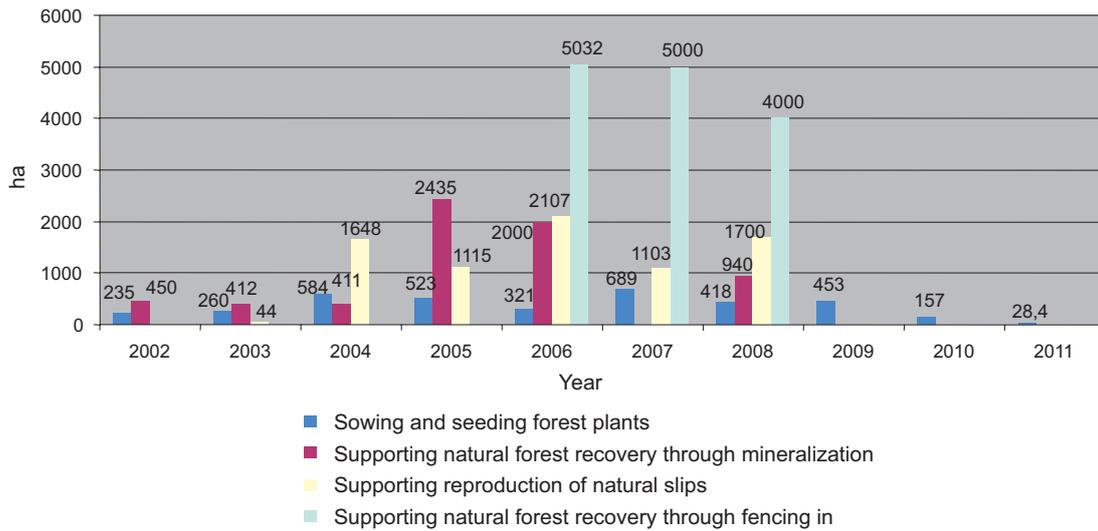
Due to impacts of both anthropogenic and nature-driven factors, degradation in the qualitative structure of forests in the country is observed.

In 2001, the German Agency for International Cooperation (GIZ) conducted surveys in order to specify surface of timberlands in the Republic of Armenia. According to the data received via remote sensor, the timberlands cover 332,333 hectares or 11.17 percent of the total area of Armenia.

• **Reforestation**

In the last 10 years, reforestation and afforestation measures have been carried out on 32,065 ha of territory in the country, whereof sowing and seeding - on 3,667 hectares, and supporting the natural forest reproduction - on 28,398 hectares of land.

**Graphic 1.10. Volume of reforestation and afforestation work performed during 2002-2011**

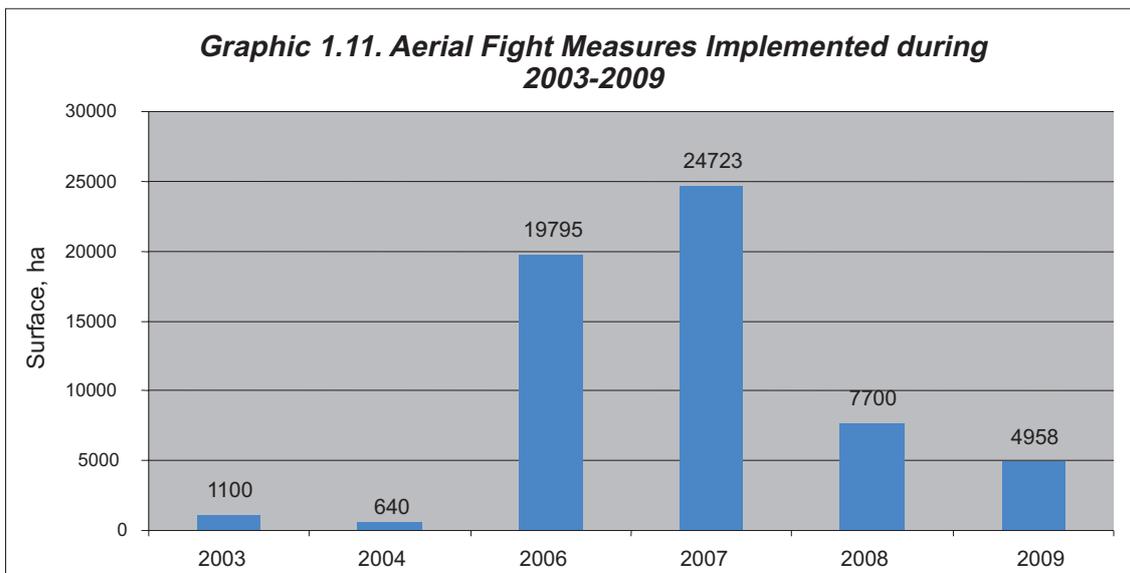


Currently, within the frame of afforestation and reforestation initiative, a modern hatchery is being constructed for growing seedlings in a closed root system.

• **Forest Protection**

Aerial and chemical works were performed during 2003-2009 to combat forest pests and diseases. The efficiency of such aerial and chemical fight measures was high and brought upon good results.

**Graphic 1.11. Aerial Fight Measures Implemented during 2003-2009**



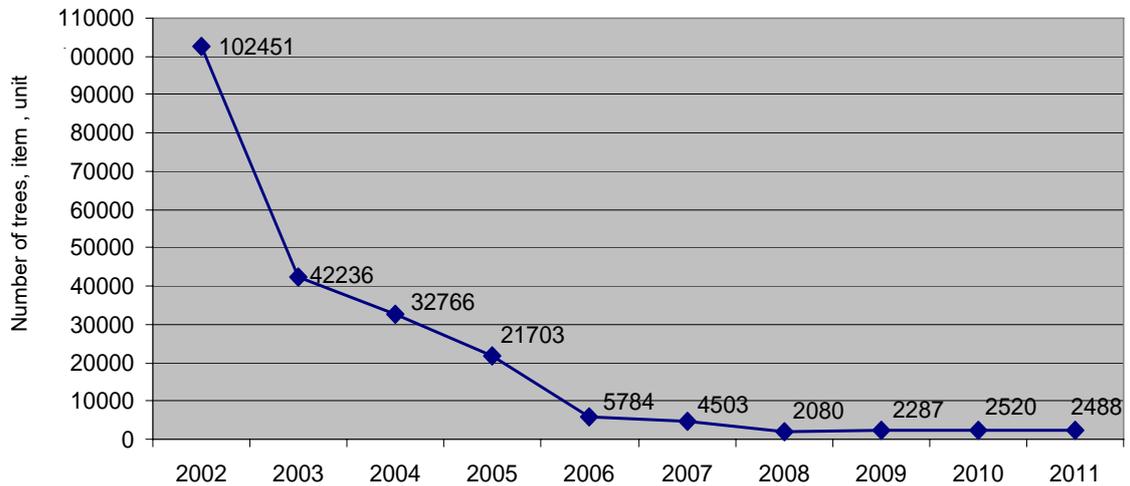
It is planned to implement aerial and chemical fight measures against pests and diseases on 9000 ha of territory in 2012. In addition, a pilot biological combating measure against forest pests is planned within the framework

of Increasing the Level of Adaptation to Climate Change Impacts in Mountain Forest Ecosystems in Armenia Project.

- **Forest conservation**

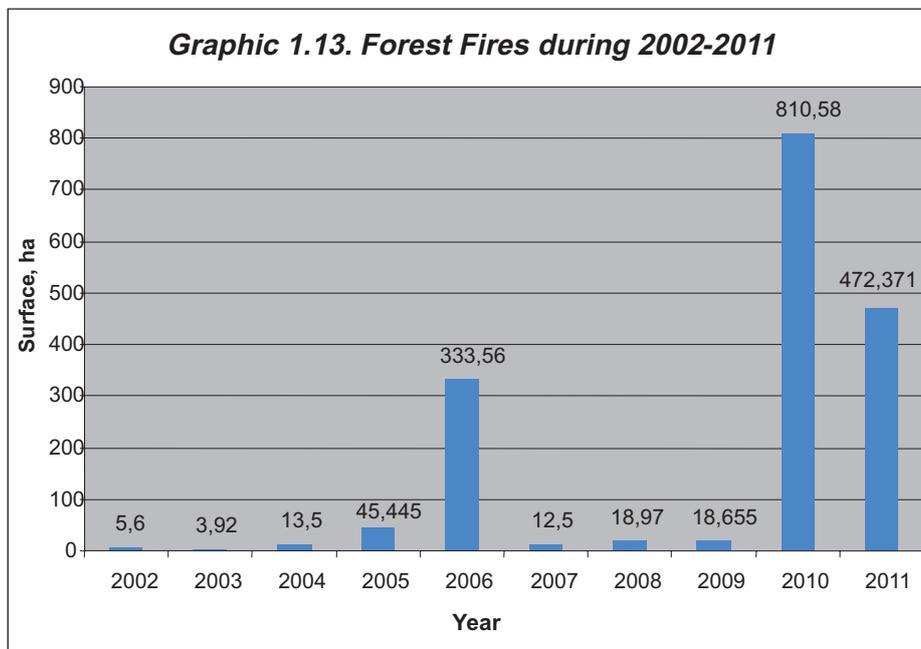
The volume of illegal timber-cutting has drawn back in recent years. In 2002, 102451 illegally logged trees were discovered, whereas in 2011 this number amounted to 2488.

**Graphic 1.12. Dynamics of illegal logging during 2002-2011**



The number of forest fires has increased in recent years. In 2002, fires were noted on 5.6ha of forest land, whereas in 2010 and 2011, fires were observed on 810.58 hectares and 472.371 hectares of forest lands, respectively. Fire increase is conditional upon factors of climate change, as well as the vicious practice of the population to burn meadows and pastures in autumn.

**Graphic 1.13. Forest Fires during 2002-2011**

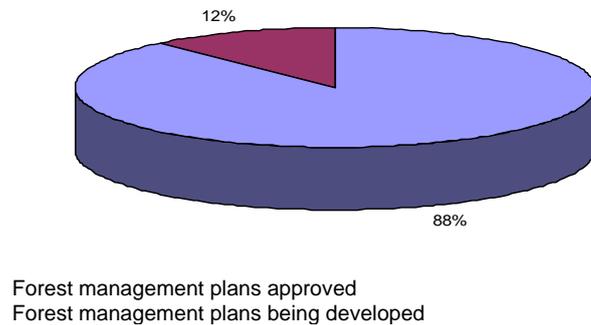


- **Forest management plans (Forest development)**

In 2004-2010, forest development designs (Forest management plans) for Ijevan, Sevqar, Noyemberyan, Artsvaberd, Syunik, Kapan, Sisian, Chambarak, Gugaraq, Dsegh, Lalvar, Jiliza, Stepanavan, Tashir, Vayots Dzor

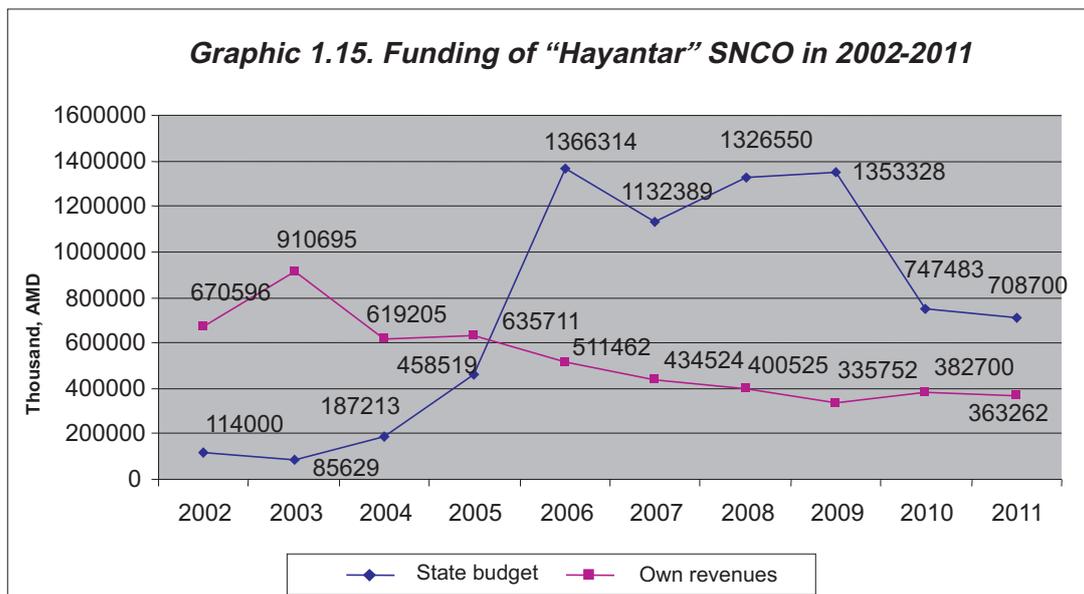
branches of “Hayantar” SNCO were developed and approved. Forest development designs for Yerevan, Aragatsotn, Hrazdan and Gyumri branches of the Forest Administration are in the phase of development.

**Graphic 1.14. Dynamics of Forest Management Plans**



• **Current features of the maintenance of forests**

In Soviet times, the majority of forestry was maintained (97-98 percent) through funds allocated from the state budget. During the independence years, in a situation of limited state budgetary resources in the country, the principles of financing the system underwent substantial changes, and it was mainly funded from the revenues of “Hayantar” SNCO. Starting from 2004-2005, as a result of adoption of the National Forest Policy and Strategy of the Republic of Armenia, as well as the National Forest Program, the policy with regard to the forest sector has changed, and the amount of funding from the state budget gradually increased. However, in recent years, due to global financial recess, the state funding was cut down, resulting in the reduction of the volumes of reforestation and afforestation works.



• **Auxiliary economies**

At present, there are almost no auxiliary economies within the state system of forest economy. The population of nearby forest areas illegally use the forests for own needs.

• **Legislation**

With a view to improving the forest sector, the RA Government approved the Action Program to Support Issues associated with Illegal Logging, and the RA National Forest Policy and Strategy in its Protocol Decision No. 38, dated September 30, 2004. In addition, on July 21, 2005, by decision No. 1232-N the RA Government approved the National Forest Program of the Republic of Armenia. The aim of adoption of abovementioned documents is to decrease the level of illegal logging; to ensure the conservation of forest ecosystems, the restoration

of degraded forest ecosystems, sustained and efficient use of forest resources, and the strategy for sustainable forest management.

Adopted on October 24, 2005, the new Forest Code of the Republic of Armenia classifies all forests, irrespective of the form of ownership, by their main special-purpose significance into the following categories:

- a) forests of protection significance;
- b) forests of special significance;
- c) forests of production significance.

Pursuant to this Code, forests of protection significance also includes the 200m of latitude area of forest upper and lower borders; the forests growing in semi-desert, grassland, forest-grassland strips, which are more vulnerable to negative impacts of anthropogenic (man-made), biotic (pests, diseases) and climatic (temperature, precipitation, humidity) factors.

In 2006-2010, the RA Government elaborated and approved a number of bylaws based on the Forest Code. (Annex 3)

#### **1.2.4. Land resources**

The Republic of Armenia is a country with scarce land resources and is characterized by the existence of a relatively young Pliocene age earth surface. The land fund of the country is just 2.974.259ha, whereof only 0.15 percent is suitable for agricultural purposes. Declivous and abrupt slopes cover almost 47 percent of the land surface. Varied conditions of land formation have contributed to the complicated and fractured structure of the land surface. The land surface is too speckled: you can observe 7 etymological types, 27 subtypes, encompassed in 8 upland zones. (Annex 5)

Armenia is especially vulnerable to desertification, given its geographic and climate conditions, cumulating with the transitional stage of the country's economy. Lands exposed to desertification comprise 53.2 percent of the total territory of the country; areas endangered by desertification comprise 28.7 percent. Therefore, combat against desertification has developed into a strategic issue for the country; mitigation and prevention of desertification stand among the guarantees for sustainable development of the country.

In 2002, the RA Government approved the National Action Plan to Combat Desertification in Armenia by decision.

Multiple projects have been implemented in Armenia to combat desertification, among them:

- The Millennium Challenges Program covered the expansion of irrigable areas, as well as rehabilitation of drainage networks. As a result, the area of irrigable lands was expanded by 1300ha, compared to 2007. In addition, steps were undertaken to improve natural hay-lands and irrigation, resulting in some 12km of irrigation systems restored and more than 18000ha of remote natural pastures rendered usable.

- Within the framework of Irrigation System Restoration Project, 260km of water pipelines, a number of pump stations and water reservoirs were restored; 238 deep wells were rehabilitated and constructed; and 310 km of existing drainage network were cleaned and installed.

- Sustainable Land Resource Management to the Benefit of Reduction of Land Degradation and Poverty Eradication in the Region of Eastern Caucuses Project has been implemented from 2010.

In 2006, requirements for the land reclamation, and the technical regulation for classification of lands exposed to reclamation were elaborated, setting forth the requirements for land reclamation; the classification of disrupted lands per reclamation directions and types of further utilization, based on their suitability.

A special role is attached to the monitoring of soil contamination caused by heavy metals and chemical compounds due to mining activities. Actually, the observations are of limited quantity and irregular mode. There is no database, mapping of geochemical, and background contamination of soils. There are also no regular observations with regard to pollution of irrigation water in the country caused by mining activities, as well as migration of heavy metals and chemical compounds in the vegetation from contaminated soils, and the pollution of vegetable and organic stuff used by people through food chain.

In order to regulate the sector, a methodology for examining, revealing, and monitoring of man-made contamination of soils was developed in 2001 and adopted by the RA Government Decree No. 1192-N, dated August 18, 2011. The methodology is relevant for areas exposed to landslides; waterlogged and deserted lands; as well as soils, disturbed due to extraction of minerals or other anthropogenic influence; soils contaminated by pesticide remnants, heavy metals, oil products and other organic and non-organic pollutants, as a result of economic acti-

vity. The definition of “Soil degradation” and diagnostic indicators of degradation have been defined in the legislation.

It is planned to review the National Action Plan to Combat Desertification in Armenia and to align it with the requirements of the 10-year strategy of the UN Convention “On Combating Desertification” before 2013.

### **1.2.5. Use of Underground Resources (Entrails)**

More than 100 minerals are found in the territory of Armenia; including metallic minerals, such as raw iron, copper, molybdenum, lead, zinc, gold, silver, aluminium, and quite substantial stocks of rare and diffused metals, contained therein. Based on the rich metal stock, many metallurgical processing enterprises and plants were established; among them Kajaran, Kapan, Alaverdi, Akhtala, Ararat and other plants. There are 19 tailing dumps in the territory of the Republic of Armenia. The total area of lands provided to mining enterprises comprises 9,700 ha, whereof 1,400 hectares are used for tailing dumps. Extensively developing mining industry renders significant harm to the environment. From environmental standpoint, tailing dumps are considered to be more harmful. Long-lasting and intensive effect of tailings gathered in dumps on the natural soil and vegetation elements of the landscape lead to their total destruction and activation of further erosion, as well as to the loss of biogenic productivity. The properties and gaseous composition of the atmospheric air is being changed; pollution with industrially born toxic substances takes place. In case of fragmented surface patterns, polluting outflows of several kilometres may form.

Adoption of the Republic of Armenia Code on Earth Entrails in 2012 laid foundation for a series of new conceptual approaches regarding the protection of environment and the health of population, as well as the improvement of living standards of population, in the process of researching the minerals and filling the mines.

In particular, it is required to attach to the application for the right of mineral extraction the shut-down plan of the mine, with indication about infrastructure dismantling, the recovery of disturbed lands, implementation of monitoring of the location of industrial tailings for ensuring the safety and health of the population in neighbouring communities.

The plan for mineral extraction should include a characterization of the impact on nature and environment, including the environmental management plan and monitoring plans; the assessment for the social impact; the storing and conservation of recessive soil layer and in parallel extracted poor ore.

With a view to ensuring national security, protecting human life and health, historic and cultural values or nature and environment, the new Code provides for prohibition of utilization of distinct sites of earth entrails in a manner stipulated in the Republic of Armenia Legislation, where supplicated sites include cemeteries; monuments of nature, history and culture; plants or animals registered in the Red Book of the Republic of Armenia, as well as in case they are a in the crossway of bird migration routes.

It is planned to set new types of payments for earth entrails utilization, for monitoring the sites of mineral extraction, the location of industrial tail stacks formed in the process of mining, and with a view to ensuring the safety and health of population in neighbouring communities.

The Code defines a new concept - “man-made (anthropogenic) mines.” Anthropogenic mines are accumulations of minerals on the earth surface or in the mountain scoops or in tailing dumps, formed in consequence of researching, mining, processing and enriching minerals, which have received a geological and economic characterisation in a prescribed manner. Earth entrails utilization payments are accrued against filling of anthropogenic mines, in a manner prescribed by the Republic of Armenia legislation. Exploitation of anthropogenic mines will contribute to solution of a number of environmental issues, among them reduction of waste products accumulated also in tailing dumps, having up-to-date relevance for Armenia, a country with scarce land resources.

Fundamentals of safe exploitation of tailing dumps are defined in the Manual on “Safe Management of Tailing Dumps in the Territory of Armenia,” elaborated in 2011. The Manual contemplates minimum requirements for exploitation of tailing dumps and is relevant for all structures associated therewith - tailing dumps, embankments, dams, settling and sedimentation wells, draining systems, pipelines, etc.

The issue of investigating the level of environmental pollution caused by mining industry is closely linked with conducting monitoring-observations. However, as it mentioned above, implementation of monitoring in areas polluted by human activity (anthropogenic pollution) of the RA territory, is still in an embryonic state. Absence of monitoring data has its negative effect on the process of taking relevant decisions (elimination of emergency outflows from tailing dumps, restriction of land utilization, land reclamation, etc.) by the legislative and executive branches of Armenia.

The Republic of Armenia lacks consistent national policy and development strategy for underground resources/entrails, which could serve as a cornerstone for elaboration of a flexible and efficient action plan for the mining sector.

### **1.2.6. Atmospheric air protection**

The RA “Law on Atmospheric Air Protection” (1994) and relevant bylaws, ensuring the enforcement thereof, regulate atmosphere management in the Republic of Armenia.

With a view to updating the Law and preventing some negative impacts on atmosphere, amendments to the Law were made, the latest one being adopted in 2011. In particular, such amendments provided for prohibition of freight transportation in trucks lacking impermeable covers; measures for preventing dust emissions from construction sites, reconstructed and newly constructed buildings; prohibition to burn stubbles, sites with plant remnants and dried vegetation, the vegetation of pastures and meadows in soils of agricultural relevance, in forest strips and forests, as well as in specially protected nature areas; increasing the threshold of regulation for ten times, in order to cut the red tape and reduce corruption risks.

At present, state registration and regulation of emissions cover 1,301 entities with over 3,850 sources of emissions into the atmosphere. This accounts for about 96 percent of emissions from stationary sources across the country, which is subject to state control.

With a view to reducing emissions from motor vehicles, the Government has adopted a Concept Paper and an Action Programme, prohibited the use of leaded petroleum and the import of cars lacking emission neutralizers. In recent years, the permissible quantity of sulphur contained in petrol and diesel fuels has been decreased about ten times. Year in year out, the use of compressed natural gas prevails over petroleum. As a result, hazardous emissions from motor vehicles have been significantly deterred.

Since 2004, efforts have been taken to introduce the principle of territorial and technological regulation of hazardous substance emissions. Principles for calculating the share of motor transport emissions into the background pollution of atmosphere in residential areas have been elaborated, and efforts are taken towards developing a mechanism for introduction of best technologies.

The “e-Atmosphere” website has been developed. Since 2008, the electronic system for atmosphere protection and, in particular, regulation of emissions has been launched.

In 2007-2010, a number of Government decisions were passed to render the management of atmospheric air protection more specific and transparent. In particular, these decrees and instruments came to regulate relations between organizations possessing stationary pollution sources and the Governmental agency holding authority in the field of atmospheric air protection with relation to the registration of business entities, and specifically established the lower threshold for registration. The above instruments also define procedures for the review of maximum permissible emissions (MPE) normative design documents and authorization of emissions, defining how economic operators can electronically submit their MPE drafts to the Ministry by posting them on Ministry website. On the one hand, such developments made it possible to simplify the procedure of submitting design documents and obtaining emission permits, cut the red tape and reduce corruption risks. On the other hand, they rendered transparent the environmental activities of economic operators and the state control over such activities.

The RA Government decision set procedures for projecting, warning and addressing hazardous meteorological incidences of excessive atmospheric pollution, climate change, and actual state of ozone layer.

The methodology for calculation of harmful emissions into the atmosphere from thermal power plants running on natural gas was set.

### **1.2.7. Hazardous Waste and Chemicals**

Given the importance of ensuring safe management of wastes and chemicals in the development process and preventing their harmful impact on human health and environment, the Republic of Armenia continues its efforts towards creating a legal and legislative foundation for chemical and waste management, having defined key directions, strategic approaches, and having identified national priorities in this domain.

In order to regulate the waste management issues, relevant legal framework has been developed, including the RA Law on Wastes and a number of relevant bylaws (RA Government decisions, Ministerial orders). In order to meet the requirements of such legal acts and ensure safe management of waste products, the Republic of Armenia takes the following efforts:

- state registration of waste products;

- itemization of hazardous waste;
- registration of waste generation, recycling and reprocessing objects and waste disposal sites;
- efforts to establish a state cadastre of waste products.

At the same time, the Republic of Armenia continues to face pressing problems related to eco-friendly use of hazardous waste products, as long as the issues of eco-friendly disposal, neutralization, and destruction of such wastes remain outstanding.

Armenia lacks waste recycling plants, as well as special facilities to neutralize and bury waste products.

With a view to preventing environmental pollution, less polluting clean technologies should be introduced, allowing for more efficient use of all resources, and recirculation of maximum amount of wastes and products.

Waste produced in the Republic of Armenia is mainly accumulated in the premises of companies or transported to landfills, thus becoming a source for environmental pollution.

At the same time, waste contains valuable elements, extraction and utilization whereof allows for neutralization of waste products, as well as economization and production of primary raw materials.

With a view to solving the abovementioned problems, the RA Government has approved the Concept Paper of Clean Production, contributing to safe management of wastes and chemicals, introduction of ecologically clean production, integrated solution for protection of environment from pollution, as well as the increase of economic efficiency of production.

In order to improve the legal framework for efficient management of chemicals and waste products, as well as to provide solutions to problems existing in the sector, the National Overview (Profile) for Management of Chemicals and Waste Products was reviewed and updated in recent years.

Given the increased volumes of chemical substance production and utilization, as well as their possible negative impact on human health and environment, need for ensuring efficient, eco-friendly and safe management of chemical substances has emerged. To this end, the RA Law on Chemical Substances, and the National Strategy for Reduction of Risks for Chemical Effects on Human Health and the Environment were drafted in the Republic of Armenia.

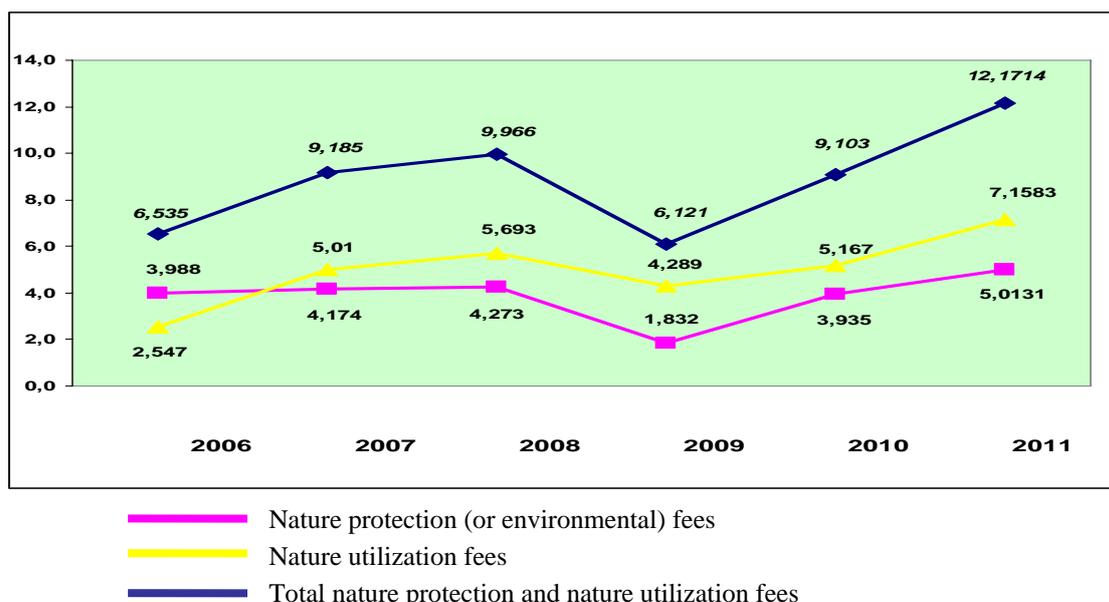
### **1.2.8. Economic Mechanisms for Nature Protection**

For the purpose of mitigating the negative impacts on the environment and ensuring efficient (sustainable) utilization of natural resources in the Republic of Armenia (regulatory role), as well as ensuring generation of financial resources (increase of cash flows) for environmental investments and replenishment of the state budget (fiscal role), a specific system of economic mechanisms (leverage) has been in place, based on enforcement of the RA Law on Nature Protection and Nature Use Payments and relevant bylaws. Thanks to this fact, a significant increase in the revenues accrued to the state budget of the country through execution of aforementioned economic mechanisms. Apart from this, in a number of instances the volume of environmental pollution has decreased.

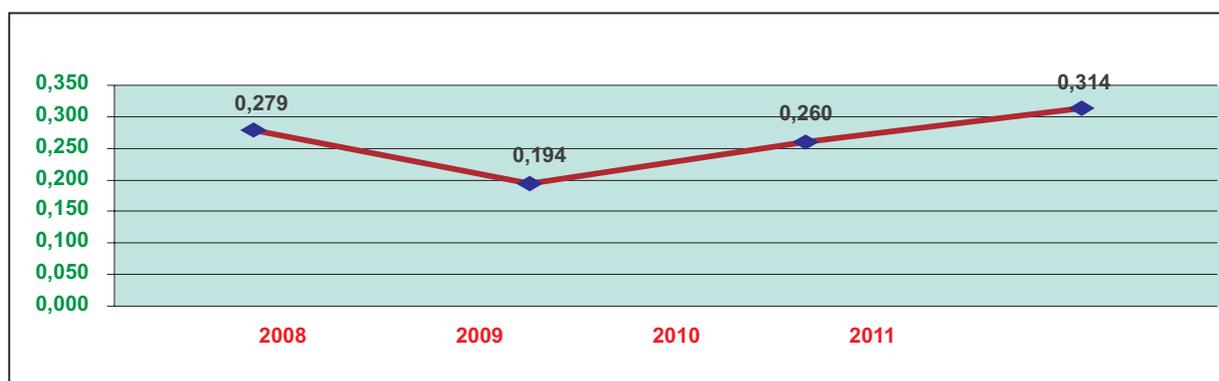
In parallel with the efficiency enhancement of inspectoral supervision operations and the economic growth of the country, substantial increase has been recorded and is still being traced in line of cash flows to the state budget through nature protection and nature utilization payments, thus establishing favourable conditions for financing various projects and activities aimed at resolution of critical environmental issues within the country.

During recent 12 years, their volume has increased for 15 times, growing from AMD 608.0 million in 1998 to AMD 12,171.4 million in 2011.

**Graphic 1.16. Dynamics of nature protection and nature use payments in 2006-2011 (billion AMD)**



**Graphic 1.17. Specific Weight of Nature Protection and Nature Utilization Payments in % within the GDP of Armenia**



However, the specific weight of nature utilization and nature protection payments (in percent) within the GDP of the Republic of Armenia remains low, with consideration of the fact that it characterizes the amount of compensation collected against the depreciation (damage) of the environment caused by economic activities. According to expert assessments, in countries with levels of development similar to that in Armenia, due to economic activities, a damage or depreciating of GDP's 8,0-10,0 percent is inflicted annually, which means that actually caused damage exceeds actual compensation amounts by over 32-40 times.

❖ **Economic instruments aimed at pollution reduction (environmental payments)**

The system of environmental payments has been in effect since 1993. These payments are due for ejection of hazardous substances into the environment, allocation of production and consumption of waste products in the surrounding environment, and for production and import of goods that are hazardous for the environment.

The fluctuations in the volumes of collection of environmental fees to the RA state budget proceeds in the period of 2008-2010 have been conditional upon financial and economic crisis.

The financial and economic crisis did not have any significant impact on the collection of environmental payments for emission of hazardous substances into the water basins and allocation of waste. Moreover, as opposed to other types of payments, an increase in collection volumes has been observed, conditional upon the fact that the level of such payments is mainly dependent on the volume of utility services provided to the population. On the other hand, as a result of enforcement of the new RA Law "On the Rates of Environmental Payments", the level of calculation of the actual volume of such payments has increased.

In spite of certain progress achieved, there are a number of problems in the sector concerned. The problems challenging the process of modernization of environmental payments are specified below:

1. Given the fact of non-performance and (or) non-availability of relevant research, the real dimensions of the damage caused to or inflicted on the environment due to pollution have not been assessed, thus resulting in a situation when the rates of environmental payments do not correspond/are not commensurate to the damage caused.

Effective environmental payments are based on the following:

- a) compensation indices or standards, developed through research during the Soviet period, which do not correspond to the present needs;
- b) these compensation indices or standards are not properly grounded, since they are based on theoretical and comparative calculations.

Comparison of the rates of nature protection payments for environmental pollution, with corresponding payments effective in other countries reveals the fact, that the rates effective in Armenia are too low, particularly, in line of pollutants. For instance:

**Table 1.10. For sulphur dioxide (SO<sub>2</sub>)**

Country	Rate of environmental payment for emission of 1 ton into the air basin			
	Within the rate limits		Exceeding the rate limits /in euro/	
	In Armenian drams	In Euros	For levels exceeding the rate limit up to 5 times	For levels exceeding the rate limit more than 5 times
Armenia	1,800	3.4	17	34
Canada		8.35		
Australia		10.0		
Average for countries of Eastern Europe (Czech Republic, Latvia, Lithuania, Poland, Slovakia)		33.75		
Serbia		57.5		
Poland		110.0		
Belarus		120.0		
Sweden		1,535.0		

**Table 1.11. For Nitric Oxides (NO<sub>x</sub>)**

Country	Rate of environmental payment for emission of 1 ton into the air basin			
	Within the rate limits		Exceeding the rate limits /in US dollar/	
	In Armenian drams	In US dollars	For levels exceeding the rate limit up to 5 times	For levels exceeding the rate limit more than 5 times
Armenia	14,800	39.4	196.8	394.0
Average for countries of Eastern Europe (Czech Republic, Latvia, Lithuania, Poland, Slovakia)		55		
Belarus		480		
Sweden		5,900		

Given the necessity of creating favourable conditions for economic development of the country during the first years of independence, rather low level of rates of environmental payments defined do not correspond to the genuine economic value of the resource/damage; therefore, such rates do not have sufficient impact on the behaviour of economic operators.

In practice, it is more profitable to pay the environmental fees, rather than to acquire and install new safe (green) technologies and equipment, which is more costly.

The further increase in pollution levels leads to unpredictable ecological consequences, the solution of which requires and year-by-year will require more financial investments. Even at present, it is not possible to stock up these financial investments through environmental payments, which are the major fiscal instrument ensuring generation (increase of cash flows) of environmental investments and financial resources for the replenishment of the state budget.

On the other hand, nowadays further application of privileges in line of environmental payments, set in the first years of independence, given the necessity of establishing favourable conditions for certain branches of economy with a view to ensuring economic development, is highly risky, since in practice it will lead to irrational (unreasonable) utilization of natural resources. In particular, below are examples of such privileges:

- a) granting of privileges in line of environmental payments to water supply and water draining companies;
- b) non-payment of environmental fees for the waste allocated in waste collectors by mining companies, conditioned by the 0-rate, as established.

#### ❖ *Payments targeted at efficient use of natural resources*

The system of nature use payments has been effective in Armenia since 1993. Such payments are charged for water consumption, extraction/extinction of minerals, and utilization of biological resources.

During the period of 2006-2010, no substantial changes in the collection level of nature utilization payments have taken place. Decrease in the collection level of such payments during 2009, conditional upon financial and economic crisis, was to major extent recovered in 2010. As evidenced by actual indicators of the half-year of 2011, they tend to exceed the highest collection level recorded in 2008.

Fluctuations in the volume of collection of earth entrails utilization payments during the reported period are conditional upon significant reduction in the volumes of mining and construction caused by financial recess, as well as the decline of international prices for precious and non-ferrous metals (especially for molybdenum), leading to substantial reduction in the volumes of nature utilization payments calculated on the basis thereof.

Minor variations in the collection levels of water use payments during the period under consideration have also been conditional upon the financial and economic crisis.

No major variations in the collection levels of biological resource utilization payments during the reported period have been observed. Furthermore, in 2010, an increase of more than 33.0 percent was recorded, as compared to 2007, which is mainly due to the growth of levels of industrial crayfish hunt.

Challenges with regard to the system concerned are almost identical with issues presented above in line of nature utilization payments. In individual cases (especially with regard to water consumption) the 0-level or low rates established for utilization of resources does not contribute to the efficient and (or) rational use of natural resources.

#### ❖ *Targeted use of environmental payments*

State budget revenues accrued from environmental and nature utilization payments create favourable conditions/framework for increasing the level of funding for projects and activities aimed at resolution of environmental issues in the country.

However, it should be noted that given the limited availability of all financial sources in the country, environmental activities are still regarded as a lower priority among budgetary expenditure priorities. In consequence, Armenia occupies one of the lowest positions among countries of Eastern Europe, Caucasus, and Central Asia, by the ratio of expenditures allotted to nature protection activities.

**Table 1.12. Allotments from the state budget of the Republic of Armenia for activities aimed at environmental protection**

	2008	2009	2010
<b>Allocations from the state budget of the Republic of Armenia for activities aimed at environmental protection (in billion Armenian drams)</b>	3.0	3.9	4.9
<b>Actual cash inflows into the state budget of the Republic of Armenia (in billion Armenian drams) for environmental and nature utilization payments (source of information: Annual Implementation Report on the State Budget of the Republic of Armenia)</b>	6.12	9.97	9.10
<b>Indicators of targeted use of payments (in percentage)</b>	49.0	39.1	53.8

**Table 1.13. Specific weight of the allotments from the state budget of the Republic of Armenia for the activities aimed at environmental protection (in percentage) within the GDP of the Republic of Armenia**

	2008	2009	2010
RA GDP /in billion Armenian drams/	3568.2	3102.8	3461.9
RA State Budget allotments for the protection of environment (in billion Armenian drams)	3.0	3.9	4.9
Specific weight of the allocations from the state budget of the Republic of Armenia for the activities aimed at environmental protection (in percent) within the GDP of the Republic of Armenia	0.08	0.12	0.14

The fact that the specific weight of allotments from the state budget of the Republic of Armenia for the activities aimed at environmental protection has demonstrated a tendency of insignificant but still “growth”, can be considered as a positive development.

The resolution of current problems in the area of targeted utilization of environmental and nature protection payments in Armenia are sought in several directions:

- **Direction One**

In order to ensure targeted use of collected environmental and nature utilization payments, corresponding provision supplemented to the Republic of Armenia “Law on the Budgetary System of the Republic of Armenia” stipulated that “the costs provided for by the state budget each year for nature protection projects shall not be less than the aggregate sum of the actual proceeds from environmental and nature utilization payments for the second budget year preceding the given year”. The law entered into force in 2001.

- **Direction Two**

The scope of the RA Law on Targeted Utilization of Environmental Payments by Companies enforcement has been extended, due to which the environmental fees paid by large mining metallurgical companies are allotted to the impacted communities for funding nature protection and health care measures.

Under execution of the Republic of Armenia 2004-2010 state budget, the amount of subventions allotted for environmental projects has grown from 131.4 thousand Armenian drams in 2004 to 277.1 million Armenian drams in 2012. Effective 2011, 26 communities have been granted the right of receiving subventions for the implementation of environmental projects.

- **Direction Three**

Taking account of the international practice, and in order to collect necessary funds for the implementation of environmental investment/target programmes (projects) in Armenia, a corresponding system of environmental funds was established and is operating involving, in particular, the following:

- In 2004, in conformance with the Republic of Armenia Government Decree No. 891-N, dated as 10.06.2004, a Fund for Forest Rehabilitation and Development was established to support the process of reforestation and create favourable conditions for forest developments in the country.

- Since 2005, an Environmental Protection Monetary Fund has been operating to collect corresponding guaranteed amounts for the reclamation, flattening, landscaping, tree-planting and building on the territories deteriorated from exploitation of subsoil. Effective 01.05.2010, an aggregate sum in excess of **350 million** Armenian drams had been collected.

- Since 2005, an extra-budgetary account named “Target Environmental Fund” has been effective. According to the results for the period of 2005-2010, natural persons and legal entities of the Republic of Armenia had made voluntary donations, contributions, and offerings to the Fund in excess of a total **260 million** Armenian drams, enabling the execution of a series of important environmental activities and projects.

In conformance with the RA Government decision No. 517-N, adopted on 28 April 2011, a Fund for Rehabilitation, Conservation and Development of Lake Sevan was established to support the restoration of the status of Lake Sevan as a strategically important depository of fresh water, its reproduction, preservation, natural development and utilization, as well as acquisition of adequate resources to ensure the purity of the water in the lake.

Data on the status of environment are presented in Annex 2.

## **1.3 National programs for development**

### **1.3.1. Poverty Reduction Strategic Program (PRSP) and Sustainable Development Programme (SDP)**

The first strategic document for a long-term projection of economic policy was the Poverty Reduction Strategic Program (PRSP) adopted by the Government of the Republic of Armenia in 2003. The participatory process of PRSP elaboration was ensured through the involvement of representatives of governmental bodies and agencies, civil society and the private sector, as well as international organizations and the donor community.

The PRSP aimed at significantly reducing the level of income poverty down to 19.7 percent in 2015, compared to 50.9 percent in 2001. In parallel, the Program targeted income inequality with an aim to reduce it from 53.5 percent in 2001 to 44.6 percent in 2015. In terms of human development, the PRSP goals included sustaining the existing human capital and further development thereof, reduction of expressions of human poverty, improvement of the population's health status, potential for reproduction and their living conditions, including raising the level of quality of general education and health care services and the level of accessibility for the poor, decrease in child and mother mortality rates, enhancement of the quality and accessibility of water and other basic services. The United Nations Millennium Development Goals (adopted in 2000) served as the basis for the adoption of the above mentioned goals and targets. In essence, the country's first strategy aimed at reducing poverty in Armenia and ensuring equitable distribution of incomes focuses on sustaining and developing human capital as a critical prerequisite for sustainable economic growth.

In 2006, the PRSP review process commenced. Currently the Sustainable Development Programme (SDP) is the main document for a long-term planning of social and economic development in the Republic of Armenia. SDP, adopted by the RA Government on October 30, 2008, is basically a revised version of the Poverty Reduction Strategy Paper. It presents, in a comprehensive and holistic manner, the major directions of and priorities for the country's development, meanwhile specifying target indicators and guidance on ways for the achievement thereof.

A thorough participatory process has been put at the basis of the SDP development and implementation, which has been institutionally formulated in a Social Partnership Agreement, signed on February 14, 2009, which specified a two-level system of management of the participatory implementation of the Sustainable Development Programme. This system consists of the SDP Steering Committee and the SDP Working Group. Both bodies are formed based on the principle of predominant participation of civil society institutions. Meanwhile, to ensure an effective participation of the civil society, a Civil Partnership Network was formed as a non-formal institutional body in the management system.

The following main goals were specified in the SDP document:

- Growth of population well-being and overcoming poverty, including eradication of extreme poverty;
- Overcoming human poverty and ensuring human development;
- Containment of further growth of economic development imbalances coupled with implementation of targeted territorial development policies to ensure expedited progress of lagging regions.

In order to reach these goals, the Sustainable Development Programme strategy focused on three main priority directions: ensuring sustainable fast-paced economic growth; implementation of active and targeted social and income policies aimed at vulnerable groups of the population; and modernization of the country's governance system including increased efficiency of public administration and ensuring progressive growth of the resource package at the disposal of the country. It is envisaged to pair the process of achievement of the mentioned priorities with addressing the issues of environment preservation and sustainable management of natural resources.

In 2008 there was an important prerequisite – a high rate of economic growth - for the implementation of the Sustainable Development Programme and as a result transferring the country's socio-economic system to a new quality level. However, the registered growth was based mainly on continuing scope of external funding, progressive growth of imports versus exports, high ratio of construction and services sectors in the structure of the economy. This made the functioning model of the development vulnerable against external economic shocks and thus was unable to provide for the achievement of sustainable development perspective. Basically, SDP intended shifting toward an economic structure based on progressive growth of exports of goods and services which should provide necessary basis for a long-term transferring of the country into the course of sustainable development. The 2008 global financial and economic crises, recent developments in the global economy and the transition of external negative shocks into the internal economy, however, endangered the SDP implementation according to

the designed scenario.

Influenced by the above-mentioned factors and in a situation of continuing uncertainty, a medium-term planning approach was adopted. As it was mentioned earlier, the country's economic realities, affected by the global crisis, to some extent have limited the opportunities for obtaining the set targets and goals; nevertheless, the Government, in the framework of its anti-crisis policy, proved to be consistent in maintaining the adopted priorities and implementing reforms that are aimed at those priorities.

The following mid-term priorities are set out in **RA Government Program for 2008-2012** approved by the RA Government Decree No. 380-A (adopted on April 28, 2008):

- ensuring sustainable growth through national security and active economic policy;
- development of effective public, local self governance and private sector governance and rooting a corporate governance culture;
- development of education and science to face the challenges of the 21st century;
- Equality in regional development.

#### ***Territorial governance and local self-governance:***

A concept for proportional territorial development in Armenia has been developed and approved by the RA Government; the Concept envisages assessment of individual communities, territories and marzes (regions) by using aggregate indicators describing both the population's quality of life and the level of economic development. As a result, it will be possible to measure each planned project in terms of its impact on the mentioned indicators and ensuring proportional territorial development. In regions of the Republic of Armenia, activities were carried out toward elaboration of marz development programs.

In 2009-2010, state-owned land plots located outside of administrative borders of communities were transferred to communities; as a result, economic and resource capacities of communities increased.

The Republic of Armenia "Law on Local Self-Government in the City of Yerevan" was adopted; in line with it, the City of Yerevan received a status of community. A concept on "Local Taxes in the Republic of Armenia" has been elaborated: the latter stipulates that property tax and land tax are mandatory types of local taxes; local tax administration is described in detail; new types of taxes are specified. The volume of subsidies for 2011 comprised around 4.6 percent of actual revenues of the previous year consolidated budget. For a more optimized and targeted utilization of financial resources possessed communities and, as a result, effective implementation of their own authorities and those delegated by the central government, a concept on community consolidation and forming of inter-community unions has been elaborated.

### **1.3.2. State employment program**

The state policy in the area of employment is directed toward creation of conditions for ensuring dignified, full and effective employment, mitigation of the tension in the labour market, enhancing the competitiveness of job seekers, effective filling of job vacancies available with different employers, support to securing employment for youth, especially rural youth, non-competitive groups of people in the labour market, particularly, people with disabilities. From the viewpoint of state employment policy the 2000-2011 period is characterized as a time for legislative reforms in the sphere of employment and institutional development of the State Employment Service Agency.

The main directions of implemented reforms have been the following:

- continuous improvement of respective legislation;
- enhancement of the system of administration;
- introduction of new state programs on employment;
- Localization of international experience.

On January 1, 2006, the Republic of Armenia "Law on Employment of the Population and Social Protection in Case of Unemployment" was adopted, which aims at promotion of labour, ensuring employment and, in case of unemployment, implementation of equitable social policy based on principles of social partnership.

In the period of 2006-2011 and during the following years the priority directions of the employment sector were elaboration and introduction of programs enhancing the competitiveness of people with disabilities in the labour market and promoting employment among people living in rural areas. In the above mentioned period the structure of the annual state program on population employment and the list of measures included in the program.

The annual state programs aimed at the regulation of employment among population are the following:

1. payment of unemployment benefit;
2. professional training courses for the unemployed;
3. professional training for unemployed and job seeking people with disabilities, restoration of their working capabilities;
4. professional training for agricultural land owners who search for jobs;
5. change of specialization for unemployed persons who have long years of work experience,
6. professional training programs for the unemployed, unoccupied jobseekers receiving long-term service and privileged pensions;
7. compensation of material expenses of the unemployed and unemployed people with disabilities who search for jobs in connection with work mission to some other place;
8. organization of financial support to the unemployed and job seeking unoccupied people with disabilities for the state registration for entrepreneurial activities;
9. partial salary compensation to employers for support of job placement for non-competitive persons in the labour market;
10. organization of paid public works;
11. organization of job fairs;
12. organization of on-job training for unemployed who have specialization but lack work experience and for job seeking unoccupied people with disabilities;
13. customization of job places for job seeking unoccupied people with disabilities;
14. organization of labour market research and forecast activities;
15. payment of funeral benefit.

Regulation of the population employment is implemented through programs and measures carried out jointly with both governmental, and international and other organizations.

### **1.3.3. Nature Protection**

#### **National Environmental Action Programme**

In 2008, the Second National Environmental Action Programme (NEAP-2), an important strategic document for the nature protection sector, representing a systematized package of environmental policy instruments, was adopted.

NEAP-2 was developed based on the decisions of the most important international meetings in the environmental sphere (Rio Summit of 1992, Johannesburg Summit 2002, Steering Committee Meetings of UNEP), and the commitments assumed under environmental conventions ratified by the Republic of Armenia.

NEAP-2 includes 120 activities developed according to the following environmental domains:

- Environmental policy, legislation, institutional capacities;
- Economic and financial mechanisms;
- Water resource management;
- Management of underground resources;
- Atmosphere protection and climate change;
- Nature protection/environmental monitoring;
- Management of biodiversity and bio-resources, including the forest sector;
- Management of chemical substances and wastes;
- Sustainable use/management of lands;
- Public awareness and environmental training, education and information accessibility;
- International cooperation in environmental domain,

As well as cross-sectoral cooperation by the following directions:

- Nature protection and health;
- Nature protection – energy, industry, agriculture and public utilities sectors.

**List of measures ensuring fulfilment of commitments deriving from a set of international environmental conventions as assumed by the Republic of Armenia:** The Republic of Armenia has ratified 22 international environmental conventions and protocols. Implementation of the mentioned agreements requires a concerted and coordinated approach aimed at development of necessary political, strategic, and legal documents; implement-

tation of appropriate actions, as well as settlement of financing issues ensuring implementation of the planned actions.

Representing the 3<sup>rd</sup> sequential document (the first one was adopted by the RA Government decision No. 115-N, dated 25.02.1998, and the second one by the RA Government decision No. 1840-N, dated 02.12.04) approving the list of short-term (five-year) actions for implementation of the requirements of international environmental conventions, the RA Government decision on “Approval of the List of Measures Ensuring the Fulfilment of Commitments Deriving from a Set of International Environmental Conventions as Assumed by the Republic of Armenia” pursues a goal to clarify the commitments deriving from a set of environmental conventions as assumed by the Republic of Armenia and to ensure coordinated implementation of appropriate tasks.

The list being approved in 2011 contains 67 measures, and 17 RA agencies/state bodies have been involved for the implementation of these measures.

The National Forest Programme of the Republic of Armenia (RA Government decision No. 1232-N, dated July 21, 2005), promotes sustainable forest management, as well as expansion of the economic, social and environmental role of forests.

The objectives of the National program are:

- Conservation and protection of forest eco-systems;
- Restoration of degraded forests;
- Sustainable and ongoing use of forest resources;
- Ensuring sustainable forest management strategy.

#### **RA Government Protocol Decree No 54 on “National Strategy and Action Programme for Development of Specially Protected Nature Areas in Armenia” (NSAP), dated 26.12.2002**

The goal of the Programme is to ensure, through establishment of a sophisticated system for specially protected nature areas, the following:

- Improvement of the state of landscape and biological diversity, conservation, restoration and sustainable use;
- Harmonious integration of the system with the social-economic development strategy of the country;
- Alignment of the network of specially protected nature areas with international treaties, standards, and criteria.

Action Programme covers 5 sections:

1. Improvement of legal framework;
2. Improvement of SPNA management system;
3. Expansion of SPNA network;
4. Improvement of financial and technical mechanisms;
5. Improvement of human resourcing.

#### **2007-2011 Action Programme for implementation of issues deriving from the State Environmental Monitoring Concept of the Republic of Armenia**

The plan was approved on 15.02.2007 in the RA Government decision and is aimed at implementation of issues deriving from “The State Environmental Monitoring Concept of the Republic of Armenia” as approved in 2006 by Protocol Decree of the RA Government, i.e. improvement of the status of the state environmental monitoring of the Republic of Armenia, as well as definitions of legal, economic, administrative and methodical directions for implementation of environmental state monitoring activities in the context of the state environmental policy of the country. The Programme provides also for public awareness raising.

#### **“Clean Country” National Program**

On August 19, 2010, the RA Government approves “National Country” National Program with the view of performing cleaning and environmental activities on the whole territory of the Republic of Armenia.

The need of the Program is accountable for by unfavourable ecological/sanitary situation in the country, especially in urban settlements, and pursues a goal to improve the legislative framework, to use, more efficiently, the cleaning and conservation means of the surrounding environment, to change the attitude of the society towards the surrounding environment. Another goal of the program implementation is to bring together, around one com-

mon idea, a number of state bodies, educational institutions, local state-government bodies and non-governmental organizations.

#### **“Action Plan on Reducing Hazardous Substances Emissions from Motor Transport”**

The RA Government protocol decree N 40, dated October 14, 2004, approved the concept on “Reducing Hazardous Substance Emissions from Motor Transport”, which pursues a goal to reveal the problems in the sphere of reduction of hazardous emissions from motor transport and to call the attention of appropriate authorities on the need of settlement of those problems. The issues prescribed under the Concept should be taken into account in course of development of strategies and action plans in appropriate sectors.

In regard to implementation of the actions identified in the Concept, an action plan has been developed, which incorporates measures aiming at improvement of registration of emissions, reduction of emissions, improvement of the monitoring of the state of the surrounding environment and public awareness rising.

#### **Local Agenda 21 Century and Local Environmental Action Plan (LEAP)**

While no comprehensive Local Agenda 21 has been developed for any community in Armenia, some steps have been taken in that direction.

Particularly, with support of international donor organizations (UNDP, UNEP, OSCE, USAID/Counterpart, GIZ, EU/REC Caucasus, and SIDA) and Diaspora:

- In 2003, the book titled “Towards sustainable cities. Local agenda Guide of 21st century for cities of transition-economy countries” was prepared and published. The book titled “Sustainable Development Process at Local Level: International Experience, Problems and Perspectives” was prepared and published in 2006.

- Town of Hrazdan established a Local Council for Sustainable Development; the Municipality signed the Manifesto on the Charter of European Cities and Towns towards Sustainability (Aalborg Charter); and acceded to the international network of ICLEI (International Council for Local Environmental Initiatives).

- In town of Goris, a Community Council has been established and is functioning under the Municipality.

- Local Environmental Action Plans were developed for four towns. These towns are Ararat, Kajaran, Vardenis and Kapan. The Program was implemented with support of REC Caucasus, UN Development Programme and OSCE. The programs were coordinated by the RA Ministry of Nature Protection. The authorities of the aforementioned cities responsible for various components of the programs were actively involved in the program implementation. The main achievements are related to the improvement of the state of the air basin, irrigation system, and enlargement of green areas. A more efficient management in the fields of water supply and water drainage, as well as solid municipal waste was ensured.

Local Environmental Action Plans for cities of Ararat and Kajaran have been already implemented by 90 percent. Local Environmental Action plan for the City of Gyumri has been prepared, which is in the publishing phase.

- For a number of rural communities of marzes, complex ecological and development plans have been developed and implemented.

- Jointly with the Armenian Apostolic Church and “The Roundtable” of the World Council of Churches (WCC), Municipality of City of Vagharshapat has developed a Declaration, according which the project of turning the City into “Green Pilgrimage Site” should be implemented.

- *The communities in towns of Hrazdan, Kajaran, Kapan and Jermuk are extremely concerned about entrails use activities in the outskirts, which may result in pollution of the surrounding environment by toxic substances. Besides, displacement of some part of population would be another problem.*

- *The problems of the capital City of Yerevan are mainly connected with the urban development underway.*

*Since 1997-98, the launch of spot construction with multi-storey buildings has been recorded in Yerevan, in most of cases at the expense of green zones and childrens playground and other public lands. The mentioned activity resulted in unprecedented density, contraction of green areas, climate change, and growth of seismic risks of the city, particularly the Centre. It is in contradiction to the principles and ideology of both green urban development and the European Landscape Convention.*

*Perhaps, the two-year negotiations of the Environmental Community with the Municipality will eventually result in establishment of the Environmental Council of the City, the activity of which will be aimed at mitigation of the aforementioned risks to the extent possible.*

### 1.3.4. Education

The education system of Armenia involves a complex of pre-school, secondary, high and post-graduate professional education levels.

Acknowledging the importance of pre-school education for the purpose of creating equal conditions for comprehensive development and schooling for all children, in 2008 the Government of the Republic of Armenia adopted its Strategy Paper 2008-2015 Reforms of Pre-School Education, whereby it targets to achieve 90 percent involvement rate of children of senior pre-school age (5 years old) in pre-school education. The Paper prioritizes children from poor families and those communities, where pre-school education facilities are not currently operational.

In the Education sector **mainstream secondary education** is prioritized as a basis for life skills/independent livelihood and further professional education for children.

In 1998 reforms were carried out in mainstream secondary education, including legislation, structure, curricula and financing. As a result of those structural reforms all schools in the Republic were reorganized into state non-for-profit organizations, as well as a new system of administration through school boards was introduced. A new school financing mechanism was enforced, according to which the schools transitioned from lump sum financing to per child allocation system. This mechanism allows for enhanced independence of school financial and economic activity. With the purpose of developing student autonomy student councils were formed in schools.

In 2001 the State Programme for Educational Development 2001-2005 was enforced as a law, the main objective of which was to ensure progressive development of education system as of a factor affecting strengthening of the state and social and economic development of the society.

Aligned to the Programme objectives the sector underwent extensive reforms aimed at modernization of secondary education, quality improvement, increased access, decentralization of governance and increased effectiveness. Loan programmes on Education Governance and Financing Reforms, and Education Quality and Compliance have significantly contributed to implementation of these reforms.

At the current phase of social and economic development of the Republic of Armenia quality **professional** education is of significant importance. Quality assurance and access thereto are among the most important factors contributing to economic growth and reduction of poverty and inequality in the country.

Reforms in professional education are targeted at integration of Armenia into European common educational area and are regulated by Bologna and Torino Processes. A series of interventions is implemented in accord with the principles of those Processes aimed at improvement of professional education quality, enhancement of capacities required for development of professionals that meet the labour market demands and European standards.

In the area of **preliminary professional (craftsmanship) and middle professional (vocational) education** the activities were implemented as per the Concept on the Development of Preliminary Professional (Craftsmanship) and Middle Professional Education, and the Reforms of Vocational Education in Armenia 2009-2011 action plan and schedule. The Government of Armenia has approved the Strategy of preliminary professional (craftsmanship) and middle professional education and training in Armenia, which sets the major goals and objectives of this system, as well as the ways to achieve those. Reforms implemented in the area of preliminary and middle professional education are supported by several international organizations, including UN Development Programme, British Council, other.

Currently preliminary professional (craftsmanship) and middle professional education facilities are governed by collegiate bodies – councils with respective involvement of social partners (employers and trade unions). A National Centre for Vocational Education and Training (VET) Development (NCVETD) has been established, which is a tri-partite body and consists of representatives of employers, trade unions and state bodies (agencies).

Since 2010, Armenia has been involved in Torino Process, which is implemented with the support of the European Education Foundation, the purpose of which is to conduct a brief documented analysis of VET reforms in the country, including key policy trends, challenges, obstacles, as well as identification of successful practices and opportunities.

As a result of the reforms implemented in the area of middle vocational education the new list of vocational specialisations and new educational standards have been established, based on which new curricula and educational plans are being developed.

One of the important achievements in this area during the recent years is the re-operationalization of vocational education facilities.

The reforms in the area of **additional and continuing education, adult education** were launched, when the Government of Armenia approved the Concept Paper and Strategy for Adult Education in 2005, as well as the Concept Paper on Non-Formal Education in the Republic of Armenia in 2006, which sets the main legal and institutional provisions and direction for non-formal education in the RA.

In 2009 the Government of Armenia approved the Concept Paper on Social Partnership in the Sphere of VET, as well as the Concept Paper on Life-long Education in the Republic of Armenia, which includes the main functions of the area, existing problems, as well as the possible ways of addressing thereof.

According to 2010 statistics, around 11 000 people participated in non-formal courses, of which 3 150 in Yerevan, and 7 850 in marzes. The number of participating women constituted respectively 1 953 (62 percent) and 4 757 (60.6 percent). Trainers of various subjects all together train minimum of 140 000 people annually.

Reforms in the area of **higher and post-graduate professional education** are implemented in alignment with the principles of Bologna Process. In 2005, Armenia officially joined the Bologna Process assuming a commitment to ensure implementation of the main principles of Bologna Process by individual directions of actions and join the European education area being formed.

Integration into the European Higher Education Area (EHEA) entails implementation of in-depth modifications within the higher education system of the Republic of Armenia, particularly introduction of a three-tier system of comparable and compatible qualifications, transition to credit system of organization of the educational process, promotion of unhindered mobility of students and faculty, enrooting of European standards of quality assurance, formation of a lifelong education system, enhancement of students' role and engagement, integration of educational and scientific research processes in higher education facilities, etc.

Within the scope of the implemented reforms the new list of higher education specializations has been approved, as well as the annex to the graduation certificate from a higher education institution. The three-tier system of higher education has been introduced; higher education standards have been revised, for a number of specializations the educational plans have been modified as per the module principle. The RA National Qualifications Framework (NQF) has been adopted, which will ensure compatibility of national qualifications with Europeans. The Strategy on Higher Education Financing and the timetable for implementation of actions required for fulfilling the Strategy have been adopted. For the purpose of setting unified requirements for higher education institutions the RA Standards for Accreditation of Professional Education and the Procedure of State Accreditation of Educational Institutions Implementing Educational Programmes and Specializations Thereof have been developed. The National Centre for Professional Education Quality Assurance has been established; new procedures of internal and external quality assurance and accreditation are being developed.

In 2010 the RA National Assembly ratified the 2011-2015 State Programme on Education Development, which, based on the already implemented reforms of the education system and the documented achievements, aims at further advancement thereof through prioritization of directions of the current phase of sector development.

A number of laws are adopted aimed at improvement of the level of enforcement of state policy in the area of secondary education, education quality assurance and education related legislation (Attachment 3).

### **Programmes Targeted at Education for Sustainable Development and Environmental Protection**

The goal of education for sustainable development is to develop individual's knowledge, skills, mentality and value base so that he/she can take informed decisions and act for his/her and other's well-being currently and in the future.

Along with other countries Armenia joined the process implemented within the framework of Education for Sustainable Development Decade.

Currently the education development policy in Armenia is based on the UN Strategy for **Education for Sustainable Development**.

According to the Strategy for Education for Sustainable Development end-results of education of a trainee have been defined within the new standards, including the knowledge and skills to be acquired by them, and the value base to be formed at each of the educational levels. Courses aimed at comprehensive personal development and applied qualifications obtained through education have been introduced, which include civic education, basics of economics, human rights, life skills, environment protection, etc.

During the recent decades in Armenia, as well as all over the world, the issues related to unbalanced development of ecology and economy, social polarization and inequality have exacerbated, which endanger cohesion

and stability of the nature, as well as existence of human society and Earth. This perspective makes the role of education even more important in terms of formation of knowledge, skills and capacities to resist the new challenges among trainees, as well as raising the level of awareness on those issues in wider society.

Uninterrupted education on ecology is an integral part of the RA education system, which in line with the RA Law on Environmental Education and Training of the Population is included in all levels of education, as well as in non-formal education.

The implementation of education on ecology in Armenia is necessitated through the country priorities, as well as through the commitments assumed by the Republic of Armenia within the scope of a number of international conventions on education and environmental protection. In this regard Armenia is also guided by the decisions of Summit on Sustainable Development held by UN in Johannesburg in 2002 and provisions of the Strategy for Education for Sustainable Development adopted by UN ECE in 2005. Armenia is among the countries of UN ECE region, committed to integrate into European education processes, and is the only state in South Caucasus, where the RA Law on Environmental Education and Training of the Population is enforced since 2001.

In 2009 the Concept on Establishment of Comprehensive and Unified National System of Education, Training and Awareness on Environmental Protection has been ratified, the purpose of which is to create necessary pre-conditions for improving the quality of education and training on ecology, formation of ecological consciousness and mentality among the society and raising the level of awareness on ecological issues.

To support the implementation of the above mentioned Concept the Action Plan for 2011-2015 has been approved, the aim of which is to contribute to the establishment of the comprehensive and unified national system of education, training and awareness raising on environmental protection.

The following actions have been implemented at various educational levels for ecological education:

A separate age-appropriate section is devoted to ecological education within the Preschool Complex Curriculum. Model centres are established in Yerevan and marzes, where seminars and practical classes, including on ecological education are organized on a regular basis;

The main topics of the UN Strategy for Education for Sustainable Development are included in the curricula of natural and social subjects at all levels of mainstream education through integrated courses. The course on "Energy and Resource Utilization" is included in the list of subjects for 2010-2011 academic year. Students regularly participate in excursions, camps and events dedicated to environmental protection;

In higher education institutions criteria for all specialization have been established, which include courses on "Ecology" and "Basics of Ecology." In addition, courses on "Social Ecology," "Human Ecology," "Industrial Ecology," "Radiation Ecology," etc. (around 24 directions in Ecology) are taught in some higher education institutions.

At present education on topics related to sustainable development is introduced in some of the higher education institutions. Some of the latter, such as the Yerevan State University, Armenian State University of Economics, Armenian State Pedagogical University, Yerevan Institute of Ecology, Economics and Law, have also included courses on Sustainable Development of Human Society, Sustainable Development and Global Security, Millennium Development Goals as a Key Factor for Sustainable Development, World Programme for Sustainable Development, Geo-Ecology in the Context of Sustainable Development.

In 2008, the RA Ministry of Education and Science approved a manual for higher education institutions on Economy and Practice of Sustainable Development: Global Processes and Armenia, which has been developed by the Yerevan State University with the support of UNDP.

Within the framework of state subsidies, a certain number of seats are allocated for students undergoing their master and postgraduate education specialized on topics related to the core themes of sustainable development.

In 2011, UNESCO Chair of Education for Sustainable Development was established in the Centre of Ecological-Noosphere Studies of the RA National Academy of Sciences, the main goal of which is to support the process of education for sustainable development in Armenia. The main objectives of the Chair is to contribute to the integration of education and scientific research, training and re-training of professionals in the area of sustainable development, development of educational materials, implementation of various initiatives and events, as well as to ensure international cooperation.

In 2012 Chair of Ecology – Sustainable Development was established in the State Pedagogical University of Armenia, as well as a Centre for Sustainable Development was established in the Yerevan State University with the support of OSCE.

Since 2001 the international educational programme, which is implemented in 17 countries, on SPARE (a school programme on energy and resource utilization) has been carried out. Since 2010 the programme is

included in the list of school subjects and is taught as a separate subject. Within the frameworks of the project energy saving initiatives were also implemented.

### **1.3.5. Science**

At present the reforms in the area of education in Armenia are aimed at legislative improvements of the field, increase of effectiveness of the scientific system management, infrastructure modernization, targeted reproduction of scientific cadre, increased effectiveness of scientific research activity, application of scientific products, as well as enhancement of international cooperation.

In science special focus is put upon ecological direction. Those are implemented in alignment with the requirements of international ecological conventions.

In 2007 the Government of Armenia approved the Conceptual Provisions on Reforms in Science.

In 2007 by the decree of the RA President the State Committee of Science was established, which assumed the responsibility for ensuring the further process of reforms in the area of science.

In 2010 the Government of Armenia approved the Strategy for Development of Science for 2011-2020, and in 2011 – the Strategic Programme for Development of Science for 2011-2015. The Strategy envisages an intervention of Supporting the Increased Ecological Safety, particularly Preservation of Lake Sevan and Optimal Utilization of its Resources, as well as implementation of a targeted project aimed at complex study of Lake Sevan. At the same time safe utilization of nature was among the priorities in the field of development of science and technology for 2010 – 2014 in the Republic of Armenia.

Currently in Armenia in the area of science the principle of co-financing of scientific research and development is applied, which serves as an additional stimulus for ensuring the modern high level.

Integration with European structures is the cornerstone, which allows for implementation of joint scientific projects and exporting the scientific product of Armenia to the European market, thus contributing to the development of science. At present, those issues are partly addressed through a number of projects supported by the European Union, such as FP-7, INTAS, SCOPES, etc. In the framework of cooperation between INTAS and Armenia in 2006 nine joint sub-projects were developed with the purpose of implementation of the South Caucasus Regional Programme. One of the nine sub-projects – Acceleration and Modulation of Sun and Galactic Cosmic Rays, implemented by the Yerevan Institute of Physics – is related to the Climate Change Convention.

### **1.3.6. Culture**

During the last decade in Armenia tangible steps aimed at acknowledgment and evaluation of culture as of a sustainable development resource are carried out. Specifically, its role in development of national identity, civil society and social capital in the country, peace keeping and protection of cultural diversity is being studied. The national policy on culture is carried out in alignment with the principles of traditional national value system, cultural environment, natural heritage of the area, preservation of historical and cultural values. The mechanisms applied allow ensuring effective integration of the sustainable development philosophy and traditional national priorities.

During the past decade issues related to institutional regulation of preservation of cultural heritage have been addressed to a significant extent, functions and liabilities of institutions operating in the area have been defined, which created favourable conditions for sustainable and even development of all cultural directions, and for ensuring adequate access of the population to culture.

#### **Immovable Monuments of History and Culture**

The Government of Armenia approved the state official list for 2002-2007 of immovable monuments of history and culture of 10 marzes of the Republic of Armenia and Yerevan, which involves 24 152 monuments. The process is of continuous nature.

The activities aimed at preservation, registration, study (including excavation), restoration, targeted utilization, and proclamation of immovable monuments are carried out by a number of state and non-state organizations.

Since 2005, the Government is allocating funds for restoration of historical monuments, which currently support the process of restoration of around 39 monuments. As a result of enhanced international cooperation, introduction of new mechanisms of public-private partnership in the period of 2011-2012 three monuments were rehabilitated and two were designed.

The functions of preservation and registration of immovable monuments lie with the Agency of Preservation of Monuments of History and Culture with its five regional branches, while the functions of preservation, targeted

utilization and proclamation are assigned to PIU of Preservation Service of Historical and Cultural National Parks, Museums and Historical Environment with its eleven regional services of historical environment preservation, and nine historical and archaeological, historical and cultural, historical and architectural, natural historical national parks and museums, two of which were established within the period of 2007-2012.

Currently the programmes of Tourism Development in Goris Town, and restoration and utilization of historical architectural monuments of Khosrov Forest National Park are launched, implementation of which will create an opportunity for harmonious preservation and valuation of natural and cultural heritage of the area. The programme aims at re-organization of management and preservation of natural, historical and cultural objects considering those as one integral natural and historical landscape. Since 2009 the process of public-private partnership is applied in this area, which resulted in Tatev Renaissance programme launched in the same year. The latter is a brilliant illustration of utilization and proclamation of historical and cultural area and utilization of monuments located therein. The project has been initiated by the Armenian National Competitiveness Foundation. The project is of continuous nature. It involves Tatev and several other communities of Syunik Region, where country-side tourism is a real development potential to become a source for constant economic development. As a result of public-private partnership in 2011 restoration processes started in two monuments, and in 2012 in four, inclusive of the Sanctuary of Hovhannes Sage Catholicos of Odzun.

### **Museums**

There are 100 museums operating in the territory of the Republic with 1 779 930 units of exposition funds as of January 1, 2012.

All museums under the Ministry jurisdiction have their web-sites, which present information about the museums, expositions and events. Introduction of modern technologies, such as touch-screen terminals, which provide additional information on the cultural values kept in museum funds and not presented in expositions, is another opportunity for enhancement of expositions.

In 2005 the RA Ministry of Culture joined the European Action of Museum Night. If in 2005 only five museums of Yerevan participated in this action, in 2011 69 museums of the Republic joined the action, regardless of jurisdiction.

Parallel to stabilization of political, social and economic situation the pricing policy of services provided by the museums was revised. According to the Order N 458-A of the RA Minister of Culture dated August 3, 2009 on Approval of the List of Services Provided by Museums and Fees, specialists and students in areas of science, study, history and culture are eligible to use the paid services of museums free of charge. At the same time, by the Order of the RA Minister of Culture of the same year on Visiting Permanent Expositions of Museums and Privileges special conditions are defined for vulnerable groups: two days of each month the museums operate free of charge. In addition, there is 50 percent discount for specialists and students in areas of science, study, history and culture for using the paid museum services.

In 2011 owing to the cooperation between the History Museum of Armenia and Tokyo National Research Institute for Cultural Properties courses on restoration of metal and fabric were organized.

Special attention is drawn on education programmes on museum management, which vary per the organization method, as well as their content (thematic excursions, contests, festivals, musical events, etc.).

### **Libraries**

The library network of the Republic consists of three republican and 957 community level libraries. The book archive registered in the libraries of the Republic constitutes 19,297,015 units, of which around 7,000 are antique books.

Since 2001 the programme of creation of Unified Automatic Information Network of Large Libraries of Armenia (ALEPH) is launched, in the scope of which bibliographic records from twelve participating libraries have been entered into a unified database.

In the period of 2007-2011 with the support of the Government modern information technologies were introduced in the libraries of the RA to ensure development of library management. As a result of this processes aimed at technical equipment, digitalization of cultural heritage, continuous advancement of information databases and unified automated network were implemented, which contributed to enhancement and increased quality of bibliographic-information services provided by libraries, increased number of service users and improved access to information.

Since 2008 the National Library of Armenia implements the Mobile Library (Bibliobus) project with the purpose of ensuring access to information for population residing in borderline and remote communities of the Republic of Armenia.

In 2009 in two libraries in marzes Family Librarian software was installed, which is designed to ensure library services for people with limited mobility.

The Arev (Sun) software installed in libraries in the period of 2009-2011 provided an opportunity to people with visual disabilities to “read” letters and numbers through audio symbols on the computer. The software is installed in eleven libraries under the jurisdiction of the RA Ministry of Culture.

A system of discounts is developed and introduced for poor and vulnerable groups of the society for using the paid cultural services. To ensure access to information and services electronic information sources (EBSKO and the RF largest Integrum World information packages in Russian language) have been updated.

With the purpose of enhancement of the international cooperation in library management, modernization, synchronization of the RA libraries and organization of experience exchange for the best practices Union of Armenian Libraries was established with membership of 25 libraries. Since 2006 the Union is a member of the International Federation of Library Associations (IFLA).

### **Intangible Cultural Heritage**

Lack of adequate means for preservation, gradual reduction of attention and care by the society and relevant scientific and cultural organizations, scarcity and, sometimes, absence of projects aimed at sustainability, development and protection of intangible cultural heritage have resulted in a situation, when, on one hand, the intangible cultural heritage was enriched with values supporting the ideology, and, on the other hand, was modified. Modification occurred in two directions: in accord with the folk culture development trends and the norms that support political ideology.

In the area of preservation of intangible cultural heritage significant progress was reported when the Republic of Armenia joined UNESCO 2003 Convention on Safeguarding of Intangible Cultural Heritage (March 20, 2006). Thereby the RA confirmed its commitment to the development of national cultural projects aimed at preservation of intangible cultural heritage and cooperation with international structures of the field of culture.

In November 2006 the Government of Armenia approved the Concept on Safeguarding of Intangible Cultural Heritage and Protection of its Viability, and in May 2007 the Action Plan deriving from the Concept. The latter has become the main document regulating the organization of consistent actions in this area, and according to which the actions aimed at preservation of intangible cultural heritage, protection of its viability and proclamation thereof were implemented in the period of 2008-2010.

In 2008, the RA National Assembly approved the RA law on Intangible Cultural Heritage, which was followed by approval of a number of legal acts by the Government of Armenia to ensure application of the above mentioned law. Those legal acts regulate the legal relations deriving in the process of preservation of intangible cultural heritage (see Annex).

In 2008 web-sites for Intangible Cultural Heritage of Armenia and Armenian Duduk Music were designed and created in Internet.

In 2009-2010 the process of inventory of intangible cultural heritage on the territory of the Republic of Armenia was launched, as a result of which the Government of Armenia approved the lists of 19 elements that are active and viable and seven that are in urgent need of preservation.

Significant steps are implemented in the area of integration of the policies on education and culture of the country.

In 2008-2010, favourable conditions were created for studies on intangible cultural heritage through formal and non-formal educational programmes, and for transfer to the new generation. Total of 18 educational programmes were organized. In the area of training in national traditional craftsmanship, cuisine, annual holidays and rituals, national singing and dance arts the School of Heritage established in Ashtarak and Oshakan communities of the RA Aragatsoth Marz implemented in the period of 2009-2011 by Tonatsuyts NGO (project on the Revival of Traditional Holidays) with the support of the RA Ministry of Culture was a new phenomenon. Ethnographers, as well as those who carry intangible cultural heritage residing in that geographic area were involved in those courses. Around 100 children participated in the courses. A club of Young Ethnographers has been formed.

## **Literature and Typography**

In the area of literature in the period of 2002-2011 with state funding 150-160 books were published annually. Previously state funding was allocated for encyclopaedic, popular scientific, fiction literature and books for children, however during the last decade the scope of literature published with state financing was enhanced to include Literature on Cultural Heritage, Literature Heritage, Literature Published on Languages of Ethnic Minorities, Diaspora Literature, Translated Literature and other sub-projects. Publication of literature, issuance of CD, DVD and multimedia devoted to issues related nature of Armenia, national traditions and customs was also given priority. In the area of book art development publication and spread of such works of national and world classics, which bring up concern for environment and humans, caring attitude towards national intellectual and spiritual heritage, as well as those of other nations, man-made and natural monuments among the new generation was organized. Thus, during the recent decade state funding was allocated for publication of The Nature of Armenia basic encyclopaedia, Wonders of Armenia, and Sacred Mountains and Caves of Armenia albums, multi-genre literature for children, which obviously has had its positive impact on increased interest of the country population towards national values, demonstration of civic activism and attitude.

The areas of **dances, theatre, music, cinematography and fine arts** have gained a new impetus for development.

## **Cultural Education**

Availability of and access to cultural education programmes has a key role in formation of cultural society.

Previously the art education institutions were part of the state education system, thus a unified state policy was applicable for those. Since 1993, there is a situation when institutions of arts education are under jurisdiction of different systems (state, community) and, consequently, do not have common goals, objectives and plans. Absence of normative acts and concept for professional education and additional education does not contribute to the improvement of this situation. Teaching of many specializations is endangered (folk, wind and string instruments, etc.). In 2008, with the purpose of increased accessibility and quality of art education Support to Arts Education Foundation was established with one representation in Yerevan and ten in marzes. To create accessible conditions for education for children the Government of Armenia approved the Programme on compensation of fees for classes on folk musical instruments in musical and arts schools in the Republic of Armenia. According to data of 2011, in total, 2,443 students from 144 schools were included in the programme, with the following distribution: students in departments of folk musical instruments (2004), string instruments (164), and wind instruments (275).

## **Culture of Ethnic Minorities in the Republic of Armenia**

Ethnic minorities residing in the territory of the Republic, which have their constitutional right to preserve and develop their traditions, language and culture, are involved in the process of sustainable development in the Republic of Armenia.

The Advisory Board Regulating the Non-Government Organizations of Ethnic Minorities operating in the country, Department for Ethnic Minorities and Religious Affairs operate at the RA President Staff. The RA Ministry of Culture annually allocates funding for preservation of cultural heritage of ethnic minorities with the purpose of their involvement in cultural processes.

According to the data from the last census, ethnic minorities in Armenia constitute 2.2 percent of country population. Armenia joined a number of international and bi-lateral agreements that ensure preservation of multi-cultural environment, as well as the Framework Convention for the Protection of National Minorities and European Charter for Regional or Minority Languages.

## **Process of International Proclamation of Cultural Heritage**

At present Haghpat and Sanahin Monasteries, Geghard Monastery and Azat River Valley, Echmiadzin Churches and Zvartnots archaeological site are included in UNESCO International Heritage Lists.

Ratification of and membership to the UNESCO 2003 Convention on Safeguarding of Intangible Cultural Heritage provided an opportunity to the member states, including the Republic of Armenia, to present the most typical from the national perspective elements of intangible cultural heritage to UNESCO for inclusion in its Lists of Intangible Cultural Heritage of Humanity.

In 2005 one of the most unique elements of Armenian cultural heritage – Duduk and its Music – was included in the lists of UNESCO Human Oral and Intangible Cultural Heritage Masterpieces, and in 2010 Khachqar: Sacrament and Art was included in the lists of Human Oral and Intangible Cultural Heritage Masterpieces as a national value. For inclusion in those lists calls for Armenian Worship of Water: Vardavar Holiday, and Bard Art: Romances, and in 2011 the call for Sasuntsi David Epos are presented, which will be discussed respectively in late 2013, and November 2012.

In 2010 UNESCO-Armenia Melina Mercury Foundation has acknowledged Garni Historical Cultural National Park Museum with the international award of Preservation and Management of Cultural Landscapes.

### **International Cooperation**

Taking into consideration the fact that one of the preconditions for sustainable development is the development of inter-cultural dialogue and preservation of world cultural diversity, after the independence of Armenia formation of new relations in the area of culture became one of the important constituents of the RA foreign policy. It was aimed at reinforcement of cooperation and agreement, establishment and development of equal and mutually beneficial partnerships with other countries. In a short period of time independent Armenia succeeded in establishing cooperation in the area of culture with such international organizations as UN, UNESCO, European Union, Council of Europe, BSEC, CIS, International Organisation of La Francophonie and structures of ICOM, ICCROM, IFACCA, IFLA.

With the purpose to further develop and strengthen this dialogue during the last ten years Armenia joined twelve international Conventions and two derivative protocols related to the area of culture. As a logical continuation of the process of joining the above mentioned conventions, Armenia takes part in such international cultural events as Days of European Heritage, Museum Night, International Day of Francophonie, Day of Music, World Book and Copyright Day annual event. Armenia participated and participates in projects implemented in the framework of Council of Europe, particularly STAGE. Since 2005 it participates also in the Kiev Initiative Regional programme, the pilot sub-project of which on Restoration of Historical Cities was launched in 2009 and aims at promoting development of cultural policies and strategies for the benefit of strengthening democracy, inter-cultural dialogue and cultural diversity in the region.

Since 2009, Armenia is involved in the EU Eastern Partnership Communication among Human Beings 4<sup>th</sup> Platform, and Armenia – EU Action Plans.

Nowadays, the Republic of Armenia maintains cooperation in the area of culture with more than 35 countries. Such cooperation is implemented in the formats of mutual exchange, two-way cultural years, seasons and days.

In 2012, Yerevan was announced by UNESCO as World Book Capital. For one year Yerevan will become one of the world cultural centres, thereby enhancing the opportunities for proclamation of Armenian culture. The project will serve as an incentive for implementation of new ideas and concepts in the areas of publications, translations and awareness raising, will create opportunities for mutual presentation of experiences and achievements in typography with countries of rich traditions in the field, mobilization around book and knowledge, revealing each others' scientific and creative potential, as well as joint discussions on ever-existing problems of the area.

During the UNESCO 36<sup>th</sup> General Conference held in the period of October 25 – November 10, 2011 at the UNESCO Headquarters the following calls presented by the Republic of Armenia for inclusion in 2012 anniversaries and events have been approved:

- the 1650<sup>th</sup> anniversary of Mesrop Mashtots (362 - 440), the author of Armenian alphabet;
- the 300<sup>th</sup> anniversary of Sayat Nova (1712 - 1795), poet, musician;
- the 500<sup>th</sup> anniversary of the first Armenia printed book (1512);
- the 1400<sup>th</sup> anniversary of Anania Shirakatsi (612 - 685), scholar.

During 2004-2011 the Republic of Armenia ratified total of seven international agreements in the area of culture (see Annex).

### **Legislation Regulating the Area of Culture**

The policy on culture of the country is based on the principle of continuous improvement of the legal basis of the area. During the last decade considerable efforts were put for regulation of the legal basis of the area of culture. A number of laws were approved and Government decrees adopted (See Annex 1).

### **1.3.7. Healthcare**

#### **Fundamental principles of healthcare policy**

Development and implementation of the healthcare policy takes into account the demographic situation in the country and the current trends, in particular, paying attention to the issues of organizing and increasing access to healthcare services provided to children, mothers, and elderly people. In the process of healthcare reforms, the objective is to ensure the constitutional right of the population to health, and to increase population access to state guaranteed free-of-charge healthcare services, given the available resources and potential.

The main directions of developing the sphere of healthcare stem from RA Government Action Plan and are in line with the provisions of "Health 2020", a policy document that is in the process of development and approval by the countries of World Health Organization European Region.

The purpose of activities directed towards ensuring the hygiene and anti-epidemic safety of population is to strengthen capacities of current institutions in the country ensuring creation of relevant regulatory legislation that would be aimed at forming a modern public health system, implementing measures to safeguard health of the population, preventing communicable and non-communicable diseases, promoting healthy lifestyles and ensuring further development of the sphere.

The role of primary healthcare continues to expand in the field of organization of medical assistance. The main development directions for ambulatory-policlinic system, which represents the most important part of the primary healthcare, are the following: development of the family medicine system through credit and direct budgetary funding; ensuring accessible, sufficient and high quality medical assistance and healthcare services to the population through free-of-charge ambulatory-policlinic care.

The main purpose of the healthcare system reforms in Armenia was and continues to be ensuring accessibility of medical assistance and healthcare services for wider population, and continuous quality improvement, reduction of morbidity, disability and mortality rates through early detection and prevention of diseases.

Mother and child health and improvement of reproductive health remain at the focus of the state healthcare policy.

A number of achievements have been recorded in the sphere of communicable disease prevention. In the result of multidisciplinary and coordinated work, no endemic cases of malaria have been registered in the country since 2006. Armenia has succeeded in eliminating endemic malaria in the territory of the country. In 2010-2011, in line with internationally accepted procedure, the Republic of Armenia was certified by the World Health Organization as malaria-free territory. Currently a state program to prevent entry and radication of malaria is being implemented in the country.

The situation in Armenia regarding combating HIV/AIDS is incomparably better than in a number of countries of the European region; however, as the international experience proves, particularly in the conditions of modern globalization and high mobility of population, delayed implementation of relevant preventive measures may reverse the situation. In this sphere, the main focus has been on increasing the level of population awareness on HIV/AIDS, preventing the spreading of the infection, and increasing effectiveness of treatment of current cases. One of the important achievements is that since 2007 no cases of HIV infection among children born from HIV positive mothers as well as no cases of HIV infection through donor blood have been registered.

In the recent years, as a result of measures implemented within the scope of RA Government National Tuberculosis Control Program for 2007-2015, the epidemiological situation with tuberculosis has demonstrated certain improvement trends. In the recent years the indicators representing the new cases of tuberculosis as well as the number of deaths from tuberculosis have been declining. Thus, in 2007-2011, the tuberculosis morbidity rate has decreased by 20 per cent, while the mortality rate for the same period has decreased by 74 per cent.

Through a decree, in 2011, the RA Government approved the "Concept of Prevention, Early Detection and Treatment of the Most Common Non-communicable Diseases and the List of Measures to Ensure Implementation of the Concept". For the purpose of early detection and prevention of the most common non-communicable diseases primary healthcare physician guidelines for prevention, diagnosis, treatment and management of these diseases were developed and introduced.

Issues of public health protection have been particularly stressed - in line with World Health Organization approaches and with a view to improve the health of the public. The set of measures and services aimed at protecting and improving public health will include, in particular, prevention and control of communicable and non-communicable diseases, ensuring favourable living conditions, protecting health of the population from different

risks and negative impact of hazardous factors, as well as informing the public about such, and promoting healthy behaviours and lifestyles among the population. In order to prevent the risk factors contributing to the incidence of non-communicable diseases, “2010-2015 State Tobacco Control Program” and the “List of Priority Measures in Tobacco Control” were approved with a key objective to continuously decrease prevalence of tobacco use (1.5-2 per cent annually) through implementation of a targeted policy to increase the smoking cessation rate and the number of non-smokers.

Within the framework of the emergency care service modernization program, modern international technologies for providing emergency medical care in life-threatening situations at pre-hospital and post-hospital levels were developed and introduced in the system, and the service infrastructures and equipment were significantly improved. Establishment of three regional neonatal resuscitation centres is in process. As a result of implemented reforms emergency care service indicators have significantly improved.

The main direction of drug and technology policy is increasing their accessibility, safety, and effectiveness of use. Activities are carried out to improve the state system of quality assurance of drugs. Reforms aimed at introduction of prescriptions and regulation of drug prices by the state will contribute to increasing accessibility of drugs for the most necessitous strata of the population.

Within the framework of proportional regional development program announced by the RA President large investments have been made in the modernization of regional healthcare systems. Eight regional central hospitals have been renovated and equipped with the most up-to-date equipment and accessories. A number of training programs have been carried out for hospital staff. New management mechanisms have been introduced in the mentioned hospitals.

E-health is one of the main prospective development directions of the healthcare system. The unified electronic information system in the RA sphere of healthcare represents a complex comprised of software and hardware, as well as functions ensuring the methodological, organizational, normative and legal frameworks, which allows for collecting medical and other data from healthcare system partakers in correspondence with the unified data transfer, processing and maintenance criteria. Activities to introduce telemedicine systems are being carried out in healthcare facilities, two-way horizontal and vertical connections are being established between regional clinics and the leading clinics of the capital, as well as direct connections are being established with the leading European clinics. At the same time, activities to introduce electronic identification cards have been formulated and will be launched in the near future.

Historically, the primary source for healthcare system financing has been the state budget. Currently the system is being financed from both local and international sources. The main local sources of funding are the state budget and private payments by the population. International sources of healthcare financing usually manifest themselves in the form of humanitarian aid and special grants directed to implementation of international projects. The state budget remains the major source of financing. State expenditures on healthcare are not sufficient to cover the needs of the healthcare system and the healthcare needs of the population. In 2000, the expenditures on healthcare system constituted only 4.4 per cent of the state budget, and one per cent of the GDP. However, these indicators have grown every year reaching 11.6 per cent of the state budget and 2.1 per cent of GDP in 2007. This growth is due to the targeted budgetary policy of the Government, as well as implementation of poverty reduction and other programs aimed at fulfilment of the latter, which have a purpose of improving health of the population considering it to be an issue of national importance. The global financial crisis of the following years did not allow for maintaining further uninterrupted development of the sphere and to ensure growth of budgetary allocations to healthcare envisioned by the country's main strategic document, the Sustainable Development Programme. Nevertheless, in 2010, the budgetary expenditures on healthcare constituted 6.0 per cent of the state budget expenditures as compared to 4.4 per cent in 2000, and 1.54 per cent of GDP as compared to one per cent in 2000. In 2011, 62.5 million drams were allocated to healthcare system financing versus 55.3 million drams allocated in 2010, which represented a 13 per cent increase. At the same time, it is worthwhile mentioning that although the state expenditures on healthcare (as percent of DGP) tended to grow, however, their level continued to be very low (around 1.5 per cent). An international comparison shows that this indicator is one of the lowest worldwide: it is around four times lower than the average for EU and OECD member states, and constitutes around half of the CIS member states' average. However, taking into account the issues connected with accessibility and quality of healthcare services, as well as the widespread private informal payments, increasing the level of state expenditures on healthcare in the mid-term and long-term perspective will be among the top priority issues of public policy.

Serious work has been done to introduce new financing mechanisms in the healthcare sphere and to bring the reimbursement for the cost of services closer to the real level. Co-payment system for reimbursement of medical services has been introduced and parallel to that the prices for paid services are being regulated. Within the framework of the birth certificates introduction program, the pricing and corresponding reimbursement of costs associated with provision of perinatal services has been increased almost twice through additional financing, as a result of which the remuneration of the medical staff has increased by several times; moreover, it is currently directly linked to the workload of physicians.

In 2011, the system of state health certificates for children under seven was also introduced contributing to a drastic increase in accessibility of hospital care services for children of ages 0-7 and the growth of healthcare professionals' remuneration due to its connection to the workload of physicians.

A new system of evaluation of the provided services has been introduced in primary healthcare, which is based on a pre-approved list of indicators with performance based financing (incentive pay) program directly linked to it.

The current and further reforms of healthcare system financing mechanisms would be directed towards reduction of shadow turnover and introduction of co-payments, clinical-economic standards and objective criteria for service reimbursement. Development of in-patient care system will employ short-term and long-term program approaches aimed at introducing clear financing mechanisms, increasing effectiveness and efficiency of spending, eliminating excessive capacities, and ensuring the quality of medical care.

The issue of health insurance is one of the most important elements of the healthcare system; moreover, it is considered not only as means of attracting additional financial resources to healthcare sector but also as means of making medical care more affordable for the population, instilling the principles of social justice and increasing the targeted use of resources, and effectiveness and efficiency of medical services.

In the recent decades, Armenia has taken part in a number of international dialogues. After becoming a member of the World Health Organization in 1992, our country has actively involved in the process of introducing International Health Regulations adopted in 2005. Currently Armenia takes steps towards introduction of these rules according to the approved schedule. In 2004, Armenia ratified the UN WHO Framework Convention on Tobacco Control, and currently continues its active participation in the negotiations over the development of protocols and guidelines implemented within the scope of the Convention, as well as fulfils its obligations to observe the Convention.

In the recent years, serious efforts have been made to bring the national healthcare legislation into compliance with the European legislation, in particular, with the requirements of European directives. A number of drafts of fundamental laws such as "Law on Healthcare," "Law on Ensuring Public Health," "Law on Drugs," etc., have been developed. The "Health 2020," a strategy document that is being devised by the countries of the WHO European Region, is in focus.

Studies in the sphere of "Environment and Health" are still limited, and the picture of accessibility of healthcare services for the population is not yet fully clarified, while the mentioned problems may play a key role in certain morbidity growth, which is reflected in the corresponding table in Annex 1.

### **1.3.8. Agriculture**

In the past decade, the agricultural policy has been implemented through a number of government supported programs. These programs have been directed towards development of primary seed breeding and pedigree breeding, fighting against the most dangerous and quarantine plant diseases, maintaining health of the livestock, ensuring food safety, improving the ameliorative condition of land, maintaining and developing irrigation systems, ensuring accessibility of crediting, infrastructure development, subsidizing farmers in the most unfavourable agricultural zones, agricultural counselling and introduction of advanced technologies, etc.

In order to implement a coordinated policy in the sphere of agriculture, in 2010, the RA Government adopted the RA 2010-2020 Strategy for Sustainable Development of Agriculture. The Strategy sets out the main directions for the government policy to develop agriculture in the next decade. The strategy defines a wide range of issues - in total, 17 groups of issues are included – and corresponding programs are put forth to address those. The strategy identifies the following directions for addressing problems that the rural community and the sphere of agriculture are facing:

1. Overcoming the consequences of the global financial crisis and institution of anti-crisis measures;

2. Deeper agrarian reforms; development of agricultural cooperatives;
3. Increased food security; ensuring food safety and at least a minimum level of self-sufficiency in terms of the main food commodities;
4. Increasing competitiveness of the locally produced agricultural products; replacement of imported foodstuffs as necessary; and development of export-oriented agriculture;
5. Zone-based specialization and rational allocation of production;
6. Ensuring food safety;
7. Increasing effectiveness and efficiency of land use;
8. Development of organic farming;
9. Development of crop production (introduction of advanced agro-technical technologies, expanding cultivation of higher added value crops, development of selection and seed breeding systems, application of productive mechanisms for seed quality control, implementing plant protection and quarantine measures, ensuring genetic diversity of crops including protection of wild species affined to cultivated crops);
10. Development of livestock breeding (support to efficient combination and rational allocation of livestock breeding branches, implementation of complex measures to develop pedigree breeding, improvement of the veterinary system and increasing effectiveness of veterinary measures, development of the fodder base for livestock breeding, support to the development of commercial livestock breeding organizations, ensuring preservation of genetic diversity of livestock pedigrees),
11. Processing of primary agricultural products (development of the sphere and rational allocation of processing facilities; introduction of advanced technologies and increasing competitiveness of the products; marketing support and development of contractual relationships with producers of primary agricultural products);
12. Development of technical and industrial services to agriculture and raising the level of technological equipment of production;
13. Development of infrastructures in rural communities;
14. Mitigation of agricultural risks;
15. Improvement of crediting of agrarian sector;
16. Improvement of the scientific-educational and advisory system in agrarian sector;
17. Improvement of the agricultural accounting system.

On May 18, 2011, the “RA Food Security Concept Note” was approved by a RA Presidential Decree. The Concept Note is a guiding document for implementation of a coordinated policy in the sphere of food security of the country in the coming decade. To ensure execution of the Concept Note provisions, the Government of Armenia has approved the “2012-2014 Action Plan for Ensuring Implementation of RA Food Security Concept Note” (RA Government Decision N 1522-N, dated October 13, 2011), which establishes the main directions for food security policy and the measures directed to their implementation together with the responsible public administration body.

Execution of the following steps could contribute to the development of rural communities in the near future:

1. Making targeted and consistent investments into road building (particularly to connect the borderline villages to the regional centres);
2. Creating storage facilities for natural gas and other types of fuel;
3. Addressing the issue of uninterrupted electric power supply at relatively low prices – making the best use of energy of the sun, wind, earth entrails, and water in rural communities located in mountainous areas or near the borderline;
4. Obtaining special agricultural machinery for mountainous areas, as well as encouraging their production in Armenia;
5. Establishing small enterprises that would process agricultural produce, and small scale ecologically clean industrial enterprises (e.g. small productions to process agricultural foodstuffs, or to pack, freeze, and store the resulting products, as well as rug and carpet weaving, needlework, pottery, woodworking, and ceramics workshops).

### **1.3.9. Energy Sector**

In energy sector, ensuring energy security is of particular importance, which can be achieved through the following:

1. Ensuring effective and efficient use of renewable energy resources and energy saving;

2. Development of nuclear power generation industry;
3. Diversification of the supply of energy resources, and regional integration of the electric power generation system;
4. Ensuring the defined level of financial stability and economic efficiency of the energy sector.

A number of key regulating documents (see Annex 3) have been adopted to support the development of the sector.

**Realization of RA Energy Security is based on:** principles set out by the United Nations Conference on Environment and Development, Rio de Janeiro, 1992, and by the World Summit on Sustainable Development, Johannesburg, 2002; the European Strategy for Sustainable, Competitive and Secure Energy reflected in European Commission's Green Paper; and obligations assumed by the Republic of Armenia resulting from ratification of environmental conventions.

A number of studies conducted in energy sector to support projections for electric power and natural gas consumption, development of the gas supply system, low cost generation units, the power grid, renewable energy sector, and energy saving approaches, improvement of legislation, as well as devising a strategy for the closure of Armenian nuclear power plant, allowed for:

1. Assessing the possible implications in case of the closure of Armenian nuclear power plant and justifications for the required volumes of replacement energy from alternative sources to ensure energy independence and security of the Republic.
2. Assessing the options for satisfying the demand for energy of the Republic of Armenia in case of the Armenian nuclear power plant shut-down.
3. Solving the issue of increasing the volume of imported natural gas through Iran-Armenia pipeline to meet the demand for natural gas;
4. Developing an economically most favourable plan for energy sector development, and defining the roles of the nuclear power generation industry and the renewable energy industry in economic development.

As a result, the following was achieved in practice:

1. Iran-Armenia gas pipeline is operational;
2. Modernization of 220 kW power substations of the Armenian energy sector is close to completion;
3. Modernization of seventeen 110 kW power substations of electric power distribution network is completed;
4. An automated system for electric power accounting and control and a supervisory control and data acquisition (SCADA) system have been introduced;
5. The lowest possible tariff for electric power generation has been maintained due to the optimization of operation modes of generating stations;
6. The second Iran-Armenia electric power transmission line is operational, and the construction of the third power transmission line has been launched;
7. One hundred and eleven small hydroelectric power plants with a total installed capacity of around 160 MW were built and put into operation through private investments in 2004–2011 (in total, the electric power generated by hydroelectric power stations in Armenia constitutes around 34 per cent of the total electric power produced in the Republic, in which the share of small hydroelectric power facilities is around seven per cent);
8. A wind farm with an installed capacity of 2.6 MW has been launched for the first time in the region;
9. Activities to identify and assess Armenia's potential in terms of geothermal power are in process;
10. The new combined-cycle gas turbine of Yerevan thermal power plant, with an installed capacity of 240 MW has been commissioned;
11. The fifth unit of Hrazdan thermal power plant, operating a combined gas turbine with an installed capacity of 440 MW has been put into operation.

Seven of the European Technical Committee energy consumption and efficiency standards for residential and public buildings were localized and harmonized.

Taking into account the scientific and technological potential accumulated by the country and the favourable climate conditions special attention should be paid to the projects for development of the solar energy sector.

### 1.3.10. Urban Development

In the sphere of urban development, importance is given to the improvement of sustainable spatial development and spatial planning process, simplification and regulation of construction procedures, addressing the housing issues, and maintaining a safe and prosperous living environment.

A number of laws and regulations were amended as part of the implementation of the concept approved by the RA Government Protocol Decision No. 36 of September 3, 2009, that refers to reforming the process of preparation and approval of urban development programmatic documents of the Republic of Armenia communities (settlements). In 2011, the following laws were adopted: "Law on making Amendments and Additions to the Law on Urban Development of the Republic of Armenia," "Law on making Amendments and Additions to the Law on Local Self-Government of the Republic of Armenia," and the "Law on making Amendments and Additions to the Land Code of the Republic of Armenia," "Law on making Amendments and Additions to the Republic of Armenia Law on Local Self-Government in the City of Yerevan," "Law on making an Amendment and Addition to the Code of Administrative Violations of the Republic of Armenia," and the "Law on making Amendments to the Law on State Duty of the Republic of Armenia" (AL-226, AL-227, AL-228, AL-229, AL-230, AL-231).

In particular, the Republic of Armenia "Law on Urban Development" regulated the procedures for approving community general plans and zoning plans, and for changing the designated purpose of land, as well as set out a number of provisions that define the procedures associated with construction, for the purpose of optimizing the planning and construction permits.

Almost all legal acts detailing out urban development procedures have also been reviewed. In particular, a new procedure on development, expertise, agreement, approval, and amendment of general plans of the Republic of Armenia communities (settlements) (approved by RA Decree No. 1920-N of December 29, 2011) has been adopted to regulate the processing of spatial planning documents. In order to encourage development of spatial planning documents the notion of "simplified general plan" has been introduced for rural communities, development of which significantly saves community budget resources. An interagency committee has been established to coordinate preparation of urban development programmatic documents, the work of which supports the process of plan adjustment and approval (RA Prime Minister Decree No. 1064-A of December 22, 2009).

Among important elements of the policy implemented in the sphere of urban development, there are issues regarding improvement of the business environment in Armenia, consistent regulation of construction procedures in the construction sphere, and reduction of the number of steps, amount of time and expenses necessary for getting relevant permits. In order to regulate the mentioned issues, on March 3, 2011, the RA Government has adopted the Decree No. 257-N "On Regulating the Procedures for Construction of Buildings in the Republic of Armenia and Making Amendments and Additions to a Number of Republic of Armenia Government Decrees." By the same Decree, the norms established by RA Government Decrees No. 1473-N (29.08.2002), No 812 (21.12.1998), No. 711-N (06.05.2010), No 660 (28.10.98), No. 91 (02.02.2002), and No. 626-N (08.05.03) have been revised, which has lead to a significant reduction in the number, duration and cost of construction procedures. Based on the level of risk, the constructed buildings have been classified into categories, according to which the construction procedures have been regulated – from simple to complex.

To raise awareness about the reforms, "A Constructor's Guide" has been developed, brief version of which has been published and disseminated to stakeholders. In addition, both versions have been published on the internet. To support individual constructors, multiple-use plans of stand-alone residential houses have been developed and catalogues of the plans have been printed and made available on-line.

In 2011, the Ministry of Urban Development has initiated the introduction of the electronic permit system in the construction sector. Electronic application system for obtaining a license has been commissioned.

For the purpose of addressing the housing issues of families left without a home in the settlements from the disaster zone of the devastating earthquake of December 7, 1988, significant amount of work has been conducted within the framework of state assistant programs. By 2008, housing issues of approximately 46,000 families have been addressed through these programs.

In 2008, a large-scale program was launched to solve the housing issues of 7,000 individuals who, 20 years after the earthquake, still had a status of homeless and were registered as such according to the specified procedure. Within the scope of the program it is envisaged to resolve the housing issues of program beneficiary families through funding amounting to 84,011.2 million drams.

In addition, in the past period, housing issues of refugee families, residential houses in landslide areas, people left homeless in the result of bombings, houses damaged in the consequence of the Noyemberyan earthquake, and those left homeless for other reasons - almost 9000 families, have been resolved.

Based on an order placed by the RA Ministry of Urban Development, in the period of 2003-2012, 405 buildings have been constructed and put into operation including 11 for administrative, 271 for educational, 63 for cultural, 28 for regional, 19 for healthcare and 12 for residential use. Of the current incomplete residential buildings, three in Maralik community and four in Stepanavan community have been reconstructed as social housing and commissioned in 2009-2011. State financed construction is aimed at raising the well-being of population in RA communities, rehabilitation of the social-economic infrastructure, and improvement of public and social life.

As to ensuring reliable and safe construction operations, it is important to regulate the process of bringing urban development normative-technical documentation into compliance with the European standards, within the framework of which the "Concept of Urban Development Normative-Technical Documentation System" has been developed and passed an expertise, as well as has been approved by the RA Government Protocol Decision No. 17 of May 6, 2010. The concept was followed by a consistent development of the "Priority Action Plan for Bringing Current System of Urban Development Normative-Technical Documentation into Compliance with the European Norms", which was approved by the RA Government through its Protocol Decision No. 51 of December 30, 2010.

Improvement of landscape characteristics of the country is one of the important directions of urban development policy. The national landscape policy is implemented in consistency with the philosophy of the European Landscape Convention (ratified by the RA National Assembly on March 9, 2004), and is directed towards creating preconditions necessary for the proportional and harmonized interaction between the needs of the society, economic activity, and the environment.

An interagency committee to coordinate implementation of the European Landscape Convention in Armenia has been established by the Decree No. 650-A of the Republic of Armenia Prime Minister, on July 31, 2009, which includes representatives from public administration bodies in the spheres of environment protection, culture, territorial administration, agriculture, transportation, energy and mining, economy, education, emergency situations, as well as from local self-government bodies, scientific and educational sectors, and non-governmental organizations. The broad composition of the committee allows for establishing both horizontal and vertical links.

On March 24, 2011, the Government of Armenia adopted the decree No 308-N "On Approving the List of Measures to Fulfil the Republic of Armenia Obligations Derived from the European Landscape Convention", and as part of implementation of the measures envisaged by the decree, the "Postulates of Implementation of the Republic of Armenia National Landscape Policy" were developed and approved by clause 16 of the RA Government Protocol Decision No 45, dated November 17, 2011. For the purpose of strengthening institutional capacities and improving professional quality, provisions covering landscape related problems were added to the civil service training course curricula. In addition, a recommendation has been made to include the knowledge of the Convention as a requirement in the civil servant position descriptions. To encourage implementation of landscape projects, the RA Government has established a landscape award of the Republic of Armenia. Draft Strategy of Landscape Preservation, Management and Planning, and the Sequential Priority and Mid-term Measures are being developed, and will be presented to the RA Government for discussion in May of this year.

### **1.3.11. Area-specific problems and concerns**

- *Although a certain progress is noted in terms of clarification of objectives and implementation of certain sub-projects, because of the above mentioned issues the results achieved are still insufficient since the poverty level has not reduced, and unemployment and migration rates have increased. According to the Programme, one of its objectives was to decrease the level of income inequality that reached a very high degree in Armenia. Legislative amendments have not resulted in the desired results in the real life yet, and polarization of the Armenian society gradually deepens. The society becomes discontent also because of the fact that for the second consecutive year the SDP review process is delayed, so, the latter is not effective. In addition, the Network of partner NGOs is not involved in the process of revising the SDP.*

- *The extremely adverse impact of shock therapy on the social and economic area of the country, which caused the Republic of Armenia to slide down from the status of an industrial/post-industrial country to a pre-industrial one, is not overcome yet. The recorded economic growth is not yet transformed into human development, which is also due to only partial identification and realization of institutional capacities and potential. Modest results of projects have no systemic effect and for the most part do not provide for continuity.*

- *The quality of life of population living in rural areas has deteriorated; 40 percent of potential arable land in Armenia is not cultivated since agricultural activities often prove to be economically inefficient in conditions of absence of business-promoting fiscal and credit policies and lack of agricultural machinery.*

- *The development of a network of small hydro power plants is legitimately considered as a positive demonstration of alternative energy. Nevertheless, construction and operation of hydro power plants (HPP), in particular small-size HPPs, is frequently implemented without observance of nature protection norms and standards; this severely harms natural ecosystems, especially water ecosystems. Very frequently small-size hydro power plants are constructed on the territory of vulnerable ecosystems (riverside forests, juniper woodlands, southern broad-leaved forests); this practice can result in degradation of forests and, consequently, eradication of biological diversity, decrease in the local populations livelihood and natural disasters (landslides, disruption of the water regime). Construction plans for small-size HPPs do not undergo wide and inclusive hearings and expert examination. These HPPs are usually constructed by harming natural landscapes; real water remains [թողքեր] for nature protection are not ensured and permissible volumes and requirements of water consumption are not respected. The high density (cascades) of small-size hydro power plants impacts the local populations capacity of sustainable consumption of irrigation water and use of water biodiversity and water resources. All the above mentioned problems can cause social and economic tensions.*

## **2. Cooperation between state bodies and the civil society**

### **2.1 State bodies and the business/private sector**

Public-private partnership (PPP) is a new approach that promotes the consolidation of all of the resources and capacities of the government, private and public sectors. Provision of services for public (water supply, sanitation, scavenging, energy supply, etc.) has traditionally been the exclusive responsibility of state authorities while the state budgetary resources are not adequate to meet the continually growing demand for these services, the needs of development of those services, including services linked to identification and utilization of new and environmentally sound technologies.

Privatization of services undoubtedly has its constraints. The executive branch of power shall remain engaged in the process of provision of those essential services, and their involvement must guarantee the fulfilment of the responsibility taken before the society, protection of all the society groups, distribution of social, environmental and economic benefits, that is to say, it has to be directed toward sustainable development, in the meantime not excluding financial goals.

In order to ensure wide application of the cooperation model in the Armenian economy, in 2009 the Republic of Armenia Government approved a concept on the development of cooperation between the state (public sector) and the private sector. In addition, the draft "Law on Public-Private Partnership" has been circulated.

Within the framework of EU SIGMA program, cooperation is underway towards formation of both a legislative framework and an institutional structure, as well as towards capacity development.

The programs supporting international development play important role in development of these opportunities, so that the last could address the problems of municipal and environmental sectors. Along with means of official development assistance (ODA) it is extremely necessary to find new financial sources, as well as technologies and new management tools.

There are best practices of public-private partnership in Armenia that have ensured investments by the private sector and effective frameworks for project implementation, meanwhile resolving environmental and social problems. The following can be considered as best practices:

#### ***The project of reconstruction of central water supply system in Avan administrative district of Yerevan city based on cogeneration technologies:***

The reconstruction of central heat supply (CHS) system in Avan residential district was envisaged by 2005-2020 Master Plan of the City of Yerevan. In the framework of UNDP-GEF program implemented under RA Ministry of Nature Protection, justifications for the potential to attract private investments to apply modern energy efficient technologies in conditions of favourable regulatory framework provided by the state have been elaborated.

The CHS system in Avan district includes 218 multi-apartment residential houses (with a total area of 305 thousands sq. m) with population of about 32 thousands. Pricing approaches applied in technical and economic justification allow for ensuring competitiveness and availability of the thermal energy produced, promoting expansion of heat supply market and settlement of problems that are of social and urban importance. Those calculations were put as the basis of the RA Government Decree No. 509 adopted on April 13, 2006, by which privileges were specified for the implementation of pioneering projects in Avan and Davitashen districts of Yerevan. In fact, this decision is the first precedent when the Government encourages reconstruction of centralized heat supply based on cogeneration energy stations. In April 2006, a Memorandum of Intent was signed between EuroSibEnerg-Engineering LLC and the Municipality of the City of Yerevan, as well as between EuroSibEnerg-Engineering LLC and the Public Services Regulatory Commission of the Republic of Armenia; the Memorandum outlined the framework of cooperation among parties, and specific activities aimed at the implementation of the project on reconstruction of the CHS system in Avan residential district of the City of Yerevan.

For the implementation of an investment programme on reconstruction of Avan CHS, ArmRusCogeneration joint-stock CJSC was established in 2006, and by the Yerevan Mayor's decision No. 1454-A (adopted on 08.09.2006) the heat supply stock was transferred to the newly established commercial company for free of charge utilization.

By now total investments of about USD 9 million have been completed by the private investor to build an energy center and heating networks, thus providing heating and hot water supply to 76 multi-apartment buildings. Currently 30 multi-apartment buildings located on Hovhannisyan, Isahakyan and Varuzhan streets use these services.

The system provides more efficient usage of natural gas due to application of cogeneration technologies, which, along with the application of a payment system based on calculation of consumption contributes to the settlement of social and environmental problems and provides reduction of greenhouse gas emissions, the estimated potential of reduction is about 7,300 tons annually.

### ***Clean Development Mechanism (CDM) Project on Nubarashen Landfill Gas Capture and Power Generation***

In the framework of this project, the RA Ministry of Nature Protection, as the state body authorized for the implementation of Kyoto Protocol, and the Municipality of the City of Yerevan, responsible for the exploitation of Nubarashen landfill. Japanese Shimizu Corporation is the private investor. As prescribed by the project design document, Yerevan Municipality has provided Nubarashen municipal landfill to Shimizu Corporation, which has introduced the technology for landfill biogas capture and burning, as a result of which a certified reduction of emissions is achieved, which is credited to Shimizu Corporation.

Currently the project is underway and is in the phase of monitoring and certification of the reduction of greenhouse gas emissions. Starting from 2009 until August 2011, 40,419 tons of reduction of greenhouse gases has been registered calculated by carbon dioxide equivalent.

The benefit of the public sector was the following: as a result of the project implementation, greenhouse gas and harmful material emissions to the atmosphere were reduced, sanitary conditions in and around the landfill site were improved, jobs were created, the best modern technology for landfill biogas capture was transferred and introduced, and professional and organizational experience for implementation of a similar project in other landfill sites was obtained.

The benefit of the Japanese party was that reduction of greenhouse gas emissions took place through relatively low level of investments, and the reduction was credited to the Japanese company as a component of implementation of the country's obligations prescribed by the Kyoto Protocol.

### **Reforms for the improvement of business environment**

The RA Government considers improving the business environment as one of the main directions of its economic development policy and has an intention to establish a simple, transparent and less costly environment for state regulations, services and procedures for doing business, equal competitive conditions, advanced market infrastructures facilitating businesses, as well as to simplify administrative procedures and implement balanced tax and customs policy.

Reforms in this sector implemented by the Government during recent years were also reflected in the World Bank report on "Doing Business 2012: Doing Business in a More Transparent World," which indicated that between June 2010 and May 2011, five reforms in the regulatory and institutional fields were implemented in Armenia, which was the highest result in the region and in the world, and occupied the 55<sup>th</sup> place among 183 countries, improving its position by six points.

The above-mentioned reforms which were aimed at improving the business environment in Armenia particularly include the following:

- Since April 2012, in an office space corresponding to European standards a center operates that provides services of registration of companies on the basis of "One-window stop" principle. Here, among other services, expertise on company names, provision of tax account IDs and the code of personal account card for obligatory social payments are also carried out by the Registry. As a result, the required time and procedure for state registration (records) significantly decreases. An electronic system for state registration of legal entities and for recording private employers was also introduced.

- Changes have been made to the Republic of Armenia "Law on State Tariffs" as a result of which state registration of companies will be free of charge, so, the state tariff of AMD 17,000 currently mandatory for the registration will not be charged any more.

- In 39 laws the requirement for the documents presented by business entities to be sealed has been eliminated.

- An electronic TWM system for customs declaration is introduced.

- Advance payments of profit tax amounts and instances of minimal payments of profit tax have been reduced by eight. Those payments are done on a quarterly basis (four payments per year) instead of monthly payments (12 payments per year) in force before. Instances of payments of property tax and land tax have been

reduced by two. Those payments are done on semi-annual basis (two payments per year) instead of former payments done on a quarterly basis (four payments per year).

- Reports of compulsory social security payments which are submitted by employers to the tax administration body have been cut by eight. These reports are submitted on a quarterly basis while previously they were presented on a monthly basis.

- An online system for the payment of property and land taxes was introduced by Yerevan Municipality. Online payments are done through the website of Yerevan Municipality. An electronic system has been introduced in tax administration bodies, as a result of which business entities have an option of submitting their tax reports electronically. There is also an option of issuing tax invoices electronically.

- On November 10, 2011, a general description of indicators determining risk-based tax review methodology and the level of risks in the framework of activities of a tax administration body was approved. By this decision, general issues concerning the application of risk-based tax review system by a tax administration body are regulated. The selection of taxpayers to be reviewed is done based on risk indicators according to separate, homogeneous groups of taxpayers.

- According the RA Government Decree No. 100-N (adopted on February 2, 2012), the payment of income tax by IT companies in Armenia will be decreased by the amount of funds spent for conducting research and development (R&D) activities; property tax and land tax arrears (unpaid taxes) accumulated by January 1, 2008 shall be cancelled by draft laws on amendments in some laws to adopted soon. The total amount of arrears is about AMD 43 billion, AMD 16.4 billion of which is land tax and AMD 9.8 billion are penalties and fines for non-payment of land tax, and AMD 11.6 billion is property tax and AMD 6 billion are penalties and fines for non-payment of property tax.

- Types of activities subject to licensing have been cut down, from 169 to 96, 13 of which are subject to simple licensing and 84 are subject to complex licensing. Meanwhile, an option of electronic licensing is already in place.

- Compulsory certification of compliance is not conducted on the state border but after the customs clearance and prior to selling. Approval of the type of measurement means is done after the customs clearance and prior to selling or utilization. The time and money spent by business entities for obtaining a certificate of origin were reduced; particularly, for goods of serial production the certificate of origin will be regularly provided via conducting an expertise only for the first time. An electronic system for submitting documents to receive a certificate of origin is also being introduced. An electronic system for customs declaration and implementation of customs control was introduced. In the practice of customs administration in the country, in total, application of 21 types of applications, references, permissions and agreements that previously were to be submitted on a mandatory basis was cancelled.

- The release of customs declarations paid electronically is done also by notification concerning the release in TWM system, which allows for monitoring the time period of customs formulations. Meantime, a report form has been created in TWM system, which will allow for automatization of the process of collection of statistical data on goods released by the “Green way” procedure and on the ratio of transactions subject to research for the purpose of post-release control.

- Procedure for the registration of organizations and sole entrepreneurs as participants of an external economic activity has been simplified; particularly, the requirement to submit a number of documents has been eliminated.

- Construction units have been classified according to risk level thereof; the procedures for construction have been regulated accordingly. For objects of low risk the mandatory actions, spending and dates have been significantly reduced or merged.

- The terms of reference, offered by agencies providing engineering services, on the design of a building are presented to the constructor along with the terms of reference on architecture and planning by the entity that prepares the Terms of reference on architecture and planning.

- The list of buildings for which urban development expertise may be replaced by a guarantee letter prepared by the author has been expanded.

- The introduction of a mechanism for self-certification of construction activities of buildings that are technically not complicated has been prescribed by legislation through certifying, through a guarantee letter prepared by the subcontractor, of the compliance with legislation, realization of the approved design, and meeting the requirements stipulated in normative and technical documents.

- Due to reforms implemented in 2011, in terms of “construction permissions” Armenia has improved its rating in the “Doing Business” evaluation matrix of 2012 by 38 points and currently occupies the 57<sup>th</sup> rank among 183 countries.

- In the Judicial Acts Compulsory Enforcement Service of the RA Ministry of Justice an electronic system was introduced to conduct compulsory auctions for the realization of a debtor’s property.

- For property that was measured and marked in past, registration of rights is done without conducting land marking activities and without charging a fee for that. The introduction of an electronic system for the registration of property is in its final stage of development. The RA Government has adopted sample contract forms that do not require the notary’s confirmation; state registration of rights on real estate is conducted without the notary’s ratification of the contracts, by the Registry. Since January 1, 2012, employees of the State Cadastre do not conduct marking activities of real estate. This function has been outsourced, and the activities are conducted by representatives of the private sector that have received qualification certificates, and the applications for state registration of rights upon real estate or for getting information can be presented by citizens to any office providing services of collecting applications and providing final documents (certificates, references), regardless of the location of the real estate.

- In the framework of Judicial Reform Project, “Datalex” public information system has been established which is aimed at online provision of a number of services in judiciary sector.

- The Central Bank of Armenia has adopted several legal acts aimed at ensuring confidentiality of the information provided to credit bureaus, licensing of credit bureaus; the level of accessibility of information on loans has been increased.

- Mortgage with common descriptions are provided by all of the banks in the Republic of Armenia.

- The Republic of Armenia “Law on Amendments to the RA “Law on Joint Stock Companies”” was adopted to improve mechanisms of revealing personal interest-based deals conducted and expand the liability of managers. The schedule for introducing Corporate Management Code in companies with state participation of 50 percent and more was approved by RA Government. The guideline for introducing the Code and the sample for annual declaration are in the process of publishing.

Currently the Government of the Republic of Armenia continues implementation of the reforms; particularly, to implement a balanced tax policy in December 2011 the Tax Code and several related laws have been adopted. For example, as specified by the Republic of Armenia “Law on License Fees,” several types of economic activity, starting from April 1, 2012, will operate on the basis of license fees, particularly, hotels, public food services and several types of activities in services sector.

### **Environmental Community Projects**

The Republic of Armenia “Law on Targeted Use of Environmental Payments by Companies,” adopted by the RA National Assembly on May 15, 2001, provides for new prospects of cooperation between the state and the business/private sector, to resolve environmental problems. Within the scope of the aforementioned law, environmental fees paid by large mining metallurgical companies are granted to the impacted communities for funding nature protection and health care measures.

Today, pursuant to the Republic of Armenia “Law on Targeted Use of Environmental Payments by Companies,” total of 26 communities in Lori (6 communities), Syunik (13 communities), Ararat (1 community), Kotayk (4 communities), Gegharkunik (1 community) and Armavir (1 community) marzes and the City of Yerevan are eligible to receive allotments for the implementation of environmental projects.

Under execution of the Republic of Armenia 2007-2011 state budget, the total amount of subventions allotted for environmental projects was 733.7 million Armenian drams, including:

**Table 2.1. Amounts of subventions granted to communities, 2007-2011**

<b>Indicators</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Amounts of subventions granted to communities (in Armenian drams)	49 144,7	114 318,8	205 646,0	213 548,6	151 226.5
Number of communities having received subventions (community)	7	5	7	11	11

The fact that the volume of subventions granted to communities has a tendency of growth, as well as allocation of 277.0 million Armenian drams for environmental projects under the RA State budget 2010, pursuant to RA law on “Targeted use of environmental payments by companies”, evidence for the efficiency of the system in force.

Under implementation of 2007-2011 Republic of Armenia state budgets, the following important and large environmental projects initiated at the expense of subventions granted to communities for implementation of environmental projects, following projects are worth mentioning:

- Landscaping works in Erebuni and Kentron administrative districts of Yerevan (2011);
- Construction of a landfill for solid waste in community of Alaverdi (2011);
- Improvement of internal network for gas supply in village of Haghpat (2009-2011);
- Restoration and maintenance of forest sites in Odzun community; cleaning of the ravine, construction and repair of sewerage pipe; installation of local heating system in the primary school in “Jaghats” block (2010-2011);
- Restoration of green sites in Akhtala community (2010-2011);
- Improvement of sanitary situation in the town of Metsamor/acquisition of a dump truck (2011);
- Acquisition and installation of a solar water heating system in the kindergarten of Kajaran community (2010);
- Construction of a burial pit for septic waste and poignant (2010);
- Expansion of green sites in Agarak community (2010).

## **2.2 State bodies and the society**

### **The principles of sustainable development as basis for public administration**

After the adoption of sustainable development principles the Republic of Armenia Government has consistently implemented a policy for ensuring public participation in the process of public administration and decision making. One of the essential ways for establishing sustainable civil society is achieving a consensus of different sectors of the society on various problems of public importance. Building relationships between the society and state authorities requires more attention in case of economic crisis that distorts political stability and developments in the society. The understanding of this problem has stimulated the establishment of formally quite serious possibilities and adequate legal bases, as well as institutional bodies. Namely:

On June 12, 2008, a **Public Council** was established by the decree of the Republic of Armenia President to stimulate a civil-political dialogue.

**The mechanism of public hearings and discussions in the National Assembly (Parliament) of the Republic of Armenia:** As specified by the National Assembly By-Laws, a memorandum of cooperation has been signed between the Head of Staff of the National Assembly and the Public (Civil) Network which is a non-formal union of civil society organizations (CSO), based on which CSOs have an opportunity to participate in decision-making processes in the National Assembly.

### **The following Councils operate by the Prime Minister of the Republic of Armenia:**

#### **Business Support Council**

This Council was established to promote private enterprise and investments, as well as to remove administrative barriers to entrepreneurship in Armenia. The Council is chaired by the Prime Minister of the Republic of Armenia.

#### **PRSP-SDP Coordination Council**

This council has coordinated the Poverty Reduction Strategic Program since 2000, and the Sustainable Development Programme since 2009. Both were decision-making bodies that involved representatives of both state agencies and civil society institutions. The Council is chaired by the Prime Minister of the Republic of Armenia.

#### **RA National Council on Sustainable Development**

The Council was set up under a governmental decree issued in 2002. The Council has activated its functioning from 2007 under the chairmanship of the Prime Minister of the Republic of Armenia. By the protocol No. 68-124 adopted on June 18, 2008, the Statute and the composition of the Council were approved. Representatives of state bodies and civil society organizations are involved in the SD Council. To date, eight sessions were

called, where important issues related to sustainable development were discussed with the participation of non-governmental organizations. The national level preparation process for Rio+20 Summit also was among the issues discussed.

### **Anti-Corruption Council**

The Anti-Corruption Council was established by a presidential decree signed on June 1, 2004 in an effort to coordinate the activities of authorized public agencies entrusted with the implementation of comprehensive and efficacious anti-corruption policies in the Republic of Armenia, elimination of corruption-conducive factors and upgrade of preventive action. As specified by the Statute of the Council, a presidential assistant-headed commission has been set up under council by-laws to monitor the process of anti-corruption strategy implementation.

### **National Youth Policy Council**

The National Youth Policy Council was established by the RA Prime Minister's decree in 2009 in an effort to enhance efficiency of youth policy in the Republic of Armenia and encourage participation in decision-making processes. The Council incorporates representatives of both public stakeholders and civil society on the basis of parity.

### **Council on Women's Affairs**

The Council was established in 2000 under the RA Prime Minister's decree in an effort to coordinate the activities toward resolution of women's problems. The Council brings together outstanding women from executive and legislative authorities, as well as female representatives of non-governmental organizations, artistic unions and the sphere of culture.

### **The Republic of Armenia General Prosecutor's Office**

On June 10, 2010, a Memorandum of Cooperation was signed between the RA Prosecutor General's Office and the "Public (Civil) Network" non-formal union of civil society organizations on participation in and raising public awareness on policies and legislative reforms in the sector, implementation thereof, and monitoring.

On July 20, 2011, in the framework of the fight against corruption, a Memorandum of Cooperation was signed between the RA Prosecutor General's Office and the Anticorruption Advocacy and Assistance Center (AAC).

### **Judicial System Reforms**

The Government of the Republic of Armenia has adopted the concept for a new Criminal Procedure Code which is currently under development in the country. The new Administrative Procedure Code and the Administrative Offenses Code are in the phase of development. With close cooperation with international organizations, the draft RA "Law on Legal Practice (Counselling)" has been finalized. It was adopted by the RA National Assembly on December 8, 2011. The RA "Law on the Academy of Justice" also undergoes further amendments.

A software system of Self-service touch-screen terminals (Datalex) was introduced. Currently it is operational and is aimed at providing a number of services to the public, particularly, searching court cases, payment of state taxes, retrieving necessary information, accessing the RA Constitution and laws.

With the support of a joint project of the Council of Europe and the European Commission, in-depth studies are currently conducted towards introduction of a system of collective suits; the corresponding draft law has been prepared and passed an expertise by the Council of Europe experts. In the framework of the same project, studies are conducted concerning the introduction of mechanisms for random selection (allocation) of cases in courts. The RA Ministry of Justice, the RA Chamber of Advocates and RA Judicial Department are the stakeholders of the above-mentioned project (Ministry of Justice is the major beneficiary).

### **The following are local-level participatory mechanisms (institutions):**

- **Student, parents' and school children's councils**, which are established and function as specified by the RA "Law on Education" and in line with internal statutes of corresponding educational institutions.

- **At the local self-government level**

The legal bases of public participation at the local self-government level are defined in RA "Law on Local Self-Government", as well as are specified by statutes of specific communities. Public participation is in the phase of development both at national and local levels and faces the same challenges and progress.

Public participation is ensured through local structures of public administration, based on democratic principles aimed at development and implementation of community policies, raising and resolving of community

problems in the framework of national level legislation. At the local level, the following are among the ways of direct democracy:

- local referendum;
- public (civic) initiative;
- citizens' committee;
- community meeting;
- public hearings;
- petitions/requests;
- internet communication;
- market mechanisms (involvement of the private sector in public services sector at the local level significantly increases the efficiency of those services);
- public awareness raising, etc.

### **Realization of human rights from the perspective of sustainable development**

The principles of human rights protection and establishment of democracy are stated in the Republic of Armenia Constitution, and the guarantees for their implementation are specified by corresponding legislation and legal acts. During the last years, in an effort to implement legal reforms, several important documents were adopted in the Republic of Armenia, including a policy aimed at the development of civil society organizations, particularly, development of the institutional system for public participation at national and local levels of administration.

In an effort to improve the situation concerning human rights and fundamental freedoms, the new Criminal code (2003), the new Labour Code (2004), the RA Judicial Code (2007), the RA laws "On the Human Rights Defender" (2003), "On Freedom of Information" (2003) and many other legal acts were adopted.

Currently, the National Human Rights Protection Strategy is under development.

### **Right to Work and Employment**

a) A National Collective Agreement was signed in 2009 by the RA Prime Minister, the President of the Confederation of Trade Unions of Armenia and the President of the Republican Union of Employers. The National Collective Agreement is the first step towards introducing mechanisms of social partnership and social dialogue in the employment sector of the Republic of Armenia.

b) In the framework of "Decent Work" project of the International Labour Organisation a corresponding program was adopted for 2007-2011, which has the following priorities:

- Improvement of the employment policy;
- strengthening of social partnership;
- improvement of social protection system.

The RA "Law on Employment and Social Security in Case of Unemployment" was adopted in 2005. The Law defines legal bases for the employment of the population, principles for social security in cases of employment and unemployment, state guarantees for free choice of work and employment and for social security of the unemployed people. The active policy on state support in the area of employment is aimed at establishing conditions for ensuring full and effective employment.

Commitments of the Republic of Armenia concerning the right to work derive from the international treaties ratified by the country. (Annex 4)

### **Right to the Highest Attainable Standard of Health**

The 2008-2013 Strategy for Primary Healthcare of the population of the Republic of Armenia was adopted. The Strategy specifies the RA Government policy in this sector. According to the Sustainable Development Programme of the RA Government, increasing the levels of affordability and accessibility of healthcare services and continuous improvement of the quality of healthcare services will continue to remain state priorities in this sector, with a special focus on the level of accessibility of critical services across regions and disparities among frequencies of healthcare service use by different groups of population based on their living standards.

### **Right to Adequate Life Standards**

Article 34 of the RA Constitution states: “everyone shall have the right to a standard of living adequate for himself/herself and for his/her family, including housing as well as improvement of living conditions.” In 2005, the RA Food Security Program was adopted, and in 2006 – the RA Strategy on Sustainable Agricultural Development.

Armenia is a full and equal member of World Trade Organisation (WTO) since February 2003. In the framework of membership commitments clarification of directions of tax legislation, increasing the accessibility of the domestic market, exclusion of discrimination in inter-state trade, clarification of gross domestic assistance (subsidizing) and improvement of legislation aimed at implementation of provisions of relevant international agreements were carried out.

### **To ensure equal rights, participation and opportunities for men and women in decision-making processes:**

- the UN Convention on the Political Rights of Women, the Optional Protocol to the Convention on Elimination of All Forms of Discrimination against Women, Council of Europe Convention on Action against Trafficking in Human Beings were ratified;
- training programs on women’s leadership and mechanisms of protection of women’s rights were organized;
- by the RA “Law on the Amendments to the RA Electoral Code” adopted on May 19, 2005, women’s quota in party candidate lists for RA National Assembly elections was increased from 5 percent to 15 percent;
- the draft “Law on the Provision of Women’s and Men’s Equal Rights and Equal Opportunities” was elaborated.

### **To eliminate violence against women:**

- Complex training programs for social workers working with women, health, education sectors specialists and law enforcement institutions were organized;
- the draft “Law on Family Violence” was developed;
- 16 Days of Activism against Gender Violence Campaign is organized annually with the assistance of UN agencies, other international organizations and with participation of NGOs and state agencies and an “End Violence against Women” campaign was initiated by the RA Government in 2008.

### **Rights of National Minorities**

Since 2000, by the order of the RA President, a Coordination Council for National Minorities functions in the Republic of Armenia with the aim of:

- supporting and protecting the rights and freedoms of national minorities;
- preparing recommendations concerning the issues connected with rights of national minorities;
- discussing, analyzing draft legal acts concerning the rights and freedoms of national minorities and preparing recommendations in this regard;
- discussing issues concerning educational and cultural programs for national minorities.

One of the 12 commissions of the **Public Council** is the **Commission on National Minorities**, which involves representatives of national minorities living in Armenia. In 2003, in the structure of Staff of the RA Government, a Department of Ethnic Minorities and Religious Affairs was established.

- By the decree No. 565-A of the RA Government, an office space was provided for establishing a cultural center for ethnic minorities. Currently resources are sought to reconstruct the space to correspond to the functions of the Department.

- The scope of awareness of rights of ethnic minorities has been significantly expanded (through training programs, publishing of handbooks, periodical consultations with NGOs and leaders representing the interests of ethnic minorities, visits to communities of ethnic minorities).

- The rights of ethnic minorities are reflected in several laws of the Republic of Armenia, particularly, Article 2 of the RA “Law on Language” prescribes that communities of national minorities may organize the education and upbringing by their native languages with compulsory teaching of the Armenian language according to state programs and under state sponsorship. And Article 1 of the same Law declares that “The Republic of Armenia guarantees free usage of their native languages by national minorities.”

### **Freedom of thought, conscience and religion**

During the past years since independence, Armenia has undertaken serious steps towards ensuring religious diversity. While in 1997 14 religious organisations were registered in the State Register, currently the number is 70.

In the Republic of Armenia all the historical and architectural, cultural and religious buildings, regardless of their ethnic or religious origin, are under the state protection.

### **The mass media**

On September 23, 2003, the RA “Law on Freedom of Information” was adopted. The main principles for ensuring freedom of information, stated in Article 4 of the Law, act as important guarantees for the implementation of the right to get information.

The guarantees for freedom of expression were reflected in the legislation of the Republic of Armenia to the degree possible as a result of constitutional amendments of 2005. Particularly, the Constitution of the Republic of Armenia was amended by adding article 83.2, which specified that “to ensure the goals of freedom, independence and plurality of the broadcasting media, an independent regulatory body shall be established by the law, half of whose members shall be elected by the National Assembly for a six-year term while the other half shall be appointed by the President of the Republic for a six-year term.”

### **The current institutional status of the youth policy and perspectives for development**

The state youth policy, as a coordinated policy, is implemented in the Republic of Armenia since 1995. The state authorized body for development and implementation of the state youth policy is the RA Ministry of Sport and Youth Affairs, which incorporates a department on youth policy.

By the decision No. 785-A of the RA Prime Minister (adopted on September 17, 2009), a National Youth Policy Council by the RA Prime Minister was established aimed at supporting the development and implementation of national youth policy in Armenia, stimulating participation of youth in various spheres of public life and promoting the activities of youth organizations.

### **Rights of people with disabilities**

The social policy implemented with regards to people with disabilities and disability is aimed at the social protection of people with disabilities in all spheres, ensuring for the people with disabilities opportunities equal to those of other citizens, establishing equal conditions and ensuring equal opportunities for them in all areas of their activities.

In 2010, Armenia joined the UN Convention on the Rights of Persons with Disabilities.

People with disabilities benefit from programs offering employment, implemented by the State Employment Service Agency. A national commission on issues of people with disabilities functions in the country.

Establishment of social enterprises is considered to be an important program aimed at social support of disabled people. These enterprises are aimed, on the one hand, at solving social and welfare problems of people with disabilities and ensuring maximum equal conditions for them, and on the other, at utilizing their labour potential for the benefit of the society.

Activities are undertaken aimed at expanding and improving of measures for people who need special education and of inclusive education.

Since 2003, the concept of inclusive education has been introduced in the Republic.

As of 2012, inclusive education is implemented in 60 secondary schools, and the education of children with need of special conditions for education is organized in 24 special secondary education institutions.

The quality of the services for providing prosthesis-orthopaedic aid and rehabilitation accessories and their range is improved year by year.

Free medical and social rehabilitation services are provided for disabled. The system of providing care and social services to disabled people has an important role in the sphere of social protection of disabled persons

Some steps were undertaken to overcome the existing obstacles to communication by people with disabilities. People with hearing disability receive hearing equipment, while Braille textbooks, Braille books (fiction, poetry, etc.), audio books and “The Bulletin” magazine were published for people with vision disabilities/ impairments.

The concept of individual programs for the rehabilitation of people with disabilities was introduced in 2002; it makes the process of rehabilitation of people with disabilities more targeted.

During the recent years non-governmental organizations dealing with issues of people with disabilities have become more active, and the Ministry of Labour and Social Affairs of the Republic of Armenia successfully cooperates with those. In 2002-2003, with the initiative of the Ministry and the NGOs dealing with the issues of people with disabilities measures were undertaken aimed at providing accessibility for people with disabilities (ramps have been constructed near the central streets, crossroads, objects of social infrastructure) in the framework of the reconstruction of the streets and sidewalks of the City of Yerevan.

### **Corruption and other forms of illegal activity**

In its fight against corruption, the Republic of Armenia closely cooperates on the international legal arena. The Republic of Armenia has joined the majority of important international legal documents acting in this sphere (Annex 4). There is a close cooperation with the Council of Europe GRECO group, particularly concerning more comprehensive statement of the crime of corruption in the Criminal Code. The draft "Law on Changes in the Criminal Code" was developed by the RA Ministry of Justice; it was a requirement stipulated in paragraph 98 of Annex 2 (Chapter on the means of criminalization of the fight against corruption) approved by the RA Government decision No. 1272-N (adopted on October 8, 2009) on the "Approval of the Anti-Corruption Strategy and 2009-2012 Action Plan of the Republic of Armenia." Particularly, as specified in paragraph 98 of the Action Plan approved by the above mentioned decision, as a measure of implementation of the anti-corruption strategy it is anticipated to complete and specify the framework of crimes of corruption. The mechanism of assessing the impact of draft legal acts is already functional, which, among other spheres, envisages assessing corruption risks of draft legal acts.

### **Activities of the Human Rights Defender**

Establishment of the Human Rights Defender's institution in the Republic of Armenia in 2004 was a considerable step forward toward regulated implementation and protection of human rights in the country. The RA "Law on the Human Rights Defender" defined the Defender as a constant and independent person who defends people's rights and fundamental freedoms violated by national and local self-government bodies or authorities. In 2005, as a result of constitutional amendments, the Human Rights Defender's institution received a constitutional status.

### **The connection of governmental bodies with the society**

The process of development of the civil society in the country is underway. The process in fact is long-term and is significantly facilitated by the UNECE Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters ratified by the Republic of Armenia in 2001.

During the last decade non-governmental organizations that are informed on Aarhus Convention and the rights of the society regulated by it (particularly the right of the society to participate in decision-making processes), have significantly increased their activeness. Taking the advantage of the rights prescribed for them by the Aarhus convention the NGOs being concerned about environmental problems and their insufficient settlement present their concerns publicly up to appealing to the Secretariat of the Convention.

Although considerable work has been done in Armenia for the implementation of this convention, nevertheless, there are some cases that raise concerns among the society. Realizing their right prescribed by the Convention the Armenian NGOs twice has filed appeals to the Secretariat of the Convention concerning the urban development activities in Dalma gardens in Yerevan (2002) and the exploitation of Teghut mine (2009). Based on these appeals the Convention Parties Conference adopted corresponding decisions/recommendations.

The 4<sup>th</sup> Conference of Aarhus Convention Parties (2011) highly appreciated measures the Republic of Armenia had taken in the period of 2008-2010 and approved the third national report of the country on the implementation of the Aarhus Convention provisions. The commitment of the Republic of Armenia to continue efforts towards harmonizing the legislation of the Republic of Armenia with the requirements of the Aarhus Convention was also scored positively.

At the same time, with regard to the appeals of the NGOs of 2009 the Parties Conference by the decision accepted on the Armenia recommended the country to make corresponding efforts to ensure proper implementation of the Convention. The following steps have been undertaken towards the implementation of the Parties Conference recommendations:

1. In 2011 According to the decision of the Prime Minister of RA "On formation of inter-ministerial commission aimed at the elaboration of a program for the implementation of Armenia's commitments under the Aarhus Con-

vention, and for coordination of efforts necessary for its implementation.” Representatives recommended by NGOs are involved in the Commission. The Statute of the Commission was approved by the Prime Minister of Armenia.

2. The Commission has approved a plan consisting of 10 activities for the implementation of Aarhus Convention Parties Conference recommendations. Those activities include, in particular, drafting the RA “Law on Changes to and Amendments in the RA “Law on Environmental Impact Expertise””, which has been returned back to the National Assembly by the RA President for processing. By now, some provisions of the action plan were implemented:

- The website of the RA Ministry of Nature Protection has been reconstructed;
- The list of “Measures on the implementation of the Armenia’s commitments specified by a number of international environmental conventions” has been approved by RA Government decision; the list includes measures aimed at the implementation of the Aarhus Convention.

In addition:

- Since 2002, 15 environmental public information centres (Aarhus centres) have been established by the initiative of the RA Ministry of Nature Protection and with the assistance of the OSCE delegation in Armenia. The mission of the centres is to establish relations between state bodies, non-governmental organizations and other interest groups (local self-government bodies, business sector, scientists, and the mass media) and to introduce relevant mechanisms to disseminate information on environmental issues and to ensure public participation in discussions on those issues.

- The draft decision of the RA Government “On the establishment of Aarhus Centres of Armenia Fund” is in the phase of negotiations. As a result of approving the document, the legal status of Aarhus Centres, their rights and responsibilities will be specified according to the requirements of the Aarhus Convention.

- By the initiative of the Law Department of Yerevan State University and with support of OSCE office, since 2008 the Scientific and Educational Center for Environmental Law functions. This center provides organisation of trainings connected with national environmental law and provisions of the Aarhus Convention for the university and other higher education institutions, NGOs, journalists, the Environmental Inspection, and judges.

- Public relations divisions function in the structures of Ministries. The main objective of these divisions is strengthening relationships between the Ministries and the society, elaboration and implementation of information policies.

Public hearings are also a means of informing and awareness raising. The interested NGOs and citizens actively participate in public hearings, and the information on the results of the hearings is published by mass media and posted on websites of the Aarhus Centres, etc.

#### **Area-specific problems and concerns**

- *The principle on the affordability of justice set by Aarhus Convention is implemented insufficiently. There is a great deal of examples when environmental NGOs are not able to protect the environmental rights of the nature or of the population at court because of being recognized an improper applicant.*

- *Another factor is that sometimes mechanisms for the implementation of conventions are not completely elaborated. Thus, often the nature protection community in the country is forced to struggle for the implementation of Convention requirements and elaborated projects in practice.*

- *The legislation regulating activities of civil society organisations has deficiencies, in particular in the context of establishment and development of the institution of volunteers and alternative financial sources; another deficiency is that there is no national strategy for the development of civil society organisations.*

- *There is a lack of clear procedures for establishing participatory institutions; certain duplications of functions occur.*

### 3. Toward “Green economy”

#### 3.1 Inclusive economic growth and equitable distribution of incomes

By the first phase of reforms implemented in Armenia in the past period and considered as the first generation reforms, it was necessary to introduce the basic market institutions. Due to large-scale privatization, liberalization of prices, trade and the exchange rate of the national currency, a private sector acting on the basis of market rules was formed in the country. Today it already provides for more than 80 percent of the GDP produced in the country. After overcoming the energy crisis, starting from the second half of 1990s, and macroeconomic stability was achieved in the country. In conditions of minimal rates of inflation (by the way, it was the lowest in the former Soviet republics), it was feasible to register two-digit economic growth for a lengthy period. Moreover, if in the period of 2000-2003 the economic growth was mainly due to import substitution and progressive export growth rates; in 2003-2007 it was characterized as a demand-driven economic growth. The sectors of construction and services acted as the main driving forces, while the contribution of industry and exports to the economic growth gradually decreased.

It was a course of an extensively growing economy, when, in irrevocable market conditions a two-digit economic growth rate was being recorded, while in the same time there was a perception of problems related to the formation of factors for an intensive growth. It was necessary to implement a new phase of reforms to be directed toward increasing the effectiveness of the introduced market institutions, shaping of new institutions typical to an ideal market economy, and ensuring structural changes in the economy. In such conditions, since 2008 the “second generation reforms” have started in Armenia. The society expressed its confidence regarding the Government’s ambitions; according to the latter, Armenia was seen as a regional (Caucasian) center in the areas of education and science, provision of health care services, provision of financial services, in ensuring best conditions for business and tourism.

The cornerstone of the package of ambitions is the human capital, which is has been main and undeniable comparative advantage at all times. For the achievement of the declared goals, the following priorities were put at the basis of the Government activities: increase in the level of the Government’s effectiveness; reduction of economic development territorial disparities; creation of infrastructures for a knowledge-based economy; ensuring a competitive business environment.

Nevertheless, even in case of best quality management it is impossible to avoid the effects of global changes. The global financial and economic crises, in Armenia, as in the rest of the world, forced to make fast and adequate adjustments in the policies in the process of implementation. Dependence upon external private remittances and structural changes in the international market formed serious challenges for the real sector in Armenia. In addition, there was a serious threat of steep escalation of social tensions. An apparent necessity to revise the forms and scopes of state interventions in the economy emerged.

The risk of deferment of the initiated reforms, on the one hand, and the urgency of acceleration of the achievement of priority directions, on the other, shaped the anti-crisis policy of the RA Government. Thus, for addressing the crisis and at the same time ensuring prospective development, all resources were channelled toward restoration of macroeconomic stability, support to the real sector of the economy, initiation of major infrastructure projects, and implementation of targeted social assistance programs.

The shift from economic growth to the path of sustainable development nowadays requires re-assessment of policy approaches and review of the set of tools with an understanding that in the context of current realities of the global economy the priority of targeting poverty eradication cannot be an adequate starting point for the economic policy. In the longer run, to secure firm bases for development it is necessary to embark on practical localization of the inclusive growth concept, thus truly enhancing opportunities for a comprehensive participation by the society in the process of achievement of economic growth, from the following viewpoints:

- From now on not only the high and stable rate of economic growth is important as a potential for the eradication of poverty, but also the nature of that growth: in the framework of sustainable development strategy, economic growth ensures maximum coverage of both different sectors of the economy and labour resources of the country.
- The keystone of inclusive growth is not the poor *per se*, but also the portion of labour resources that is alienated from the process of growth. Moreover, the goal is not the employment or redistribution of income but rather productive employment. That is, economic policy emphasizes not only and not especially the creation of

new job places or incomes, but also the increase in the level of productivity, which in combination create real opportunities for self-employment and growth of incomes of the employed.

- It is important for the State to shift from solutions based on redistribution of the results of economic growth and private remittances as a means of poverty eradication and mitigation of income inequalities to long-term target schemes in order to ensure equal opportunities for individuals and companies to participate in and benefit from growth. For achieving the above mentioned, dissemination of education and knowledge and development has to be the bridge through which the passive expectation, especially among people with limited capacities and skills, of employment and income will transform into a pro-active behaviour and self-employment.

Adoption of the concept on inclusive growth as a practical tool for long-term sustainable development also requires a realistic assessment of the country's capacities and constraints in new realities and targeted channelling of resources.

Lessons learned from the impact of the global financial and economic crisis and modern challenges of sustainable development faced by comparator countries require considering the achievement of sustainable development through diversification of the economy as a major priority. To reinforce the tendency of recovery of the economy and ensure further development, the ultimate issue is to raise the level of diversification of the economy and expansion of the exportable sector of the economy.

### ***Implementation of the industrial policy***

By overcoming the consequences of the global financial and economic crisis, the industrial sector of the Republic of Armenia demonstrates trends of stable growth, nevertheless, mining industry and food industry (particularly, cognac) products comprise the dominant part of the country's exports. This is the case in a situation when the country's processing industry possesses great potential for the diversification of exported products. The above stated first of all refers to the assessment of the potential of the internal economy and implementation of a policy of accurate promotion and channelling. In this sense, currently the following are priority objectives: diversification of the economy and its export orientation, improvement of the internal competitive environment and continuous development of the business climate, modernization of the country, adoption and introduction of criteria in force in progressive countries, formation of an infrastructure for an innovative economy, and, through all these, enhancement of the country's integration into global economic processes. Development of the country's economy and stable growth are largely dependent upon ensuring increase in productivity and a competitive level of the unit of labour cost, coupled with the existence of such job places that produce high value added.

As a response to the above-mentioned imperatives, in 2001, the RA Government adopted a strategy on the "Export-Oriented Industrial Policy of the Republic of Armenia"; the main goal of the Strategy is to form new sectors to drive economic growth in the longer perspective through continuous modernization of enterprises, sub-sectors with export potential and the business environment and realization of initiatives aimed at increasing the level of international competitiveness. In particular, the industrial policy is implemented through the following means:

- conducting of activities of general nature, aimed at the creation of a favourable environment and increase in the level of productivity;
- application of a special set of tools based on sector-specific strategies.

In three sectors among the eleven specified by the Strategy studies and analyses at the micro level have already been conducted, and sector-specific strategies are elaborated. In particular, in the framework of the strategy for the initial phase it is envisaged to ensure realization of sector-specific strategies in the areas of cognac production, medicine, biotechnologies, and exact precision engineering. To this end, a clear list of activities will be developed and an infrastructure to ensure the implementation thereof will be formed.

To define the sequence of sectors in the Strategy, the following priority areas specified by the RA Government have critical importance, and regarding which sector-specific strategies are elaborated or key projects are in the process of implementation: Information and communication technologies, Tourism, Health care, Education, and Agriculture.

### ***Sustainable rural and agricultural development***

The vector of the policy for agricultural development in the Republic of Armenia is directed toward effective use of the available resource base, increase in the level of food security, significant reduction of poverty in rural areas, protection of environment and development of rural communities.

In the past decade, the agricultural policy has been implemented through a number of government supported

programs. These programs have been directed towards development of primary seed breeding and pedigree breeding, fighting against the most dangerous and quarantine plant diseases, maintaining health of the livestock, ensuring food safety, improving the ameliorative condition of land, maintaining and developing irrigation systems, ensuring accessibility of crediting, infrastructure development, subsidizing farmers in the most unfavourable agricultural zones, agricultural counselling and introduction of advanced technologies, etc.

As a result of the implemented policy and due to efforts put forward by agricultural business entities, significant progress has been recorded in the area of production of potato, various types of vegetables, fruits, grapes, meat, and milk, which have to a certain extent increased the level of self-sufficiency with regards to the main food products.

One of the important achievements of the agricultural sector in the Republic of Armenia is the development of cooperation with international organizations. Membership in the World Trade Organization (WTO), United Nations Food and Agriculture Organization (FAO), International Fund for Agricultural Development (IFAD) and other international organizations is an important factor in terms of remaining in the field of world developments, as well as for the legal and technological regulation of the sector in line with universal requirements. The latter is an important precondition for the attraction of foreign investments and enhancement of foreign trade.

Along with the achievements mentioned above, numerous issues have risen in the agricultural sector, including the following:

- Small sizes of rural farms still seriously impede the effective development of agricultural production. Currently, each rural farm possesses in average 1.4 hectares of agricultural land, including 1.1 hectares of arable land.
- An overarching issue is the full and effective utilization of land resources. Nevertheless, because of various factors, the level of targeted use of agricultural land plots, especially, of arable land, is extremely low. In particular, according to 2010 data, around 37.0 percent or 165.0 hectares of arable land, due to various reasons, were not used as per its intended utilization purpose. According to 2011 data, the areas under grain crops sown in autumn indicate that in 2012 tangible positive changes are expected in terms of targeted use of arable land according to utilization purposes.
- The next issue facing the agricultural sector in the country is related to the imperfections of the seed breeding system, insufficient and incorrect use of fertilizers and pesticides, violation of the rules of application of agricultural equipment: all the above mentioned result in a still low level of agricultural produce, and consequently – low level of production effectiveness.
- Problems requiring solution exist also in the sub-sector of livestock farming. Along with a steep decrease in the yield of animal feed crops, natural grasslands are not utilized at a sufficient rate. In particular, pastures adjacent to villages are over utilized, while distant pastures have limited utilization. The above described causes serious economic losses and degradation of pastures. The level of animal meat and dairy production is low.
- Serious problems have emerged in the area of availability of agricultural equipment and respective maintenance services. As of today, the working life period of more than 95 percent of agricultural machinery and equipment has expired.
- In addition to the above mentioned issues, there are difficulties related to the formation of a market for the sale of agricultural products, due to a still low level of effective demand in the domestic market, as well as due to the limited scope of infrastructures/entities purchasing-selling agricultural food products, low pace of formation of such infrastructures/entities and difficulties related to exporting.
- The total value of agricultural products imported is four times higher than the value of exported agricultural products; thus, increase in the volumes of exported agricultural products, improvement of trade balance and trade structure are also considered as very important issues.
- Agriculture, as an area prone to risks, every year registers losses caused by natural disasters. Thus, implementation of activities aimed at risk mitigation and introduction of a system of agro insurance are important issues to be resolved.

### ***Development of small and medium size entrepreneurship***

Since 2000, development of small and medium entrepreneurship (SME) in the Republic of Armenia is considered as one of the major guarantees for sustainable development in the country. The Republic of Armenia Government consistently conducts steps toward state support to and development of SMEs, thus attaching great

importance to the role of SMEs in the development of the country's economy, creation of new employment opportunities, raising the living standards of the population, shaping a middle class in the society, and ensuring social and political stability in the country.

SMEs play a decisive role in the GDP formation. In 2010, the share of small and medium size enterprises in GDP already reached 43.0 percent, in the total exports of Armenia – 17.9 percent, and in total imports – 26.4 percent. The SME development index in Armenia, as an aggregate economic indicator, equalled 441.8 in 2010, increasing around 7.6 times in comparison to the 2002 figure.

For the application and coordination of state support tools, the Republic of Armenia “Law on State Support to Small and Medium Entrepreneurship” was adopted on December 5, 2000. The law defines criteria for SME entities (in accordance with the amendments to the Law, starting from January 1, 2001 new criteria for SME entities are applied in the Republic of Armenia), main directions of state support and principles of implementation of the state policy in the area of SME development.

Programs for state support to small and medium entrepreneurship are based on the fundamental principles of the economic policy adopted by the Republic of Armenia and contribute to economic development and overcoming of disparities in the country, especially in remote and border areas. The majority (about 90 percent) of activities envisaged by those programs is targeted toward provision of support to start-up and acting SME entities in the regions of the Republic of Armenia, especially in border and remote populated areas, as well as toward increasing the level of economic and business activity in the regions of Armenia.

Problems addressed by state programs aimed at SME development in Armenia coincide with state priority directions stipulated in the Republic of Armenia “Law on State Support to Small and Medium Entrepreneurship”; the programs, however, lack basic format (divisions are differentiated, etc.), which makes analysis of the programs difficult. 2001-2004 programs of state support to small and medium entrepreneurship in Armenia did not contain outcomes deriving from the programs and funding schemes. Starting from 2005, all programs contain program goals, expected outcomes, funding scheme and timeline of activities; part of the outcomes, however, is not measurable, which results in difficulty while assessing the effectiveness of the expected results.

Projects implemented by international organizations have achieved various levels of effectiveness. Some components of those projects are best examples of transforming the system, while other components bring about new obstacles in the system.

Despite the fact that in the last decade the RA Government attaches great importance to the process of SME statistical data collection in Armenia, however, accurate and detailed information that would allow understanding the general situation with SME field in the country is currently not available. The second major source of SME statistical data in Armenia are the statistical bulletins issued by the Small and Medium Entrepreneurship Development National Center (SME DNC) of Armenia; these bulletins considerably differ from the data published by the RA National Statistical Service (difference in the range of 1 percent-25 percent).

A number of factors affect the change in the share of SME in GDP formation; a group of factors have universal impact on small and medium size enterprises operating in all spheres, while part of the factors are mostly influential in one or several spheres or with regards to different groups (micro, small and medium). Impact of the global economic crisis was total. Since the SME units have comparatively limited power in the economic field, they are more vulnerable toward crisis-related processes.

### ***Employment and distribution of incomes***

In the process of elaboration of the state policy in the area of employment and labour, Council of Europe requirements on bringing legislation regulating the social welfare sphere into compliance with European standards, provisions of a number of conventions adopted by the World Labour Organization and ratified by the Republic of Armenia are taken into consideration based on principles of social partnership. Taking into account these principles, and with an aim to make coherent decisions on issues of development and implementation of national and regional programs on employment, the Republic of Armenia legislation stipulates establishment of national and local (territorial) Agreement Committees initiated by the State Employment Service Agency. The labour market policy, due to the above mentioned legal acts, became more flexible and active. As a result, seven groups of persons, less competitive and in need of additional assistance were specified in the labour market; a number of new programs regulating employment of the population were initiated.

The state policy in the area of employment is directed toward creation of conditions for ensuring dignified, full and effective employment, mitigation of the tension in the labour market, enhancing the competitiveness of job

seekers, effective filling of job vacancies available with different employers, support to securing employment for youth, especially rural youth, non-competitive groups of people in the labour market, particularly, people with disabilities. From the viewpoint of state employment policy the 2000-2011 period is characterized as a time for legislative reforms in the sphere of employment and institutional development of the State Employment Service Agency.

On January 1, 2006, the Republic of Armenia “Law on Employment of the Population and Social Protection in Case of Unemployment,” which aims at promotion of labour, ensuring employment and, in case of unemployment, implementation of equitable social policy based on principles of social partnership. The adoption of the Law was justified by the necessity to improve the Republic of Armenia legislation on population employment and to introduce a system of mandatory social insurance from unemployment cases in the country.

In the period of 2006-2011 and during the following years, priority directions of the employment sector were the following: elaboration and introduction of programs enhancing the competitiveness of people with disabilities in the labour market and promoting employment among people living in rural areas. In the above mentioned period the structure of the annual state program on population employment and the list of measures included in the program.

The social protection state policy in Armenia focuses on the following: ensuring effective employment of the population, reforms in the area of pensions, including increase in the sizes of pensions, increase effectiveness of state benefits through better targeting, provision of social guarantees to people with disabilities, elderly people, women, children and other social groups in need of social protection, creation of conditions for a full realization of the right to social protection. Armenia has assumed a number of policy commitments on the establishment of a system social protection in line with requirements stipulated in the European Social Charter.

Social protection largely targets meeting of essential needs of the most vulnerable groups of population. The following are forms of social protection:

- specification of certain social guarantees stipulated by legislation, and realization of the guarantees based on baseline standards and programs;
- regulation of incomes and expenses of the population;
- social services;
- targeted social programs.

Among targeted social assistance programs, different initiatives are directed towards satisfaction of social needs of single older persons, people with disabilities, homeless people, children with special needs and other social groups are particularly important.

State pension system provides the population with the following types of pensions: Labour - old age, privileged, long service, disability, survivor’s pension, and partial; Social - old age, disability, and survivor’s. Provision of all types of pensions is funded through the Republic of Armenia state budget financial resources.

### ***Area-specific problems and concerns***

*In Armenia, the mechanisms for the promotion of SMEs are not yet sufficiently effective and operational; moreover, there are objective and subjective factors that hamper SME development. In particular, small and medium size business is in very unequal competitive conditions in comparison with large business entities not only because of disproportional tax burden and very frequent changes in tax legislation, but also due to absence of regulation of document flows, shadow turnover of goods and shadow money turnover, and the preparedness to confront the existing numerous business risks. Micro-size business is in need of special protection.*

## **3.2 Development of scientific, energy efficient and eco-friendly technologies**

A certain part of fundamental objectives of the Green Economy Policy is incorporated into the Sustainable Development Program (SDP), defining following priority objectives:

- Prevent or limit negative effect on human health and environment;
- Eliminate atmospheric over-pollution;
- Mitigate negative impacts of global climate change;
- Conserve biodiversity;

- Ensure necessary volume of reproduction of renewable natural resources and conditions for natural balance;
- Ensure rational and efficient use of non-renewable natural resources.

Improvement of environmental policy instruments is one of key directions of environmental issues valid for the actual stage of development defined in SDP. This assumes that along with economic growth, it is necessary to promote introduction of the best – environmentally safe and resource-saving technologies, through application of environmental economic instruments to further abandon obsolete technologies causing harmful emissions in the long term; and to simplify, clarify and introduce e-management for reduction of corruption risks in the environmental management sector; along with improving administrative procedures, to develop mechanisms for promoting environmental activities through introducing the principle of Public-Private Partnership, i.e. environmental rating tools of enterprises, including the practice of international ISO standards.

Following the need to create favourable conditions for economic development, rather low rates of nature utilization and nature protection payments were set, which by no means comply with the real economic values of resources/damages, therefore, lack any adequate influence on environmental and nature utilization behaviour of business entities.

The Program features developing environmental management plans for enterprises and introducing a self-monitoring/self-control system.

Regretfully, within the period of 2009-2011 not all prior actions designed to accomplish these objectives were fulfilled due to financial and economic crisis. However, the achievements and completed activities are significant; among them, the following could be mentioned:

#### **Introduction of green technologies**

- Development of renewable energy sources;
- Energy-efficient and resource-saving technologies (construction of Yerevan TPP combined-cycle (thermal gas) energy block - green loan);
- Projects implemented through application of clean development mechanism of Kyoto Protocol - 5 registered projects are in process, and 8 projects have been approved, in particular, Nubarashen and Lusakert projects, which are the first ones in the region to resolve the issue of negative impact of hazardous waste on the environment within the framework of Private-Public Partnership.

#### **Introduction of Relevant Schemes (Infrastructure) of Environmental Management in Businesses**

- RA Law on “Self-control over compliance with environmental legislation” has been drafted, and at present, is in the final stage of third reading with the RA National Assembly;
- The RA Government has approved the Concept Paper on Clean Production;
- Seven standards on energy intensity and efficiency of residential and public buildings defined by the European Committee for Standardization have been adapted and harmonised. The standards have passed expert examination and are in the phase of alignment.

#### **Ensuring Sustainable Biodiversity Management**

Recent years were crucial with regard to biodiversity conservation and development of specially protected areas. The RA Government has adopted several decisions expanding the specially protected nature areas, in particular, “Lake Arpi” and “Arevik” National Parks; “Jermuk Hydrological”, “Hankavan Hydrological,” “Zangezour” and “Zikatar” State Sanctuaries. The territory of “Khosrov Forest” State Reserve has been expanded through establishing a reserve mode in “Gilan” Sanctuary. As a result, the total surface of specially protected areas in Armenia has grown by 76.3 thousand ha, resulting in 380.0 thousand ha of specially protected nature areas (SPNA) in Armenia. This comprises about 12.8 percent of the country’s territory, which is close to internationally accepted standards.

#### **Economic instruments aimed at pollution reduction (environmental payments)**

Along with the efficiency enhancement of inspectoral supervision operations and the economic growth of the country, substantial increase has been recorded and is still being traced in line of cash flows to the state budget through nature protection and nature utilization payments, thus establishing favourable conditions for financing

various projects and activities aimed at resolution of critical environmental issues within the country. In the last 12 years, their volume has increased for 15 times, from AMD 608.0 million in 1998 up to AMD 12,171.4 million in 2011.

However, the specific weight of nature utilization and nature protection payments (in percent) within the GDP of the Republic of Armenia remains low, with consideration of the fact that it characterizes the amount of compensation collected against the depreciation (damage) of the environment caused by economic activities. According to expert assessments, in countries with levels of development similar to that in Armenia, due to economic activities, a damage or depreciating of GDP's 8,0-10,0 percent is inflicted annually, which means that actually caused damage exceeds actual compensation amounts by over 32-40 times.

Problems challenging the process of modernization of environmental payments are specified below:

1. Given the fact of non-performance and (or) non-availability of relevant research, the real dimensions of the damage caused to or inflicted on the environment due to pollution have not been assessed, thus resulting in a situation when the rates of environmental payments do not correspond/are not commensurate with the damage caused.

Effective environmental payments are based:

- either on compensation indices or standards, developed through research during the Soviet period, which are not commensurate to the present needs;
- or, these compensation indices or standards are not properly grounded, since they are based on theoretical and comparative calculations.

2. Comparison of the rates of nature protection payments for environmental pollution, with corresponding payments effective in other countries reveals the fact, that the rates effective in Armenia are too low, particularly, in line of pollutants.

Given the necessity of creating favourable conditions for economic development of the country during the first years of independence, rather low-level rates for environmental payments defined do not correspond to the genuine economic value of the resource/damage; therefore, such rates do not have sufficient impact on the behaviour of economic operators. Such relatively low rates of environmental payments do not allow for applying them as a more efficient instrument for reduction of negative impacts on the environment and for ensuring efficient (sustainable) use of nature resources. Low rates of environmental payments do not promote the polluter-enterprises to take steps towards reduction of pollution. In practice, it is more profitable to pay the environmental fees, rather than to acquire and install new safe (green) technologies and equipment, which is more costly.

**Targeted use of environmental payments:** State budget revenues accrued from environmental and nature utilization payments create favourable conditions/framework for increasing the level of financing the projects and activities aimed at resolution of environmental issues in the country. However, it should be noted, that given the limited availability of all financial sources in the country, environmental activities are still regarded as a lower priority among budgetary expenditure priorities. In consequence, Armenia occupies one of the lowest positions among countries of Eastern Europe, Caucasus, and Central Asia, by the ratio of expenditures allotted to nature protection activities.

The fact that the specific weight of allocations from the state budget of the Republic of Armenia for the activities aimed at environmental protection has demonstrated a tendency of insignificant, but still "growth" can be considered as a positive development.

The chances to increase the specific weight of environmental expenditures through state or budgetary funds are still limited.

The role of private (including financial) sector in increasing the volumes of financing the sector might be decisive; however, the private sector contribution in financing environmental problems is still insufficient or insignificant.

Private sector involvement in the processes of financing environmental issues is currently carried out in two ways or pipes:

- Through nature protection and nature use payments into the state budget (although a part thereof, unfortunately does not return to the environment);
- Investments in enterprises and organizations for reduction of pollution volumes, and other environmental objectives;
- Private sector contribution is strictly limited, conditional upon following:

- First of all, environmental projects and designs are not financially attractive; and
- On the other hand, effective legislation does include promoting provisions; however, they are either not applied or do not have relevant mechanisms for practical application, being mainly of declarative nature.

Another reason for limited involvement is the lack of relevant legal framework (in particular, required for introduction of environmental insurance system).

**Promotion of “green” production.** Although the legislation currently in force contains provisions promoting nature protection goals, these provisions lack appropriate mechanisms for practical application and are basically declarative in nature; thus, it can be stated that those provisions do not properly function.

In the framework of improvement of legislative and methodological foundations for the introduction of green economy in Armenia, it is necessary to ensure the following:

- development of policies aimed at the creation, by the state, of a conducive environment for the introduction of environmentally sound technologies;
- determination of relevant economic and financial mechanisms to promote the introduction of “green” technologies.

In this process, opportunities for support by civil society representatives as well as the potential for public-private partnership are still not sufficiently utilized.

### ***Organic agriculture***

From the viewpoint of achieving sustainable development goals, identification and realization, to the highest extent possible, of the potential for the development of organic farming in the country is especially important. Moreover, in international market, especially in countries of the European Union, the demand for both fresh and processed organic food products increases year by year. In Armenia there exist certain conditions for the development of production of such organic food products that offer increased value added. The critical prerequisite is the availability of alpine and subalpine meadows necessary for the production of food products of animal origin and organic food produced through processing thereof.

In 2003 the total area of lands cultivated in accordance with organic farming requirements was 110 hectares; in 2011 the total area of lands used for organic farming (of cultivated and wild species) reached 1,250 hectares. These figures are not sufficient for the existing market demand or for considering organic farming as an economically well established sector; nevertheless, interest toward it and trends of continuous growth are evident. At the same time, during recent years there is also a tendency of widening the areas of organic farming. Organic farming was first initiated in orchards but currently a serious focus is on beekeeping and production of bee products, enlargement of the range of wild plants, growing of annual and biennial plants of high value. The issue of meadows and husbandry, as well as organic production of dairy is under discussion.

Nowadays a more important and driving factor is the processing of organic foodstuff by food processing companies, presenting the processed food at international fairs and exhibitions, exporting to the European Union and other markets. In order to make exporting economically beneficial, increase in the assortment and volumes of raw materials are required. To this end, processing companies, in their turn, have started making investments in the sphere of agricultural production; so, in the coming years it is expected that volumes of both raw materials and end food products will increase. The absence of organic components in the Republic of Armenia is especially important for the production of end products and prolongation of the expiration date thereof.

The Republic of Armenia “Law on Organic Farming,” adopted in 2008, regulates the production, preservation, processing, transportation and sale of agricultural products and materials as well as the storage of wild plants, and defines the principles of and legal grounds for the management of organic agriculture, main demands related to the circulation of products, directions of state support, and duties of the authorized body. Legal acts/by-laws (in total, seven) have been adopted to ensure implementation of the Law. These by-laws make the legislative framework regulating organic agriculture in Armenia complete, and specify the procedure for conformity assessment, approaches to marking and labelling of organic products, responsibilities of economic entities, establishing the catalogue of and procedure of use for permitted and partially permitted substances, including fertilizers, substances for soil quality improvement, fertility increase and plant protection, establishing the procedure for the organization of organic agriculture, production of plants, foods of plant origin, production of agricultural animals and food of livestock origin, organic processing, packaging, preservation, transportation, as well as procedures for conferring conformity certificates and for the regulation of other relationships.

A local private and independent organic certification body, Ecoglobe Company, operates in Armenia. It has

received an internationally accredited certificate by the German Accreditation Organization (DAkkS, former DAP), and in 2009 Ecoglobe was accredited by the National Organic Program of the U.S. Department of Agriculture. Due to the mentioned two accreditations, producers certified by Ecoglobe Company are able to enter the EU and US markets of fresh and processed organic food products.

### ***Green urban development (green engineering)***

The general purpose of development of populated areas is the improvement of social, economic and environmental conditions for the population, forming a favourable and safe environment for living, working and leisure, as well as preservation of architectural values created by older generations. In line with this purpose, the following priority directions for urban development are emphasized in the Sustainable Development Program: territorial development and planning, ensuring seismic security and reliability of buildings, mitigation of the impact of dangerous estrogenic geological processes, improvement of housing conditions, and restoration of cultural and historical environment.

To ensure sustainable territorial development of the country, elaboration of documents for spatial planning and sustainable development of populated areas (communities) in line with provisions stipulated in those documents is highly important. To this end, the following activities were carried out in the course of recent years:

- radical reforms aimed at simplification and regulation of procedures for the elaboration of spatial planning documents;
- revision of requirements applying to the format and content of community general plans to be developed at the local level on a mandatory basis;
- introduction of the notion of “simplified general plan” for rural communities;
- establishment of an inter-ministerial committee to coordinate activities aimed at elaboration of urban development policy documents for the Republic of Armenia communities;
- transfer of the authority to approve community general plans from the Republic of Armenia Government to local self-governance bodies;
- clarification of procedures for the change of utilization purposes of lands;
- specification, by law, of a certain period of time, after which, in case of absence of an approved general plan and a zone scheme, disposal of property by community heads for the purpose of construction will be prohibited.
- organization of seminars in various marzes (regions) of Armenia with an aim to raise public awareness of the reforms.

As a result, the elaboration of spatial planning documents was significantly promoted, which is the basis for ensuring sustainable territorial development of communities. While in the period of 2004-2007 community general plans were developed mainly in the framework of state targeted programs and with state budget funds, only in 2010-2011 more than 25 community heads initiated development of simplified community general plans for their localities. In the course of 2009-2011, three regional level spatial planning documents were developed using state funds and approved by respective decrees of the RA Government (Lake Sevan basin territorial management plan (land use scheme), territorial management plan for Vayots Dzor marz, zoning plan for territories in the central part of Lake Sevan envisaged for construction).

With the intention of regulating urban development (construction) activities in territories that have special importance for the State, and for the preservation and improvement of the quality characteristics of those territories, with a series of RA Government decisions certain buildings were specified for special regulation of urban development (construction) activities in the following territories: Lake Sevan basin; territories bordering with inter-state roads and general usage state automobile roads of national significance; in Gyumri, Vanadzor, Dilijan, Vagharshapat, Ashtarak and Goris urban communities and in Tatev and Halidzor rural communities.

Increasing the energy efficiency of buildings is a new direction in Armenia. Pursuant to this, in 2010 a project started, “Improving Energy Efficiency in Buildings,” which is implemented with support from UN Development Programme and GEF. In the framework of the first phase of the Project, as a result of the analysis of the legislative and normative framework regulating the sphere, an action plan including activities to be carried out in the upcoming three years toward improvement of the legislative and normative framework regulating the sphere. In addition, in 2011 a Letter of Intent on cooperation was signed among the Republic of Armenia Ministry of Urban Development, Glendale Hills Closed Joint-Stock Company and United Nations Development Programme. With Project funds, it is envisaged to perform measures ensuring high level of energy efficiency in one of the three

residential multi-apartment buildings to be constructed in Akhuryan community in the framework of the state housing program aimed at solving housing problems facing by people left homeless as a consequence of the 1988 earthquake. The activities of construction of the exemplary building are planned to be completed in 2012; the attained results will lay the foundation for the application of energy efficient technologies in multi-apartment residential buildings being constructed.

No matter how much the issues of sustainable development and environmental security of the City of Yerevan are interconnected with sustainable development of the country's resettlement plan; however, those issues are shaped also by current urban development processes underway in the capital city. The problem is related to the following: starting from mid-1990s, construction of multi-storey individual buildings and complexes carried out in Yerevan, as a result of disproportional territorial development, has increased the density of buildings in the city, especially in its central part. Urbanization occurred in the context of actual construction in the city especially raises concerns related to the protection and improvement of green areas in yards and territories of common use, intensification of seismic and environmental risks. Activities of Yerevan Municipality aimed at the resolution of these problems were mainly included in the Action plan of major measures toward implementation of the 2006-2020 General Plan of Yerevan City, approved by the RA Government Decree No. 1402-N (adopted on September 7, 2006).

Currently Yerevan Municipality conducts steps toward the new strategy on decentralization of construction processes in the capital city. Realization of such an approach will not only constrain future construction processes in the central part of the city but will also contribute to the development of the rest of the administrative districts in Yerevan and will act as a crucial factor for a generally sustainable and proportional development of the capital city. In accordance with the new strategy, the following is envisaged:

- to direct urban development investment projects exclusively toward the improvement of well-being conditions in and qualities of the urban living environment by synchronizing those with principles and ideology of "Green urban development (engineering)" and the European Landscape Convention;
- to transfer major plans and projects, and investments being made in such initiatives from downtown Yerevan and larger center of the city to other administrative districts.

In November 2001 the RA Government made a protocol decision on "The Approval of the Principles for the Implementation of the Republic of Armenia National Landscape Policy"; provisions stipulated in the decision, in addition to being used as a means of implementation of the landscape policy in the City of Yerevan, shall lay the foundation for the fulfilment of the requirement specified in Paragraph 6 of the Appendix of the RA Government Decree No. 308-N on "The Approval of the List of 2011-2012 Measures for the Implementation of the Republic of Armenia Commitments under the European Landscape Convention," adopted on March 24, 2011. This requirement is included in the list of short-term measures for the implementation of the Convention and refers to the approval of the "Concept on preservation, planning and development of the landscape in the City of Yerevan" before the end of the year.

According to the document, to ensure fulfilment of the Republic of Armenia commitments taken under the European Landscape Convention, Yerevan Municipality, within the limits of power granted by legislation, assumes responsibilities for ensuring implementation of processes of preservation, management and planning of landscapes in the territory of the city and in territories adjacent to the city. In the mentioned processes the landscape component shall become part of all types of sector-specific programs and projects related to territorial development and shall be justified by documents on spatial planning in the City of Yerevan.

In this context, requirements deriving from the provisions of "Green urban development" and the European Landscape Convention have been incorporated into the Terms of Reference for the plan of adjustment of Yerevan City Master Plan, which has been developed since 2010 and is currently in negotiations phase for reaching an agreement. The plan presents a comprehensive analysis of the whole system of landscape gardening of the capital city and changes in landscape gardening in the period of 2005-2009, and stipulates directions for the development of landscape gardening and respective measures to be taken. For the restoration and enlargement of the system of landscape gardening of the city, provisions of the Master Plan envisage elaborating and implementation of a complex plan of action, which includes the following provisions:

- restoration activities: landscape gardening of new territories in accordance with plans and programs, ensuring subsequent irrigation, care and maintenance;
- establishment of seed plots and greenhouse farms;
- construction of an irrigation network to ensure irrigation without interruption;

- introduction of modern technologies and new scientific achievements;
- justified selection of the assortment of seedlings;
- increase the total area of planted (green) areas up to 9,397.7 hectares (78.3 sq m/person) by year 2020, of which, increase territories of public use up to 2,382.3 hectares (19.85 sq m/person), territories of limited use - up to 3,245.3 hectares (27.05 sq m/person), and special purpose territories – up to 3,770.1 hectares (31.4 sq m/person).

According to conducted research, in 2005-2009, the total area of planted areas in Yerevan city has increased by 1,212.5 hectares, of which, territories of public use have increased by 292 hectares, territories of limited use – by 78.4 hectares, and special purpose territories – by 674.8 hectares. The rate planted areas of general (public) use per person has increased by 2.6 sq m and in 2009 reached the level of 7.6 sq m/person. The seed plot (21 hectares) is reconstructed, and a greenhouse farm (0.4 hectares) for growing flowers created.

Currently activities envisaged by Yerevan Master Plan for the restoration and development of landscape gardening of the capital city are underway; nevertheless, it is noticeable that the process significantly lags behind the planned results.

In the process of adjustment of the draft Master Plan the green territories of general use have been seriously revised, added and clarified; this was possible due to, on the one hand, detailed specification of general plan solutions in zoning schemes and identification of additional opportunities for landscape gardening, and, on the other hand, due to clarification of sanitary zones and utilization of opportunities for landscape gardening of buffer territories and spatial refinement.

The following served as basis for the adjustment of the landscape gardening system:

- changes in general plan limitations;
- organization of full-fledged green territories for general use instead of sanitary zones reserved in Yerevan City Master Plan;
- policy recommendations on the distribution of leisure and public centres in administrative districts, the practical orientation and long-term and day-to-day activities thereof.

In 2006, the draft general territorial plan of agglomeration in Yerevan city was elaborated, where, at a conceptual level, issues of complex organization of the establishment, landscape gardening and flowering of a Circle forest surrounding the City of Yerevan.

In 2007 the draft outline of landscape gardening territories envisaged by the City of Yerevan Master Plan was elaborated, which contained the de facto available territories subject to landscape gardening that were specified in accordance with examinations and assessments of natural conditions conducted in the field.

In zoning schemes of several administrative districts of the city, elaborated in the period of 2007-2009, the existing green areas were accurately defined and, in certain cases, the sizes of those areas were increased based on scheme requirements. This process is still underway since in zoning schemes envisaged for the rest of Yerevan administrative districts there are possibilities to significantly increase the sizes of areas for landscape gardening, in particular, using buffer territories envisaged by the draft Master Plan.

In 2010 “Yerevannakhagits” CJSC presented, for discussion and approval by Yerevan Municipality, the plan of formation and development of centres for public recreation in administrative districts of Yerevan city. The plan contains a preliminary proposal on the organization of distribution and operational orientation of recreational centres. The proposed network of recreational centres has to be adopted as the basis for the elaboration and implementation of the “Complex Scheme of Landscape Gardening of Yerevan City and the City Adjacent Zone” after the completion of current activities aimed at further adjustment of Yerevan City draft Master Plan. Parks, city gardens, boulevards (walking parks), public gardens have been specified as the main structural components for the elaboration general plans and configuration of green areas in recreational centres. In addition to parks of city and regional significance, specialized (thematic) parks have also been specified: children’s parks, sports parks, parks for exhibitions, zoological and botanical parks, other types of parks and gardens that are connected to local specificities.

### **3.3 Major issues**

Since 2003, the setting and fulfilment of targets defined in the Poverty Reduction Strategic Program of Armenia have been carried out synchronized with the phases of economic progress. Through implementation of the Poverty Reduction Strategic Program lined up with shifts “from economic stability to economic growth” and

“from quantitative growth to the provision of preconditions for a qualitative development”, and later, under the Sustainable Development Programme (SDP) elaborated on the basis of the PRSP achievements, the parties at all levels of decision making in fact came to an agreement on putting the country on the path of sustainable development. Nevertheless, lack of certain legislative and methodological foundations hampered the process of introduction of “Green economy” in the Republic of Armenia. There are certain unresolved issues in the process of introduction of “Green economy” in the country which require gradual addressing and necessary support, through all possible or accessible ways and mechanisms, from developed countries to the developing ones.

In particular:

- There is a limited scope of scientific research on “green” technologies and innovations, a limited number of recommendations on these. The main mechanisms of state interventions for the promotion of “green” innovations, namely, mechanisms aimed at the elimination of obstacles in the preliminary stage of introduction of innovations and mechanisms aimed at the provision of funds for scientific research are still not utilized at a sufficient level of effectiveness. So far there is a lack of adequate mechanisms, especially in the framework of international environmental agreements (contracts), for the transfer of “green” technologies and innovations by developed countries to the developing ones. So far favourable conditions are not created for the participation of financial/ banking capital in financing “green” technologies and innovations, improvement of the status of the environment and services of nature protection.

- Absence of respective studies on and assessments of the component of environmental pollution and overexploitation of natural resources in major macroeconomic accounts.

- High prices for the production or acquisition of new technologies and technical means (wind power plants, solar energy stations) for the production of renewable energy impede the introduction of such technologies and technical means.

- In a situation where the rates of payments for the use of natural resources are at a low level, cyclic use of resources (materials) is still not considered as economically favourable.

- So far, the acting tax system and the system of permits (constraints) have not created necessary incentives for enterprises (especially organizations that use natural resources) for a behavioural change aimed at the shift toward “Green economy”; the regulatory role of the above mentioned systems is by far less significant than the fiscal role.

- The acting standards and technical regulations do not specify adequate requirements for the introduction of highly effective and at the same time “green” (energy efficient, resource conserving and other) technologies, production and (or) procurement of ecologically clean and high quality products.

- Similarly, in the field of transportation, the acting economic tools so far do not create sufficient incentives for the reduction of emissions and for a conscientious use of non-renewable energy resources. Financial resources accumulated through the collection of transport-related taxes are not channelled toward the development of electricity-operated public transport (especially surface and underground transportation) that is more energy efficient and ensures reduced emissions (“green” transport).

- Still there is no sufficiently formed political will for a shift to “Green economy” (more precisely, the economic and social advantages of a shift toward “Green economy” are not estimated as being sufficient in terms of environmental effectiveness and social equity).

- The acting system of environmental education still insufficiently utilizes the potential for changing human mentality as an important factor in terms of the shift to “Green economy” for the purposes of making decisions, changing behaviours, specifying requirements (constraints), shaping (especially in the period of introduction of systems of labelling and certification of eco-products) of demand for “green” technologies, and environmentally sound and high quality products.

- It is difficult in the small territory of the country to combine the adopted priorities for economic development – mining industry (especially the intensive exploitation of metal mines) with clean agriculture and tourism.

*It is evident that the increasing pollution of the environment, especially as a consequence of strip mining practices and expansion of the tailing dam network, as well as because of an extremely unsatisfactory system of wastes management, can become a serious obstacle for the development of organic farming in the country.*

*It is also necessary to improve the area of application of agricultural pesticides and address the issues of eradication or rendering harmless the burials of pesticides, piles of outdated and prohibited pesticides.*

*Another key issue is the import and use of seeds of doubtful origin, as well as substandard inspection of those seeds in relevant laboratories. Preservation of the gene pool of wild crops is a serious issue for organic farming in*

*the country as well as the issue of conservation and development of harmless high quality and diverse varieties grown through selection.*

- *Pre-industrial (resource-intensive and based on raw materials) economy does not need such great scientific potential any more, which has been developed and accumulated in Armenia in the course of past decades. Consequently, brain drain from the country has started and continues till today, which, undoubtedly, is an obstacle for the development of knowledge-intensive and clean technologies. Recently the Government approved the Concept on Export-Oriented Industrial Policy of Armenia, which encourages development of the non-economic sphere of the economy; this Concept can contribute to the resolution of the above mentioned problem.*

To conclude, in a situation where the respective policy for the creation, by the state, of favourable conditions for “green” investments (introduction of environmentally preferable technologies) and absence of appropriate mechanisms for motivation, introduction of “green” technologies is not sufficiently attractive for the private sector, and without the participation of the private sector progress in this process is impossible. In this process, all the available opportunities for support by the civil society and cooperation between public and private sectors are not utilized to the necessary extent. The above mentioned process is hampered by insufficient integration of environmental issues in such sectors of the economy as transportation, energy, housing and agriculture.

## 4. Preconditions for development and existing challenges

### 4.1. Achievements

– Processes of post-crisis recovery point out that the Armenian model of economic growth has been enhanced and will continue changing in the coming years. This sector-based structure of the economy may be considered as more stable compared to the pre-crisis structure.

– During the period of 2001-2011, the average economic growth was 8 percent.

– During the period of 2007-2011, in the framework of annual SME State Support Programs 1.5 times more allocations (AMD 1,723.5 million) were made from the state budget than during 2002-2006 (AMD 1,154 million). The SME development index increased ten times as compared to year 2002.

– For the first time, the RA Government adopted an export-oriented industrial policy; the main goal of the Policy is to form new sectors to drive economic growth in the longer perspective.

– As a result of deferment of the payment of Value Added Tax by three years, 21 investment projects of 19 companies received permissions by the RA Government, and 1,400 new jobs were created.

– “Temporary import” customs regime privilege has been provided to 12 companies, which allowed importing of modern equipment of about AMD 1.6 billion, preserving about 2,000 jobs.

– During the period of 2007-2011, the annual average growth of foreign investments comprised around 11 percent (the FDI growth rate comprised around 15 percent).

– In 2011, the process of development of a legal framework for establishing free economic zones was finalized providing new incentives for the attraction of foreign investments, export promotion and development of entrepreneurship.

– During the period of 2002-2006, the rate of natural increase of the population increased 1.5 times, and during the period of 2007-2011 this rate remained unchanged. Meanwhile, in 2011 the rate of natural increase grew 2.2 times as compared to 2002.

– In recent years, five reforms in the regulatory and institutional fields were implemented in Armenia, which was the highest result in the region and in the world. Due to these reforms, the number of taxes decreased by 16, and the time being spent on administrative procedures decreased by 2,756 hours.

– The RA Code of Corporate Management was adopted; the Code defines criteria for corporate management of companies based on best international practices.

– The increase in accessibility of foreign markets for Armenian goods was ensured. In particular:

– Procedures for exporting and importing were simplified; the list of goods subject to compulsory certification was cut down from 65 to 16. The compulsory certification requirement has been moved from customs border to the domestic market, procedures of customs regimes of temporary export/import for processing were simplified and made affordable, and the number of required documentation was reduced.

– During the period of 2007-2011, in the framework of implementing the annual SME State Support Programs state budget allocations amounting AMD 1.7 billion were made and provided to more than 21,000 start-up and functioning SME entities.

– The scope of IT production has increased from AMD 80 million in 2007 to AMD 205 million in 2011 (increase by 156.25 percent); the number of companies in the sector has increased by 82 percent - from 165 companies in 2007 to around 300 in 2011. As of 2011, around 5,500 professionals were engaged in the IT sector as opposed to 4,000 in 2007.

– The system of electronic digital signatures was introduced; it is widely used both within circulation of documents among state bodies and when entities submit tax reports to tax administration bodies.

– An increase in demand for Armenia as a tourism zone in the international market and a significant improvement of its competitiveness was ensured: the number of tourist visits doubled comprising 800,000 in 2011, as opposed to 381,136 in 2007.

– In early 2000s, the stable development of the economy brought about an increase in salaries, stabilization of the employment level and increase in expenditures directed to social welfare sectors. All of this, along with an increasing inflow of private remittances, contributed to a significant reduction of poverty level in 2008, by 23.5 percent.

– The last decade can be considered as a period of development in the sphere of support to elderly and disabled people. The quality of provided social services was improved, the range of services expanded, and new

structures were formed.

- During the last decade significant positive changes have been recorded towards increasing the level of self-sufficiency in terms of main food products.

- In the course of recent years, radical reforms aimed at simplification and regulation of procedures for the elaboration of spatial planning documents was carried out.

- Due to measures taken in the sector it was feasible to assess consequences related to the possible shut-down of the Armenian Nuclear Power Plant (NPP) and evaluate justifications for the necessary substituting power capacities aimed at ensuring energy independence and security for the country, assess options for meeting the Republic of Armenia energy demand in case the Armenian NPP operation is ceased.

- Construction of Iran-Armenia gas pipeline completed; an automated system for the calculation and control of electric power was introduced; as a result of optimization of operating regimes of power producing stations, maintaining a minimum possible cost of electric power production has been achieved; construction of the second electricity transmission line was completed.

- Seven standards on energy intensity and efficiency of residential and public buildings defined by the European Committee for Standardization have been adapted and harmonised.

- Office of the Human Rights Defender of the Republic of Armenia has been established.

- According to the results of implementation of CIVICUS Civil Society Index project, most of the CSOs (65.6 percent) considers, based on their individual experience, that the laws and legislative acts (by-laws) are either moderately or completely favourable. The legislative framework of Armenia regulating civil society activities was granted an index of 3.9. This means that the legislative framework is in medium transition phase.

- Since 2001, the level of Lake Sevan has increased by over 3.6 meters.

- Effective 2005, the system of water basin management was introduced in the Republic of Armenia.

- In 2001, the average duration of potable water supply was 15 hours, while in 2004 the duration was 6 hours.

- Due to an expansion of the territory of specially protected areas (in 2009, “Lake Arpi” and “Arevik” national parks, and “Zangezur” state sanctuary were established, and in 2010 - “Zikatar” state sanctuary), the total area comprises about 12.8 percent of the country’s territory.

- Measures of reforestation and forest conservation were carried out on 32,065 hectares of territory in the country.

- The electronic system of establishment of limits for atmospheric emissions was introduced.

- In the framework of Clean Development Mechanism (CDM) of Kyoto Protocol to the UN Convention on Climate Change, five projects are underway or in the phase of exploitation registered by the CDM International Executive Council in the Republic of Armenia.

- A legal base for waste management has been established.

- The process of increasing the level of public awareness has been improved, the system of public hearings is being developed, the role of the society in decision-making processes enhances.

- The preservation of cultural heritage and mechanisms for its popularisation, development of the arts and modernisation of cultural infrastructures, affordability and quality of cultural education are ensured.

- Armenian historical and cultural monuments located abroad have been documented; the process of digitalisation of archives has started.

- Interstate cultural relationships and cooperation with international organizations have been expanded.

- As a result of the national strategy on healthcare and development of children and adolescents, the gross child mortality rate has continuously decreased comprising 11.8 in 2011 (14 in 2002).

- Armenia has succeeded in eliminating endemic malaria in the territory of the country. No endemic cases of malaria have been registered in the country since 2006. In 2010-2011, in line with internationally accepted procedure, the Republic of Armenia was certified by the World Health Organization as a malaria-free territory.

- As a result of successful implementation of measures for combating controllable infectious diseases in the Republic of Armenia, in 2002 the country, along with other countries of the European region, was declared as a poliomyelitis-free country and maintains that status till now.

## **4.2. Challenges at global, regional and national levels**

### **4.2.1. Global level**

Following the Rio Summit, issues of partnership, regional security and cooperation have become dominant within international and regional relations. However, some global challenges, as well as issues and limitations that require solutions still exist. In particular:

- Increase in the number and intensity of global climate change and natural disasters;
- Possible new waves of global financial and economic crisis;
- The dominance of consumer mentality over environmental approaches;
- Absence of mechanisms to transform the principles of global economy from “Washington Consensus” to “Green Agreement”;
- Both international and regional disparity of development resources, the usage thereof and distribution of economic incomes emanating from those resources.

### **4.2.2. Regional level**

The countries of our region are engaged in a number of partnership structures and levels. From the perspective of economic cooperation, however, our region remains divided and devoid of encompassing and comprehensive mechanisms for stability and security. Among the challenges still existing in the region are the following:

- Dividing lines;
- Unsettled conflicts;
- Race of armaments;
- Disproportionate development of democracy and democratic institutions.

The imprudent exploitation of Caspian energy resources, directing the derived income toward the race of armaments, the competition and manipulations among entities engaged in energy resources production, transportation and consumers create additional tension in the region with potential of deepening of dividing lines and emergence of instability.

In this regard, the unilateral closing by Turkey of Turkey-Armenia land border has to be noted. Moreover, the Azerbaijan and Turkey maintain a policy of economic blockade and isolation of Armenia from regional projects.

The unsettled condition of Nagorno-Karabakh conflict remains a crucial challenge in the region.

Although the negotiation process within the agreed format of OSCE Minsk Group co-chairs had significantly intensified, however, the parties still continue negotiating on fundamental principles of regulation.

According to statements made by OSCE foreign ministers in Helsinki, Athens, Almaty and Vilnius, the statement made at the OSCE Summit in Astana, statements made by the heads of OSCE member states in L'Aquila, Muscoca and Deauville, the conflict shall be regulated based on three basic principles of the international law: non-use of force, right of peoples to self-determination and territorial integrity.

The Azerbaijani authorities implement destructive and militant policy impeding the security and sustainable development in the region:

- Distorting the essence of the Nagorno-Karabakh conflict and the fundamental principles of regulation, Azerbaijan bypasses the agreed format of negotiations making an effort to include the issue of Nagorno-Karabakh in the agenda of other international organisations or parliaments of a number of countries.

- During the last 6 years Azerbaijan has increased its military expenditures around 20 times thus violating the limit defined by the Treaty on Conventional Armed Forces in Europe and acquiring not only defensive but also explicitly offensive arms.

Azerbaijan continues declining the proposals made by the OSCE Minsk Group towards establishing trust between the parties and strengthening of the ceasefire regime, in particular by refusing to:

- withdraw snipers from the Armenian-Azerbaijani border and NKR-Azerbaijani line of contact;
- establish a mechanism for the investigation of ceasefire breaches.

The anti-democratic, authoritarian ruling regime of Azerbaijan that nourishes its own people with illusions about “enemy countries and peoples” and disregards both global and regional real challenges, is another threat to the peaceful and sustainable development in the region.

The consequence of all of the abovementioned is that the capacities of regional countries are not realized fully, mutually exclusive demonstrations of competition are in place instead of synthesizing the interests, and the implementation of sustainable development programs absorbs unforeseen efforts, resources and time.

With the presence of those problems and challenges Armenia will continue to remain a reliable partner and an inseparable member of the international community by promoting and supporting any initiative aimed at transforming challenges into opportunities both at global and regional levels.

The consequence of wide-scale man-made activities, in particular of intensive oil and natural gas extraction, is that seismic risk is expanded in the region.

### **4.2.3. National level**

- Existence of economic monopolies, shadow economy and corruption.
- Unequal distribution of income among different groups of the society; intensification of polarization in the society; increase in the level of poverty.
  - Labour migration and emigration from the country, particularly from border zone villages.
  - The normative-technical acts and standards on labour protection are not complete in the country.
  - The increase in food product prices can be of a long-term nature which, in case of Armenia, will create additional tension in terms of balance of payments and trade balance (as far as Armenia is a net food-importing country), as well as in terms of preventing the increase in poverty level and reaching poverty reduction strategic goals.
    - Global warming is another similar factor; in this case the level of unpredictability of climate change rises, which may also bring about reduction of the income of those employed in the agricultural sector (in particular, by worsening of conditions for agricultural activity) and increase in public expenditures (expenditures aimed at compensating for the changing conditions and at preventing the expansion of rural poverty).
    - The legislation framework for more effective utilization of energy and energy saving, and the policy implemented in this sphere need to be improved, especially in the areas of urban development and consumption.
    - Similarly, in the field of transportation, the acting economic tools so far do not create sufficient incentives for the reduction of emissions and for a conscientious use of non-renewable energy resources. Financial resources accumulated through the collection of transport-related taxes are not channelled toward the development of electricity-operated public transport (especially surface and underground transportation) that is more energy efficient and ensures reduced emissions (“green” transport).
      - Decrease in the age threshold of diseases, including cancer.
      - Restoration of Lake Sevan ecological balance.
      - Overexploitation of natural resources.
      - Increased risks of desertification.
      - Existence of illegal deforestation.
      - Existence of “commercial” constructions disregarding environmental and social issues.
      - Deficiencies in the legislative framework in terms of a shift to “Green economy.”
      - Limited scope of scientific research on “green” technologies and innovations, a limited number of recommendations on these. The main mechanisms of state interventions for the promotion of “green” innovations, namely, mechanisms aimed at the elimination of obstacles in the preliminary stage of introduction of innovations and mechanisms aimed at the provision of funds for scientific research are still not utilized at a sufficient level of effectiveness. So far there is a lack of adequate mechanisms, especially in the framework of international environmental agreements (contracts), for the transfer of “green” technologies and innovations by developed countries to the developing ones. So far favourable conditions are not created for the participation of financial/banking capital in financing “green” technologies and innovations, improvement of the status of the environment and services of nature protection.
        - Unavailability of a system promoting the introduction of environmentally safe and clean technologies.
        - Absence of a mentality for the protection of environment.
        - The acting system of environmental education still insufficiently utilizes the potential for changing human mentality as an important factor in terms of the shift to “Green economy” for the purposes of making decisions, changing behaviours, specifying requirements (constraints), shaping (especially in the period of introduction of systems of labelling and certification of eco-products) of demand for “green” technologies, and environmentally

sound and high quality products.

– Absence of ethno-environmental culture: lack of appreciation of traditional knowledge on and skills of using natural resources developed in the course of time and shaped by specificities of a certain natural-historic environment.

– Lasting disruption of science-production link.

– Increase in the scope of dangerous emissions, waste waters and wastes that are dangerous for health.

### 4.3. Recommendations

- Increase the level of the competitiveness of the Armenian economy.
- Implanting of the model of socio-economic development in Armenia.
- It is necessary to promote exports and diversification for absorbing external shocks and providing macro-economic stability, as well as to ensure creation of jobs requiring high qualification, and high productivity of work.

- Implementation of the industrial policy.

- Increasing the openness level of the Armenian economy, meanwhile intensifying the integration with the global economy.

- Establishing and developing the main institutes of a knowledge-based economy.

Science and scientific development are the crucial foundation of the RA economic strategy. This implies implementation of effective state policy aimed at the targeted reproduction of the scientific potential, establishment of an effective system for the introduction of results of scientific and research activities, integration of education and science, etc. In this regard, the key focus of the progress in Armenia is on the development of human capital, which ensures that the competition is mostly based on capacities of introducing modern technologies, which, in its turn, brings about limited importance of specific natural resources and, at the same time, more efficient economic activity caused by expansion of the human factor in the process of creation of new values.

- Establishment of equal conditions for economic activity; consistent elimination of monopolies.

- Ensuring proportional territorial development.

- Raising the quality of public administration.

- Strengthening democratic principles in the country, ensuring implementation of the legislation in force and establishment of the rule of law.

- Legislative, institutional and operational complex reforms are necessary, aimed at overcoming the chronic imbalance in the labour market in Armenia.

- Improvement of the legislation regulating activities of the NGO sector; promotion of the participatory process.

- Implementation of programs aimed at prevention of emigration and improvement of demographic situation.

- Improvement of environmental legislation.

- Implementation of the Action Plan and Schedule of the Presidential Committee on Lake Sevan Issues, approved in 2010 by the RA Government Decree No. 876-N on the “Approval of the schedule of actions designed in compliance with 2009 Action Plan of the Presidential Committee on Lake Sevan Issues and furnished in letters of the Presidential Committee on Lake Sevan issues.”

- Reasonable use of natural resources.

- Strengthening the system specially protected natural areas; establishment of an environmental network.

- Revision of the strategy on forests.

- Elaboration of a strategy on the use of mineral resources; utilization of tailing dumps as a source of raw materials.

- Improvement of the environmental situation in populated areas, particularly in the capital city, including through proper application and implementation of a set of tools for territorial and landscape planning.

- Development of the sub-sector of alternative energy, in particular, elaboration and implementation of a plan of heliofication.

- Organisation of a series of TV programs on the principles, projects and positive experience related to sustainable development.

- Preserving the national cultural identity in parallel to the adoption of global and universal values.

## Acronyms

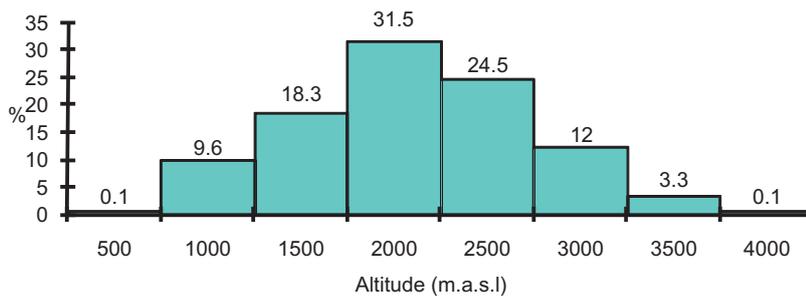
**CJSC** – Closed Joint-Stock Company  
**CoE** - Council of Europe  
**CSO** – Civil society organization  
**EBRD** – European Bank for Reconstruction and Development  
**EC** – European Commission  
**EECCA** – Eastern Europe, Caucasus and Central Asia  
**EU** – European Union  
**EUWI** – European Union Water Initiative  
**FAO** – Food and Agriculture Organization  
**FDI** – Foreign direct investments  
**GDP** – Gross Domestic Product  
**GEF** – Global Environment Facility  
**IHLCS** – Integrated Household Living Conditions Survey  
**IT** – Information technologies  
**MTEF** – Medium Term Expenditure Framework  
**NGO** – Non-governmental organization  
**NPP** – Nuclear power plant  
**NSS** – National Statistical Service  
**OECD** – Organisation for Economic Co-operation and Development  
**OSCE** – Organization for Security and Cooperation in Europe  
**PRSP** – Poverty Reduction Strategy Program  
**PSI** – Pre-school institution  
**REC Caucasus** – Regional Environment Centre for the Caucasus  
**SDP** – Sustainable Development Programme  
**SME** – Small and medium entrepreneurship  
**SNCO** – State non-commercial Organization  
**SPNA** – Specially protected nature areas  
**UN** – United Nations  
**UNDP** – United Nations Development Programme  
**UNECE** – Economic Commission for Europe  
**UNESCO** – United Nations Educational, Scientific and Cultural Organization  
**USAID** – United States Agency for International Development  
**WB** – World Bank  
**WHO** – World Health Organization  
**WTO** – World Trade Organization

## Brief geographical data on the Republic of Armenia

The territory of the Republic of Armenia lies in the North-Eastern part of the Armenian Highland, within the borderline of Caucasus and Western Asia/Middle East. The Republic of Armenia is bordered by Georgia to the North, Azerbaijan to the East, Turkey to the West and South-West, and Iran to the South.

The Republic of Armenia covers a territory of 29,743 square kilometers. Maximum extension of its territory from North to South-East is 360 kilometers, and from West to East - 200 kilometers. Around 4.8 percent of the country's territory is covered by lakes, mainly the surface of the Lake Sevan.

**Graph A1. Distribution of Armenia's Territory by Altitudes**



Armenia is a mountainous country with complicated geological composition and a diverse landscape. Around 76.5 percent of the country's territory is located at an altitude of 1,000-2,500 meters above the sea level. The minimum altitude is 375 meters above the sea level. The maximum altitude is 4,095 meters at the summit of Mount Aragats.

Existence of various altitudes is an important factor for the climate and the formation of vertical landscape zones. Armenia's territory has high seismic activity with exogenous processes that contribute to the evolvement of landslides and land erosion.

The necessity to consistently resolve sustainable development problems is also dependent upon specificities of the country's nature. In particular:

Approximately 56 percent of the total territory of the Republic of Armenia is suitable for resettlement, while the rest of the territory is located above an absolute level of 2,200 meters and is not suitable for settlement. Alpine and mountainous communities comprise around 40 percent of all communities in the country and are located in under-developed zones. These communities are mainly situated on mountain slopes at an altitude of 1,700-2,200 meters; possess sufficient reserve territories, have a large resource-wise and environmental potential. The above mentioned communities, however, are characterized by a lack of engineering and transportation networks, by under-developed network of settlements, abandoned settlements and low population density.

In addition, the total territory of Armenia, being prone to seismic risks, is also characterized by widespread exogenous geological processes (landslides, landfalls, mud streams, floods, etc.). The latter cause serious damages to the economy and environment of the country, and pose threats to the population security.

Table 1.1. Gross Domestic Product and Structure of GDP by Sector

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Gross Domestic Product</b>	<b>Million Armenian Dram (AMD)</b>	1031338.3	1175876.8	1362471.7	1624642.7	1907945.4	2242880.9	2656189.8	3149283.4	3568227.6	3141651.0	3460202.7	3776443.0
	<b>Million AMD</b>	1911.6	2118.4	2376.3	2807.1	3576.6	4900.4	6384.5	9206.3	11662.0	8648.0	9260.3	10138.1
<b>GDP per capita (based on purchasing power parity), thousand USD</b>		2.3	2.4	2.8	3.2	3.4	3.9	5.1	5.9	7.1	6.2	...	...
<b>Gross Domestic Product real volume indices (%)</b>	<b>Compared to year 2000</b>	100.0	109.6	124.1	141.4	156.3	178.0	201.5	229.1	244.9	210.4	215.0	225.1
	<b>Compared to previous year</b>	105.9	109.6	113.2	114.0	110.5	113.9	113.2	113.7	106.9	85.9	102.2	104.7
<b>GDP Production account by economic activity (market prices), %</b>		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>agriculture, hunting, forestry, fishing and fish farming</b>		23.2	25.6	23.5	21.5	22.7	19.1	18.7	18.3	16.3	16.9	17.1	20.2
<b>industry</b>		25.2	23.2	22.5	22.5	22.1	21.7	17.2	15.0	13.3	13.5	15.4	16.3
<b>construction</b>		10.2	9.7	12.6	15.7	15.5	19.6	23.7	24.5	25.3	18.6	17.3	12.8
<b>services</b>		32.3	31.8	31.7	31.2	31.3	31.0	31.9	32.2	33.7	40.4	39.0	39.8
<b>net taxes on products</b>		9.1	9.7	9.7	9.1	8.4	8.6	8.5	10.0	11.4	10.6	11.2	10.9
<b>Consumer prices index in comparison with the last year, %</b>		99.2	103.1	101.1	104.7	107.0	100.6	102.9	104.4	109.0	103.4	108.2	107.7

**Table 1.2. GDP structure and contributions to GDP growth by ESA-95  
(European System of Accounts), A3 and A6 groupings, calculated by production method**

NACE 1.1 classification			Gross Domestic Product real volume indices compared to previous year					Contribution to GDP growth (percentage point)					Gross Domestic Product structure				
A3	A6		2006	2008	2009	2010	2011	2006	2008	2009	2010	2011	2006	2008	2009	2010	2011
		<b>Domestic product (gross, market prices)</b>	113.2	106.9	85.9	102.2	104.7	13.2	6.9	-14.1	2.2	4.7	100.0	100.0	100.0	100.0	100.0
<b>A+B</b>	<b>A+B</b>	<b>Agriculture, hunting and forestry; fishing and operation of fish hatcheries and fish farms</b>	100.5	103.3	106.0	84.0	113.7	0.1	0.6	1.0	-2.7	2.4	18.7	16.3	16.9	17.1	20.2
<b>C+D+E+F</b>		<b>Industry, including energy and construction</b>	116.6	107.8	70.4	105.8	99.8	6.8	3.0	-11.4	1.8	-0.1	40.9	38.6	32.1	32.7	29.1
	<b>C+D+ E</b>	<b>Industry, including energy</b>	97.5	102.1	93.1	109.2	113.5	-0.6	0.3	-0.9	1.2	2.1	17.2	13.3	13.5	15.4	16.3
	<b>F</b>	<b>Construction</b>	137.7	111.3	58.4	103.3	87.5	7.4	2.7	-10.5	0.6	-2.2	23.7	25.3	18.6	17.3	12.8
<b>G to P</b>		<b>Service activities</b>	115.5	105.0	96.4	104.6	106.9	5.0	1.7	-1.3	2.0	2.7	33.0	35.2	42.0	40.9	42.4
	<b>G+H+I</b>	<b>Wholesale and retail trade, repair of motor vehicles and household goods, hotels and restaurants; transport and communications</b>	113.5	108.2	94.0	104.9	104.1	2.4	1.5	-1.1	1.0	0.8	18.0	18.8	20.5	20.1	20.4
	<b>J+K</b>	<b>Financial, real-estate, renting and business activities</b>	132.4	112.3	99.2	108.2	112.6	1.6	0.8	-0.1	0.7	1.1	5.8	7.1	8.8	8.6	9.2
	<b>L to P</b>	<b>Other service activities</b>	110.4	93.5	98.9	101.8	107.3	1.0	-0.6	-0.1	0.3	0.8	9.2	9.3	12.7	12.2	12.8
		<b>FISIM<sup>1</sup></b>	101.7	109.1	89.8	119.0	145.5	0.0	-0.1	0.1	-0.3	-0.8	-1.1	-1.5	-1.6	-1.9	-2.6
		<b>Net taxes on products</b>	114.9	117.1	77.5	113.4	104.3	1.3	1.7	-2.5	1.4	0.5	8.5	11.4	10.6	11.2	10.9

<sup>1</sup> - Financial Intermediation Services Indirectly Measured (FISIM)

**Table 1.3. State budget expenditures<sup>1</sup>**

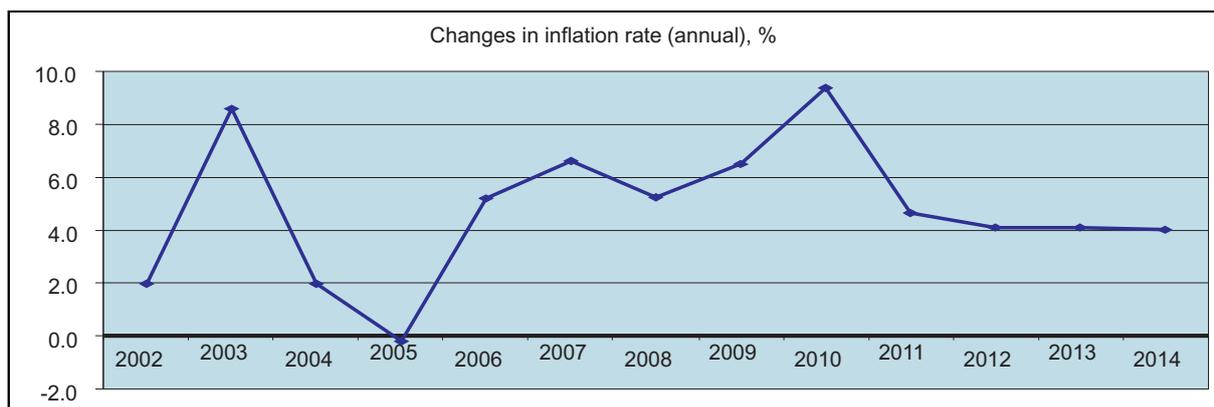
Million AMD

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Total expenditures</b>	222886	244381	263912	312698	333970	417506	481183	634735	810575	929109	954317	986509.2
<b>of which,</b>												
<b>Education</b>	27176	27312.2	26406.1	31895.6	44125.4	56702.6	66975.8	89218.3	103531	107529	97790.1	106085.0
<b>As percentage of total expenditures</b>	12.2	11.2	10	10.2	13.2	13.6	13.9	14.1	12.8	11.6	10.2	10.8
<b>As percentage of GDP</b>	2.6	2.3	1.9	2	2.3	2.5	2.5	2.8	2.9	3.4	2.8	2.8
<b>Health care</b>	9846.4	15745.6	15965.6	19598.6	24691.2	31079.7	39437	46851.1	49972.5	56168.8	56130.8	63312.4
<b>As percentage of total expenditures</b>	4.4	6.4	6	6.3	7.4	7.4	8.2	7.4	6.2	6	5.9	6.42
<b>As percentage of GDP</b>	1	1.3	1.2	1.2	1.3	1.4	1.5	1.5	1.4	1.8	1.6	1.7
<b>Social insurance and social security<sup>2</sup></b>	21952.5	26108.5	23792	29255.1	34987.5	44145.7	52304.1	61321.6	...	...	...	...
<b>As percentage of total expenditures</b>	9.8	10.7	9	9.4	10.5	10.6	10.9	9.7	...	...	...	...
<b>As percentage of GDP</b>	2.1	2.2	1.7	1.8	1.8	2	2	2	...	...	...	...
<b>Social protection</b>	...	...	...	...	...	...	...	...	212559	243634	244169	256176.3
<b>As percentage of total expenditures</b>	...	...	...	...	...	...	...	...	26.2	26.2	25.6	26.0
<b>As percentage of GDP</b>	...	...	...	...	...	...	...	...	6	7.8	7	6.8
<b>Recreation, culture and religion</b>	3703.8	5548.7	6477.7	14090.8	8485.5	10407.6	13593	16680.6	16021.9	16297.7	16102.6	17581.4
<b>As percentage of total expenditures</b>	1.7	2.3	2.5	4.5	2.5	2.5	2.8	2.6	2	1.8	1.7	1.8
<b>As percentage of GDP</b>	0.1	0.5	0.5	0.9	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5

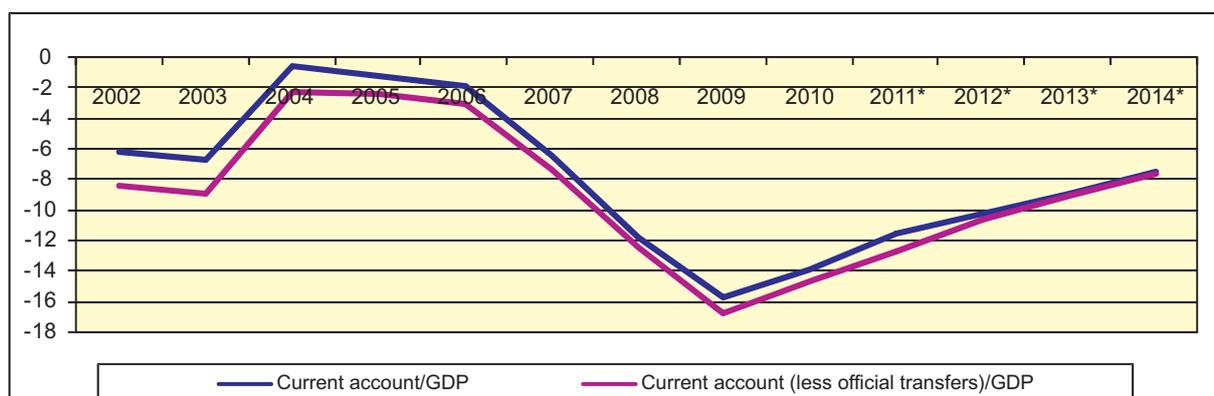
<sup>1</sup> - Since 2008, the Republic of Armenia State budget data have been classified in accordance with the *Government Finance Statistics Manual 2001* (GFS-2001) categories; as a result, data from previous years are not comparable.

<sup>2</sup> – Expenditures of State social insurance fund are not included.

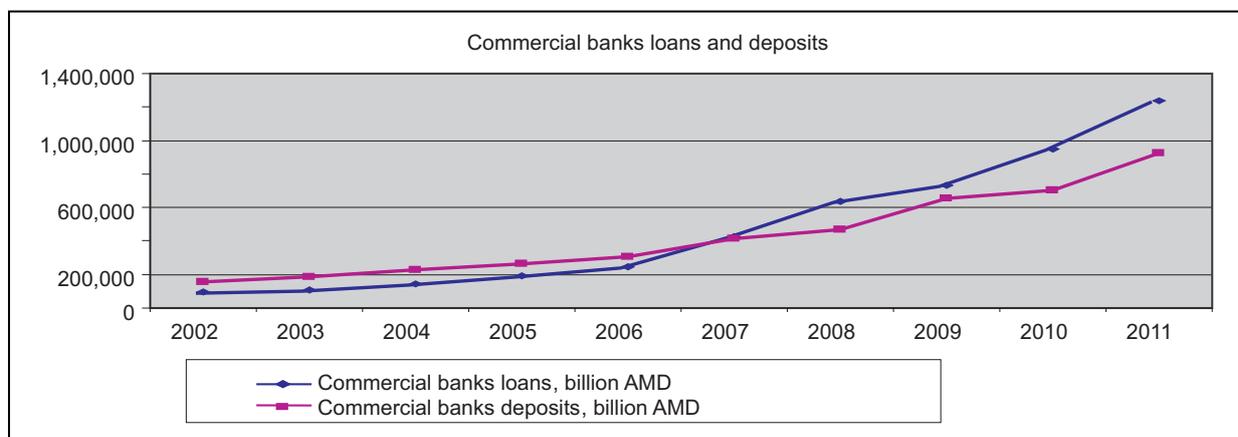
**Graphic 1.1. Changes in consumer price index (CPI), 2002-2014**



**Graphic 1.2. Current account deficit/GDP ratio, %**



**Graphic 1.3. Commercial banks loans and deposits, 2002-2011**

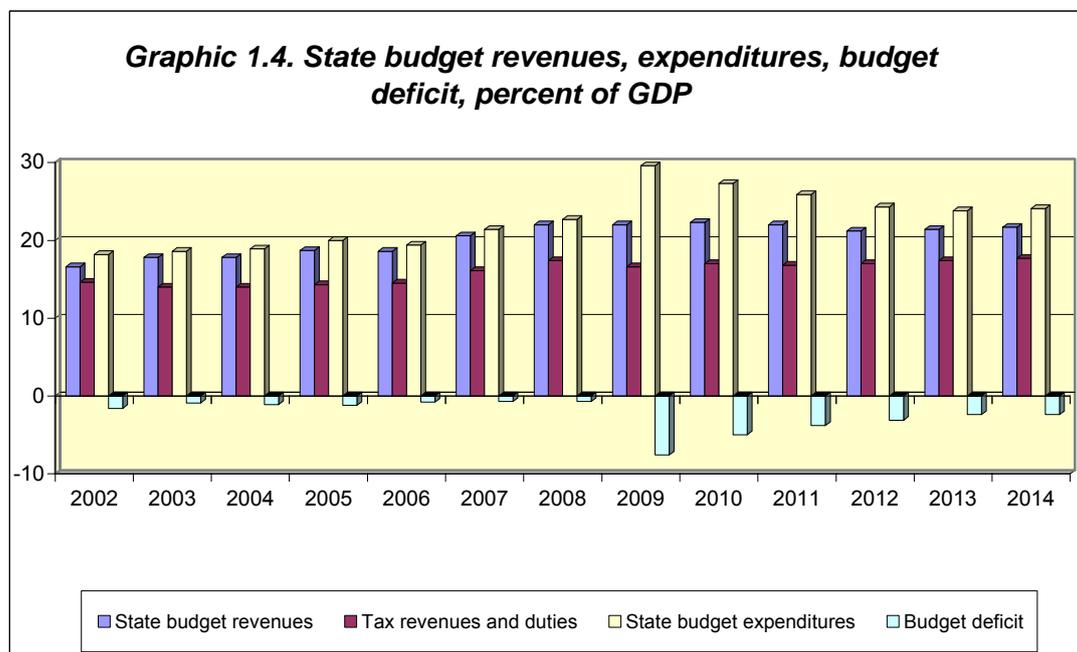


**Table 1.4. Total assets of banking system/GDP, 2002-2011**

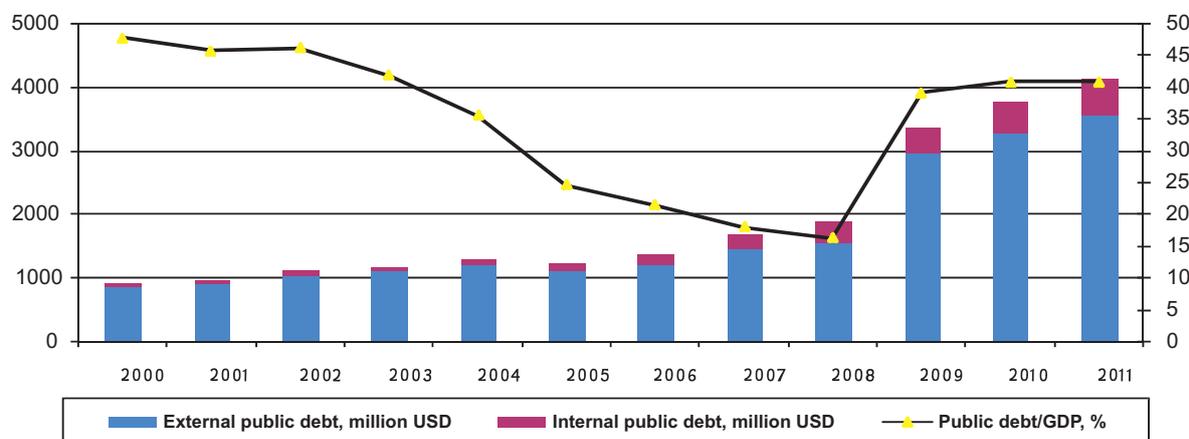
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Nominal GDP</b>	1362.5	1624.6	1907.9	2242.9	2656.2	3149.3	3568.2	3141.7	3501.6	3864.2
<b>Loans</b>	94	107.5	143.5	194.9	243.6	426.2	634.5	735.2	949.8	1271.0
<b>Share of loans in GDP, %</b>	6.9	6.6	7.5	8.7	9.2	13.5	17.8	23.4	27.1	32.9
<b>Deposits, %</b>	153.6	184.8	230.2	264.1	306.8	413.2	465.9	657	702.3	969.7
<b>Share of deposits in GDP, %</b>	11.3	11.4	12.1	11.8	11.6	13.1	13.1	20.9	20.1	25.1

**Table 1.5. Financial Market Average Interest Rates, 2002-2011**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Loan</b> <sup>1</sup>	18.8	20.9	18.2	17.3	17.2	16.5	16.5	18.8	18.9	17.7
<b>Deposit</b>	8.45	6.41	4.42	6.45	5.59	6.13	7.71	8.10	8.76	10.29
<b>Spreads</b>	10.4	14.5	13.8	10.8	11.6	10.3	8.8	10.7	10.1	7.4



**Graphic 1.5. External debt of the Republic of Armenia, 2000-2010**



Source: The Republic of Armenia Ministry of Finance and the Republic of Armenia National Statistical Service

<sup>1</sup> Calculated for the period from 16 days to 1 year, for loans provided and deposits attracted only in Armenian dras (less the interbank market).

**Table 1.6. Main indicators on poverty, 2008-2010**

(Percent)

	2008		2009		2010			
	Extremely poor	Poor	Extremely poor	Poor	Extremely poor	Poor	Poverty gap	Severity of poverty
<b>Urban</b>	1.9	27.6	4.6	33.7	4.1	35.7	8.4	2.7
<b>Yerevan city</b>	1.1	20.1	2.1	26.7	2.2	27.1	5.8	1.8
<b>Other urban</b>	2.8	35.8	7.4	41.5	6.1	45.4	11.3	3.7
<b>Rural</b>	1.2	27.5	1.7	34.9	1.1	36.0	7.6	2.1
<b>Total</b>	1.6	27.6	3.6	34.1	3.0	35.8	8.1	2.5

Source: Integrated Household Living Conditions Survey, 2008-2010

**Table 1.7. Poverty lines and changes in poverty lines, 2008-2010  
(per adult equivalent, per month)**

(AMD)

	2008	2009	2010	2010/ 2009, %
<b>Food or extreme poverty line</b>	17644	17483	19126	109.4
<b>Lower total poverty line</b>	24388	25217	27410	108.7
<b>Upper total poverty line</b>	29903	30920	33517	108.4

Source: Integrated Household Living Conditions Survey, 2008-2010

**Table 1.8. Minimum consumption basket value in 2010 at average current urban prices,  
per capita, per month**

(Calculated by the National Statistical Service in accordance with the World Bank 2010 methodology, based on results of an Integrated Household Living Conditions Survey among 7,872 households, actual per capita consumption)

	Name of the food product	Daily actual per capita consumption, gram	Daily per capita food dietary energy, kilocalories	Cost of per capita food consumption in one month, AMD	Cost of per adult food consumption in one month, AMD
1.	<b>Bread and bakery goods</b>	461.1	1355.0	6087.4	6778.8
2.	<b>Meat and meat food</b>	48.3	87.6	2215.5	2467.2
3.	<b>Fish</b>	2.5	2.4	199.1	221.7
4.	<b>Milk and milk products</b>		144.3	2225.4	2478.2
5.	<b>Eggs</b>	18.6	27.2	540.5	601.9
6.	<b>Butter and vegetable oils</b>	30.5	229.9	1254.0	1396.5
7.	<b>Fruit, berries and grape</b>	113.9	47.7	1953.8	2175.7
8.	<b>Vegetables</b>	203.7	76.0	4206.0	4683.8
9.	<b>Potato</b>	145.6	109.2	792.7	882.7
10.	<b>Sugar</b>	24.4	94.4	252.0	280.6
11.	<b>Non-alcoholic beverages</b>	4.2	1.1	20.0	22.3
12.	<b>Other food</b>	35.6	57.2	1356.4	1510.5
	<b>Total</b>		2232.0	21102.8	23499.9

<b>Monthly cost of food basket</b>	<u>AMD 21,102.8</u>	<u>AMD 23,499.9</u>
<b>Monthly cost of minimum consumer basket</b>	<u>AMD 37,352.0</u>	<u>AMD 41,594.8</u>

**Table 1.9. US dollar-valued level of poverty by purchasing power parity, 2008-2010**

(Percent)

Per person per day poverty line	Based on 2005 US dollar purchasing power parity (PPP) exchange rate 1 US dollar = 196.19 Armenian dram		
	2008	2009	2010
1.25 US dollar	0.2	0.2	0.5
2.50 US dollar	12.1	17.4	19.7
5.00 US dollar	67.2	71.2	76.6

Source: RA NSS Integrated Household Living Conditions Survey, 2008-2010

Note: Consumption was calculated on per capita basis.

**Table 1.10. The share of state pensions and benefits in money income of households, 2008-2010**

	Per household member, monthly average					
	AMD			%		
	2008	2009	2010	2008	2009	2010
State pensions and benefits	4,870	5,615	5,888	18.1	20.0	18.7
Money income	26,866	28,038	31,553	100	100	100

Source: Integrated Household Living Conditions Survey, 2004, 2008-2010

**Table 1.11. Income and consumption inequality, 2008-2010**

	Consumption			Income		
	2008	2009	2010	2008	2009	2010
Gini coefficient	0.242	0.257	0.265	0.339	0.355	0.362

Source: Integrated Household Living Conditions Survey, 2008-2010

**Table 1.12. Structure of money income by money income shares of decile groups, 2008-2010  
(per person, monthly average)**

(Percent)

Money income shares of decile groups	Year	Money income	Pensions, benefits, scholarships
I	2008	100	48,7
	2009	100	51.5
	2010	100	52.2
II	2008	100	40,9
	2009	100	48.0
	2010	100	44.4
III	2008	100	32,1
	2009	100	33.3
	2010	100	34.2
IV	2008	100	26,3
	2009	100	25.7
	2010	100	26.7
V	2008	100	24,6
	2009	100	25.6
	2010	100	22.7
VI	2008	100	23,5
	2009	100	26.8
	2010	100	25.1
VII	2008	100	19,1
	2009	100	21.1
	2010	100	23.6

VIII	2008	100	19,9
	2009	100	17.4
	2010	100	18.2
IX	2008	100	10,8
	2009	100	15.8
	2010	100	12.6
X	2008	100	8,2
	2009	100	10.1
	2010	100	7.7

Source: Integrated Household Living Conditions Survey, 2008-2010

**Table 1.13. Financial cost of poverty alleviation, 2010**

	2010	
	extremely poor	poor
Average consumption of the poor (AMD, per adult equivalent, per month)	16 826	25 945
Poverty line (AMD, per adult equivalent, per month)	19126	33517
Additional consumption needed by the poor (AMD, per month)	2300	7572
Deficit - Additional consumption needed by the poor/poverty line ratio (percent)	12.0	22.6
GDP (billion AMD)	3541.7	3541.7
Required budget (billion AMD)	2.7*	105.9*
Required budget as percentage of GDP	0.1	3.0

Source: RA NSS Integrated Household Living Conditions Survey, 2010

\* Calculated by multiplying the average annual number of de jure (permanent) population by poverty level and the size of annual additional consumption needed by the poor (the Table above reflects monthly additional consumption needed).

**Table 1.14. Changes in habits caused by the current economic crisis, 2010**

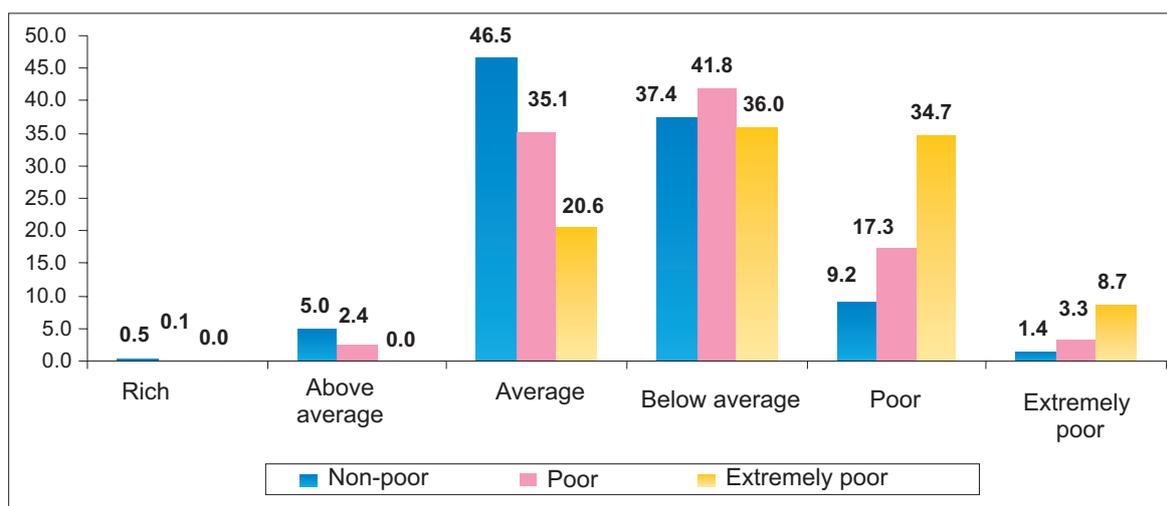
(Percent)

	Forced to change their habits
Reduced consumption of food	31.5
Consumption of expensive food substituted by cheaper food	59.2
Household member went for work abroad as seasonal worker	12.2
Increased production of food for self-consumption	19.8
Less or no purchases of non-food products	48.3
Started purchasing second-hand items	11.0
Less expenditure on entertainment	66.1
Fewer gatherings with friends	64.6
One or more children ceased attending school	0.8
Withdrawn or delayed tuition fees for school, college, or kindergarten	0.6
Fewer or no visits to health care centers	43.2
Less or no purchases of medicine	33.4
Changed means of transportation (increased use of public transportation or go on foot)	24.3
Started doing occasional work	16.5
Other	1.0

Source: RA NSS Integrated Household Living Conditions Survey, 2010

**Graphic 1.6. Subjective and Objective Assessment of Living Standards, 2010**

(percent)



Source. ILCS 2010

**Table 1.15. Major health care indicators, 2005-2010**

		2005	2006	2007	2008	2009	2010
Total number of physicians of all specialties, person	total	12307	12388	12251	12929	13177	13591
	per 10,000 population	38.2	38.4	37.9	39.9	40.6	41.7
Total number of paramedical personnel, person	total	18364	18574	18595	18 94	18516	18649
	per 10,000 population	57.0	57.6	57.6	57.4	57.0	57.2
Number of hospitals, item		145	140	135	130	127	130
Number of hospital beds, item	total	14353	14276	13126	12358	12068	12160
	per 10,000 population	44.6	44.3	40.6	38.2	37.1	37.3
Number of physicians in medical institutions rendering out-patient services, person	total	4640	4628	4650	4859	4889	4968
	per 10,000 population	14.4	14.4	14.4	15.0	15.0	15.2
Number of paramedical personnel in medical institutions rendering out-patient services, person	total	7631	7725	7841	7970	7865	7893
	per 10,000 population	23.7	24.0	24.3	24.6	24.2	24.2
Number of junior personnel in medical institutions rendering out-patient services, person	total	1078	1059	1052	1087	1115	1094
	per 10,000 population	3.3	3.3	3.3	3.4	3.4	3.3
Number of medical institutions rendering out-patient services and dispensary aid to the population, item		458	460	467	474	487	504
Capacity of medical institutions rendering out-patient services and dispensary aid (number of attendances during a shift)	total	39236	39582	37964	38 37	38783	39259
	per 10,000 population	121.9	122.9	117.7	120.4	119.6	120.6
Number of antenatal clinics, children's polyclinics and number of institutions with antenatal clinics and children's polyclinics, item		246	237	301	329	3 3	363
Number of beds for pregnant women and women in childbirth, item	total	1666	1636	1331	1190	1165	1185
	per 10,000 women of fertile age (aged 15-49)	18.1	17.7	14.4	12.9	12.7	13.1
Number of hospital beds for sick children, item	total	1683	1652	1464	1288	1237	1197
	per 10,000 children	25.3	26.0	23.8	21.4	20.8	20.2

**Table 1.16. Distribution of population who has applied to specialists in medical institutions or emergency (ambulance) services during their last visit, by the types of specialists in medical institutions and the poverty level, 2010**

(Percent)

	Non-poor	Poor	Extremely poor	Total
Family doctor	21.4	26.9	13.1	22.4
Pediatrician	5.9	13.4	20.7	7.8
Obstetrician-gynecologist	3.5	2.8	2.2	3.3
Therapist	33.2	29.1	29.5	32.3
Narrow specialist	25.2	17.7	24.7	23.6
Private physician	4.0	3.9	4.6	4.0
Diagnostic center	3.6	1.9	0.0	3.1
Emergency (ambulance) services	1.9	1.8	5.2	2.0
Other	1.3	2.5	0.0	1.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Integrated Household Living Conditions Survey 2010

**Table 1.17. Morbidity: Number of registered diseases with the diagnosis set for the first time, 2000-2011**

(Per 100,000 population)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Infection and parasitic diseases</b>	1719.0	1608.1	1754.3	1874.0	1807.4	1796.0	2458.3	2078.1	2146.8	2241.5	2497.1	2628.9
<b>Neoplasms</b>	155.9	159.3	190.2	211.7	226.5	216.7	245.6	259.1	264.8	279.7	267.8	293.1
<b>Diseases of the endocrine system, digestion disorders, disorders of metabolism and immunity</b>	250.2	248.1	295.0	279.6	343.7	402.8	474.5	396.1	428.3	430.4	431.2	441.1
<b>Blood diseases and other hematogenic disturbances</b>	146.4	149.1	188.5	194.3	233.9	247.9	284.0	282.8	307.6	329.0	331.5	340.0
<b>Psychic dysfunctions</b>	125.4	122.1	138.1	150.0	177.2	189.4	228.0	215.1	232.3	243.6	306.3	278.4
<b>Nervous system disorders and organs of senses diseases</b>	891.5	784.9	1006.0	1123.6	1423.7	1819.2	2467.2	2622.0	2935.8	2990.1	3272.9	3383.3
<b>Blood circulation diseases</b>	529.9	522.7	699.3	714.9	798.3	1092.9	1209.7	1311.3	1309.9	1497.6	1549.7	1716.2
<b>Respiratory organs diseases</b>	7013.7	6187.4	6990.0	9189.5	8536.1	8695.1	8960.9	9322.5	10090.2	12682.7	11898.6	11017.5
<b>Digestive organs disorders</b>	1133.2	989.7	1146.0	1094.6	1115.5	1181.2	1405.1	1325.4	1388.2	1369.0	1438.9	1455.4
<b>Urogenital diseases</b>	542.6	523.0	670.7	758.0	772.3	898.4	1158.6	1174.6	1414.8	1429.4	1493.6	1554.1
<b>Complication of pregnancy, child birth and post-natal period <sup>1</sup></b>	1230.9	932.3	1189.1	1363.8	1371.3	1654.9	1533.2	1532.2	1536.0	1563.4	1457.4	...
<b>Skin infection and underskin fat diseases</b>	566.5	538.2	562.9	601.2	690.0	807.1	1000.1	1046.5	1156.0	1240.8	1382.0	1406.5
<b>Osteo-muscular and connective tissue disorders</b>	165.0	155.9	181.6	218.7	231.9	320.0	437.1	440.4	516.1	515.9	628.2	639.5
<b>Congenital anomalies (developmental defects)</b>	30.2	29.3	36.0	37.2	45.6	44.4	71.6	66.8	73.3	67.5	65.9	101.0
<b>Symptoms, signs and inexactly identified states</b>	48.3	40.7	50.6	44.0	57.5	61.8	71.9	87.4	81.3	77.5	167.4	157.9
<b>Injures and poisonings</b>	1866.1	1565.8	1854.7	1860.9	1414.1	1469.7	1468.1	1609.9	1703.7	1748.7	1726.9	1758.6
<b>Number of registered diseases, total</b>	15623.8	13979.2	16194.5	18838.4	18376.5	19814.6	22635.9	22789.9	24759.3	27682.2	27948.5	27659.2

<sup>1</sup> This indicator is calculated using the number of women of fertile age (aged 15-49).

**Table 1.18. Number of registered diseases among children aged 0-14 with the diagnosis set for the first time, 2000-2010**

(per 100,000 children aged 0-14)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Infection and parasitic diseases</b>	4172.4	4020.1	3987.0	3779.8	3541.0	3315.7	5626.0	4546.1	4738.5	4768.3	5516.9
<b>Neoplasms</b>	19.2	13.2	22.9	17.6	17.1	18.2	36.9	42.8	40.3	43.3	45.1
<b>Diseases of the endocrine system, digestion disorders, disorders of metabolism and immunity</b>	506.6	512.4	524.1	506.4	467.4	434.7	507.9	491.0	518.8	496.6	434.1
<b>Blood diseases and other hematogenic disturbances</b>	423.7	419.5	484.6	489.3	600.9	635.1	712.8	763.1	797.7	886.0	904.2
<b>Psychic dysfunctions</b>	96.8	68.7	66.3	67.8	89.5	124.4	106.2	137.7	171.3	189.0	218.0
<b>Nervous system disorders and organs of senses diseases</b>	1831.5	1516.3	1922.8	1747.9	2018.5	1348.1	3866.5	4268.6	4731.3	4973.0	5541.9
<b>Blood circulation diseases</b>	42.5	55.5	42.9	41.9	44.8	65.7	118.5	89.8	97.3	104.1	103.3
<b>Respiratory organs diseases</b>	14727.4	13636.0	14765.4	16381.7	16435.3	17454.6	20660.8	22723.6	24212.8	31178.9	29293.0
<b>Digestive organs disorders</b>	2641.1	2177.3	1985.1	1808.6	1857.6	2046.6	2637.7	2473.1	2516.3	2489.4	2738.3
<b>Urogenital diseases</b>	377.0	359.1	412.3	394.0	405.6	453.3	573.8	633.1	738.0	764.6	861.0
<b>Skin infection and underskin fat diseases</b>	930.8	800.7	804.0	808.1	929.8	1024.5	1532.2	1604.7	1839.9	2114.8	2367.4
<b>Osteo-muscular and connective tissue disorders</b>	98.4	87.7	120.1	106.7	111.9	139.4	226.1	207.4	201.9	207.2	246.8
<b>Congenital anomalies (developmental defects)</b>	108.4	103.2	120.0	119.4	144.3	125.7	239.5	209.2	247.0	215.9	235.3
<b>Symptoms, signs and inexactly identified states</b>	143.3	132.7	158.5	140.4	130.7	145.3	186.6	190.4	211.2	204.8	301.0
<b>separate states occurring in perinatal period</b>	370.0	386.3	419.0	439.3	507.1	467.7	580.1	576.9	526.0	522.1	484.4
<b>Injures and poisonings</b>	2572.6	2269.3	2426.1	2156.4	1735.6	1857.5	2100.2	2044.0	2178.4	2222.4	2208.4
<b>Number of registered diseases, total</b>	29061.6	26557.3	28261.0	29006.0	29038.4	31128.9	39713.6	41001.6	43785.1	51379.9	51460.9

**Table 1.19. Enrolment of children in general education primary schools (public and private), by gender, 2000-2010**

(%)

	Total	Girls	Boys
1990	77.1	80.0	74.4
1991	72.1	74.2	70.1
1992	71.9	74.0	69.9
1993	68.3	70.6	66.2
1994	79.6	81.9	77.3
1995	81.1	83.6	78.8
1996	84.4	88.2	80.8
1997	85.0	86.1	84.0
1998	85.4	90.4	80.7
1999	81.7	82.1	81.3
2000	87.8	88.8	86.9
2001	94.6	95.0	94.2
2002	94.7	95.6	95.3
2003	93.9	94.5	93.3
2004	90.0	91.0	89.1
2005	91.8	93.1	90.7
2006	93.1	93.9	92.4
2007	93.2	93.5	92.9
2008	95.5	96.2	94.9
2009	96.1	96.3	95.9
2010	96.8	97.4	96.4

**Table 1.20. Enrolment of children in general education schools (public and private), by gender, 2000-2010**

(%)

	Total	Girls	Boys
1990	88.5	91.8	85.4
1991	85.2	87.9	82.7
1992	84.4	87.8	81.1
1993	81.0	83.9	77.5
1994	79.8	81.5	74.0
1995	76.5	80.5	72.7
1996	77.8	82.4	73.4
1997	78.8	82.1	75.7
1998	78.6	83.0	74.4
1999	77.4	81.7	73.4
2000	76.6	79.3	74.1
2001	86.8	88.9	84.9
2002	87.1	88.4	85.9
2003	86.6	87.6	85.7
2004	87.4	88.5	86.4
2005	89.2	90.5	87.9
2006	90.9	92.4	89.5
2007	89.2	90.4	88.2
2008	90.8	92.1	89.6
2009	90.2	91.7	88.9
2010	90.1	91.8	88.6

**Table 1.21. Enrolment of children in general education basic schools (public and private), by gender, 2008-2010**

(%)

	Total	Girls	Boys
2008	93.5	94.0	93.0
2009	92.1	92.7	91.6
2010	91.6	92.1	91.1

**Table 1.22. Enrolment of children in general education senior schools (public and private), by gender, 2008-2010**

(%)

	Total	Girls	Boys
2008	81.9	86.0	78.1
2009	83.9	88.6	79.4
2010	84.4	90.9	78.4

**Table 1.23. Main indicators of the labor market, 2010-2011**

	Total		Men		Women		Urban		Rural	
	2010	2011	2010	2011	2010	2011	2010	2011	2010	2011
Labor resources, 1,000 population	2389.7	2286.3	1075.7	1017.0	1314.0	1269.3	1554.5	1498.3	835.1	788.0
Economically active population (in thousands)	1463.3	1440.9	777.2	739.0	686.1	701.8	869.7	864.3	593.7	576.6
Employed population	1185.2	1175.1	644.8	610.9	540.4	564.2	627.7	631.8	557.5	543.3
of which, have second jobs	53.2	36.2	28.4	19.8	24.8	16.4	11.4	8.7	41.8	27.5
Unemployed	278.2	265.7	132.5	128.1	145.7	137.7	242.0	232.5	36.2	33.3
Economically non-active population (in thousands)	926.3	845.4	298.4	278.0	627.9	567.5	684.9	634.0	241.5	211.4
Economic activity rate <sup>1</sup> , %	61.2	63.0	72.3	72.7	52.2	55.3	55.9	57.7	71.1	73.2
Employment rate <sup>1</sup> , %	49.6	51.4	59.9	60.1	41.1	44.4	40.4	42.2	66.8	68.9
Unemployment rate <sup>2</sup> , %	19.0	18.4	17.0	17.3	21.2	19.6	27.8	26.9	6.1	5.8

Source: Integrated Household Living Conditions Survey 2010-2011

**Table 1.24. Distribution of officially registered unemployed by duration of seeking a job, gender and type of community, 2011**

	Total, 1000 population	month				year			Average duration of seeking a job, month
		< 1	1 - 3	3 - 6	6 - 12	1 - 2	2 - 4	4 >	
Total	265.7	7.6	29.4	43.1	45.6	54.3	37.2	48.6	24.6
Men	128.1	4.0	15.3	24.4	23.7	24.5	18.7	17.6	21.5
Women	137.7	3.6	14.1	18.8	21.9	29.8	18.5	31.0	27.4
Urban	232.5	6.2	25.4	35.8	40.4	45.1	33.5	46.0	25.6
Rural	33.3	1.4	4.0	7.3	5.2	9.2	3.7	2.5	17.3

Source: Integrated Household Living Conditions Survey 2011

<sup>1</sup> Calculated vis-à-vis the figure of labor resources (based on the size of de facto population).

<sup>2</sup> Calculated against the number of economically active population.

**Table 1.25. Unemployed by Means of Job Search and Age Group, 2011**

	Total, 1000 cases	By age groups					
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 >
<b>Total<sup>1</sup></b>	426.1	114.6	102.7	65.9	77.2	58.1	7.7
<b>Applied to the State Employment Agency</b>	19.8	1.5	1.9	4.1	8.1	4.3	0.0
<b>Applied to private employment agencies</b>	15.5	4.0	4.5	2.3	2.6	2.0	0.0
<b>Followed job announcements on regular basis</b>	71.2	20.8	17.6	9.7	12.7	8.8	1.6
<b>Placed announcements on regular basis</b>	13.3	3.9	2.9	2.5	2.0	2.0	0.0
<b>Searched for job through acquaintances, relatives</b>	211.9	56.9	49.8	32.0	38.8	29.6	4.8
<b>Applied directly to employer</b>	64.1	17.5	17.5	10.6	9.2	8.1	1.2
<b>Searched via Internet</b>	24.5	7.9	6.8	4.2	2.6	2.8	0.2
<b>Searched for job through job fairs, participated in competition(s), interview(s)</b>	4.2	1.8	1.3	0.5	0.3	0.4	0.0
<b>Searched for area, facilities, machines, equipment to start own business</b>	0.6	0.2	0	0	0.3	0	0
<b>Tried to obtain funds, loans to establish own business</b>	0.1	0	0.1	0	0	0	0
<b>Applied to state authorities to obtain permit for starting own business</b>	0.9	0.1	0.2	0	0.6	0.1	0

Source: Integrated Household Living Conditions Survey 2011

**Table 1.26. Labor migrants by age groups, 2010**

	Total, %	Age groups						Average age, annual
		15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 >	
<b>Labor migrants</b>	<b>100</b>	<b>14.8</b>	<b>35.3</b>	<b>17.6</b>	<b>25.9</b>	<b>5.5</b>	<b>0.9</b>	<b>37.4</b>
	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
Internal	11.1	18.9	14.7	6.1	2.4	15.2	63.7	<b>33.3</b>
External	88.9	81.1	85.3	93.9	97.6	84.7	36.3	<b>37.9</b>

Source: Integrated Household Living Conditions Survey 2010

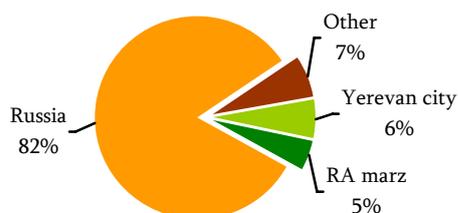
**Table 1.27. Labor migrants by educational level, 2010**

	Total, %	Educational level					
		Tertiary, post-graduate	Secondary specialized, incomplete tertiary	Vocational	General secondary	General basic	Preliminary, incomplete preliminary
<b>Labor migrants</b>	<b>100</b>	<b>15.3</b>	<b>21.0</b>	<b>2.4</b>	<b>53.4</b>	<b>6.5</b>	<b>1.4</b>
	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
Internal	11.1	20.1	5.3	12.0	8.6	17.1	66.3
External	88.9	79.9	94.7	88.0	91.4	82.9	33.7

Source: Integrated Household Living Conditions Survey 2010

<sup>1</sup> The same person could mention more than one way of job seeking.

**Graphic 1.7. Labor migrants by location, 2010**



Source: *Integrated Household Living Conditions Survey 2010*

**Table 1.28. Relative indicators of average pension**

Indicators	2008	2009	2010
Average size of labor pension (AMD)	21842	25686	28623
Average size of social pension (AMD)	8656	10073	13197
Average monthly salary (AMD)	87406	96019	108840
Extreme poverty line (AMD)	17644	17483	18916
Total poverty line (AMD)	29903	30920	33455
Minimum consumption basket (RA National Statistical Service data) (AMD)	32438	33371	35827
Minimum consumption basket (RA Ministry of Health Care data) (AMD)	36175	36722	42630
Ratio of the average size of labor pension to the average monthly salary (%)	25.0	26.8	26.3
Ratio of the average size of labor pension to the extreme poverty line (%)	123.8	146.9	151.3
Ratio of the average size of labor pension to the total poverty line (%)	73.0	83.1	85.6
Ratio of the average size of labor pension to the Minimum consumption basket (RA National Statistical Service data) (%)	67.3	77.0	79.9
Ratio of the average size of labor pension to the Minimum consumption basket (RA Ministry of Health Care data) (%)	60.4	69.9	67.1
Ratio of the average size of social pension to the extreme poverty line (%)	49.1	57.6	69.8
Ratio of the average size of social pension to the total poverty line (%)	28.9	32.6	39.4
Ratio of the average size of social pension to the Minimum consumption basket (RA National Statistical Service data) (%)	26.7	30.2	36.8
Ratio of the average size of social pension to the Minimum consumption basket (RA Ministry of Health Care data) (%)	23.9	27.4	31

**Table 1.29. Proportion of the number of pensioners to the population size**

Year	Number of pensioners (thousand persons)			Ratio of the number of pensioners to de facto (present) population size (%)		
	Total	Labor	Social	Total	Labor	Social
2009	518025	467555	50470	16,0	14,4	1,6
2008	518379	469747	48632	16,0	14,5	1,5
2010	516064	465084	50980	15,9	14,3	1,6
2011	505782	454488	51294	15.4	13.9	1.6

**Table 1.30. Dynamics of changes in state benefits, 1999-2011**

	1999	2000	2006	2007	2008	2009	2010	2011
<b>Family benefits</b>								
<b>Registered households (% of the number of households of RA)</b>	67.70	52.85	23.81	22.14	21.54	19.16	17.11	14.91
<b>Beneficiary households (% of registered households)</b>	67.70	52.85	72.25	72.29	73.25	73.4	78.77	78.94
<b>Beneficiary households (% of households in RA)</b>	27.54	26.70	16.95	16.24	15.77	14.0	13.50	11.77
<b>Households with children (% of registered households)</b>	36.26	47.19	72.20	75.90	76.34	81.19	78.28	78.07
<b>Means envisaged by the RA State Budget (billion AMD)</b>	21.141	19.08	24.0	26.407	29.388	32.324	31.022	35.497
<b>Number of beneficiary families</b>	217265	198504	130170	124689	121160	107493	105005	91575
<b>Average benefit size (AMD)</b>	7600	6900	15000	17500	21100	23560	26850	26850
<b>Child care allowance (monthly average)</b>	10450	10091	5145	4262	4488	7114	9844	10495
<b>Allowance size (AMD)</b>	2300	2300	2300	3000	3000	18000	18000	18000
<b>Lump-sum allowance at childbirth</b>	26200	24500	29000	38801	38303	45823	43033	38724
<b>Allowance size (AMD)</b>	5900	5900	35000	35000	35000	50000	50000	50000
<b>Size of lump-sum allowance for the third and each next child born in a family (AMD)</b>	-	-	-	200000*	300000*	430000	430000	430000

\* In 2007 and 2008, for the third and each next child born in a family, lump-sum allowance was provided in case the family was registered with the Family Vulnerability Scoring System, and the family vulnerability score was above "0".

**Table 1.31. Main indicators of the Republic of Armenia labor market,  
2005-2011\* as of start of the year**

	Persons registered in Employment territorial centers and seeking job (person)	Including		Number of unemployed (person)	Including		Number of persons placed at jobs (person)	Unemploy- ment rate** (%)
		Em- ployed	Unem- ployed		Women	Benefi- ciaries		
<b>2005</b>	142664	4184	138480	108622	76315	3728	7893	9.3
<b>2006</b>	120941	9024	111917	88991	63023	4940	8296	7.7 (2006 - 27% study)
<b>2007</b>	102172	10901	91271	84571	60681	10041	8268	7.2
<b>2008</b>	89367	11787	77580	75050	55239	15076	8322	6.7 (2008 - 28.6% study)
<b>2009</b>	90244	13224	77020	74698	56417	16556	8657	6.3
<b>2010</b>	99308	13041	86267	84493	59762	25737	9394	7.1 (real 16%)
<b>2011</b>	93230	12807	80423	78804	55139	19030	11341	6.9

\* Data from "Form no. 1 - Employment" statistical reports of the State Employment Service.

\*\* Average monthly rate.

**Table 1.32. Volumes of extracted solid minerals and losses during extraction, 2002-2010**

	2002		2005		2008		2009		2010		2011	
	Extraction	Losses from exhausted supplies, %	Extraction	Losses from exhausted supplies, %	Extraction	Losses from exhausted supplies, %	Extraction	Losses from exhausted supplies, %	Extraction	Losses from exhausted supplies, %	Extraction	Losses from exhausted supplies, %
<b>Gold, kg</b>	95.4	6.8	481.1	5.6	720.5	4	498.7	4	1,946.10	3.3	2735.7	4.9
<b>Gold polymetallic ore, thsd. t</b>					233.5	3.9	224.8	2.9	650	2.7	1327.2	3.9
<b>Silver, kg</b>	1,590.30	6.7	9,665.00	5.9	443218	2.3	10794.5	4.2	21,892.40	4.8	25205.1	6.8
<b>Copper, t</b>	1,488.40	5.1	23,412.90	2.2	28280.3	2.4	32920.4	1.8	40,946.10	2.2	43093.7	2.1
<b>Zinc, t</b>	1,125.90	6.8	4,850.00	5.1	8468.8	4	7238.5	3.2	8,971.80	5.8	104.92.2	7.9
<b>Copper molybdenum ore, thsd. t</b>	200,132.60	4.3	10,224.70	2	13245.8	2	13745	1.8	15,882.60	1.8	16497.1	1.5
<b>Molybdenum, t</b>			4,701.70	2.2	5594.7	2.1	5311.6	1.8	5,408.00	1.9	5745.1	1.5
<b>Selenium, m</b>					1.2	7.7	380	5	1,540.60	2.5	967.8	3.9
<b>Tellurium, m</b>					2.1	8.7	846	4.5	5,997.90	1.3	1779.8	3.2
<b>Lead, m</b>					2145.6	3.3	1655.2	1.1	732.7	3.5	825.6	5.8
<b>Salt, t</b>	105.5	76.2					17382	-	24,116.00	-	26379.6	-
<b>Rock-salt, t</b>	17,527.00	58.6	34,986.70	24.3	29849.4	65.6	21584.3	58.8	13,910.00	71.8	19702.0	36.4
<b>Coal, cub. m</b>					4004	4	2923	3.8	2,367.00	4.1	2269.0	3.9
<b>Sulfur, m</b>					7424.6	4.9	2829.8	-	403.4	-	50.4	5.1
<b>Basalt, cub. m</b>	45,833.90	34.8	98,833.50	16.5	165276.8	18.7	138497.2	16.7	196,222.60	14	176688.9	13.3
<b>Basaltic detritus, cub. m</b>	20,149.30	1.9	37,000.00	10	41500	10.7	39024	10.7	43,073.00	10.7	13562.0	10.7
<b>Doleritic basalt, cub. m</b>							4562	8.2	9,384.00	8.2	9690.0	8.2
<b>Dolerite, m</b>					135	76.7	420	23.6	487.7	24.7	175.0	77.0
<b>Tufa, cub. m</b>	37,218.50	59.9	1,005,647.50	9.1	154735.5	32.7	115820.2	22.8	118,864.60	17.7	122503.4	20.7
<b>Felsitic Tufa, cub. m</b>					22823.4	-	5475.4	63.3	4,271.50	60.1	3340.0	60.0

<b>Felsite, cub. m</b>	1,145.90	77.8	12,072.10	35.6	14499.4	26.5	12844	13.8	11,466.00	13.8	13852.0	13.8
<b>Marble, cub. m</b>	699.3	82.4	2,747.20	51.7	468.9	89.5	330.4	87.1	531	83.4	83.0	90.0
<b>Travertine, cub. m</b>	758.2	6.4	28,338.20	18.1	38742	19.5	44375.2	19.8	45,578.60	23.8	55403.6	11.8
<b>Pearlite, cub. m</b>			28,712.00	2	129700	19	84142	18.7	74,200.00	19	74627.0	19.0
<b>Diatomite, cub. m</b>			17,699.50	0.4	39095	-			13,348.00	4.8	12546.0	5.7
<b>Granodiorite, cub. m</b>					12250	46.7	24434	46.7	37,256.00	46.7	30698.0	46.7
<b>Sand, cub. m</b>	28,011.00	-	18,668.00	1	58528	0.7	76950	7	106,415.00	6.7	91267.0	4.3
<b>Sand-gravel mixture, cub. m</b>	139,837.00	2.5	90,683.80	2.3	107023.5	8.2	126143	7.5	156,169.00	5.9	130339.7	7.9
<b>Quartz sand, cub. m</b>							9145	16.7	1,481.00	25.6	1879.0	14.6
<b>Boulder of sand and gravel, cub. m</b>					64010	11.2	100769.7	12.5	27,014.70	12.9	6737.2	12.9
<b>Sandy limestone, cub. m</b>							150	60	473.2	82.9	394.0	67.3
<b>Sandy Tufa, cub. m</b>			258.1	78.2			1539.1	39.8	2,146.40	33.9	2672.9	49.0
<b>Detritus, cub. m</b>			26,595.00	8	32179	9.3	49481	9	26,428.00	9	27068.0	9.0
<b>Lithoidal pumice, cub. m</b>			131,015.00	8.1	142462	14.3	120589	12.2	115,040.00	9.9	64293.0	11.7
<b>Clay, cub. m</b>	127,154.20	2.7	81,789.90	0	127988.8	0	105401	1.4	106,750.00	1.7	115893.0	1.2
<b>Gypsiferous clay, cub. m</b>	40,670.90	7.3	56,227.10	16.2	59088.7	27	38993.9	21.5	38,939.10	17.8	30006.5	18.9
<b>Limestone, cub. m</b>	254,125.20	3.6	288,229.20	0.5	397437.3	0.1	440158.4	4.5	358,297.00	2.4	361039.0	2.3
<b>Crystalline limestone, t</b>							2376.9	16.6	2,118.40	16.6	3774.0	16.7
<b>Scoria, cub. m</b>	4.3	20.4	10,859.60	0,0	17105.3	24.9	14365	-	18,117.00	0.2	26863.0	8.6
<b>Andesite dacite, cub. m</b>					16946	11.8	31850	10.7	33,892.00	8.6	-	-
<b>Monzonite, cub. m</b>					61	0.8	158.4	1	279	0.7	45.0	2.2

**Table 1.33. Volumes of exported and imported minerals  
(according to the summary information of the State Revenue Committee under the RA Government), tons**

	2002		2005		2008		2009		2010		2011	
	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
<b>Copper ore, concentrate</b>	55,279.9	-	34,078.5	-	67,715.2	-	81,401.9	-	115,964.3	40.1	118,332.5	0.04
<b>Zinc ore, concentrate</b>	2,330.4	-	6,027.1	-	7,554.5	-	8,971.0	-	15,895.5	-	14,888.0	0.01
<b>Molybdenum ore, concentrate</b>	-	-	778.0	907.3	783.1	501.1	1,192.6	53.9	300.0	160.5	860.0	136.4
<b>Oil and oil products (petrol, black oil, oil, diesel fuel, engine and other oils)</b>	0.3	327,414.0	201.4	359,493.5	-	399,543.0	571.0	344,487.4	127.8	377,686.1	97.1	357,306.1
<b>Natural and liquid gas</b>	-	24,749.5	10,762.4	1,199,510.1	22,989.1	1,587,344.5	22,286.1	1,226,743.7	51,703.4	1,295,882.5	55,807.7	1,504,699.6
<b>Bituminous coal</b>	-	18.10	1.5	1,371.3	-	2,507.8	0	372.5	-	2,324.1	-	3,012.9
<b>Salt - of all types</b>	2,795.0	1,015.7	3,566.3	1,747.4	4,948.1	3,470.0	3,853.1	3,642.1	3,213.1	3,621.9	5,623.0	3,226.4
<b>Natural sand - of all types</b>	1,852.2	229.1	-	7,667.7	13.4	27,910.6	24.4	27,917.2	0.3	32,897.7	0.9	33,927.6
<b>Marble, Tufa, limestone, travertine</b>	730.5	486.7	435.9	144.3	914.1	330.1	365.4	297.1	3,190.4	152.2	2,622.0	217.2
<b>Granite, basalt, porphyry, sandstone</b>	265.3	742.1	1,139.3	574.7	4,648.2	1,273.9	4,432.4	783.8	5,670.8	781.5	6,117.5	1,738.4
<b>Detritus, polished quarry tile, chipping</b>	1,625.0	1,432.7	971.0	65.2	23,960.0	2,356.7	5,825.4	2,200.0	3,339.1	3,826.7	2,691.4	5,167.6

**Table 1.34. Value of gross agricultural output and agricultural output volume indices, 2002-2011**

Indicator	Years									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
<b>Gross agricultural product, billion AMD</b>	377.6	410.1	504.1	493.0	555.9	633.9	628.1	552.1	636.7	825.2
<b>plant-growing</b>	226.6	228.7	283.9	288.0	356.2	429.9	405.9	346.7	392.7	450*
<b>animal husbandry</b>	151.0	181.4	220.2	205.0	199.7	204.0	222.2	205.4	244.0	375.2*
<b>Agricultural output volume index, %</b>	104.4	104.3	114.5	111.2	100.4	109.6	101.3	99.5	86.4	114.1

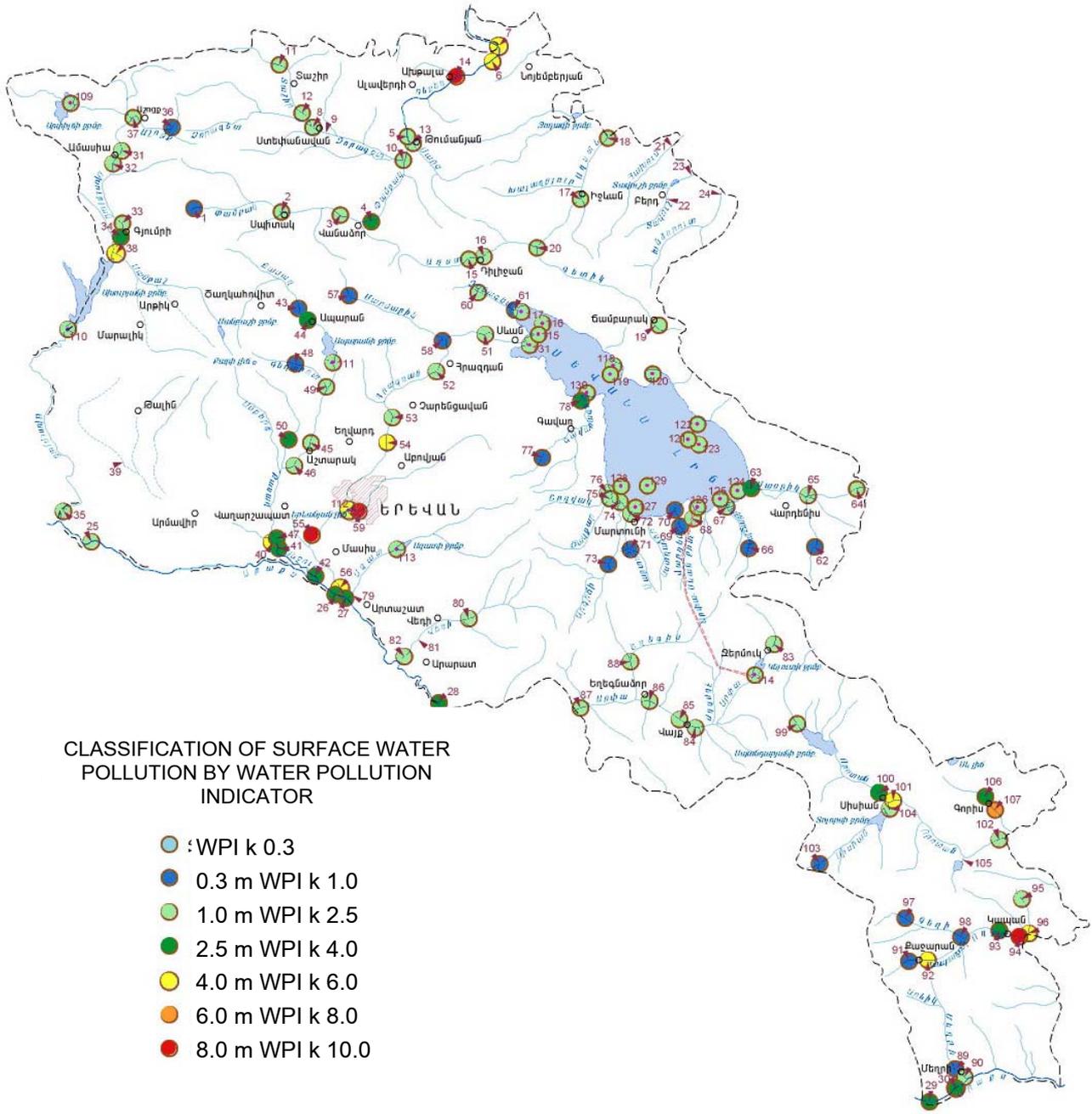
\* Preliminary data.

**Table 1.35. Production of main types of agricultural output, 2002-2011**

Type of output	Years									
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*
<b>Grains, thousand tons</b>	415.5	310.0	456.9	396.2	212.5	452.5	415.4	374.9	326.4	446.9
<b>Potato, thousand tons</b>	374.3	507.5	576.4	564.2	539.5	583.9	648.6	593.6	482.0	548.5
<b>Vegetables, thousand tons</b>	466.0	569.4	600.8	663.8	780.0	845.3	825.3	819.8	707.6	771.5
<b>Water-melons, thousand tons</b>	89.7	115.4	112.9	117.8	134.9	206.3	182.2	216.1	132.5	179.6
<b>Fruit and berries, thousand tons</b>	82.6	103.1	113.7	315.6	286.0	260.2	317.8	332.2	128.7	234.6
<b>Grapes, thousand tons</b>	104.0	81.6	148.9	164.4	201.4	218.9	185.8	208.6	222.9	229.1
<b>Meat (slaughter weight), thousand tons</b>	89.0	92.0	94.6	99.1	117.1	122.2	125.9	126.2	124.3	128.0
<b>Milk, thousand tons</b>	489.5	513.7	555.2	594.6	620.0	641.2	661.9	615.7	600.9	611.7
<b>Eggs, million pieces</b>	477.7	502.2	563.0	518.2	463.7	525.4	576.1	630.1	702.2	667.0

\* Preliminary data.

**Graphic 2.1. The Republic of Armenia surface water quality monitoring network and levels of surface water pollution in 2010, by complex indicator for the assessment of BOD<sub>5</sub> (Biological Oxygen Demand), dissolved oxygen, nitrite, ammonium ions, pollution with vanadium and copper.**



**Table 2.1. Content of several monitored pollutants in the lower surface layer of atmospheric air in Yerevan and Alaverdi cities, average annual concentration, mg/cub m**

		<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Dust	Yerevan	0.29	0.17	0.19	0.12	0.11	0.31
	Alaverdi	0.17	0.15	0.14	0.12	0.11	0.11
Sulfur dioxide, <b>SO<sub>2</sub></b>	Yerevan	0.09	0.05	0.05	0.04	0.04	0.03
	Alaverdi	0.58	0.59	0.59	0.53	0.18	0.19
Nitrogen dioxide, <b>NO<sub>2</sub></b>	Yerevan	0.116	0.112	0.07	0.08	0.1	0.11
	Alaverdi	0.05	0.06	0.07	0.06	0.02	0.014
Nitrogen monoxide, <b>NO</b>	Yerevan	0.06	0.06	0.04	0.03	0.07	0.07
	Alaverdi	0.03	0.04	0.06	0.05	0.03	0.03

**List of laws adopted in 2002-2012 in the Republic of Armenia in line with Sustainable development**

<b>Title of the Law</b>	<b>Year adopted</b>
<b>Social and economic spheres</b>	
Law of the Republic of Armenia on the Regulatory Body for Public Services	2003
Law of the Republic of Armenia on Minimum Consumer Basket and Minimum Consumer Budget	2004
The Republic of Armenia Family Code	2004
Law of the Republic of Armenia on State Benefits	
Law of the Republic of Armenia on Employment and Social Protection in Case of Unemployment	2005
Law of the Republic of Armenia on Electronic Communication	2005
Law of the Republic of Armenia on Local Self-Government in the City of Yerevan	2008
Law of the Republic of Armenia on Public-Private Partnership	2009
Law of the Republic of Armenia on Licensing Payments	2011
<b>Political sphere</b>	
Law of the Republic of Armenia on Political Parties	2002
Law of the Republic of Armenia on the Mass Media	2003
Law of the Republic of Armenia on Freedom of Information	2003
Law of the Republic of Armenia on the Human Rights Defender	
Law of the Republic of Armenia on the Advocate's Service	2011
Law of the Republic of Armenia on the Academy of Justice of the Republic of Armenia	2011
<b>Environment</b>	
The Republic of Armenia Water Code	2002
Law of the Republic of Armenia on Seismic Protection	2002
Law of the Republic of Armenia on Concession of Subsoil for Surveying and Mining for the Purpose of Exploiting Useful Ores	2002
Law of the Republic of Armenia on Amending and Supplementing the Code on Administrative Violations (the section on nature protection and use of natural resources)	2002
Law of the Republic of Armenia on Wastes	2004
The Republic of Armenia Forest Code	2005
Law of the Republic of Armenia on Environmental Expertise	2005
Law of the Republic of Armenia on Compensation Tariffs for the Damage Caused to Flora and Fauna due to Environmental Violations	2005
Law of the Republic of Armenia on Fundamentals of National Water Policy	2005
Law of the Republic of Armenia on Specially Protected Areas (a law with the same title was first adopted in 1991)	2006
Law of the Republic of Armenia on Substances Depleting the Ozone Layer	2006
Law of the Republic of Armenia on National Water Program of the Republic of Armenia	2006
Law of the Republic of Armenia on Rates of Environmental Charge (a law with the same title was first adopted in 2000)	2006
Law of the Republic of Armenia Law on Hunting and Hunting Enterprises Management	2007
Law of the Republic of Armenia on the Code on Underground Resources	2011
<b>Agriculture</b>	
Law of the Republic of Armenia on Organic Agriculture	2008
<b>Urban development</b>	
Law of the Republic of Armenia on Urban Development 1998 (Revised on June 23, 2011 based on HO-226-N)	
Law of the Republic of Armenia on Management of Multi-Apartment Buildings	2002
Law of the Republic of Armenia on Condominiums	2002
<b>Education and science</b>	
Law of the Republic of Armenia on Pre-school Education	2004
Law of the Republic of Armenia on Higher and Postgraduate Professional Education	2004

Law of the Republic of Armenia on Primary Vocational (Handicraft) and Secondary Vocational Education	2005
Law of the Republic of Armenia on General Education	2009
<b>Energy</b>	
Law of the Republic of Armenia on Energy Conservation and Renewable Energy	2004
Law of the Republic of Armenia on Construction of New Nuclear Energy Bloc(s) in the Republic of Armenia	2009
<b>Human rights sphere</b>	
Law of the Republic of Armenia on Human Rights Defender	2003
Law of the Republic of Armenia on the Profession of Advocate	2011
Law of the Republic of Armenia on the Academy of Justice of the Republic of Armenia	2011
<b>Culture</b>	
Law of the Republic of Armenia on the Fundamentals of Cultural Legislation	2002
Law of the Republic of Armenia on Immovable Monuments of History and Culture Considered State Ownership of RA and Not Subject to Alienation	2003
Law of the Republic of Armenia on Archives Activity	2004
Law of the Republic of Armenia on Honorary Titles of the Republic of Armenia	2004
Law of the Republic of Armenia on Export and Import of Cultural Values	2004
Law of the Republic of Armenia on Copyright and Related Rights	2006
Law of the Republic of Armenia on Intangible Cultural Heritage	2009

### **Legislation regulating the activities of political parties**

Law of the Republic of Armenia on Political Parties (15.11.2002)  
The Republic of Armenia Civil Code (01.01.1999)  
Law of the Republic of Armenia on Entry into Force of the RA Civil Code (06.08.1998)  
Law of the Republic of Armenia on State Registration of Legal Entities (18.08.2001)  
Law of the Republic of Armenia on Fundamentals of Administrative Action and Administrative Proceedings (01.01.2005)  
Decree of the Republic of Armenia Government on the Acknowledgement of Authorized Body (05.02.2004, Decree No. 56-N)  
RA Minister of Justice Order No. 39-N, dated 12.05.2005, on Approving the Procedure for Presenting Financial Statements by Political Parties to the Ministry of Justice of the Republic of Armenia  
Decision of the RA Constitutional Court, dated 22.12.2006, on the Case Concerning the Determination of the Issue Regarding the Conformity of Article 31 Part 2 Points 2 and 3 of the RA "Law on Political Parties" with the Constitution of the Republic of Armenia  
RA Minister of Justice Order No. 31-N, dated 01.04.2011, on Repealing the RA Minister of Justice Order No. 164-N, dated April 25, 2003, on Regulating the Process of State Registration of Legal Entities.  
On 03.07.2002, 04.12.2002, 25.12.2003, 08.12.2004, 09.04.2007, and 14.04.2011 the Law of the Republic of Armenia on Political Parties was amended and supplemented; however, these resulted in no major reform.

### **Legislation regulating activities of civil society organizations**

Law of the Republic of Armenia on Non Governmental Organizations - 27.12.2001  
Law of the Republic of Armenia on Foundations - 26.12.2002  
The Republic of Armenia Civil Code - 01.01.1999  
Law of the Republic of Armenia on Charity; under the Law, projects implemented by organizations, rather than organizations *per se*, are proclaimed charitable.  
Law of the Republic of Armenia on Putting the Civil Code of the Republic of Armenia into Effect - 06.08.1998  
Law of the Republic of Armenia on State Registration of Legal Entities - 08.08.2001  
Law of the Republic of Armenia on Administration and Administrative Proceedings - 01.01.2005  
RA Minister of Justice Order No. 31-N, dated 01.04.2011, on Repealing the RA Minister of Justice Order No. 164-N, dated April 25, 2003, on Regulating the Process of State Registration of Legal Entities.  
RA State Tax Administration Decision No. 03296/3-1, dated 28.11.1994, on Conducting Economic Activities and Receiving Tax Benefits by Non Governmental/Charitable, Religious Organizations  
RA Government Decree No. 489, dated 30.04.2002, Approving the Procedure on Using All Modifications and Translations of the Word "Armenia" in the Name of Non Governmental Organizations, and on Using the Name of a Deceased Renowned Person in Case of Absence of an Inheritor.  
On 04.12.2001, 14.12.2004, 09.04.2007, 14.04.2011, the Law of the Republic of Armenia on Non Governmental Organizations was amended and supplemented; however, these changes resulted in no major reform.  
Law of the Republic of Armenia on Trade Unions - 05.12.2000, 24.10.2006, 14.04.2011

## **Decisions of the RA Government**

### **Forestry**

Decision of the Government of the Republic of Armenia No. 1412-N, dated September 7, 2006, on the Procedure for Reforestation Cutting in Forests of Industrial Importance

Decision of the Government of the Republic of Armenia No. 897-N, dated June 22, 2006, on the Procedure for Improvement (Regeneration) and Sanitary Cuttings

Decision of the Government of the Republic of Armenia No. 583-N, dated May 4, 2006, on the Procedure for the Transfer of State-owned Forests to Community-based Organizations without Bidding for Trust Management

Decision of the Government of the Republic of Armenia No. 1545-N, dated November 29, 2007, on the Procedure for Forest Utilization and Preservation in Forests of Industrial Importance

Decision of the Government of the Republic of Armenia No. 1316-N, dated November 8, 2007, on the Procedure for Forest Utilization and Preservation in Forests of Defense Importance

Decision of the Government of the Republic of Armenia No. 806-N, dated May 24, 2007, on the Procedure for the Transfer of State Forests and Forest Lands for Utilization

Decision of the Government of the Republic of Armenia No. 1045-N, dated August 30, 2007, on the Procedure for the Implementation of Activities Not Related to Running of the Forest Economy and Forest Utilization in State Forest Lands

Decision of the Government of the Republic of Armenia No. 133-N, dated February 7, 2008, on the Procedure for the Maintenance of State Forest Cadastre, State Registration of Forests and Submission of Data

Decision of the Government of the Republic of Armenia No. 465-A, dated January 31, 2008, on Preservation, protection and Sustainable Use of Animals in Hunting and Hunting Grounds, and Specifying Authorized Bodies in the Sphere of Hunting (Wildlife) Management

Decision of the Government of the Republic of Armenia No. 907-N, dated August 14, 2008, on the Procedure for Utilization of Border Forests and Forest Lands and Forests and Forest Lands of Military Importance

Decision of the Government of the Republic of Armenia No. 668-N, dated June 3, 2010, on the Minimum Rent Price for Forests Defined as State Ownership

### **Energy**

Protocol Decision of the Government of the Republic of Armenia No. 24, dated June 23, 2005, on the Adoption of the Energy Sector Development Strategy in the Context of Economic Development in the Republic of Armenia

Decision of the Government of the Republic of Armenia No. 1296-N, dated November 1, 2007, on the Action Plan of the Ministry of Energy Developed Based on Provisions of the RA National Security Strategy

Protocol Decision of the Government of the Republic of Armenia No. 2, dated January 18, 2007, on the Republic of Armenia National Program on Energy Conservation and Renewable Energy

Protocol Decision of the Government of the Republic of Armenia No. 43, dated November 4, 2010, on the Action Plan of the RA Government for the Implementation of the Republic of Armenia National Program on Energy Conservation and Renewable Energy

Protocol Decision of the Government of the Republic of Armenia No. 35, dated September 8, 2011, on the Adoption of the Program for the Republic of Armenia Hydro Energy Sector Strategic Development

### **Culture**

Decision of the Government of the Republic of Armenia No. 841-N, dated June 02, 2002, on State Commissioned Restoration and Preservation of Historical and Cultural Monuments

Decision of the Government of the Republic of Armenia No. 438-N, dated April 20, 2002, on the Approval of the Procedure for State Registration, Exploration, Preservation, Affirmation, Renovation, Restoration and Utilization of Historical and Cultural Immobile Monuments

Decision of the Government of the Republic of Armenia No. 630-N, dated May 12, 2005, on the Approval of the Procedure and Standards for the Implementation of Expertise of Cultural Values in terms of Arts and Cultural Value

Decision of the Government of the Republic of Armenia No. 631-N, dated May 19, 2005, on Specifying the Procedure for and Standards of Voluntary Registration of Non-State Property Cultural Values in the List of Preservation of Cultural Values

Decision of the Government of the Republic of Armenia No. 1526-N, October 26, 2006, on Displacement of Historical and Cultural Immovable Monuments

Decision of the Government of the Republic of Armenia No. 310-A, dated March 11, 2010, on the Approval the Standards of Composing the Lists of Non Material Cultural Values of the Republic of Armenia and the List of Non Material Cultural Heritage Values

Decision of the Government of the Republic of Armenia No. 173-N, September 03, 2010, on the Approval of the Procedure for Identification, Documentation, Preservation and Information Exchange of Non Material Cultural Values and the Sample Certificate for Non Material Cultural Values

Decision of the Government of the Republic of Armenia No. 36-N, dated January 20, 2011, on the Approval of Standards of Composing the Lists of Non Material Cultural Values Requiring Immediate Protection and the List of Non Material Cultural Heritage Values Composed Based on Those Standards

Decision of the Government of the Republic of Armenia No. 241-N, dated March 01, 2012, on the Approval of Standards for the Specification of Cultural Areas in the Republic of Armenia and the List of Cultural Areas

### **Urban Development**

Decision of the Government of the Republic of Armenia No. 2164-N, dated December 19, 2002, on the Approval of the Procedure for the Development, Expert Examination, Reconciliation, Approval, Modification and Monitoring of the Master Resettlement Plan of the Republic of Armenia

Decision of the Government of the Republic of Armenia No. 608-N, dated May 2, 2003, on the Approval of the Master Resettlement Plan of the Republic of Armenia

Decision of the Government of the Republic of Armenia No. 997-N, dated August 8, 2003, on the Approval of the Procedure for the Development, Expert Examination, Reconciliation, Approval and Modification of Territorial Layout Schemes and Designs

Decision of the Government of the Republic of Armenia No. 1787-N, dated December 11, 2006, on the Approval of the Territorial Layout Design for Lake Sevan Catchment Basin (Edited decision of the Government of the Republic of Armenia No. 143-N as of February 18, 2010)

Protocol Decision of the Government of the Republic of Armenia No. 36, dated November 3, 2011, on the Endorsement of the Concept for Regulation of Mechanisms for the Provision of Electronic Urban Development Permits and the Timetable of Activities Derived from Directions of the Introduction of the System

Decision of the Government of the Republic of Armenia No. 257-N, dated March 3, 2011, on Regulating the Procedures for the Implementation of Construction Activities in Construction Sites in the Republic of Armenia and on Making Amendments and Supplements to a Number of Legal Acts

Decision of the Government of the Republic of Armenia No. 711-N, dated May 6, 2010, on the Approval of the Procedure for Conducting Expert Examination of Urban Planning Documents (Edited Decision of the Government of the Republic of Armenia No. 257-N, dated March 3, 2011)

Decision of the Government of the Republic of Armenia No. 91, dated February 2, 2002, on the Approval of the Procedure for Construction Permits and Demolition Permits in the Republic of Armenia (Last amended by editing the Decision of the Republic of Armenia Government No 257-N, dated March 3, 2011)

Decision of the Government of the Republic of Armenia No. 660, dated October 28, 1998, on the Approval of the Procedure for Informing about Planned Shifts in Life Sustained Activities and Participation of the Representatives of the Public in the Hearings and Adoption on Decisions on Published Urban Development Plans and Designs (Edited Decision of the Government of the Republic of Armenia No 257-N, dated March 3, 2011)

Protocol Decision of the Government of the Republic of Armenia No. 43, dated November 3, 2011 on the Endorsement of the Concept for Regulation of Mechanisms for the Provision of Electronic Urban Development Permits in Communities of the Republic of Armenia and the Timetable of Activities Derived from Directions of the Introduction of the System

Decision of the Government of the Republic of Armenia No. 308-N, dated March 24, 2011, on the Approval of 2011-2012 list of activities for implementation of the Republic of Armenia Commitments deriving from the European Landscape Conventions”;

Protocol Decision of the Government of the Republic of Armenia No. 45, dated November 17, 2011, on the Endorsement of Directions for the Implementation of the Republic of Armenia National Landscape Policy

Decision of the Government of the Republic of Armenia No.164-N, dated February 16, 2012, on the Establishment of the Republic of Armenia Landscape Prize

Decision of the Government of the Republic of Armenia No. 177-N, dated March 3, 2011, on the Approval of the Zoning Plan for the Sites Designated to Building in the Central Area of Lake Sevan

Decision of the Government of the Republic of Armenia No. 1563-N, dated December 18, 2008

Protocol Decision of the Government of the Republic of Armenia No.17, dated May 6, 2010, on the Endorsement of the Concept on the System of Normative and Technical Urban Documentation

Protocol Decision of the Government of the Republic of Armenia No. 51, dated December 30, 2010, on the Approval of the Priority Activity Program for Harmonizing the Existing System of Normative and Technical Urban Documentation with the European Standards

Protocol Decision of the Government of the Republic of Armenia No.1, adopted on January 11, 2007, on the Endorsement of the Concept on Landslide Disaster Management in the Republic of Armenia

Protocol Decision of the Government of the Republic of Armenia No. 8, dated February 19, 2009, on the Endorsement of the Concept on Prevention of Stone Slides in the Territory of the Republic of Armenia

Protocol Decision of the Government of the Republic of Armenia No. 23, dated June 12, 2008, on the Endorsement of the Concept for Settlement of Residential Issues of Families Rendered Homeless due to the Earthquake in the Residential Sites in the Earthquake Zone

Decision of the Government of the Republic of Armenia No. 432, dated June 10, 1999, on the Approval of the Procedure for Providing Apartments Out of turn in the Residential Sites of the Earthquake Zone (amending the following Decisions of the Republic of Armenia Government: 17.05.01 No. 433, 15.04.02 No. 405, 21.11.02 No. 1935-N, 09.09.04 No. 1283-N, 11.09.08 No. 1024-N, 26.11.09 No. 1402-N, 06.11.08 No. 1288-N)

Decision of the Government of the Republic of Armenia No. 309-N, dated February 24, 2005, on the Approval of the Procedure for Granting Certificates for the Purchase of Apartments at the Expense of the Expenditure Plan for Provision of Residences as Envisaged by the Annual State Budget of the Republic of Armenia

Decision of the Government of the Republic of Armenia No. 1337-N, dated November 13, 2008, on the Approval of the Procedure for Registration of Families Rendered Homeless due to the Earthquake in the Rural Residential Sites of the Earthquake Zone and Prioritization of Provision of Residences Thereto

Protocol Decision of the Government of the Republic of Armenia No. 22, dated June 10, 2011, on the Endorsement of the Master Plan of Allocation of Landfills in Lake Sevan Basin

Protocol Decision of the Government of the Republic of Armenia No.38, dated September 29, 2011, on the Endorsement of the Five-year Program for the Improvement of the Management, Maintenance and Operation of the Multi-Unit Housing Fund in the Republic of Armenia

Decision of the Government of the Republic of Armenia No. 593-N, dated May 20, 2002, on Comprehensive Program for Reconstruction and Improvement of Secondary Schools in the Republic of Armenia

Protocol Decision of the Government of the Republic of Armenia No. 5, dated February 11, 2010, on the Approval of the Concept on Resolution of Issues Related to Fighting Arbitrary Construction in the Territory of the Republic of Armenia

## International conventions ratified by the Republic of Armenia

### Environmental sphere

Title of the Agreement	Entry into force for the Republic of Armenia
<b>GLOBAL CONVENTIONS</b>	
Convention on Wetlands of International Importance Especially as Waterfowl Habitatant (Ramsar, 1971)	1993
Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)	1993
UN Convention on Biological Diversity (Rio de Janeiro, 1992)	1993
- Cartagena Protocol (Montreal)	2004
UN Framework Convention on Climate Change (New York)	1994
- Kyoto Protocol (Kyoto)	2005
UN Convention on Combat Desertification (Paris)	1997
Convention for the Protection of the Ozone Layer (Vienna, 1985)	1999
- Protocol on Substances that Deplete the Ozone Layer (Montreal, 1987)	1999
- London amendments to the Montreal protocol	2003
- Copenhagen amendments to the Montreal protocol	2003
- Beijing amendments to the Montreal protocol	2009
- Montreal amendments to the Montreal protocol	2009
UN Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel, 1989)	1999
Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade (Rotterdam, 1998)	2003
Convention on Persistent Organic Pollutants (Stockholm, 2001)	2004
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Washington D.C., 1979)	2009
Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979)	2011
<b>REGIONAL CONVENTIONS</b>	
UNECE Convention on Long-Range Trans-boundary Air Pollution (Geneva, 1979)	1997
Protocol on Long-term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)	Is under ratification
UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991)	1997
- Protocol on Strategic Environmental Assessment (Kiev, 2003)	2011
UNECE Convention on Transboundary Effects of Industrial Accidents (Helsinki)	1997
UNECE Convention on Access to Information	2001
UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki)	
- Protocol on Water and Health (London)	Is under ratification
Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques (Geneva, 1976)	2002
European Landscape Convention (Florence, 2000)	2004
Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979)	2008

### Labor rights

Title of the Agreement	Year ratified by the Republic of Armenia
ILO Convention on Labour Inspection (in Industry and Trade)	2004
ILO Convention on Abolition of Forced Labour	2004
ILO Convention on Minimum Wage Fixing Convention	2004
European Convention for the Protection of Human Rights and Fundamental Freedoms	2004
ILO Convention on Protection of Workers' Claims (Employer's Insolvency)	2005
ILO Convention on Holidays with Pay (Revised)	2005
European Social Charter (Revised)	2004

### Social and economic sphere

Title of the Agreement	Year ratified by the Republic of Armenia
WHO Framework Convention on Tobacco Control	2004
<b>Fight against corruption sphere</b>	
Council of Europe Civil Law Convention on Corruption	2005
Criminal Law Convention on Corruption	2002
Additional Protocol to the Criminal Law Convention on Corruption	2005
United Nations Convention against Corruption	

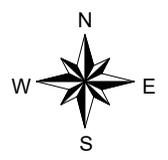
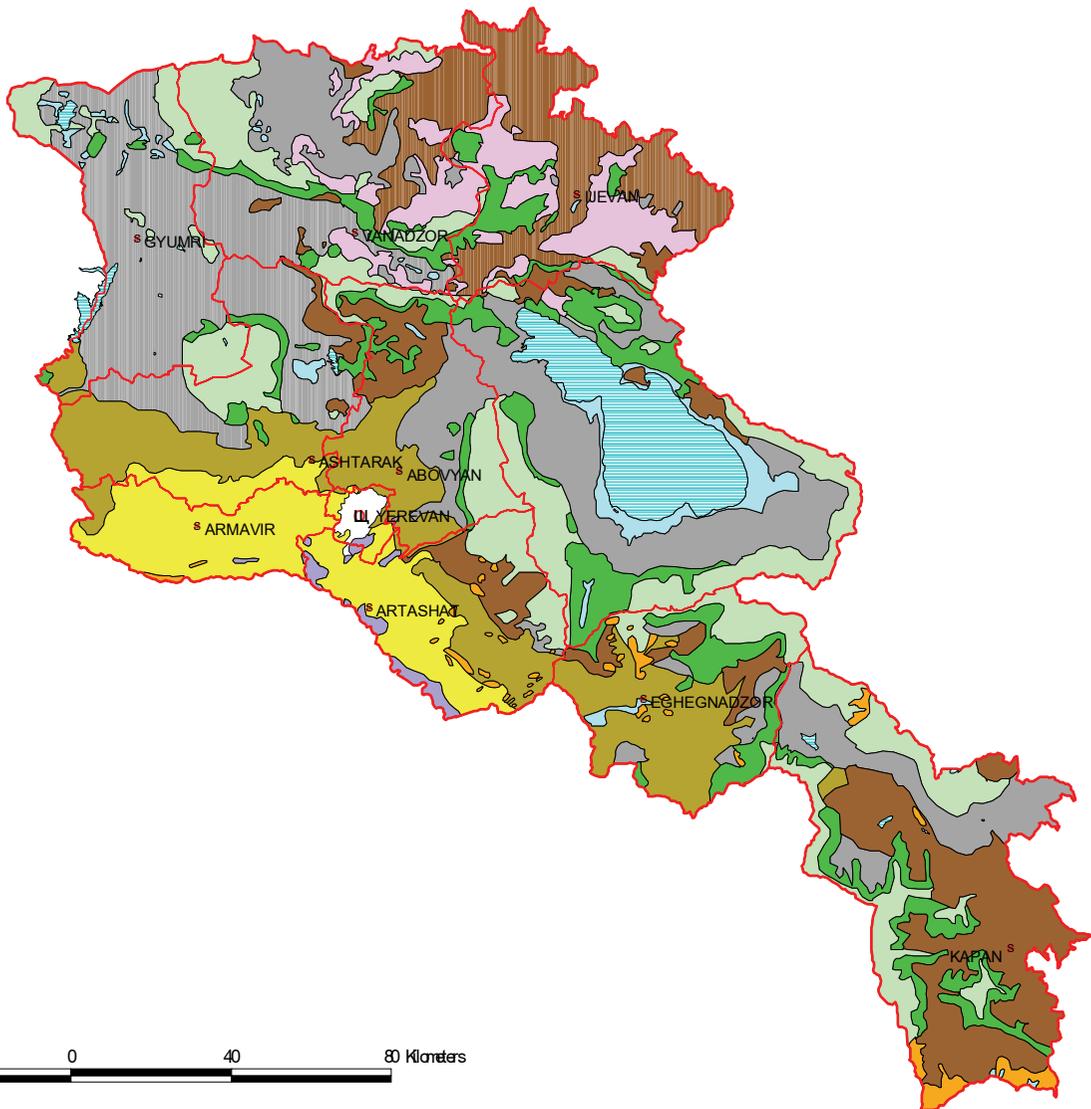
### Cultural sphere

Title of the Agreement	Year ratified by the Republic of Armenia
European Cultural Convention	2005
European Convention on the Protection of the Archaeological Heritage	2005
European Convention on Cinematographic Co-Production	2005
Convention for the Safeguarding of the Intangible Cultural Heritage	2006
Convention on the Protection and Promotion of the Diversity of Cultural Expressions	2006
Convention for the Protection of the Architectural Heritage of Europe	2008

Map of land cover of the Republic of Armenia territory

Legend

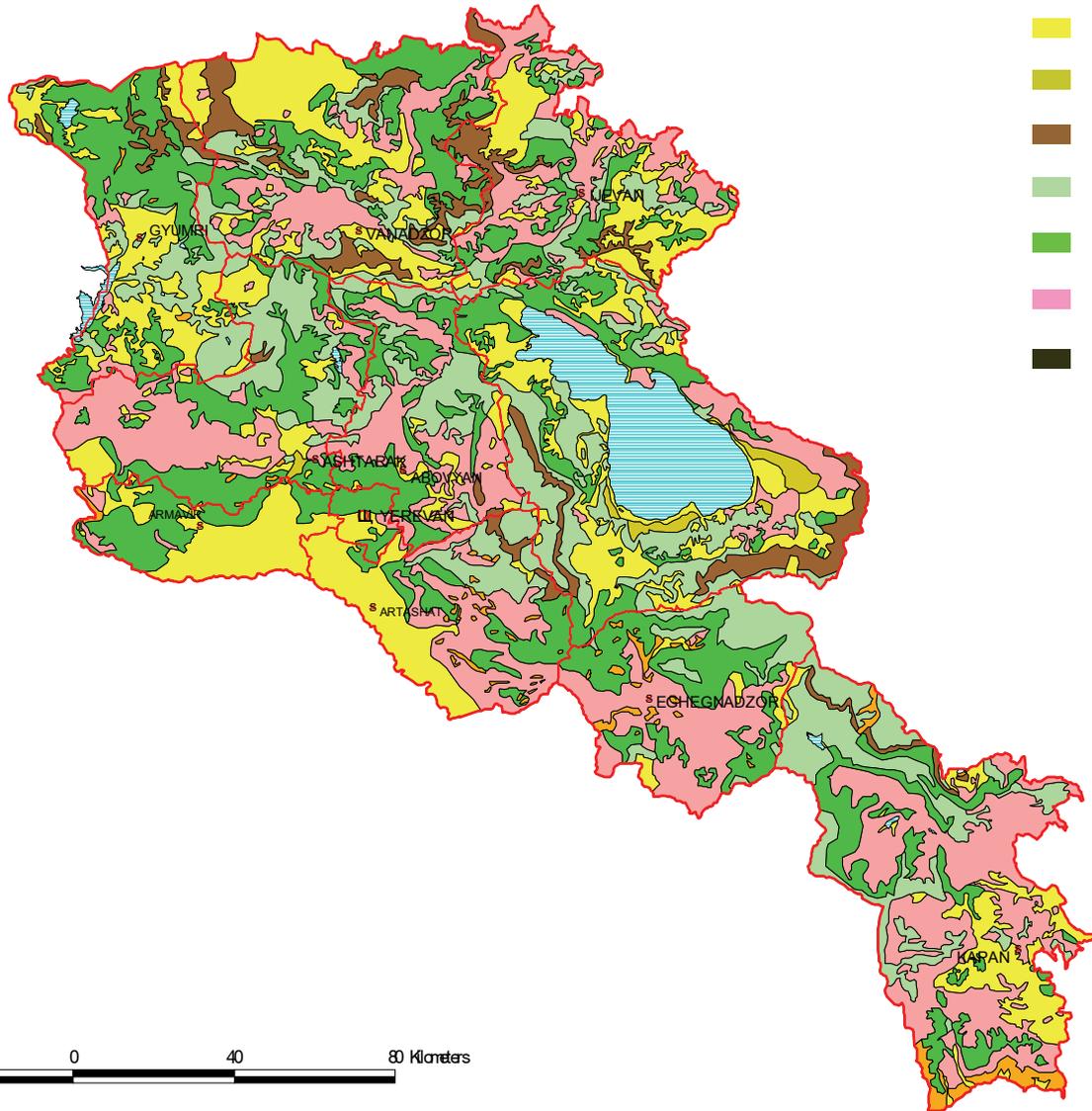
-  Semi-desert gray lands
-  Hydromorph saline-alkali lands
-  Forest gray lands
-  Black soil
-  River field hilly lands
-  Chestnut gray lands
-  Forest brown lands
-  Mountainous meadow lands
-  Mountainous meadow steppe lands
-  Mother bed outcrops and stony sub-straits



# Map of general landed areas in the Republic of Armenia

## Legend

- Up to 1% (landed areas)
- 1-10% (landed areas)
- 11-25% (landed areas)
- 26-45% (landed areas)
- 46-70% (landed areas)
- >70% (landed areas)
- Story sub-straits and mother bed outcrops



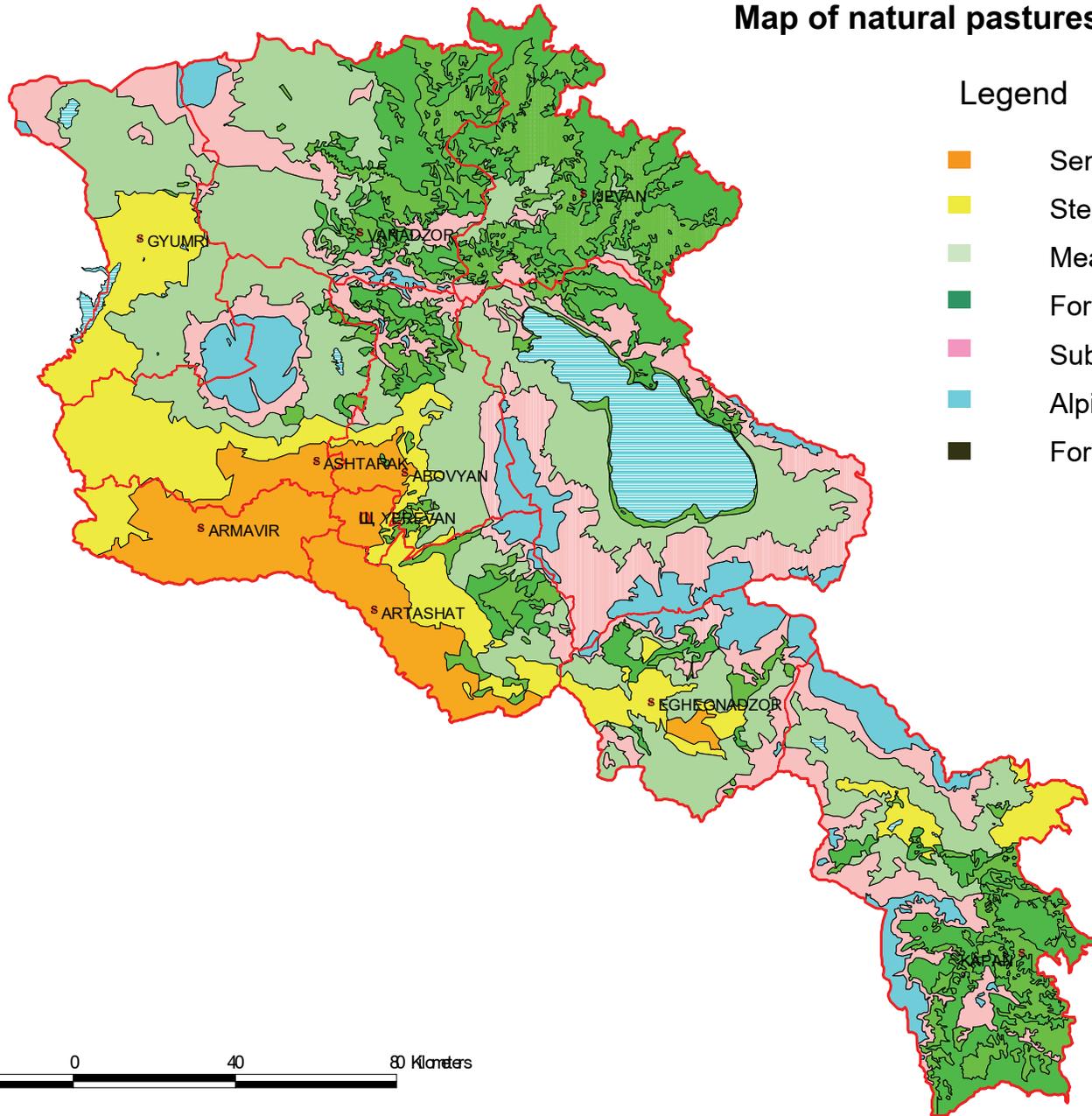
40 0 40 80 Kilometers



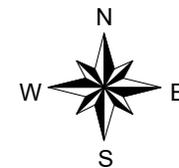
# Map of natural pastures of the Republic of Armenia territory

## Legend

-  Semi-desert
-  Steppe
-  Meadow steppe
-  Forest meadows
-  Sub-alpine
-  Alpine
-  Forests



40 0 40 80 Kilometers

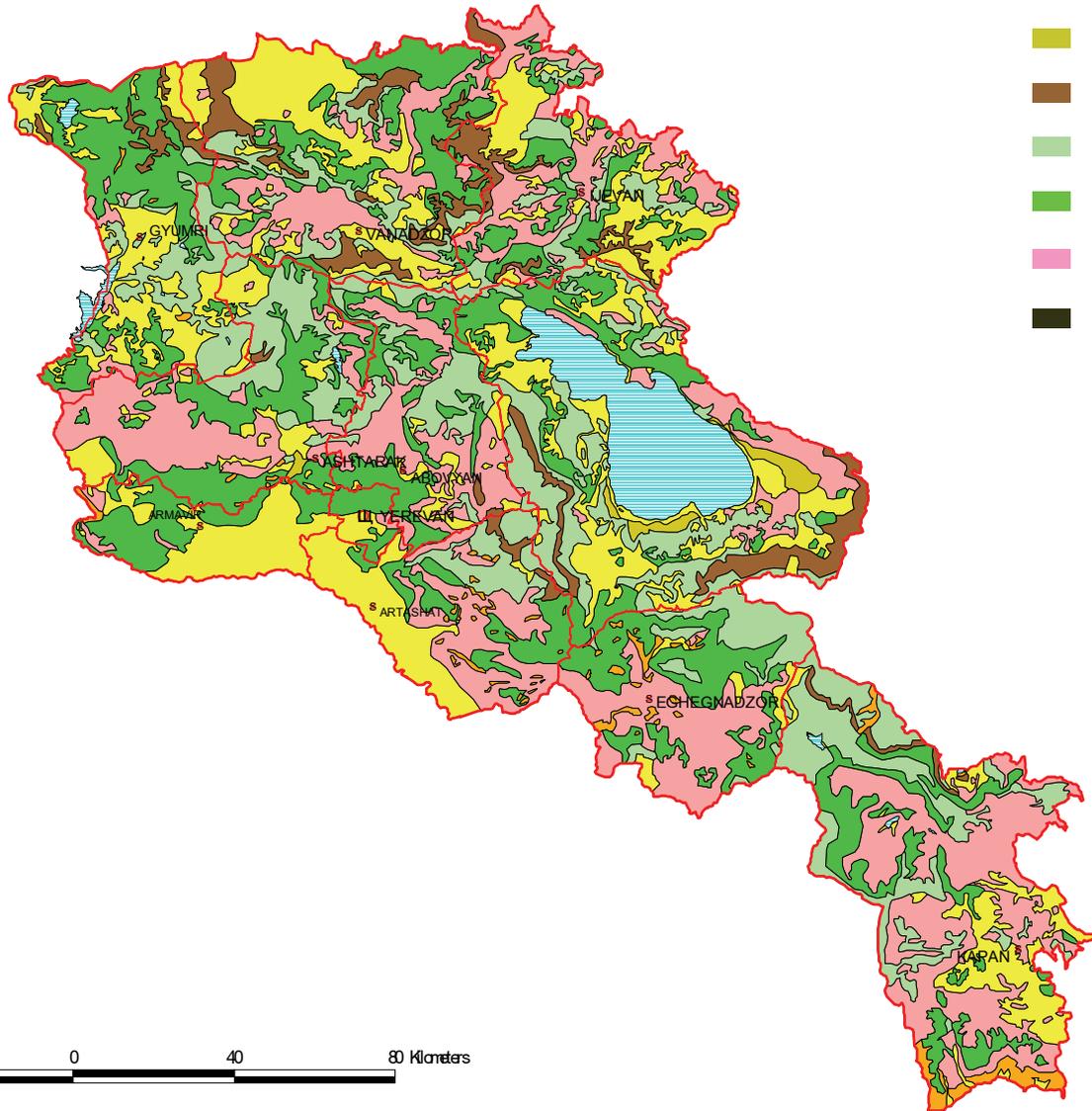




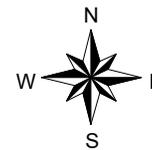
# Map of general landed areas in the Republic of Armenia

## Legend

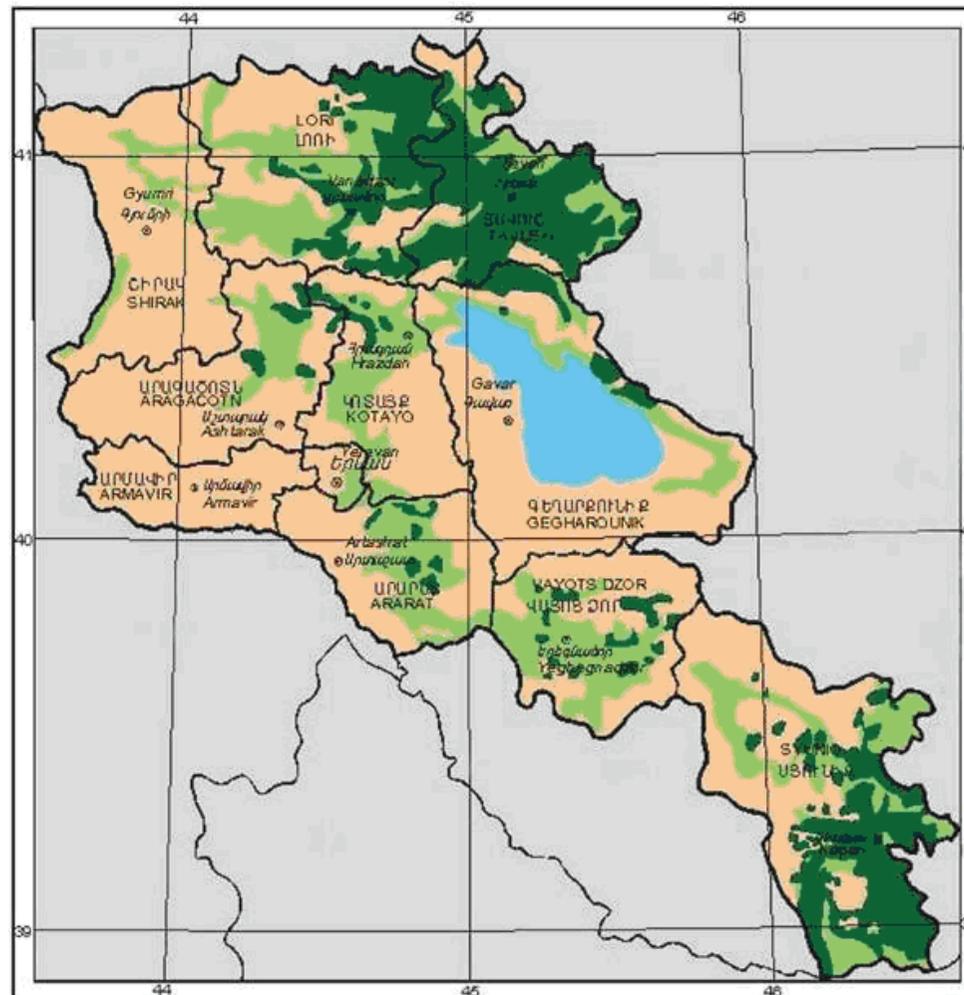
- Up to 1% (landed areas)
- 1-10% (landed areas)
- 11-25% (landed areas)
- 26-45% (landed areas)
- 46-70% (landed areas)
- >70% (landed areas)
- Story sub-straits and mother bed outcrops



40 0 40 80 Kilometers



ՀԱՅԱՍՏԱՆԻ ԱՆՏԱՌԱՊՈՍՎԱԾՈՒԹՅՈՒՆԸ  
 ՎԱՂ ԱՆԹՐՈՊՈԳԵՆ ՇՐՋԱՆՈՒՄ ԵՎ ՆԵՐԿԱՅՈՒՄ  
 Forest lands at the anthropogenic era and at present in Armenia



- Ամառապատ վաժնոյունը վաղ անթրոպոգենում / Early anthropogenic forest lands
- Ներկա անառապատվաժնոյունը / Nowday forest lands

# Basin Management Areas and Main River Basins of RA

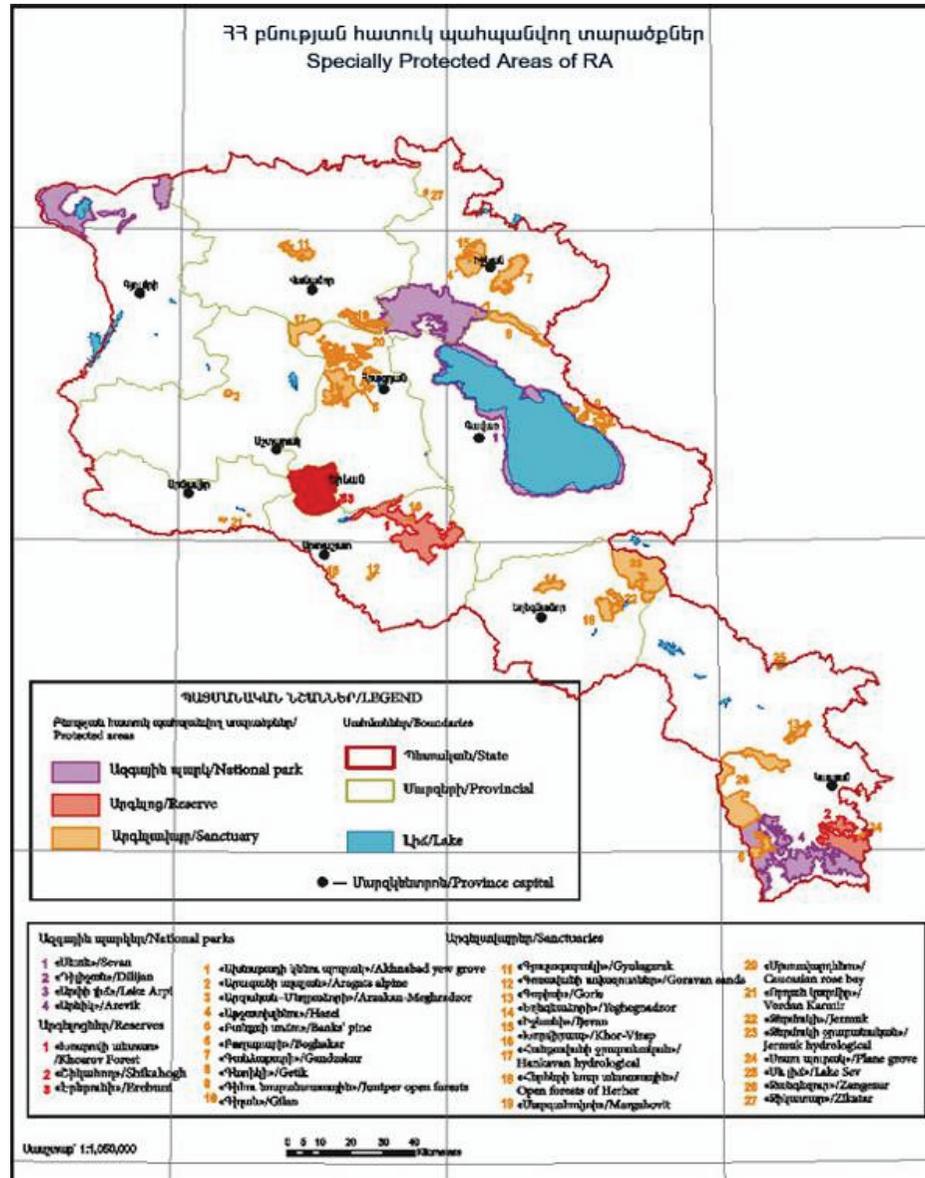
## ՀՀ ջրավազանային կառավարման տարածքները



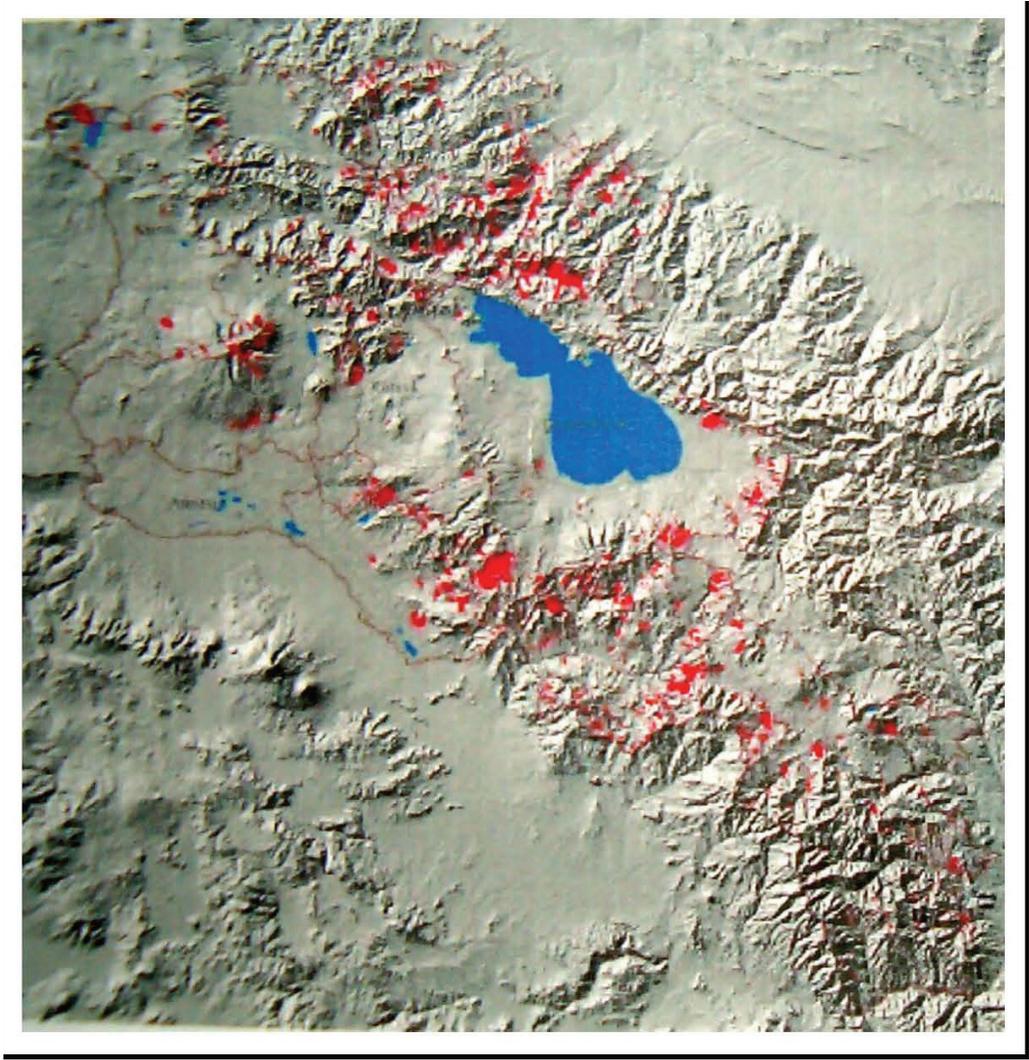
- Legend**
- State border
  - Cities
  - Major rivers
  - Major lakes and water reservoirs
- Territories under water basin management**
- Akhuryan
  - Araratyan
  - Hrazdan
  - Northern
  - Sevan
  - Southern

Ամփոփ տեղեկություններ ՀՀ ջրավազանային կառավարման տարածքների վերաբերյալ

Ջրավազանային կառավարման տարածք	Մակերես կմ²	Օգտագործելի ջրային ռեսուրսներ մլն մ³/տարի	Ռազմավարական ջրային պաշար մլն մ³/տարի	Ազգային ջրային պաշար մլն մ³/տարի
Հյուսիսային	7185	1897	59.2	63.3
Սևանի	6225	2068	500	34583.6
Հրազդանի	2565	733	229.3	254.1
Արարատյան	4256	1306	229	245.3
Ախուրյանի	5024	1602	564	608.2
Հարավային	4481	1443	90.5	101.1
Ընդամենը	29736	9049	1672	35855.6



**Map of Landsides Distribution in RA**



● **LANDSLIDE TERRITORIES**

## **The environmental factor in the system of assessment of sustainable development /A short memo/**

The purpose of this work is to present main points, calculation methodology and usage possibilities of the environmental factor in the system of assessment of sustainable development, which has been suggested by Republic of Armenia. The environmental factor will be presented on the site-event, organized by Republic of Armenia, in the framework of the UN World Summit on Sustainable Development.

It is stated in the “Agenda 21” that:

40.6 Countries at the national level and international governmental and non – governmental organizations at the international level should develop the concept of indicators of sustainable development in order to identify such indicators....

40.7. ... The organs and organizations of UN system, in coordination with other relevant international organizations, could provide recommendations for harmonized development of indicators at the national, regional levels, and for incorporation of a suitable set of these indicators in common, regularly updated and widely accessible reports and databases, for use at the international level, subject to national sovereignty considerations. [Agenda 21, par. 40 “Information for decision-making”, 1992].

For the past 20 years, different sets of indicators were developed both on the national level, and by the organs and organizations of UN system (about 140 indicators). Nevertheless, it is still early to speak about a harmonized set of SD indicators. At the same time, an Index of sustainable development, in the direction of which there are currently only fragmentary developments, is crucial for the adequate assessment of the progress towards SD, and especially for the purposes of country rankings.

In the past decade the research in this context took three main directions:

- Development of the Environmental sustainability index, Ecological footprint (FP), etc., without the attempts made to combine them harmoniously with the social-economic indicators, and a possible transition to the SD Index. Isolated experience in constructing an FP/HDI graphic, in our opinion, does not provide for an adequate, objective picture. (Positioning Armenia in the SD framework, conditioned to a large degree by the labor migration/immigration of the population, and, consequently, by the decrease in national resources utilization, can serve as an example).

- Inclusion of one or two environmental indicators (principally the CO<sub>2</sub> emission indicator) into the Human Development Index for the purposes of obtaining an SD Index, which is, in our view, absolutely misleading.

- Development of the SD Index for the business purposes, with an emphasis on the corporate social responsibility of the companies, which is interesting and important in itself, but is not generally applicable to the case of the countries.

Yet in 1995, the “For sustainable human development” Association, with the assistance of the UNDP Armenia office, gathered a group of specialists in different fields, who have jointly developed their version of the SD Index. A technique for measuring the integral Environmental Index (Pe, consisting of 21 indicators) was developed, using the same ideology and methodology, as the one used in the Human development index, so that the data could be cross-compared, and that Pe could be incorporated into HDI, in order to formulate an integral Sustainable development index.

UNDP-Armenia presented our methodology to the UN Headquarters in New York. The remark was made there that “Armenia has made a breakthrough in the sustainable development theory”, but that they cannot recommend the methodology for the use in the other countries, due to the fact that it is based on a mathematical apparatus, which is too complex. We had to agree, since the calculations were indeed very complex.

During those years, our National statistics service has periodically calculated the Sustainable development index for the RA with the use of our methodology (once it was calculated also for Georgia). Furthermore, our methodology is presented in some detail in the “Five years of Human Development” report, published in 1997, and UNDP received a certificate “For the creative approach towards the indicators”. In 1997 this work was presented during the “Rio+5” National conference (in Yerevan), and the European “Rio+5” conference (in Minsk). The methodology was published as well in the country assessment reports on human development in 1996 (in brief), in

2006 (in more detail and with the results of the calculations for the RA for a number of years), and in the National Report on "Rio+10" assessment process in 2002.

Currently steps are made in the following directions:

Research and generalization of the more or less similar methodologies developed in the course of the years by the specialists from other countries, and international organizations. Strengthening the links between the indicators we use with the MDG, which are planned to be transformed into the SD goals.

Simplification of the mathematical apparatus of our methodology for calculation of the Environmental index, so that other countries are able to use it with more ease. Development of the named methodology taking into consideration the modern realities.

Strengthening of the social component of the SD Index - we came to a conclusion that it is necessary to take as the basis not just the HDI, but the inequality-adjusted HDI, presented in the Human Development Report 2011.

Strengthening of the institutional component of the SD Index. The following indicators are proposed as the elements of the Institutional component:

- Existence of the permanent National Council on Sustainable Development (in 3 dimensions: does not exist; exists, but does not function; functions on a permanent basis).
- Representation of the main society groups in the NSSD (yes/no).
- Existence of the National Strategy on Sustainable Development (in 3 dimensions: does not exist; is developed, but not implemented; is adopted and implemented).
- Existence of the local SD councils (% of the towns, where LCSDs exist, and which move towards sustainability).
- Existence of the implemented local agenda 21 (yes/no).
- Existence of the National Program in the framework of "Education for sustainable development" (in 3 dimensions: does not exist; is developed, but not implemented; is adopted and implemented, ensuring the inclusion of the SD related subjects into the formal and informal education systems).

We believe that the Sustainable Development Index has to be dynamic in nature: have the above stated base formula, and a number of versions of the base SDI, developed by aggregating it with other, additional indicators, in accordance with the future developments and possible challenges.

Currently it is possible to develop such versions by means of aggregation with the inclusion of:

- Democracy index,
- Corruption index,
- Poverty index,
- Demography index, including the indicators of the natural dynamics and migration of the population.

We propose to present our version of the SD Index during the site-event, and invite the corresponding authors to present their developments.

The main strategic goal of the site-event is to find a consensus for maintaining and developing the calculation methodology of the Sustainable Development Index.

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We believe that the environmental factor is characterized by the two components: the state of environment in the region, and the environmental indicator of the human activity. At the same time, the environmental factor index is calculated as the arithmetic average or the geometric mean of those two indicators. It is natural to consider the first component as the function of the second, however, it needs to be noted that it largely depends as well on a number of other factors, and in particular the climatic, geographic, hydrogeologic, etc.

The calculation of the integral index characterizing the environmental factor (Ie) is implemented with the use of the methodology for calculating the human development index, recommended and used in practice by the UN. For each of its parts and components, the index will be calculated as the ratio of the difference between its factual and the minimum value observed in the world, and the maximum and the minimum values observed in the world. Thus:

$$\text{Index} = \frac{\text{Factual value} - \text{minimum value}}{\text{Maximum value} - \text{minimum value}};$$

Using the same logic and methodology, we propose to calculate the Human sustainable development index aggregated with the environmental factor in the following way:

$$HDI_s = \sqrt[4]{I_1 * I_2 * I_3 * I_e}$$

Where:  $I_1$  - index of the life expectancy,

$I_2$  - education index,

$I_3$  - adjusted GDP index,

$I_e$  - environmental factor index.

The environmental factor index, its characteristics and the calculation methodology is summarized in the table below:

Name of the index, indicator	Characteristics of the index, indicator	Components of the index, their characteristics and the data sources	Calculation description	Threshold limit values of the indicator, component	Notes
1	2	3	4	5	6
A. Index of the state of environment in the region: Calculated as an arithmetic average of the A1, A2, A3, A4 components					
A1 1. Indicator of the air basin conditions	The demand for the annual volume of air, necessary to bring the concentration of the air pollutants to the threshold limit values (TLV).	Annual controlled emission of pollutants in the given region (country), and their average daily concentration values. Data sources include statistical services and administrative registers (e.g. the environmental inspectorates)	Sum of the differences between the annual volumes of pollutants emission and their threshold limit values	Max - 10 bln. sq. m. Min - 200 mln sq. m.	The original version used the differentiated assessment of the excess over the threshold limit values. The indicator is taken with a negative sign.
A2 2. Indicator of the environmental state of the water resources	Grade ranking of the surface water quality (pollution)	Average annual concentration of the controlled pollutants in the surface waters. Data sources include administrative registers.	A quality grade is selected according to the average annual concentration of a given pollutant. The highest grade is taken as the base value.	Max - 5 points Min - 1 point	The ... table is taken as the system of assessment. The original version considered the concentration of the pollutants in excess of the normative values. The indicator is taken with a negative sign.

<p>A3 3. Indicator of the environmental state of the land resources</p>	<p>Share of land degradation in the total volume of the arable land and perennial crop plantations.</p>	<p>Total share of eroded, second time saline, leaching, decarbonized, waterlogged, wetland, and disturbed soils in the total volume of the arable land and perennial crop plantations. Data sources include administrative registers.</p>	<p>The ratio between the listed types of soils and the total volume of the arable land and perennial crop plantations.</p>	<p>Max - 80% Min - 0%</p>	<p>The original version used the total volume of agricultural lands in the denominator. The indicator is taken with a negative sign.</p>
<p>A4 4. State of biodiversity indicator</p>	<p>Total share of high-value crops, vertebrates, forest areas in danger of extinction, critically endangered, endangered, and vulnerable in percentage values of their total quantities.</p>	<p>Total share of the listed species in their total quantities in the country. Data sources include administrative registers, results of the corresponding monitoring and research activities.</p>	<p>When assessing the indicators for the animals, the changes in the number of migratory bird species are also considered with a 0.25 coefficient, taking into consideration the fact that in this case the changes are conditioned by the situation in 4 neighboring countries on average. For the forest areas, the share of their annual loss/removal in the total area is considered.</p>	<p>For the animals and crops: Max - 16% Min - 0%  For the forests: Max - 2% Min - 0%</p>	<p>The indicator is taken with a negative sign. A version which does not include the case of migratory birds is also proposed, taking into consideration the higher probability that the data is unavailable, as well as the lack of justification for using the 0.25 coefficient.</p>
<p>B. Environmental index of the human activity. Calculated as an arithmetic average of the B1, B2, B3, B4, B5, B6 components.</p>					
<p>B1 Greenhouse gas emissions indicator</p>	<p>CO<sub>2</sub> emissions per capita</p>	<p>Annual emissions of all greenhouse gases recalculated into CO<sub>2</sub>. Data sources include administrative registers.</p>	<p>The corresponding conversion factors, and the average annual population of the country are used for the calculation.</p>	<p>Max - 6000 tons/year/person  Max - 100 tons/year/person</p>	<p>If the result of the calculation will be with a negative sign, this will be an indirect indicator that the country has the selling quota. The original version proposed the use of the greenhouse gas emissions capturing and purification indicators. The indicator is taken with a negative sign.</p>

<p>B2 Water resource management indicator</p>	<p>Indicator of the sewage water mixing, and the accessibility of safe water</p>	<ul style="list-style-type: none"> <li>- indicator of the necessary quantities of clean water to bring the concentration of the pollutants in the receiving streams (surface water conduit) to the threshold limit values (TLV)</li> <li>- water utilization (water intake) index</li> <li>- indicator of the availability and accessibility of safe drinking water</li> </ul> <p>Data sources include administrative registers, household integrated surveys, and the results of other observations.</p>	<p>sub-indicators are calculated in the following way:</p> <ul style="list-style-type: none"> <li>- quantity, necessary for mixing (the ratio of the product of the integral coefficient of mixing and the sewage water volume to the volume, necessary for ensuring filling of the water conduit system to 95%)</li> <li>- ratio between the annual countrywide water intake and the reusable water resources under the country management.</li> <li>- is obtained from the aggregated household integrated surveys</li> </ul>	<p>Min - 0</p> <p>Max - 0.4 Min - 0.1</p> <p>Max - 1,0 Min - 0</p>	<p>The original version proposed the usage of per capita water intake, sewage water purification level, and safe water accessibility indicators. The indicator is taken with a negative sign.</p>
<p>B3 Waste management indicator</p>	<p>Indicator of the management of the waste arising from sanitary cleaning of the residential areas, and as a result of human activities (neutralization, disposal, utilization, burying)</p>	<p>The components are:</p> <ul style="list-style-type: none"> <li>- indicator of community sanitary cleaning and communal (municipal) waste management,</li> <li>- indicator of neutralization, disposal and utilization of the hazardous waste,</li> <li>- share of the waste not neutralized, recycled, disposed of, or utilized, in the total volume of waste.</li> </ul> <p>Data sources include administrative registers.</p>	<ul style="list-style-type: none"> <li>- shares of the quantities of municipal waste according to the reports of the organizations dealing with its management</li> <li>- share of the ultimately removed (disposed, neutralized, utilized) hazardous waste in their total volume,</li> <li>- share of waste not recycled, neutralized, disposed of, or utilized, in the total volume of waste (including non-hazardous waste).</li> </ul>	<p>For all cases:</p> <p>Max - 1.0 Min - 0</p>	<p>The original version disregarded the indicator of the "share of the ultimately removed (disposed, neutralized, utilized) hazardous waste in their total volume". The indicator is taken with a negative sign.</p>
<p>B4 Indicator of the efficient use of energy</p>	<p>Purchasing power parity (PPP) adjusted indicator of the energy use for producing \$1000 of the GDP.</p>	<p>The components are the energy use and the share of alternative energy sources in the total volumes.</p> <p>Data sources include statistical services and administrative registers.</p>	<p>It is calculated as the ratio of the energy use in the country recalculated into the oil equivalent, and the produced PPP adjusted GDP.</p>	<p>Max - 650 Min - 50</p>	<p>The indicator is taken with a negative sign.</p>

B5 Biodiversity protection indicator	Indicator of the management of special protected territories (national parks, state reserves, sanctuaries) for protection and use of biodiversity.	Data sources include administrative registers.	Share of the special protected territories in the total area of the country.	Max - 12% Min - 0%	The indicator is taken with a positive sign.
B6 Indicator of investments in environment	Annual volume of investments in the area of environmental protection.	Data sources include administrative registers.	It is calculated as the share of the annual volume of investments in the area of environmental protection in the country's GDP.	Max - 4% Min - 0%	The indicator is taken with a positive sign.

The original version also proposed the use of B7 indicator: harm caused to the special natural objects having minimally regional importance, as a result of human activities, with a coefficient of -0.1. However, it is not proposed in the new version due to the absence of justification for using its numeric value.

In the system of the integral assessment of sustainable development, apart from the above mentioned, the following environmental factors are proposed:

- indicator of vibrations and oscillations in the residential areas,
- indicator of the presence of green areas in the residential areas,
- indicator of the decrease in the stock of natural resources under the jurisdiction of the state,
- indicator of purely environmental scientific and technical developments and their implementation, etc.

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