

Peru March 2013





The Post 2015 Water Thematic Consultation

# National Consultation on Water in the Post-2015 Development Agenda

#### Introduction

Peru is the twentieth largest country in the world and has an important water wealth: 71% of the world's tropical glaciers, 6% of surface water, more than 3000 kilometers of coastline and water availability per person over 70 000 m<sup>3</sup>. Peru is a country highly vulnerable to climate change, not only due to structural factors such as poverty and inequality, but the impact expected in ecosystems of global importance such as the Amazon and Glaciers<sup>1</sup>. It is included between the ten most vulnerable countries in the world, according to the key indicators of climate risk issued by the Tyndall Centre (2004). Peru presents four of the five characteristics of vulnerability recognized by the United States Framework Convention on Climate Change (UNFCCC): low-lying coastal areas; arid and semi-arid regions; areas liable to floods, drought and desertification; and fragile mountainous ecosystems.

In recent years, in Peru the vulnerability of the population has increased and their livelihoods, due to the increasing frequency of meteorological phenomena influenced by induced climate change, environmental impacts and global climate change. The disordered economic growth based on unsustainable use of water resources and other natural resources exacerbates the effects of climate change. This is aggravated even more, because in Peru there is an asymmetric distribution of water supply in respect to population density, considering large concentrations of the population just settle in the regions where water availability is lowest, such as the coast. However, it should be noted that in this region, the inefficiency in the various uses over 60% for all water uses (population, agriculture, industry and mining).

Despite institutional efforts<sup>2</sup> in the integrated water management and its links to the processes of adaptation to climate change. This is weak and disconnected, limiting the effectiveness of policies and strategies designed to contribute to water security, to close the link with food security and energy security, essential processes for sustainable economic development.

Therefore, it is evident that the State faces a complex challenge to guarantee the water security and to generate development processes to make efficient and sustainable use of water resources, and to provide social and economic benefits to the most vulnerable populations.

In this context arises the need for a cross-sectoral agreement reflects the commitment of the different sectors of the State in integrated actions making it possible implementation of Policy N°33 on Water Resources, newly created in August 2012 in National Agreement<sup>3</sup>, which prioritizes the

 <sup>&</sup>lt;sup>1</sup> MINAM (2010). El Perú y el cambio climático. Segunda Comunicación Nacional del Perú a la Convención Marco de las Naciones Unidas sobre Cambio Climático 2010. Lima: Fondo Editorial del MINAM.
 <sup>2</sup> Water National Authority (ANA) was founded in March, 15th, 2008.

<sup>&</sup>lt;sup>3</sup> It is the place where all State policies, on the basis of dialogue and consensus, are prepared and approved through the process of workshops and consultations at the national level, in order to define a direction for the

access to water and its efficient use, food security and energy security in response to the multiple challenges posed by climate change and the need to ensure the water security for the population, productive activities and vital ecosystems.

The initiative for achieving a cross-sectoral agreement was promoted by the Global Water Partnership with the support of the Swiss Cooperation (SDC) and under the leadership of the National Water Authority (ANA), which conducted the participatory process of this Agreement. This process was considered a high priority by the National Water Authority and through an Administrative Decision, signed on 15 November 2012 was formed a Technical Commission responsible for formulating a proposal of the cross-sectoral agreement (see annex 2).

As a part of this process, the "First Dialogue on National Development and Water Security and adaptation to climate change", was jointly organised between the National Water Authority, the Peruvian Forum on Water (GWP Peru) and the Pontifical University Catholic of Peru, with the support of the Swiss Agency for Development and Cooperation SDC (see annex 1).

The dialogue was held on 1 March 2013ro and was attended by 355 representatives from different institutions, public, private, NGOs and academic (see annex 3) and recognized national experts in water issues and international expert in charge of the keynote speech (see program of dialogue in annex 4).

It is expected that First Dialogue will be the step prior to the cross-sectoral agreement to be signed by various ministries related to water resources and the head of ANA, which reflect the high priority given to water and the need to manage it in an integrated way by the Government.

#### 1. Importance of water in national development

Water is a central to the current challenges facing the country in terms of development. Climate change has become a factor that may limit or reverse development and worsening levels of poverty in

sustainable development of the country and assert their democratic governance. It was created in July 22<sup>nd</sup> of 2002. The member of the National Agreement Forum are: Government (Presidente de la República, Presidente del Consejo de Ministros, Asamblea Nacional de Gobiernos Regionales y Asociación de Municipalidades del Perú), Partidos políticos (Acción Popular, Alianza para el Progreso, APRA-Partido Aprista Peruano, Cambio 90, Fuerza 2011, Gana Perú, Partido Humanista Perú, Partido Popular Cristiano, Perú Posible, Restauración Nacional, Siempre Unidos, Solidaridad Nacional, Somos Perú, Todos por el Perú, Unión por el Perú), Civil society Organizations (Asamblea Nacional de Rectores, Concilio Nacional Evangélico del Perú, Confederación Nacional de Instituciones Empresariales Privadas, Conferencia Episcopal Peruana, Consejo Nacional de Decanos de los Colegios Profesionales, Coordinadora Nacional de Frentes Regionales, Mesa de Concertación para la Lucha contra la Pobreza, Plataforma Agraria de Consenso, Sociedad Nacional de Industrias) and other bodies (Secretaría Ejecutivo, Comité Consultivo, Comité Técnico de Alto Nivel). http://www.acuerdonacional.pe/

a country. In recent years, Peru has experienced the influence of climate change through an increase in the frequency of extreme weather and events related to water such as drought and floods, which is exacerbated by bad practices in the management of natural resources, as well as the existence of dynamics of development which do not always consider the elements of sustainability.

Peru has 71% of the of the world's tropical glaciers which are important for human consumption, agriculture, mining, and energy<sup>4</sup>. However, glacial retreat during the last 35 years has resulted in a 22% loss of coverage, increasing the problem of water stress especially in those places where there are large concentrations of population because the availability of water is reduced and the efficiency of its use very low. Moreover, disordered economic growth based on unsustainable use of water resources deepens this stress. The coast which comprises only 11% of the country accounts for more than half (52.8%) of the population and only has 2% of the total available water in the country. At the other end, the jungle covers 63% of territory accounts for 10% of the population, and has 80% of the nation's water supply.

Glaciers play a major role in feeding the rivers that support economic development of the coast, highlands and jungle areas of the country, as well as the ecological processes that affect the Amazon basin. In the last decades, climate change has accelerated the glacier retreat which implies a very important loss of water reserves and increased vulnerability to natural disasters. Added to this, the contamination processes are leading to a progressive reduction in water availability. It is estimated that during 2009, the sewage systems managed by sanitation companies in Peru, collected approximately 786.4 million m<sup>3</sup> of wastewater from household connections. However, due to the lack of adequate infrastructure at national level, only 35% of this volume receives some treatment before being discharged into a receiving body.<sup>5</sup>

In terms of coverage of drinking water, it is estimated that only 30% of total localities with this service receives under appropriate conditions in quantity, quality and continuity, about 40% have their services with management problems and infrastructure is in poor condition and that the remaining 30% have their services in poor condition or does not work.<sup>6</sup> Despite significant investment in the sector, this is still insufficient.

On the other hand, extreme events have caused major disasters nationwide and substantial human and economic losses as stated a report by the Andean Community of Nations in 2009. Between 1970 and 2007, Peru experienced 19 928 natural disasters which resulted in more than 82 thousand deaths, more than 4 million victims, 3 and a half million affected, 192 thousand destroyed homes and 313 thousand homes affected. According to this report prepared for the four Andean countries, in the past 37 years, hydrometeorological phenomena influenced by global climate change represent 71% of

<sup>&</sup>lt;sup>4</sup> MINAM (2010). El Perú y el cambio climático. Segunda Comunicación Nacional del Perú a la Convención Marco de las Naciones Unidas sobre Cambio Climático 2010. Lima: Fondo Editorial del MINAM

<sup>&</sup>lt;sup>5</sup> FONAM. Oportunidades de Mejoras ambientales por el tratamiento de aguas residuales en el Perú. 2010.

<sup>&</sup>lt;sup>6</sup> PRONASAR. Manual de operaciones. Programa Nacional de Agua y Saneamiento Rural. PRONASAR 2011-2013. Lima: 2011.

local disasters records highlighting the high vulnerability of the sub region to threats associated with the climate, particularly events such as floods and landslides.<sup>7</sup>

The above highlights the increasing vulnerability of populations and their livelihoods as well as the worsening shortages of water for cities and the development of productive activities. This has been internalized in some way by past governments, because there have been many institutional efforts for the water management and its links with the processes of adaptation to climate change but they are still scattered and disarticulated.

Therefore, in this context it is necessary to design and implement adaptation strategies to climate change with the participation of all sectors to implement trans-sectorial and point towards an integrated water resources management and sustainable development.

# 2. Key national priorities for the sustainable development of water:

The national priorities identified in this respond to the situation in the country, marked by a commitment to affirm that Peru is on the path of sustainable development, with a dynamic rate of public and private sector investment; and policies and programs for social inclusion for the neediest groups. These priorities have been outlined in a draft cross-sectoral agreement, which have been improved the First National dialogue.

# 2.1 key Water Resources Management priorities

- Strengthen the National System of Water Resources Management as part of the National Environmental Management System, through the active participation - of all the institutions of the State, private and mixed - in the design of effective mechanisms for their proper articulation and performance. This also implies capacity-building of member institutions of the system and the clarity of their roles and responsibilities to exercise their sectorial policies and implement administrative mechanisms in a coordinated and articulated according with the Thirty Third Policy of the State of National Agreement about water resources. The participation active and articulated in all sectors is considered essential to articulate efforts to generate the necessary resilience to climate change adaptation.
- Participate actively and steadily in the formulation and implementation of the National Water Resources Plan. The National Water Resources Plan should be an instrument to minimize inequities, rating ecosystem services for the well-being and health of the people and support for the sustainability of economic growth. This plan will allow the knowledge of the current state of the water resources (levels) in the basins, to develop programs, projects and actions for the

<sup>&</sup>lt;sup>7</sup> Comunidad Andina de Naciones (2009). Atlas of the dynamics of the Andean region: Population and assets exposed to natural hazards. Cali: Corporación OSSO.

protection and conservation of the sources of water in the watershed. In these operations all the actors that make up water resources of basin councils in the planning, coordination and conservation of the sustainable use of water should participate. This plan must be integrated with plans for adapting to climate change that are being developed.

- Strengthen the national system of information about water resources. All information concerning quality generated by the players in both the public and private sectors should be made available, integrating it into the system for use for the management of water resources. It is necessary to be furnished with complete information so as to make appropriate use of water in the different productive activities. The information will improve the comprehension and management of the resource. This also requires the strengthening of capacities as much for the generation of information as well as its use for decision making.

**Strengthen the risk management system.** Risk management is a process aimed at reducing the vulnerability of the population to events or extreme phenomena which can affect them such as those related to climate change. In 2011, is promulgated the National System of Disaster Risk Management in which is fundamental participation of the Ministry of Economy and Finance for the implementation of the Strategic Budget Programme for reducing vulnerability and for the provision of emergency care for disasters with a focus on the Budget by Results. In 2012, the Government incorporated the National Policy for Disaster Risk Management as mandatory policy for all entities of National Government<sup>8</sup>. In this aspect is important that all sectors work together and prioritize those public investment projects that are the most efficient. In order to prioritise the joint action of the sectors in assessing the vulnerability to climate change of the watersheds, it will be necessary to harmonize the prioritization criteria, in such a way as make combined and complementary efforts. It is important to create a water culture and prevention at a family level; this will help to minimise increased future costs.

## 2.2 Key Water, Sanitation and Hygiene priorities

To ensure universal access to safe drinking water and sanitation. The State Policy in the National Agreement N° 33 emphasises this aspect indicating that to ensure so it is required to have systems which allow bringing water to each point of use and then treating the waste water to return it as clean as possible to the natural system. To achieve this, the State must work on the access and coverage of sustainable quality services, drinking water and sanitation, both in urban and rural areas. For this to happen it is important, to finish formalizing the rights to the use of water prioritizing, the population in the relevant socio-economic and environmental areas.

## 2.3 Key waste water and water quality priorities

<sup>&</sup>lt;sup>8</sup> Decreto Supremo № 111-2012-PCM.

Strengthen mechanisms to encourage the optimization in the use and reuse of water for water safety. All sectors must contribute to ensure that waste water is not discharged into natural sources without prior treatment. Although highly ambitious, according to the National Plan for Environmental Action 2011-2021, for year 2021, 100% of urban domestic waste water shall be treated and 50% will be reused; and 30% of the sewage from rural areas shall be treated and reused. This alternative source of water is a valuable resource that could replace the volume of water for first time use in activities that do not require the water to be of drinking quality. The impact of such treatment will mainly affect: in reducing the risks to human health; the vulnerability of aquifers to pollution; the original conservation of the water quality in surface and groundwater natural sources, better use by its continuous availability and positive effects to competitiveness by reducing levels of pollution in the production of national and export consumption in accordance with international standards.

#### 2.4 Suggested areas for future sustainable development targets for water.

- Develop mechanisms for funding and cooperation to guarantee water security. Design a methodology for determining new financial mechanisms (trust funds, loan funds, payments for environmental services, among others) is a big step to constitute the new management of water resources, based on the use to be made of the water resources.
- Empowering women in the provision, management and care of the water.
  It is known that women have a role in the access, use and care of water. With climate change gender inequalities can increase resulting from reduced water resources and agricultural productivity. It is hoped that women can reverse this and participate in the decision making process and in activities which enable them to diversify their income.
- Reduce morbidity and mortality of vulnerable populations (boys and girls under the age of 5 years, women and those suffering from HIV) by the emergence of new diseases as a result of increasing temperatures.

Public health depends on access to sufficient food, safe drinking water, well built homes, good social conditions and ambient and social environment adapted to the control infectious diseases. **Improve the education and development of a water culture.** 

The adaptive capacity of a country depends on the education of the population, at all levels as formal, professional (decision-makers and social responsible) and with special emphasis in children in basic education. The variable impacts of climate change can alter the means for making a livelihood from childhood, influencing a decline in opportunities for children to receive a complete high-quality form of education at the primary level. Capacity building is a key strategy for success to generate organizational changes and update the knowledge and skills of the actors and leaders related to the resources water management.

The promotion and development of a water culture, based on the evaluation of best practices, technologies and appropriate traditional knowledge, and promoting social participation with respect to cultural diversity, raising the awareness of citizens on the issue of climate change thus contributing to a better and effective water governance and generating a current of opinion.

### 3. WRM monitoring and reporting issues

The National Water Authority, through the National Information System of Water Resources integrates, standardizes and disseminates information regarding the quantity and quality of the water provided by the members of the National Water Resources Management System and by the generators of information coming from the basins. This information shall be made available for use in various activities relating to the management and planning of such resources.

In 2013, the ANA wants to strengthen the network of hydrological monitors, design and implement environmental and political indicators about water resources, to build an evaluation system and inventory of water resources database and, finally, to disseminate information, such as a policy of access to and transparency of information. This will contribute an effective and participatory monitoring in all sectors.

Integrated water resources management requires stakeholders to observe and take a more active participation to overcome the fragmentation and duplication of effort. A holistic view which considers the different dimensions of water resources, their interrelationships and processes, is required so that the decisions taken are really effective. The promotion of a new water culture is oriented to raise the awareness of the different actors of the National Water Resources Management System and the population in general, regarding its responsibilities in the role that it plays in the different areas that develop: family, educational institutions, communities, social organizations, government and private entities.

The thirty-third State Policy on water resources establishes that the State shall guarantee research, recovery, conservation and dissemination of knowledge and traditional and ancestral technologies in the management of water resources, combining them with the technological developments at the time, and transferring them in a timely and suitable form for their use. This implies promoting research and innovation in the field of water resources in Peru, where universities, technological institutes, innovation, public and private bodies, ONGs, companies and other organizations related to this theme, play a major role. For this purpose the generation of synergies between these actors is a fundamental priority in order that the results of the research have workability and continuity, and the national water authority must be one of the institutions that drive these initiatives.