



National Stakeholder Consultations on Water: Supporting the Post-2015 Development Agenda

Nicaragua

April 2013



The Post 2015 Water Thematic Consultation

Priorities in the development agenda for water post-2015

1. Importance of water in national development

Nicaragua is the largest country in Central America with approximately 130 000 km², with 7.7% of the national surface water sources, which are distributed in 21 watersheds, with 3 of those shared with neighboring countries. Despite the abundant surface water wealth in the country, over 75% of the water supply for various uses comes from underground sources, and 42% of total supply sources intended to show significant reductions in flow or level groundwater during the dry season. The water resource is available nationwide per capita of 38.668 mt³ per year, which positions the country over Central America average. It is emphasized that owns approximately four times the availability "per capita" water that America or some European countries such as Switzerland.

The National Human Development Plan is the national instrument of governance, where the implementation of policies and development activities for the period 2012-2016, which was conceived within a long-term plan. This instrument consists of 4 axes transformers (social, economic, political and environmental), all related, in some way, with the issue of water resources; and 20 development policies for these axes, 11 (55%) are directly related to the integrated water resources management.

The National Human Development Plan provides strategic guidance in their efforts to ensure the sovereignty and food security and nutrition, through increased irrigation areas for food security. In addition, to encourage the development of agro-industry, among the items featured by its impacts are: sugar cane, African palm, peanuts, tobacco and rice.

There are investment projects nationally threatening Cocibolca Lake, main freshwater reservoir drinkable for Central America, such as the construction of the Nicaragua inter-oceanic canal.

Hydroelectric power generation in 2012 accounted for 10% of total electricity generation from renewable energies, as set out in the Human Development Plan, it is expected that by 2017 this production will increase to 35%.

The Plan also provides for the promotion of extractive industries at national level, including: a refinery with a processing capacity of 150,000 barrels of oil per day, and increasing metal mining concessions (gold and silver).

In 2007, the General Law on National Waters of Nicaragua was passed, it's a guiding instrument for the integrated water resources management, establishing water as a heritage of the nation, and considered one of the essential elements for the existence and socioeconomic development of the country, establishing itself as a strategic natural resource for the country and therefore, its access is a right associated to life and human health which must be guaranteed by the State to the Nicaraguan people.

According to Article 66 of the General Law on National Waters, sources of water intended for human consumption have the highest and unwavering priority for the Nicaraguan state.

2. Key priorities at national level for sustainable development on water resources

2.1. Priorities for integrated water resources management.

Since 2001, Nicaragua has a Water Resources Policy and in 2007 the General Law on National Waters was approved; however, this has not been sufficient to ensure the safeguarding of surface and underground resources in the country, through management, use, sustainable and equitable use of resource.

The subject of risk management and adaptation to climate change from an approach of integrated water resources management is evident so at the national level the need to prioritize specific actions that contribute to counteract the impacts of climate change on water sources and their various management systems is undisputed.

Nicaragua is considered the third country with highest climate risks worldwide, which coupled with the accelerated process of deforestation in the upper watershed areas and the absence of systems for domestic wastewater treatment, lead to the continuing degradation of physical, chemical and bacteriological conditions of water sources.

Some of the remaining tasks to develop and that it means a priority on the issue of sustainable water management, are:

1. *Update and enforce the legal framework and policies applied to water resources at national level.*

- 1.1. Update the National Water Resources Policy.
- 1.2. Approve the National Water Resources Plan.
- 1.3. Develop plans and programs for basins, sub-basins and micro-basins.
- 1.4. Establishment of National and Watershed Committees.
- 1.5. Preparation and approval of the Law on Fees for Disposal and Use of Water Resource.
- 1.6. Establishing mechanisms for the efficient implementation of the National Information System of Water Resources, in addition to its permanent and continuous updating.
- 1.7. Preparation of National Climate Change Adaptation Plan with an approach of integrated water resource management and food security.
- 1.8. Encourage the establishment of incentives for conservation actions, protection and rational use of water, through the development and approval of a Special Law of Payments for Environmental Services.
- 1.9. Government institutions must implement policies and strategies consistent with the current environmental legislation.
- 1.10. Standardize instruments, requirements, parameters and procedures between the institutions linked to the water sector.

- 1.11. Increase budget allocated to various governmental institutions related to the area of water resources, so that there is greater investment in equipment, technology and capacity building of human capital.
- 1.12. Develop action plans from micro-basins.
- 1.13. Implement the National Risk Management Plan.
- 1.14. Strategic planning that integrates the management of physical resources and takes into consideration the potential use of soils.
- 1.15. That government agencies change their emergency vision by a prevention vision.
- 1.16. The protection and conservation of the sources, especially in the upper watersheds.
- 1.17. Approval of Law on Territorial Planning with watershed management approach.

2. *Strengthening community organizational structures.*

- 2.1. Promotion and strengthening of Watershed Committees and Irrigation Districts.
- 2.2. Promotion and strengthening of drinking water and sanitation committees and their national, departmental and municipal networks.
- 2.3. Strengthening local committees for prevention, mitigation and response to natural disasters.

3. *Strengthening Knowledge Management at national level.*

- 3.1. Systematizing the experiences of good practice in the use and exploitation of water resources, promoting the implementation of best practices and technologies in various economic sectors, among which could include: appropriate methods of wastewater treatment and reuse, efficient irrigation systems.
- 3.2. Inventory all existing water sources at national level, indicating its current state and its main environmental stressors.
- 3.3. Promote education and awareness campaigns on the use and conservation of water sources, prioritizing school sectors in areas of greatest vulnerability.
- 3.4. Promoting and encouraging greater investment in the development of scientific research on issues related to water resources, prioritizing involvement of the university community.
- 3.5. Strengthen educational processes at the community level, with the support of the Ministry of Education (MINED)-
- 3.6. Studies to identify critical areas with high levels of risk.
- 3.7. Risk analysis in public, private and mixed investments.
- 3.8. It's necessary to invest in research on water quality and potential health risks.

4. *Develop actions to ensure the quality of water for different uses*

- 4.1. Regulate application of chemicals used for the development of agro-industrial activities.
- 4.2. Regulate and control the use and extraction of groundwater for profitable uses.
- 4.3. Continuing the process of decontamination of Lake Xolotlan.

2.2 *Priorities on water, sanitation and hygiene (WASH).*

In November 2002, the Committee on Economic, Social and Cultural Rights adopted General Comment n° 15, which refers to human right to water is indispensable for leading a life in human dignity; and on 28 July 2010, the United Nations General Assembly explicitly recognized the human right to water and sanitation and acknowledged that clean drinking water and sanitation are essential to the realization of all human rights, through Resolution 64/292, while in the Universal Declaration on the Rights of Mother Earth, in its Arto. 2, mentions "the right to water as the source of life", all these approaches taken up nationally in the General Law on National Water.

Priorities on the issue of drinking water, sanitation and hygiene, are:

1. *Update and enforce the legal framework and policies applied to water resources at the national level.*

- 1.1. Required territorial planning policies, urban control and settlements.
- 1.2. Clarify institutional responsibilities relating to water resources at national level.
- 1.3. Promote social and environmental responsibility of businesses.

2. *Strengthening community organizational structures*

- 2.1. Promote and strengthen the community organizational structures, prioritizing drinking water and sanitation committees and their national, departmental and municipal networks.
- 2.2. Adoption of good environmental practices in relation to the sustainable management of sources and treatment systems.

3. *Strengthening Knowledge Management at national level.*

- 3.1. Raising the awareness all stakeholders and sectors, recognizing the importance of access to water quality and quantity required for use as a human right.
- 3.2. It's necessary a wider divulgation and implementation of instruments of methodological strategies for education and environmental awareness.

4. *Increasing the coverage of access to drinking water for human consumption*

- 4.1. At the end of the current period of the National Human Development Plan, is expected to have increased service coverage of drinking water supply in urban areas by 91% and in rural areas 50.7%.
- 4.2. Increased investment to improve the distribution network for drinking water and sanitation by the Nicaraguan Aqueduct and Sewer (ENACAL).

2.3 Key Waste Water and Water Quality Priorities

1. At the end of the current period of the National Human Development Plan, is expected to have increased the coverage of sanitation systems in urban areas by 46.3% and in rural areas 53%.
2. Implement and improve treatment systems and drinking water for human consumption, as currently only used chlorination systems.
3. Implement domestic wastewater treatment systems.
4. The Ministry of Health (MOH) must strengthen institutional capacities to improve epidemiological monitoring mainly in rural areas.

3 Areas suggested for future sustainable development goals on water.

1. Update and implement the Policy and National Water Resources Plan for basins, sub-basins and micro-basins.
2. Preparation of National Climate Change Adaptation Plan with an approach of integrated water resource management and food security.
3. Setting and implementing the legal framework that encourages participation of community management of water resources.
4. Establishment of inter institutional coordination mechanisms.
5. Establishment of incentives to promote effective management and administration of water resources.
6. Deepening the baseline studies related to integrated water resources use and defining priorities, supporting access to water and sanitation as a human right.
7. Establishing educational campaigns formal and no-formal for promoting the sustainable water resources management.
8. Identify and reduce pollution source of water sources.
9. Implement and improve treatment systems and drinking water for human consumption.

4. Issues related to monitoring and reporting of water resource management.

At national level, there are technical standards and legal instruments which mandated governmental institutions devote efforts to monitor all matters relating to the management of natural resources, especially water, however, to date, such monitoring is insufficient, breach of standards set lacking effective mechanisms for monitoring and permanent control of these actions.

Actions are necessary for the establishment of a monitoring system:

1. *Update and enforce the legal framework and policies applied to water resources management at national level*

- 1.1. Strengthen existing monitoring initiatives, such as National Information System of Water Resources, the agroecological system of Nicaraguan Institute of Agricultural Technology and Agriculture and Forestry Ministry, Early Warning Systems from Nicaraguan Institute of Territorial Studies among others.

- 1.2. Develop monitoring mechanisms by the competent authorities to the impacts caused by the development of productive and extractive activities on water resources, mainly in recharge areas and aquifers for human consumption.
- 1.3. The National Water Resources Plan must formulate with monitoring indicators and define the responsibilities of each institution must assume.
- 1.4. That the Ministry of Environment and Natural Resources (MARENA), in conjunction with the National Water Authority to develop permanent and continuous monitoring and control plans of industrial wastewater discharges to natural water sources.
- 1.5. Qualified human resources in government institutions have greater job stability, as there is currently a problem of permanent rotation of trained personnel, which greatly limits the actions of the institutions in the territories
- 1.6. Promoting the opening of a space for consultation to establish dialogue between all actors involved in the watershed management.
- 1.7. Retaking the slogan "the polluter pays"
- 1.8. Increased allocation of economic resources to invest in strengthening technical and technological capabilities at institutional level.
- 1.9. The implementation of these monitoring should be a shared responsibility between national and local authorities, with the support of civil society.

2. *Strengthening Knowledge Management at national level*

- 2.1. Using approved tools and techniques for monitoring the quantity and quality of water sources.
- 2.2. Financial management to ensure economic resources to carry out scientific research to determine quality of sources.

Commitment of stakeholders for effective monitoring of water resources:

1. It's required being clearly established competencies of each state institution involved in water resource management.
2. Must be the political will of state institutions to develop continuous and permanent monitoring mechanisms.
3. Communities must assume a commitment to monitoring, as a form of control and social audit.

Economic actors must comply strictly with legal framework and to contribute with an attitude of social environmental responsibility in water resources use.

5. Annex

5.1 List of actors participating in the National Consultation Workshop "Water in the post-2015 Development Agenda"

Nº	Actors
1	Acción Agua
2	Agua para la Vida en Nicaragua
3	Asamblea Nacional / Comisión de Medio Ambiente y los Recursos Naturales
4	Asociación de Educación y Comunicación La Cuculmeca
5	Asociación Nicaragüense de Acuicultores (ANDA)
6	Autoridad Nacional del Agua (ANA)
7	Camarones del Pacífico
8	CAMPA
9	Centro Alexander von Humboldt
10	Centro Nacional de Investigaciones Sismológicas (CENAIIS-Cuba)
11	Cooperativa Municipal de Nueva Segovia
12	El Centro de Investigaciones y Estudios de la Salud (CIES-UNAN)
13	Farallón Aquaculture S.A
14	Fundación Nicaragüense para el Desarrollo Sostenible (FUNDENIC)
15	Gasolinera UNO Ticomo
16	Instituto Nicaragüense de Capacitación y Estudios Juveniles (INCEJU)
17	Instituto Nicaragüense de Estudios Territoriales (INETER)
18	ISAREC
19	Mesa Nacional de Gestión de Riesgos (MNGR)
20	Ministerio de Fomento, Industria y Comercio (MIFIC)
21	Ministerio del Ambiente y los Recursos Naturales (MARENA)
22	NICAMBIENTAL
23	Observatorio de la Sostenibilidad - Red Latinoamericana
24	Red de Comités de Agua Potable y Saneamiento /REDCAPS)
25	Red de Reservas Silvestres Privadas de Nicaragua
26	SERVICONSA
27	Universidad de Las Américas (ULAM)
28	Universidad Evangélica de Nicaragua
29	Universidad Nacional Autónoma de Nicaragua (UNAN-Managua)