









GEORGIA

NATIONAL WATER POLICY DIALOGUE ON INTEGRATED WATER RESOURCES MANAGEMENT



Results and lessons learnt from Georgian National Policy Dialogue on Integrated Water Resources Management under European Union Water Initiative

Tbilisi 2013

The report provides the overview of the process and results of the activities carried out in the framework of National Policy Dialogue (NPD) on IWRM in Georgia.

The review has been prepared based on generalization of materials and recommendations of the meetings of Steering Committee of the National Policy Dialogue. The leadership of the Steering Committee has been provided by Mr. George Zedginidze, Ms. Nino Sharashidze and Ms. Mariam Makarova. Mr. Rainer Enderlein, Mr. Bo Libert, Ms. Gulnara Roll, Ms. Elina Mirzoeva and Mr. Peep Mardiste have provided support from the UNECE while Ms. Tatiana Efimova has been supporting the NPD process from the OECD. Mr. George Dzamukashvili from the National Water Partnership of Georgia has been coordinating the work of national experts.

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LIST OF ABBREVIATIONS

BMU Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of

Germany

EC European Commission

ECBSea Environmental Collaboration for the Black Sea EECCA Eastern Europe, the Caucasus and Central Asia

EIA Environmental Impact Assessment ENVSEC Environment and Security Initiative

EU European Union

EU WFD European Union Water Framework Directive

EUWI European Union Water Initiative

FAO United National Food and Agriculture Organization

GEF Global Environment Facility
GWP Global Water Partnership

G-PAC Policy, Advocacy, and Civil Society Development in Georgia

GDP Gross Domestic Product

HPP Hydropower Plan

IPPC Integrated Pollution Prevention and Control IWRM Integrated Water Resources Management

LLC Limited Liability Company
MDG Millennium Development Goal
NATO North Atlantic Treaty Organization
NGO Nongovernmental organization

NPD National Policy Dialogue

OECD Organization for Economic Co-operation and Development
OSCE Organization for Security and Co-operation in Europe

SIDA Sweden International Development Agency

TACIS Technical Assistance to the Newly Independent States

UNDP United Nations Development Program

UNECE United Nations Economic Commission for Europe
USAID United States Agency for International Development

WHO World Health Organization

INTRODUCTION

Due to the ongoing association with the European Union, Georgia continues to work on modernizing legislation in many areas, including water legislation.

Principles of water policy can be derived from international conventions, like UNECE Water Convention or the relevant EU Directives, such as Water Framework Directive (WFD).

At the meeting of the EUWI Working Group for the EECCA countries (Ashgabat, December 4, 2008), representatives of Georgia confirmed the commitment of Georgian Government to the process of National Policy Dialogue on integrated water resources management in 2010-2012, and asked the European Commission and the UN Economic Commission for Europe to start preliminary actions as soon as possible. Ministry of Environment and Natural Resources of Georgia submitted an official request to launch National Policy Dialogue on IWRM by the letter of the Ministry of Environment and Natural Resources of Georgia to the UNECE on 28 October 2009. National Policy Dialogue in Georgia started in 2010.

Preparatory work for the National Policy Dialogue (NPD) on integrated water resources management (IWRM) started in November 2010. The objective of dialogue is to support the implementation of IWRM principles, including the river basin approach to water resources management at local, national and international levels in accordance with the principles of the UNECE Water Convention, the WHO/UNECE Protocol on Water and Health, the EU Water Framework Directive and other instruments of the UNECE and the European Union.

The results of the National Policy Dialogue in the field of IWRM in Georgia are presented in this report.

I. OVERVIEW OF THE WATER SECTOR IN GEORGIA

1. Quick Overview about Georgia

Georgia is a mountainous country with a complex mountain terrain, situated to the south of the Caucasus Range between the Black Sea and the Caspian Sea. Its total area is 69.7 thousand km². Population of Georgia is 4.6 million people, whereof urban population is 2.4 million. Georgia is characterized by a great variety of climatic zones ranging from subtropical to arid.



Graph 1. General map of Georgia

Georgia has over 26.000 rivers with total length of about 60.000 km. There are about 860 lakes and 43 water reservoirs in the country. Glaciers cover about 1% of the total surface of the country and accumulate about 23.8 km³ of water.

The rivers of Georgia mainly have features typical to mountain rivers: highly ranging gradients and slopes, temporary flood/mud water in small rivers and riverbeds, snow and rainfall and ground water feeding of the rivers, spring high waters. Rivers are mostly fed by the glaciers, atmospheric precipitation and ground waters. Water in the majority of the mountain rivers is fresh and of adequate quality for supply of potable water. The operational resource forecast of ground water in Georgia is estimated to be 17.2 billion m³.

Water demand by economic sector in Georgia is as follows:

- Potable water supply 500 million m³/year
- Industrial water supply 3100 million m³/year
- Irrigated agriculture 900 million m³/year

2. Main Sectors of Water Use

Industry and Energy

The collapse of the economy in the 1990s resulted in significant decrease of the impact of industry and energy sectors on the environment. There has been some growth in these sectors in more recent times.

The trend over the past years has been largely positive: industrial production doubled over the period from 2004 to 2007, while construction increased by a factor of 5 over the same period. Approximately half of the GDP generated by the industry sector is generated by food sector (including tobacco and beverages). Contribution from various industrial sectors has remained relatively constant over the recent years; however, this may be subject to changes in the medium term as a result of further attracting investment into the industrial sector.

Hydropower is the only domestic energy resource available in significant volumes in Georgia. The total hydropower potential in the country is estimated at 80 TWh, 27 TWh of which is considered to be economically viable.

Following the breakup of the Soviet Union and acquisition of independence, Georgia suffered severe energy crises. The country largely depended on imported electricity due to the deteriorated condition of its domestic energy infrastructure.

Since 2000, significant investments have been made in power generation and transmission and distribution networks. Consequently, from being a net importer, Georgia has become a net exporter of electricity. Total power generated in Georgia amounted to 10 TWh in 2010.

Currently, 51 hydropower plants (HPPs) are operational. Georgia plans to expand hydropower generation significantly in the near future. 36 more hydropower development projects are already in the process of planning throughout the country.

Development of hydropower is based on the Energy Policy, adopted in 2006, one of the objectives of which is effective utilization of national hydro resources to meet domestic energy demands at full extent. There is, however, an urgent need for nation-wide strategic planning of

hydropower resources in order to detect the most suitable rivers and to avoid construction in the areas of high natural or cultural value.

Agriculture

Agricultural land in Georgia constitutes about 3 mln ha, or 43% for the country, whereof 40% is suitable for arable farming, the remaining natural meadows and pastures - for grazing.

During the Soviet period, agriculture was a key sector of Georgia's economy, exporting vegetables, fruits and subtropical cultures to the Soviet Republics (G-PAC, 2010). Accordingly, the contribution of agriculture, including arable crops, livestock, forestry, hunting and fishing, to GDP, was high, 32% in 1990; while the share of agriculture in GDP surged in the early 1990s, this represented a relative increase due to worse situation in other sectors of the economy, as the total annual production value continued to decrease till the 2000s. Since 1994, the share of agriculture in GDP decreased, from 22% in 2000 to 9% in 2011.

The agricultural sector remains one of the most significant sources of income of the population of Georgia and one of the key contributing factors for poverty elimination in rural areas. Over 55% of the active labor force derives the most part of its income from the agricultural sector (GeoStat, 2010). For this reason, the government is now paying special attention to development of the agricultural sector.

Since the early 2000s, the Georgian government has invested in irrigation & drainage infrastructure rehabilitation programs. Total area suitable for irrigation is estimated at 725,000 ha (FAO Aquastat, 2012), whereof 500,000 ha was already used in early 1980s. Irrigation systems are largely deteriorated at present.

The main source of water for irrigation is river diversion. The Ministry of Agriculture aims to enhance irrigation areas from 25,500 ha to 200,000 ha in the coming 3-6 years.

The plan will refurbish primary and secondary canals, install efficient methods of irrigation systems, including drip irrigation.

The expansion of irrigated land area is estimated to double water consumptions compared with the current intake. It will have a significant impact on available water resources in Georgia as well as in downstream Azerbaijan, the more so that the temperature rises, increasing crop water demands in the already dryer part of the country, best suited for grain production. In addition, the planned expansion will be challenging because of problems with wind erosion, soil salinity and decline in soil nutrients due to historically poor agricultural practices, as well as potential impacts of water pollution.

Municipal Water Supply

Due to the poor technical state of the existing water supply system, access to safe drinking water is still a problem in almost all regions of Georgia.

At present, drinking water treatment facilities are often technically unfit, and lack adequate supplies of filter materials, installations and chemical reagents. While it was assessed that more than 60% of the water distribution infrastructure needed to be replaced, no major rehabilitation works were carried out in the period between 1987 and 2004.

Surveys, conducted between 2000 and 2002, proved that the quality of drinking water failed to meet state standards, causing threats of intestinal infection and epidemic outbreaks (ECBSea, 2009). Despite the relatively high coverage of the centralized water supply, varying from almost 100% in the 3 biggest cities to 64-82% in 17 other cities and towns, about 30% of the population outside Tbilisi receives water for less than 12 hours per day; many people living on upper floors do not receive water at all due to low pressure, and water often contains sediments and has inappropriate smell and color (OECD, 2008).

While, on average, 70% of the population is connected to sewage water collection systems, all wastewater treatment plants established during the Soviet period are currently out of order or provide only primary treatment. As a result, untreated municipal wastewater is a major polluter of surface waters in Georgia (GE-MEPNR, 2010).

Starting from 2004 the improvement of water supply was initiated with funding from the state budget and international donors. Extensive reconstruction-rehabilitation works were carried out in Tbilisi in 2005-2007. Most central water supply pipelines have been rehabilitated and all major drinking water quality monitoring laboratories have been refurbished and equipped with modern computerized systems (ECBSea, 2009).

Currently, Tbilisi is provided with an up-to-date high-quality water supply service ensuring delivery of good quality drinking water without significant interruptions 24 hours a day to 400, 000 customers, of which about 2000 are public and state organizations, about 15,000 - commercial enterprises and the rest are in the residential sector (GEO-Cities 2011).

The development of water and sewerage systems has become an important priority at all levels in the country. Extensive rehabilitation projects are ongoing in several regions in Georgia (Task Force for Regional Development in Georgia, 2009). Development and improvement of municipal infrastructure, including water supply and sanitation systems, is one of the objectives of the State Strategy for Regional Development of Georgia for 2010-2017. Specifically, the

Strategy aims at creation of favorable environment for investments in the sector; rehabilitation and construction of water supply/sanitation infrastructure; ensuring access to safe drinking water and sanitation; improving water metering; reducing water loss; improving cost recovery etc. In 2009 about 120 mln USD was allocated for the rehabilitation and development of drinking water systems, and an additional 35 mln USD - for sewerage network (Task Force..., 2009).

There has also been increased involvement of donor organizations in supporting rehabilitation of water supply and sewerage sectors in recent years. Among them is the recently completed project of the US Millennium Challenge Corporation, which, through Georgian Municipal Development Fund, supported the USD 57.7 mln regional infrastructure development project for improvement of municipal water and sewerage services in five cities throughout Georgia.

3. Current Legal Framework

There are more than 15 major laws in Georgia that significantly influence the protection and management of water resources and the associated environmental concerns. However, mainly, water resources management system in Georgia is currently regulated by the Water Law of 1997. The Law mainly provides for protection and use of surface waters and practically leaves out legal regulation of groundwater as well as coastal waters.

Georgia's legislation has continued its further evolution since adoption of the Law in 1997; however, practically no effort has been made to ensure consistency of the latest water legislation with the basic principles and provisions of the Law.

The main legislative change was brought to Georgia's environmental law with the 2004 Tax Code of Georgia and 2005 Law on Licenses and Permits. According to the Tax Code, all taxes for environmental pollution (including for water pollution) were abolished. The Law on Licenses and Permits further radically reduced the number of activities, classified as environmentally sensitive and requiring management and supervision. The initial draft of the law included permitting system for surface water abstraction and discharges but later it was removed.

These are the examples of why the Water Law of 1997 fails to provide good basis for regulation of management of water resources. In addition, current water-related legislation practically does not provide for comprehensive and clear regulation of such important and diverse issues as water resources management; pollution prevention tools; ownership, the rights of ownership and use of water bodies; water cadaster; integration of water protection requirements and restrictions in regard to land use and spatial development; jurisdiction of regional and local self-governing bodies over water resources, etc.

Overall, Georgia's water-related legislation is inconsistent, contradictory and fragmented throughout the wide range of legal acts, of which the most important ones are listed below:

- Law of Georgia "On Environmental Protection" (1996) ⇒ provides for establishment of environmental quality (including water quality) norms (*standards*);
- Law of Georgia "On Mineral Deposits" (1996) ⇒ considers groundwater as part of mineral deposits and regulates all aspects of groundwater use and to certain extant groundwater protection as well;
- Law of Georgia "On Land Melioration" (1997) ⇒ regulates waters and water bodies used for melioration (agricultural) purposes;
- Law of Georgia "On System of Protected Areas" (1996) ⇒ provides legal ground for establishment of protected area categories (including marine protected areas and water bodies within terrestrial protected areas);
- Laws of Georgia "On Health Protection" (1997) and "On Public Health" (2007) ⇒ provide for establishment of sanitary-hygienic requirements, norms and rules with regard to waters and water quality;
- Marine Code of Georgia (1997) and Law of Georgia "On Marine Space" (1998) ⇒ provide for pollution prevention and control measures of coastal and territorial waters;
- Law of Georgia "On Regulation and Engineering Protection of the Seashores, Reservoirs and River Banks" (2000) ⇒ regulates engineering protection for seashores and river/reservoir banks against abrasion, floods etc.;
- Law of Georgia "On Recognition of Ownership Rights on Land Plots Being under the Usage of Natural Persons and Legal Entities of Private Law" (2007) ⇒ regulates legalization of ownership rights on land plots (including water bodies/water lands) which are being used by natural and legal persons in unlawful way;
- Laws of Georgia "On Conservation of Soils and Reclamation and Improvement of Soil Fertility" (2003), "On State Control for Environment Protection (*State Environmental Control*)" (2005), "On Environmental Impact Permit" (2007) and "On Ecological Expertise" (2007) ⇒ provide for legal streamlining in a number of water-related important aspects (e.g. EIA etc.);
- Organic Law of Georgia "On Self-governance" (2006) ⇒ provides for creation of certain rights of local authorities with regard to water resources.

Therefore, the current water resources management lacks consistency, efficiency and integrity with other sectors and therefore needs overall reorganization both with regard to institutional and regulatory aspects. There is a strong need for reform of the current water legislation and the current system of water resources management.

In order to achieve and maintain the appropriate quality of water resources, Georgia intends to replace the existing administration principles in water resource management and introduce the approach of integrated river basin management. New law on Water is under development to achieve this objective. The law will address all types of water bodies including groundwater and will regulate water quality as well as quantity. It will introduce water management at the level of river basin and other aspects of integrated water resources management, such as water classification system, water quality objectives and standards, water use, water resources planning, pollution prevention, monitoring and enforcement, flood risk management and public participation. Adoption of the new water law tentatively in late 2013 will be a significant step towards establishing internationally accepted and sustainable water management practices.

4. Institutional Arrangement

Former Ministry of Environment Protection was reorganized in October 2012 and became the Ministry of Environment and Natural Resources Protection with respective increase of responsibilities, staff and budget.

With this reorganization, all the rights and responsibilities related to natural resources management and protection are now with this Ministry. The Ministry is the key authority at the national level dealing with water management.

The Ministry includes the central office for water resources management – the Water Resources Management Service, which implements governmental policy in the field of water resources management and protection, assesses plans of environmental impact mitigation in EIA reports in the field of water, establishes and adopts Maximum Admissible Discharges, conducts state inventory of water use, etc.

The National Environmental Agency under the Ministry is responsible for water quality and quantity monitoring. It also is in charge of issuing licenses for abstraction of groundwater since October 2013. Presently, water monitoring is undertaken by three laboratories under the Agency: Batumi, Kutaisi and Tbilisi laboratories.

The Department on Environmental Supervision under the Ministry is responsible for state control on implementation of water legislation. The Department has 7 regional services and the Black

Sea Convention Inspection, located in Batumi.

Other water-related responsibilities are distributed between different state institutions:

The **Ministry of Labor, Health and Social Affairs of Georgia** is responsible for protection of public health. The Ministry develops environmental quality standards, including those for drinking water, surface waters, groundwater and coastal waters.

The **Ministry of Regional Development and Infrastructure of Georgia** is responsible for implementing regional development policy including coordination and support of the development of water supply and sanitation systems.

The **Ministry of Agriculture of Georgia** is responsible for carrying out drinking water quality monitoring, supervision and state control over irrigation systems.

Local Self-Governance Institutions are responsible for the management of water resources of local importance but they generally have very limited competences; water management is highly centralized.

5. International Cooperation

Georgia has not acceded to the UNECE 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention). However, it is planned to initiate the process of acceding to the convention in 2014. Georgia has signed but not (yet) ratified the UNECE/WHO-Europe 1999 Protocol on Water and Health and the process of ratification may already be initiated in 2014.

Georgia lacks a full-scale strategic document, regulating and determining protection and use of transboundary rivers and lakes. Among the neighboring countries, only Azerbaijan and Russia are Parties to the UNECE Water Convention.

At present, there are nine bilateral treaties and agreements in force between Georgia and riparian states:

(a) "Treaty on Water Consumption in Boundary Rivers, Rivulets, and Springs of the Union of Soviet Socialist Republic and Turkish Republic Concerning the Issues of Irrigation, Water Supply and Regulation of the Rivers of Araks, Vorokh (Chorokhi), Kura". The Treaty was signed on 08.01.1927 in the city of Kars, entered into force on 26.06.1928 and a Joint

Commission between Soviet Union and Turkey was established. The Treaty was acknowledged by already independent Georgia in 1992-1993.

- (b) "Agreement between the Government of Georgia and Turkish Republic in the Field of Environmental Protection" (1997). The Agreement between the Government of Georgia and Turkish Republic was signed with the purpose of cooperation in the field of environmental protection. The Agreement also assumes cooperation in the field of protection of surface and marine waters; it especially specifies the necessity of exchange of information regarding the condition of the Chorokhi/Korukh River.
- (c) "Protocol on Mutual Understanding between the Ministry of Environmental Protection and Natural Resources of Georgia and the Ministry of Energy and Natural Resources of Republic of Turkey with the Purpose of Surveillance of Transportation of River pumps of the Chorokhi River" was signed on 19.01.1998 in the city of Ankara. On the basis of this protocol, the decision was taken on performance of joint monitoring over alluvia of the Chorokhi River and study of the impact of coordinated hydroelectric systems over lower reaches of the River.
- (d) "Memorandum on Mutual Understanding between the Ministry of Environment of Georgia and State Committee on Ecology and Control over Nature Management of Azerbaijani Republic Concerning Cooperation in Development and Realization of Pilot Projects on Monitoring and Evaluation in the Basin of the Kura River" (16.09.1997). The Memorandum became the basis of practically all further joint projects in Kura-Araks river basin.
- (e) "Agreement between the Government of Georgia and Azerbaijani Republic in the Field of Environmental Protection" (18.02.1997). Intergovernmental agreement on cooperation in the field of environment within the framework of conservation and regulation of transboundary ecosystems assumes that the parties "join their efforts for the protection of their basins from pollution, as well as management of water resources". The Agreement also stipulates creation of separate treaty on the use of transboundary water resources.
- (f) "Protocol on the Results of Negotiations between Governmental Delegations of Georgia and Azerbaijan Republic on the Use of Water Resources" (27.12.1997).
- (g) "Agreement between State Committee on Irrigation and Water Economy of the Republic of Azerbaijan and Department of Management of Melioration Systems of Georgia on the Use of the Reservoir of Djandara (lake of Djandara)". According to the Agreement, Djandara reservoir receives 70 million cub. m of water from Georgia annually, including 50 million m³ for irrigation of 8500 hectares of lands in the Azeri region of Akstafa and 20 million m³ to maintain the ecologic balance of the reservoir.

- (h) "Protocol of the Agreement between Georgian Soviet Republic and Armenian Soviet Republic on Water Intake from the Debed River of November 5, 1971"
- (i) "Agreement between the Governments of Georgia and Armenian Republic in the Field of Environmental Protection (1997)". The Agreement assumes that the Parties "will make efforts for establishment of connections between national systems on environmental monitoring and corresponding databases".

II. ORGANIZATION OF THE NATIONAL WATER POLICY DIALOGUE

1. Main Fields of Work

The National Policy Dialogue (NPD) on IWRM started in Georgia in September 2010 with meetings of the representatives from the UNECE Water Convention Secretariat with the representatives of the Ministry of Environmental Protection and Natural Resources and other stakeholders. The Memorandum of Understanding on the implementation of NPD was signed by the Ministry of Environment Protection of Georgia and the UNECE in October 2011.

The NPD on IWRM in Georgia focuses on three major topics:

- Transboundary activities, including cooperation with neighboring Azerbaijan and accession to the Water Convention;
- Setting targets for the implementation of the Protocol on Water and Health;
- Preparation of National Water Law based on IWRM principles and the EU WFD.

The report with an overview of ongoing activities in the water sector in Georgia was finalized in June 2011. This report served as a tool for planning future NPD activities.

The first Steering Committee meeting (June 2012), which was followed by Stakeholders Workshop, focused on the planning of the new water legislation to be developed on the basis of the EU WFD principles. These plans are included in the EU-Georgia Association Agreement currently under development. In addition to support from the UNECE, the NPD on IWRM in Georgia is supported by the Government of Finland with funding provided by the EU and Finland.

OECD activities under the NPD are dedicated to broadening of discussions on financing of water resources management or some aspects thereof. Work in 2012 has started by discussing the possible scope of the dialogue in more details and developing the analytical work to support the process. In this perspective, the work done to promote the use of economic analysis in water management in the Kura River Basin countries is an important starting point.

2. Steering Committee

A Steering Committee has been established to guide the NPD process in Georgia. It meets once or twice a year and gathers all key state agencies, as well as the relevant NGOs and private companies.

Deputy Minister of Environment Protection of Georgia, Mr. George Zedginidze was the Chairman of the Steering Committee till 2012. From October 2012 the First Deputy Minister of Environment Protection and Natural Resources of Georgia – Ms. Nino Sharashidze acts as a Chairman of the Steering Committee.

The following institutions are represented in the Steering Committee:

- 1. Ministry of Environment Protection and Natural Resources
- 2. Ministry of Regional Development and Infrastructure
- 3. Ministry of Economy and Sustainable Development
- 4. Ministry of Energy
- 5. Ministry of Agriculture
- 6. Ministry of Foreign Affairs
- 7. Ministry of Internal Affairs
- 8. Ministry of Labour, Health and Social Affairs
- 9. Environmental Protection and Natural Resources Committee of the Parliament of Georgia
- 10. Health-Care and Social Issues Committee of the Parliament of Georgia
- 11. "The United Water Supply Company of Georgia" LLC
- 12. Environment and Security Initiative (ENVSEC) project
- 13. NGO "National Water Partnership of Georgia"
- 14. NGO "The Greens Movement of Georgia/ Friends of the Earth Georgia"

Duties of the Secretariat of the Steering Committee of the National Policy Dialogue on IWRM in Georgia are performed by the National Water Partnership of Georgia.

III. MAIN RESULTS OF THE NATIONAL POLICY DIALOGUE

The NPD on IWRM started in Georgia in September 2010 and the Memorandum of Understanding between Georgia and UNECE was signed in October 2011. Georgia has not acceded to the UNECE 1992 Convention on Protection and Use of Transboundary Watercourses and International Lakes (Water Convention). However, it is planned to start ratification process of the Convention in 2014. Georgia has signed but not ratified the UNECE/WHO-Europe 1999 Protocol on Water and Health yet. Perhaps in 2014 the process of ratification could be started.

1. Transboundary Activities

The Project "Technical Assistance to Georgia for Ratification and Implementation of the UNECE Transboundary Water Convention and Development of the Draft Bilateral Agreement on the Shared Water Resources between Azerbaijan and Georgia" is implemented under the ENVSEC Initiative Work Program for the South Caucasus. The objective of this Project is to support Georgia to ratify and implement the UNECE Water Convention and to strengthen transboundary water cooperation between Azerbaijan and Georgia.

During 2010-2013, five bilateral consultations between Georgia and Azerbaijan took place with the objective to define the scope and structure of the future bilateral agreement on the shared water resources and develop the text of the Agreement. The fifth bilateral consultation between Azerbaijan and Georgia took place on 30 April 2013 in Tbilisi, Georgia. During the consultations, consensus was reached on all articles of the Agreement, except three articles. It was decided that the International Expert would revise the agreement according to the comments received at the fifth bilateral meeting and deliver the 4thdraft of the Agreement.

2. Setting targets for the Implementation of the Protocol on Water and Health

In 1999 Georgia signed this Protocol under the Water Convention, but has not ratified it and is not yet a party to the Protocol. However, during the initiation of the National Policy Dialogue it was decided that one of its objective would be to develop targets under the Protocol.

National Policy Dialogue on Integrated Water Resources Management has provided a platform for greater integration between different ministries and agencies, bringing together various stakeholders (such as legislative, governmental and nongovernmental organizations, private sector and the public). It provided links between the various levels of management and decision-making on setting the targets based on consensus. This is a good basis for developing work under the Protocol.

The process of development of project proposals for setting targets and the discussion was open to all interested parties with access to all necessary documents concerning this matter. Non-governmental organizations were actively involved in this process.

Within the National Policy Dialogue on IWRM, project proposals for setting targets were presented for discussion at the NPD kick-off meeting of the representatives of the concerned ministries, agencies and non-governmental organizations March 22, 2011.

Analysis of the Existing Situation

The analysis of the current situation with regard to the legal framework (national and international), as well as in areas of environment and public health in Georgia was conducted, to identify problems and to develop possible targets.

Out of the 20maintarget areas provided by the Protocol on Water and Health, eight areas were chosen and appropriate proposals for setting targets were developed as a result of extensive consultations with ministries, agencies, and with a wide range of organizations.

The selected areas are:

- I. The quality of the drinking water supplied (in accordance with the Protocol Area I);
- II. The reduction of scale of outbreaks and incidents of water related disease (in accordance with the Protocol Area II);
- III. Access to drinking water (in accordance with the Protocol Area III);
- IV. Discharge of untreated waste water (in accordance with the Protocol Area IX);
- V. The quality of waters which are used for bathing (in accordance with the Protocol Area XV);
- VI. The identification and remediation of particularly contaminated sites (in accordance with the Protocol Area XVIII);
- VII. The effectiveness of systems for the management, development, protection and use of water resources (in accordance with the Protocol Area XIX);
- VIII. The frequency of the publication of information on the quality of the drinking water supplied and of other waters within the scope of the Protocol (in accordance with the Protocol Area XX).

For the selected 8 fields, 16 targets have been defined and 30 activities worked out. The proposed activities for the achievement of targets were of complex character, that is, of financial, organizational, investigative nature, etc, which significantly facilitated the solution of some difficult and complex problems. Out of 45activities 17 were implemented during 2011-2012, while 29 activities will be carried outin accordance with the plan, with completion expected during 2013-2017.

During the consideration of the progress in achieving targets, due to the shortage of relevant scientific and technical materials, and in some cases also financial resources, some of the deadlines for the fulfillment of the planned activities needed to be revised. For example, development of sanitary rules regarding supervision over the drinking water quality in small-scale systems of water supply which had been planned for 2012 on the basis of consultations but was shifted to 2015. Implementation of these activities and drawing up and publication of small size sources of water supply register was also shifted to 2015-2016

In 2011-2012, with the purpose of the improvement of the water supply and sanitation systems infrastructure, the Government of Georgia attracted not only budgetary but also other financial resources for investments. As a result, large-scale construction and rehabilitation activities were carried out in the country, which facilitated the increased access of the population to quality drinking water.

On the basis of the above stated, it could be said that the system of control for the early identification, study, response and announcement concerning the infectious diseases (including those transmitted by water), functioning on the non-stop basis, is working rather effectively. However, it should be noted that for the purpose of improvement of control of diseases, including water-borne, it is necessary to introduce the methods of express-diagnosis of the quality of water and water-borne diseases and the recommendations of the "Chapter 1.2.2 – Bodies of the Public Health" from the Guidelines for the control of the quality of drinking water developed by WHO.

Next Steps

In 2013 the Ministry of Environment and Natural Resources Protection of Georgia started preparatory activities for the ratification of the «Water and Health" Protocol. In November 2013, the Round Table was organized regarding these issues with UNECE and GWP support, the existing problems and advisability were discussed. The meetings with different Ministries, NGOs and other stakeholders continued in December. The Working Group was established for the development of the Action Plan on the procedures of ratification.

In addition, the stakeholders stressed the necessity of the continuation of the works for the meeting the Protocol requirements and setting of targets for other target areas of the Protocol. The financial support is needed for the implementation of these activities.

3. Preparation of the Water Law Based on the Principles of IWRM and the EU WFD

Support to preparation of the national Water Law is a priority for the NPD process in Georgia. This corresponds to the political priorities of the Government of Georgia as well.

The Government of Finland has provided expert support to Georgian NPD/IWRM in the preparation of the water law.

The first session of the Steering Committee Meeting, (June 2012), was devoted to institutional and legal reforms in the water management sector. During the session, a concept for the development of new water legislation was discussed and agreed on. The draft Law was discussed during the second Steering Committee Meeting in May 2013.

Based on the agreed Concept, draft Law "On Water Resources Management" has been prepared. The new Law applies principles of IWRM; it also responds to EU-Georgia Association Agreement that is under development.

The Law will consist of four main sections – general, principal, transitional and final sections with approximately 40 sub-sections (chapters) covering the water-related subjects consistently and integrally.

The Law will seek to cover a broad range of topics related to management, use and protection of water resources. So, it will become important to ensure coverage of enough details in the content to enable the Government and regulating authorities to implement the law correctly. It should be clear to the practitioner – particularly one who represents interested agencies (in particular the Ministry of Environment and Natural Resources Protection) and/or natural or legal bodies – if the law establishes any norms or create any binding obligations on various governmental agencies to enact specific and enforceable regulations. Indication should be given on how the Government has to implement and enforce the Law. The Law should define clear distribution of responsibilities. For the Law to work, it needs to clearly define what will be required, what role the public, industry and government agencies will play in the regulation process, and what will happen in the case of non-compliance.

The substantial principles should be outlined in the Law itself. The responsible governmental agency should be specified in the Law and obliged to develop regulations based on those principles.

In terms of convergence with the EU water legislation, the Law is supposed to cover the legal requirements under the following directives:

- The Water Framework Directive (WFD)
- The Bathing Water Directive
- The Urban Waste Water Treatment Directive
- Floods Directive
- The Nitrates Directive
- The Groundwater Directives
- Drinking Water Directive
- The Dangerous Substances Directive
- The Freshwater Fish Directive
- Environmental Quality Standards Directive
- Integrated Pollution Prevention and Control (IPPC) Directive
- The Dangerous Substance Discharges Directive
- Biocides Directive
- Marketing and Use of Dangerous Substances Directive
- Plant Protection Products Directive

The scope of the Law, in line with the WFD, shall cover surface waters, transitional waters, coastal waters, groundwater and the related protected areas, as well as water infrastructural facilities (all water services which provide, for households, public institutions or any economic activity: abstraction, impoundment, storage, treatment and distribution of surface water or groundwater; waste-water collection and treatment facilities which subsequently discharge into surface water etc.).

The Law will provide for water management on a river-basin basis with the Ministry of Environment and Natural Resources Protection as central competent authority.

The Law also will provide for all other aspects of integrated water resources management including water classification system, water quality objectives and standards, water use, water resources planning, pollution prevention, combined approach, economic tools, public participation, monitoring and enforcement, flood risk management, etc.

As convergence with different EU Directives is envisaged, the Law will legally link the different processes, since institutional and administrative requirements are similar for different directives.

Currently the draft law is under the process of consideration at different levels, which includes, amongst others, its review by general public. The public hearings of the draft Law took place in November and December 2013 with participation of the representatives of the different Ministries, NGO, private sector and other stakeholders. The draft Law will be submitted for the consideration by the Parliament in late 2013.

IV. NATIONAL CONSULTATIONS ON WATER IN POST-2015 GLOBAL DEVELOPMENT AGENDA

The Round Table "National Consultations on Water in Post-2015 Global Development Agenda" was organized in Georgia on 11 April 2013, facilitated by the Global Water Partnership (GWP) and UNECE. Representatives from different social groups at different levels took part: the Government, civil society, academia, private sector, professionals and workers, men and women. An important feature was to include stakeholders from non-water sectors that are water-dependent. Potential long-term priority areas in water sector were discussed.

Suggested areas for future sustainable development targets for water:

- 1. Development and Implementation of National Integrated Water Resources Management System:
- Institutional development and coordination for IWRM.
- Development of legal mechanisms and national policies to support IWRM.
- Development of national and regional conjunctive use strategy for sustainable utilization of surface and groundwater resources based on future trends in water use for different sectors and the potential impacts of climate change.
- Support for capacity building to improve the sustained implementation of IWRM and ongoing assessments based on water nexus and economic approaches.
- Improvement of information management.
- Improvement of public participation in the decision-making process and awareness.
- Facilitation of cooperation on transboundary water courses.

2. Strengthening of Water Quantity and Quality Monitoring System:

Adoption of the revised national physical-chemical, biological and hydromorphological
monitoring programs for both surface and groundwater, including geographical coverage,
schedule and parameters measured in line with the EU WFD and international standards.

- Updating of hydro-meteorological data collection systems with improved national and transboundary stations including the use of online real time monitoring techniques.
- Improvement of Quality Assurance & Quality Control in sampling & analytical practices.

3. Improvement of Public Health through Water Supply and Sanitation

- Strengthening of the system of control over water quality, water purification and enhancement of water quality.
- Continuation of actions on the improvement of quality drinking water supply and sanitation.
- Providing of local treatment of wastewater discharged into the sewage systems.
- Development and implementation of the national legislation on sanitary protection zones for drinking water intakes.

4. Strengthening of Transboundary Cooperation

- Increased compliance with international environmental agreements.
- Initiation of the dialogue between the Caucasus states on development of mutually acceptable rules and regulations for water resources management on the basis of the principles of the international law and provisions of regional agreements.
- Development of common water quality index and related river basin status assessment criteria.
- Adoption of harmonized regional water quality standards in line with the EU WFD and international best practices.
- Development of transboundary early warning system for pollution events.

SUMMARY

Three years of implementation of the National Policy Dialogue in the field of IWRM have created grounds for assessment of initial results of the NPD activities in Georgia.

First of all, it should be noted that there is a good coordination between the interested ministries and other establishments, and non-stop dedicated tasks with national and international experts, including consultants of UNECE and OECD to ensure successful fulfillment of NPD priorities.

Local expert organizations, using methodological support of international consultants, prepared the majority of mainframe materials, which were later considered at the Steering Committee meetings. It is obvious that this valuable staff potential, created by the NPD process, shall not only be kept, but also shall significantly be strengthened in the future and used for assistance in finding a solution for the most problematic tasks in the water sector of Georgia.

As it has been revealed during the NPD process so far, one of the key roles of NPD is to be an effective mechanism for coordination of project implementation activities in water sector and for gaining support of international and donor organizations. Meetings of the Steering Committee have created all necessary conditions for broad consideration of the number of project proposals, including progress and final results of implementation of specific international projects. At the same time, opportunities arose not only for correction of some of the tasks, such as the tasks of avoiding and preventing duplication of different projects, but also for aggregation of efforts of different projects for obtaining more effective results with minimal expenditures.

Since the participants of the Steering Committee meetings include representatives of international and donor organizations, the outcomes of the joint discussions of urgent problems allow these organizations to promptly specify their approach towards the formation of their own investment policy with regard to the water sector of Georgia.

In conclusion, and with positive affirmation, it should also be noted, that in the framework of NPD, the representatives of NGOs, private sector and mass media, were also able to participate equally in discussions, which resulted in recommendations for a wide spectrum of current and foreseen water problems, thus increasing their own knowledge base and allowing input of opinions for the people who will be making these important water policy and management decisions.

The most significant outcome of NPD in Georgia is the development of the New Water Law of Georgia, which is actually finalized. Consideration of the draft Law by the Parliament of Georgia is planned in late 2013.

All the above mentioned testifies that the potential of the Dialogue in perspective is far from the exhaustion and complex activities in the framework of NPD shall, by all means, be developed.

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ANNEX 1. INTERNATIONAL PROJECTS IMPLEMENTED IN GEORGIA IN THE FIELD OF WATER RESOURCES MANAGEMENT – BASIC DIRECTIONS AND OBJECTIVES

One of the key areas of work of the National Policy Dialogue (NPD) process is providing a platform for coordination of water-related projects supported by international organizations in Georgia. NPD Steering Committee meetings provide opportunity for different donors to present their ongoing projects and plans in water sector. There have been events organized jointly with other projects to benefit from (such as 7 March 2013 joint seminar between legal working group of the NPD program and the Steering Committee of the EU-funded project "Environmental Protection of International River Basins").

The list of water-related projects, funded by international donors, is provided below.

TACIS Project "Joint Programs of Management of the Basin of Kura River" (2001-2003, Armenia, Azerbaijan, Georgia)

- Application of Guiding Principles of UNECE on monitoring and assessment of conditions of transboundary Rivers;
- Review of existing transboundary measures and practices of water resources management;
- Coordination of activities in monitoring, field selections, and analysis;
- Ensuring of quality and quality control.

USAID Project "Management of Water Resources in the Region of South Caucasus" (2002-2004, Armenia, Azerbaijan, Georgia)

- Demonstration of the process of integrated planning of River basins at local level and capacity building in the field;
- Projects of IWRM plans for the basins of transboundary Rivers of Alazani (Georgia-Azerbaijan) and Khrami-Debeda (Georgia-Armenia) were prepared by the Basin Development Councils (Alazani, Khrami, Debeda);
- Regional data exchange;
- Program of small grants for local NGOs related to the water for short-term actions (56500 USD in Georgia).

USAID Project "South Caucasus for Water Program" (2005-2008, Armenia, Azerbaijan, Georgia)

• Joint monitoring of quality and quantity of water in transboundary Rivers;

- Introduction of GIS in the process of monitoring of water quality, creation of the model basin MIKE:
- Assistance by the data of information exchange between three countries;
- Integrated regulation of River basins, workshops of planning of water objects;
- System of coding.

UNDP/GEF/SIDA Project on Reduction of Transboundary Degradation of Kura-Araks River Basin (2004-2007, Armenia, Azerbaijan, Georgia),

- Identification of the needs for transboundary management of the basin;
- Gender factor role in the field of water resources management;
- Identification of optimal institutional model of River basin management;
- National and regional GIS maps;
- National action plans regarding the currents of three countries of Southern Caucasus.
- Creation of regional forum of NGOs on Kura-Araks;
- Analysis of identification of interesting parties.

BMU Project of Development of Transboundary Cooperation for Prevention of Danger in the Basin of Kura River (2003-2006, Armenia, Azerbaijan, Georgia),

- Prevention of accidents in the basin of Kura River in transboundary context;
- Transferring of know-how in the field of dangerous activities.

NATO and OSCE Project "Program Science for Peace: South Caucasus Rivers Monitoring" (2002-2008, Armenia, Azerbaijan, Georgia).

- Creation of social and technical infrastructure for international transboundary Rivers water quality and quantity monitoring;
- Joint use of watershed management system and data;
- Increase of technical possibilities;
- Joint establishment of management methods for all partners.

EU Project "Water Resources Management in Western Countries of EECCA" (2008-2010, Ukraine, Belorus, Moldova, Armenia, Azerbaijan, Georgia)

- Preparation of recommendations on development of water quality standards and water bodies classification system on the basis of these standards;
- Draft new "Law on Water of Georgia" based on the principles of River basin management

EU Project "Creation of Favorable Conditions for Integrated Management of the Transboundary Basin of Kura-Araks River" (2007-2009, Azerbaijan, Armenia, Georgia)

• Development of the "road map" for sustainable management of Kura-Araks River basin in the light of introduction of EU Directive on Water.

EU Project "Phase II of Management of Transboundary Rivers for the basin of Kura River" (2008-2011, Armenia, Azerbaijan, Georgia)

- Development of common systems of information monitoring and management;
- Joint monitoring of water quality of transboundary Rivers of Kura, Alazani, Khrami, Debed (once in 3 months);
- Project on River Basin Management Plans (RBMP), including preliminary program of measures prepared for selected pilot River basins in each country project with the use of UN Framework Directive on Water Methodology (in Georgia – the Rivers of Alazani-Khrami-Debeda and Aragvi).

USAID Project "Integrated Natural Resources Management in Watersheds (INRMW) of Georgia" (2010-2015)

- Sustainable management of natural resources;
- Application of INRMW in target watersheds up to scaling of applied models by means of support of the policy and institutional reforms and capacity building of the corresponding institutions;
- INRMW models and management plans for 4 watersheds in Alazani/Iori and Rioni basins.

EU Project "Environmental Protection of International River Basins (EPIRBP)" (2012-2016, Ukraine, Belorus, Moldova, Armenia, Azerbaijan, Georgia)

- Improvement of availability and quality of data on the ecological, chemical, and hydromorphological status of trans-boundary river basins including groundwater;
- Development of River Basin Management Plans for the selected river basins / sub-river basins according to the requirements of the WFD (in Georgia the Chorokhi-Ajaristskali river basin).