



The post-2015 development agenda

# Brazil stakeholder perspectives on a water goal and its implementation

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# 1 Comments on the recommended SD Goal and Targets for Water

This first chapter introduces the process of discussion carried out in the national consultation. Some issues were considered as specific of Brazil and the respective indicators were proposed whenever possible. Contributions to the reshaping of the global objectives and goals were sought with suggestions for amendment of statements. The goals related to water were worked out seeking to follow the SMART definition of SMART (ER) [specific, measurable, attainable, relevant and timely) (assessed and reassessed)].

## 1.1 Discussion of the recommended Goal and Targets in relation to local development aims

It was recognized that it would be important to have a standing-alone water statement among SD Goals and Targets, however the concept of water security was not discussed in details. Rather, it was emphasized that SD Goals and Targets should contemplate social and economic development. In this respect, water supply for all purposes in enough quantity and satisfactory quality should be stated clearly as an obligation of governments and communities.

It stands out among others as important for good water management:

- the need to expand integrated and intersectoral water resources planning among sectors of society;
- the need of greater social control and water governance;
- the need for improvement in water resources evaluation, monitoring and law enforcement procedures;
- the need for better protection of water sources;
- the need of improving quality and quantity of treated water to the population;
- the need of application of improved technologies to treat water and effluents and to rehabilitate ecosystems;
- the establishment of strong economic incentive mechanisms to induce better use of water resources;
- the establishment of mechanisms of capacity building, environmental education and mobilization to make stakeholders participation more effective;
- the need of strengthening of institutions to ensure better efficiency of the management of the national water resources.

The tables below present the outcome of the discussions of the topics planned for this chapter.

## 1.2 Ensure universal access, gender sensitive and sustainable to water, sanitation and hygiene

**Goal:** Achieve universal access to water, sanitation and hygiene (WASH).

In Brazil the term Sanitation incorporates the drinking water supply, collection and treatment of sewage and solid waste, urban drainage, vector control and health education systems, thus fully covering the WASH concepts and incorporating some others.

To achieve universal access to WASH it is important to develop policies not only to meet the demand, but also to reduce losses, such as stimulating the population and users in general to use water rationally, and strive for changing consumer habits that generate excessive use and waste of water. Also public/private partnership should be stimulated to ensure sanitation, including water supply, mainly to the low income population.

Regarding the proposed goal of "achieving universal access to safe water, sanitation and hygiene" it was understood to be a good one, but difficult to achieve, mainly due to the difficulty of reaching the rural populations.

In relation to the goals of "improving on (x%) use and sustainable utilization of water resources in all countries" and "strengthen participatory, equitable and accountable water governance in all countries", they were considered as good targets, but difficult to measure.

The other goals were considered good and measurable: "reduce (x%) non-treated sewers and (y%) nutrient pollution" and "increase in (z%) water reuse" and "reduce (x%) mortality and (y%) the economic losses caused by natural and anthropogenic disasters related to water. "

According to the Brazilian Institute of Geography and Statistics, Brazil achieved the 2015 MDG as regards poverty alleviation and some others. The country continues striving to achieve all goals. A major effort is being made in the last 15 years to provide for water supply for the low-income population in the rural areas especially of the semi-arid Northeastern region of the country ranging from rain collection cisterns to large scale projects.

The following targets and indicators for Brazil, can be considered as feasible:

1. Increase of 91% to 98% the percentage of urban population served by public drinking water network;
2. Increase of 62% to 88% the percentage of urban population served by sewage collection networks;
3. Increase of 32% to 56% the percentage of collected sewage that is treated by sewage treatment plants at higher level standards;
4. Establish the goal of reducing losses in potable water systems with an acceptable maximum 20% loss.

Goals in the areas of solid waste and urban drainage should also be developed as they would be important in improving the quality of water and mitigate the effects of urban floods.

Targets and indicators for the reduction of pollution from pathogens and organic micro pollutants should be developed.

The environmental licensing process aimed at improving the expansion of the collection and treatment of sewage and solid waste systems needs to be reviewed and improved.

### 1.3 Integrated consideration of water within the context of management and in all sectors of basic services

**Goals:** Improve integrated and intersectoral water resources management approaches, and reduce pollution and increase the collection, treatment and reuse of water

It is proposed to amend the wording of the Objective to: Integrated consideration of water within the context of management for multiple-purpose uses.

The following changes are proposed as for the goals:

1. Improve management and integrated and intersectoral water management approaches, considering the multiple uses.
2. Increase the supply of drinking water, of wastewater collection systems and treatment and water reuse systems and
3. Reduce pollution.

And, It is proposed to add another goal:

4. Encourage the development of technologies that increase efficiency in water use with a focus on water reuse and combating water waste.

It is important to establish mechanisms that encourage water reuse in various productive activities such as mining and industry, among others.

It is essential for the integrated management of water resources that sectoral planning be integrated to water resources planning. To achieve this principle it is important that public policies be articulated and that official documents clearly show this and what actions need to be developed aiming at horizontal integration of different sectoral policies with the water resources policy.

Capacity building and strengthening of water resources public institutions and collegiates (basin committees and councils) are essential for the water resources management to become effective.

Targets and indicators relating to water use for food production should be added, such as:

- a) Improving the efficiency from 60% to 75% in water use for irrigation.
- b) Increase by x% the use of water saving technologies in its multiple uses

Review of legislation in order to avoid monopolies in "WASH" services that may still exist so as to encourage actions towards increased efficiency by all water users.

Search for more efficient and sustainable technologies.

### 1.4 Promotion of good governance of water, using it to generate growth and "green economies"

**Goal:** Increased resilience against the impacts and challenges related to water

It is proposed to change the this Objective wording to: Promote good governance of water as a way to promote sustainable development.

Do not use terms that were widely questioned during Rio +20: "green economy" and "blue water".

Change Goal to: Increase the capacity of resistance and resilience against the effects of the impacts and challenges related to water.

Add a new Goal: Build effective policies that make water be looked and managed as a strategic natural resource in the sustainable development process. This concept of water as a strategic resource should be the beacon guidance for sectoral planning and for the economic and environmental zoning.

The water resources plans should be used as guides for other public planning and sectoral policies. The water resources planning must leave the reactive level "water impact" to the strategic level "water for development".

The process of empowering stakeholders for the water resources planning and decision making should be further enhanced.

Review laws and plans that ensure greater governance policies in water resource systems. Countries that still do not have done so, should review their laws in order to incorporate the Dublin Principles.

Establish that the national water resources plans should have an institutional character in order to induce the integration of policies of the various water user sectors, by establishing general guidelines and targets to be observed in their sectoral plans.

### **1.5 Creating new modes of micro and macro, public and private financing**

Discussion on the global objectives and goals versus specific issues of the country, in accordance with local circumstances.

It is proposed that the Objective wording be amended to: Stimulate the implementation and improvement of economic and financial management mechanisms, such as charging for the use of water, aiming at the sustainability of water resources systems.

The creation or further development and dissemination of mechanisms for payment or reimbursement for hydrological environmental services should be considered within this context.

Encourage training in the public and private sectors, and civil society as well for the development of projects that appropriately meet technical requirements of the project funders. The access to financial resources should be simplified.

Promote effective decentralization in the management of water resources, such as the delegation of powers between the Union and the States / Federal District and vice-versa, for the management of water resources.

Encourage mechanisms of certification of good practices in corporate value chains

Foster financial mechanisms for the dissemination and replication of good practices in water resources management

Encourage the construction of public-private partnerships.

Other considerations, including discussion on indicators for the goals, when applicable.

Adjust the laws in order to encourage and simplify (reduce bureaucracy) the implementation of financial mechanisms for the proper management of water resources.

### 1.6 The Global Water Security, and interconnections with other MDGs

There was consensus from all plenary with respect of having a stand-alone Objective with specific goals on water in the Post 2105Agenda. The concept of water security as proposed by UN-Water was considered but was not discussed in detail due to lack of time.

It was also proposed that an indicator is constructed for this purpose considering the some or all of following items and possibly additional ones:

- Adequate quantity of water for all users
- Acceptable quality of water for all users
- Protection against pollution
- Climate change resilience
- Protection against natural disasters (water-related)
- Preservation of ecosystems
- Sustainable living
- Well-being (health)
- Socio-economic development
- Peace and political stability

The overall goal, with an index composed of the above items is directly related to poverty reduction and sustainable development having interconnections with other MDGs, without leaving anyone behind, with sustainability as a focus, reflecting strengthened water governance and thus would contribute to new global partnership in as much a post 2015 water agenda is concerned.

## 2 Key implications and means of implementation identified for achieving the goal and targets over the period 2015 to 2030

This chapter presents a review of the capacity of institutions to meet the goals highlighting the necessary resources and other issues relating to the theme.

In recent years Brazil advanced in the management of water resources through laws and legal linkage of revenue from water usage to the budget of the National Water Agency which demonstrates political prioritization of water issues by the federal government. It is important to stress that the explicit political will is fundamental to the development and implementation of the national water resources public policy.

However, except at the federal level, the existing institutions and their structures are insufficient to account for the challenges to proper management of water resources in the country as a whole.

There is a need for strengthening the States institutions by investing in capacity building and operational resources. Human resources training and updating/recycling of current technical staffs is needed to disseminate and incorporate new concepts into the management of water resources, especially regarding the sustainability issue. Besides there is a need of priority in investing in science, technology and innovation for the advancement of knowledge and development in the various areas



relating to water. It is essential to use economic instruments, and others, to generate economic and financial sustainability of the water resources systems.

It is essential that sustainable goals be established for water use in order to allow universal access to safe drinking water and other sanitation services. Goals should also induce improved and integrated water resources management at all levels, including water quality, efficiency of water use, wastewater treatment, recycling and safe reuse, and eliminating the release of toxic materials into water bodies, as well as actions aimed at protecting and restoring ecosystems due to its essential function in maintaining the quality and quantity of water. The goals related to integrated water resources management are directly related to other objectives, such as health, food security through sustainable agriculture, energy, healthy cities, sustainable consumption and production.

Internationally accepted water quality indicators should be refined to detect pesticides, hormones and other substances harmful to human health, and to be easily communicated and commonly understood by all stakeholders.

The need for the development and implementation of urban water management programs due to the accelerated urbanization process that occurs around the planet is emphasized. Similarly adaptation plans to climate change in the national hydrographic regions should continue to include vulnerability mapping and resilience indicators, as a means for orientating and prioritizing investments in the areas most susceptible to the natural occurrence of extreme events. The implementation of payment for environmental services may contribute to the conservation of water and soil and thus induce to reduction of consequences of landslide disasters, whose frequency is increasing in urban and rural areas.

International regional and sub-regional cooperation is of paramount importance in providing technology transfer, capacity building, training, and other technical and financial support for the implementation of the water resources agenda for underdeveloped and developing countries in achieving their goals.

### 3 Concluding comments specific to the country<sup>1</sup>

Brazil is a country with a population of just over 200 million people in an area of 8.5 million km<sup>2</sup>. It is a federal republic with 26 states, one federal district, where the capital city of Brasilia is located, and over 5570 municipalities.

Water is a key resource and a critical issue in Brazil. According to the Federal Constitution of 1988 all national water resources are considered as public goods, under the administrative control of the Union or the 26 States and the Federal District, which should be used and managed considering equal access rights for all present and potential users, as well as environmental, social and economic aspects. In other words, it is worth mentioning that water management is of competence of the federal and states governments, whereas water supply and sanitation is of competence of municipalities, except in metropolitan areas where the responsibility is shared among the state government and the municipalities therein comprised.

Brazil has a comfortable situation, overall, as the per capita availability of water resources, but it is worth mentioning that the spatial distribution of its waters is disproportionate to the occupation of their territory, since about 80% water availability is in Amazon (73,478 m<sup>3</sup> / s) where the lowest

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<sup>1</sup> Based on "Relatório de Conjuntura", 2013, prepared by the National Water Agency, available at [http://arquivos.ana.gov.br/institucional/spr/conjuntura/webSite\\_relatorioConjuntura/pr\\_ojeto/index.html](http://arquivos.ana.gov.br/institucional/spr/conjuntura/webSite_relatorioConjuntura/pr_ojeto/index.html)

population density in the country, with only 4.85% of the population. The average water availability in the country is 91,271 m<sup>3</sup> / s. Therefore more than 95% of the country's population depend on the remaining 20% availability, which is already a cause of conflict situations in some cities and regions.

According to the Brazilian Institute of Geography and Statistics - IBGE 2010 Brazil has 90.88 and 61.76% of the urban population served by the water supply and sewage collection networks, respectively. Hydropower is of paramount importance in the country accounting for 70% of the total electricity produced. The potential area for irrigated agriculture is about 30 million hectares, of which about 20% is actually developed, which means that food production is highly dependent on water availability.

In fact the increased use of withdrawal to the country's average consumption is for irrigation, with approximately 54% of the total, followed by the urban water supply with 22%, 17% industrial use and animal consumption of 6%. This distribution is varied according to the peculiarities of each hydrographic region.

In contrast to the Amazon and its low population density, the Brazilian Northeast is home to the most populated semiarid region of the world with 22 million people (11.8% of the population). Besides the metropolitan region of São Paulo has about 20 million people (10 %) is experimenting water scarcity. These examples point out to the existing large room for proper management of water resources within a context of a wide social, cultural, environmental and economic diversity, among other challenges.

As a result of the intensive use of national water resources, conflicts are growing and a modern national water policy was necessary to implement tools for water resources management and strengthen institutional arrangements.

In the implementation of the Water Resources Policy, the National Water Resources Council was created in 1998, and the National Water Agency - ANA in 2000. Besides these, 184 basin committees and 7 water agencies were installed. In addition, the preparation of the National Water Resources Plan, approved in 2006, was held with a wide social participation. Nowadays, 20 states already have Water Resources Plans which are considered a necessary tool to guide sustainable development and institutional action to improve integrated management of water resources.

The National Water Resources Policy and the consequent governance process, with public participation, decentralization and dissemination of the planning process and implementation of policy instruments are recognized as major advances in the legal and institutional structure of the country. Nevertheless the results are still somewhat scarce regarding the improvement of the quality and quantity of water, as well as the efficiency of water use and integrated management. It is recognized by the community in general that it takes time for the results to be achieved.

In fact the implementation of the policy has been a complex and time consuming task because it depends a lot of the driving forces in the basin level, a better understanding by all stakeholders, politicians and decision makers on issues of integrated water resources management. It requires changes in cultural values and habits, and also requires the development of science, technology and information taking into account a changing world.

The challenges are mainly due to the management difficulties and insufficient funds to finance studies, planning and implementation of works and infrastructure, especially those sectors that rely on public actions and public funding.

The continued promotion of the integration of public policies and public participation, based on the development of capacities for understanding the principles of politics in order to induce participatory and consistent decision making, is essential for the advancement of water resources management.

## Annex 1 : List of Participants

Date of meeting: 03 de abril de 2014

Venue: Sala de Vidro da Agência Nacional das Águas - ANA

Organizer: Global Water Partnership – GWP/ Latin America

Supporting institutions: National Water Agency - ANA and Brazilian Water Resources Association - ABRH

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