



### **Acknowledgements**

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GWP also wishes to thank all those in the GWP Regional and Country Partnerships who organised and conducted the consultations so effectively – as well as the numerous stakeholders who contributed to the country consultations.

### **ACRONYMS**

CONRED Consejo Nacional para la Reducción de Desastres

GIRH Gestión Integrada de Recursos Hídricos

GIR Gestión Integrada de Riesgo

INFOM Instituto de Fomento Municipal

INSIVUMEH Instituto Nacional de Sismología, Vulcanología, Meteorología e Hidrología

MARN Ministerio de Ambiente y Recursos Naturales

MSPAS Ministerio de Salud Pública y Asistencia Social

MAGA Ministerio de Agricultura, Ganadería y Alimentación

UN-WATER United Nations inter-agency mechanism for all freshwater and sanitation

related matters.

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# 1 Comments about the goal and targets recommended about water.

The objective and goals presented by UN-water, in general terms, agree with those developed previously in Guatemala for the objectives post 2015, so Guatemala does not see drawbacks with most of them. In Guatemala the emphasis has been given to issues as drinking water, sanitation and hygiene coverage, as well as the pollution. Both considered the most urgent and priority tasks to take care off. This does not reduce the importance of the others goals, there is a conviction that the integrated management of water resources as well as governance, are essential to achieve the above goals.



Event opening by Jeanette de Noack, Chair of GWP Guatemala, Sergio Ruano Deputy Minister of Environment and Natural Resources, the Water Secretary Pablo Roberto González and the Deputy Director of the Water and Sanitatin Directorate from the Ministry of Health Jorge Mario Molina

The consultation meeting was held at Casa Ariana in Guatemala City with fifty seven participants. The participants were from different sectors: 25 from Ngo's, 17 from government, 14 from private sector and one from the academic sector.

### 1.1 Overall objective of UN-water

The global goal "Ensuring sustainable water for all" is an objective that covers very well all the expectations of the country and includes those of other countries.

### 1.1.1 Target 1: Achieve universal access to safe drinking water, sanitation and hygiene

This target is one of Guatemalan priorities; on 2013 one of the actions defined was to reach 0% open defecation by 2020. In the case of access to water is expected to achieve on 2030 an increase of 15%, compared with the current situation which is 79%, so the coverage would rise to 94 per cent, while not universality, it is considered that the remaining 6%, is dispersed population with great difficulties for water supply. In the case of sanitation, proposed at the country level an increase of 10%, but this milestone is still far from universality. However the hygiene issue was never considered as an independent one, because all water and sanitation projects, always considered hygiene is an integral and essential part, therefore it is included in all projects.

## 1.1.2 Target 2: Improve by (x%) the sustainable use and development of water resources in all countries

In the case of Guatemala, the lack of a legal framework on water, limits the use and sustainable development of water. Therefore, water use and registration controls will not be developed in the absence of the legal framework. For that reason, the targets focused on the other themes like the volume of water stored and issues of efficient production, or increasing the hydroelectric generation and the areas under irrigation. As protection of natural reserves the only aspects included was the conservation of the forest cover, because it is easier to measure with the existing information. Although there are the lists of endangered species, the information related to the changes, it is difficult to update. This lack of information will be compensated with the preparation of basin management plans, which will serve to define the baselines.

## 1.1.3 Target 3: All countries strengthen equitable, participatory and accountable water governance

In Guatemala a specific goal of governance was not considered, because it was included in the context of the integrated water resources management or in the legal aspects. It is acknowledged the need for a water law, but still is far away to be achieved. For example, the plans of IWRM at the level of river basins were considered within the task 2. On the other hand, some of the indicators proposed buy UN-Water require regulators that do not exist in the country due to the lack of regulatory frameworks. With respect to financial efficiency indicators of local water and sanitation providers as well as knowledge transfer were not considered but are important.

## 1.1.4 Target 4: Reduce untreated wastewater by (x%), nutrient pollution by (y%) and increase wastewater reuse by (z%)

Tasks coincide with the ones proposed in 2013 by Guatemala, although the pollution by nutrients was managed with a standardized index of water quality, which includes several parameters including nutrients. Indicators are consistent with reducing the number of downloads without treatment, although they were not detailed, because industrial discharges in the country, are concentrated on few watersheds.

### 1.1.5 Target 5: Reduce mortality by (x%) and economic loss by (y%) from natural and human-induced water-related disasters

Although this goal was not specifically considered for water on 2013 in Guatemala, there are many actions on the issue of risk management: from floods and landslides hazards maps, to organization work with communities, evacuation plans with early warning systems, most of it through the National Council for Disaster Reduction (CONRED), and the Institute of Seismology, Volcanology, Meteorology and Hydrology (INSIVUMEH); as well as drought contingency plans, through the Ministry of Agriculture, Livestock, and Food (MAGA). Maps of risk of flooding, landslides and droughts, at national and municipal level, had been prepared with cooperation projects.

# 2 Key implications and implementation means identified to achieve the objective and goals in the period 2015-2030

The implications for each of the goals are described below:

#### 2.1 Target 1: Achieve universal access to safe drinking water, sanitation and hygiene

**Capacity:** There is technical capacity in the country, but bureaucratic administrative processes of financial organizations and the State apparatus, as well as limited planning, make the implementation slow and inefficient.

Costs and Financing: Currently there are funds available, but the lack of projects well developed and well prepared, due to a limited investment in feasibility studies, have slow down the implementation of resources. There are resources for more than \$50 million. It is estimated that to achieve the proposed goals for the country, it is required to invest US \$100 million for drinking water, \$125 million for sanitation and \$35 million in hygiene, for a total of 260 million, which must be dealt 80% in rural area and the rest for urban areas.



Institutions: There is an institutional structure formed by the Ministry of Public Health and Welfare Social Assistance (MSPAS) and the Municipal Development Institute (INFOM), the first is the regulatory authority for drinking water and sanitation, and a new direction in charge had been created recently. The second is a technical and financial institution, which gives support to municipalities and runs municipal development projects, as well as the construction of potable water and sanitation projects.

**Infrastructure:** The building of new infrastructure is not very sophisticated, with the exception of some major

projects proposed for the metropolitan area, if there is adequate financing for its construction the goals will be achievable in the period proposed.

**Monitoring**: UN-WATER indicators are consistent with those proposed by the country and it is considered feasible to carry them out and keep them updated.

**Technical and economic feasibility:** Achieve these goals is feasible technically and economically, as well as their sustainability on time.

### 2.2 Target 2: Improve by (x%) the sustainable use and development of water resources in all countries

**Capacity:** Presently, there is no detailed measurement of water extraction and use, mainly due to the lack of a Water legal framework, so the measurement will be difficult to achieve. There are national policies on water, irrigation and climate change, as well as a large system of protected natural areas.

**Costs and Financing:** Productive infrastructure costs will be done with private funding, as already occurs in the agricultural and hydroelectric sectors. However, water storage for climate change adaptation, like drought and flooding, should be done by the public sector (national and local), in partnership with the private sector when could be done. The water and sanitation companies must be self-sufficient. The profitability of the projects will improve when they become multi-purpose. The environmental services payment should be used as a financing tool for the protection of natural areas, as well as expand the forestry incentives as PINFOR and PINPEP by concentrating them in water recharge areas and mangroves.

**Institutions:** Presently, the institutional framework, for water management, is disperse and sectorial. So the option is to develop a necessary plans and Integrated integrated water resources management through the operative basin units, comprising residents and water users in the basin.

**Infrastructure:** There is a shortage in storage infrastructure, which increases the vulnerability to climate change, both in terms of drought and flood. New infrastructure should focus on storage systems, dams of different magnitudes, better if they are multiple-purpose, recharge of aquifers and other natural systems for storage and use.

**Monitoring:** UN-water indicators coincide with those proposed by the country, with the exception of those relating to the extraction, use and allocation of water, which, in the case of Guatemala, are

bound to gross estimates by sector, so in the short term and without an appropriate legal framework, it will be very difficult to carry out. The increase in volume of storage is coincident with the interests of the country. With regard to other indicators, especially those of productivity, there is a system already established for environmental accounts, working parallel to the national accounts system.

**Technical and economic feasibility:** The goals of extraction and use are not viable in the country for the absence of the legal framework, however an effort can be done at river basin level within implementation of integrated plans. The others are feasible technically and economically, as well as their sustainability on time.

## 2.3 Target 3: All countries strengthen equitable, participatory and accountable water governance

**Capacity:** There are great difficulties, because planning tools are not well articulated at the community level, decisions and consultations are not always taken into account. However, is a long-term process, which can achieve real participation in water management at all levels, the process will succeed if bottom-up and top-down planning is done joining the general development plans. The water law is required and is a limiting factor, but the health and municipal codes, allow important actions if they are correctly applied. Education, formal and non-formal is a prerequisite for effective and responsible participation.

**Costs and Financing:** Required more investment in consultation processes. The costs of consultation and participation should be integrated in the investment amounts. It is a long-term process that requires political decision and authorities support, motivation, as well as the interest in participating by civil society.

**Institutions:** Institutions should focus on participatory decisions more than a centralized institutional structure. So it is necessary to take advantage of the Local development, Municipal and departmental councils, a current legal structure in the country, which allows community participation, but that many times is politicized and distorted. The population is the one that should take advantage of these instances and overseeing them, so they could achieve their goal. The municipal offices of planning, in the absence of municipal enterprises or local water committees, should strengthen these actions and be responsible for the operation and maintenance of water systems.

**Infrastructure:** More than infrastructure, what is required is training, formal and non-formal, promotion campaigns on practical hygiene issues, training on participatory processes, as well as spaces to exercise it. It is necessary to strengthen community management of water systems, whereas they should be self-sustaining, especially for rural systems, promoting the participation of women and young people, taking into account the multicultural aspects. A law to regulate the use of water and assign rights and obligations, is required, helping to define the regulatory bodies. IWRM plans should be institutionalized and also they should be carried out.

**Monitoring:** The indicators are viable and feasible although some with complex difficulties, due to the absence of the water regulatory framework and because it does not be approved in the short term.

**Technical and economic feasibility:** General goals are feasible and only require decision and responsibility on the part of the stakeholders.

## 2.4 Target 4: Reduce untreated wastewater by (x%), nutrient pollution by (y%) and increase wastewater reuse by (z%)

**Capacity:** Although in 2013 the proposal were more optimistic, it is considered that the required resources will not be sufficient, so the ability to execute will be more limited and more conservative percentages are proposed. For the fulfillment of the indicators proposed in 2030, is expected to reduce by 30% domestic sewage pollution, while the industrial pollution will be reduced to 50%, as the latter only require private investment. In the case of nutrients, it is estimated to have a reduction of 25% and the increase in reuse of wastewater will be 25%. The weak application enforcing the present discharge regulation suggests that these percentages are realistic. **Costs and Financing:** Investment in sewage systems is partially covered in the issue of drinking water, for industry, investment will be by the private industry. Regarding reuse investment should

water, for industry, investment will be by the private industry. Regarding reuse investment should be on awareness, to break down mental barriers on the use of those waters. What do require investment is the monitoring, to ensure the fulfillment of the goals with systematic sampling and monitoring of the operation of the plants.

**Institutions:** The institution in this matter would be MARN, which requires a strengthening in human and financial resources, to improve the monitoring and implementation of the regulation.

**Infrastructure:** As already mentioned, it should be financed partly on the issue of water and sanitation and by the private sector in industries. However, the high cost of them, requires the pursuit of more economic and efficient technologies.

**Monitoring:** The indicators are viable and feasible measure, only if the Ministry of Environment and Natural Resources (MARN) is empowered.

**Technical and economic feasibility:** General goals are feasible and at these levels they can be achieved.

## 2.5 Target 5: Reduce mortality by (x%) and economic loss by (y%) from natural and human-induced water-related disasters

**Capacity:** The vulnerability, of the country, to extreme events, had generated the need to develop a national strategy of risk management, which goes beyond the themes of water, so the capacity exists to meet the goal. The reduction is difficult to quantify, because the variety of events and different parameters, as well as the combination of several events at the same time, make it very difficult to define a specific number. But the main objective is to minimize both loss of human lives such as economic. It is necessary to implement the land management plans at municipal level, to facilitate the management of risk, especially defining high-risk areas inhabitable.

**Costs and Financing:** Investment is required in development of land management municipal plans, with the risk management component. Investment amounts are not excessive, but require the interest of officials to generate contingency plans at the municipal level, for drinking water, from ministries of agriculture (drying for agricultural and livestock production issues) and energy, to make more resilient services. The investment is required as well for better monitoring, forecast and early warning systems.

**Institutions:** The National Council of Disaster Reduction (CONRED), is an institution for Risk management and prevention, although the greater part of its resources are still dedicated to alleviating the situation after an extreme event. However, it has a well-established infrastructure at the community level and local committees.

**Infrastructure:** The required infrastructure is going to improve systems of monitoring, forecast and early warning systems; as well as preparation of contingency plans prepared, tested and constantly improved at all levels. In some cases, it is important to recover the ancient customs that help communities become more resilient to extreme events.

**Monitoring:** The indicators are viable and feasible to measure; in fact CONRED manages and generates the indicators proposed at the national level.

**Technical and economic feasibility:** General goals are feasible but difficult to quantify on a percentage reduction due to the variability of vulnerability in different areas and by the magnitude of events. But the main intention is to reduce and minimize losses.

### 3 Conclusions at the country level.

General goals and tasks are feasible and they coincide with the ones proposed previously by the country. In Guatemala we consider of vital importance taking into account the multicultural aspects, which should not be neglected in governance, neither in the IWRM plans. Community participation is essential in the management of water resources. This makes the process slower, but their results are sustainable in the long term.

A limiting factor in the country is the water regulatory framework, more than 60 years have passed without being able to approve a water bill, which is essential for the equitable allocation of the resource. However, it is necessary to keep insisting in its establishment.

The workshop participants support the recommendation that the post-2015 Goals for Sustainable Development have a specific goal for water which transcends the one devoted to water and sanitation in the Millennium Development Goals.

The proposed goal for water is overarching and easy to understand. It is recommended that its wording should be changed to: "Sustainable water for all" in order not to use the word "securing", which does not imply changes in the goal message, and avoids a possible impact on the countries' sovereignty.

The targets cover current and future problems over the period 2015-2030. However, the need to make some changes in the targets and their related elements has been pointed out, in order to enhance their formulation and scope.

Indicators must be improved in terms of their scope and formulation, taking into account the possibilities countries have to survey, calculate and report the data involved.

It is recommended that the reports on the progress made on the achievement of the targets should be made every 3 years.

### **Annex 1 : List of Participants**

Full Name	Organisation	Full Name	Orgainsation
Reyna Pelicó	Wester for People	Eladis Marin	Vene pas
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Full Name	Organisation	Full Name	Orgainsation
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Keyn Ariel Nicolas  Agabal Roberto she	C. Barrio Ean Pedro	Jorge Enis Ramin R	A A
Gados Enrique Carcia C Sonia Perez		Detero Estelan	SE CONRED
Avec Pever Conquer	Red de Mujores		CONREP
Ing. Orlando Herrante	NEOM	Carolina Caraia	GEWNRED
Carlog R. Colons Gabrilla Frens	Hidronfortion EAB-TVG.		
Marco Tacam Alvaro Solano	utz Che MSPAS		
Kerstin Klein	Elice presidencia		
Fatima Reyes Haroldo Galindo	AMSCLAE WSPAS		
Emi Inomoto			

### **Annex 2: Meeting Agenda**

## Consultation Workshop: POST 2015 WATER SUSTAINABLE DEVEELOPMENT GOALS

April 22th, 2014 Earth Day, Casa Ariana, Salón Vincent Van Gohg

No.	Hora	Actividad	Participantes		
	8:30-9:10	Registration			
	9:10-9:15	Welcome: Directive Council GWP-GUATEMALA			
1	9:15-9:30	<ul> <li>Opening</li> <li>Mrs. Jeanette de Noack, Chair GWP-Guatemala</li> <li>Mr. Jorge Mario Molina, Subdirector Agua y Saneamiento, MSPAS</li> <li>Mr. Sergio Ruano, Environment Viceministry MARN</li> <li>Mr. Pablo Roberto González, Water Secretary</li> </ul>			
2	9:30-9:45	GWP and its facilitating role in national, regional and global process	Elisa Colom, Honorary Chair GWP- Guatemala		
3	9:45-10:15	ONU-WATER Document	Carlos Cobos, Consultant GWP-CAM		
	10:15 a 10:30	Cofee Break			
4	10:30 a 11:00	Goals and tasks by ONU WATER from the National Perspective	Carlos Cobos, Consultant GWP-CAM		
5	11:00- 13:00	Workshop tables by Tasks: Metodology, rules, time and group organization	Facilitador y participantes		
6	13:00 a 13:20	Plenary Session	Group representative		
7	13:20	Clausura y conclusiones	GWP-GUATEMALA		
	13:30	Lunch			

Guatemala stakeholder perspectives on a water goal and its implementation			