

Rio+20 Dialogues: Water

Moderators:

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INTRODUCTION

The Rio+20 Dialogue on water drew 2,116 participants for a rich discussion on a wide range of issues – from fundamental questions such as whether water should be viewed as a human right, a commodity or something in-between, to specific proposals for research, technologies and policies.

Many valuable ideas were presented. The process of posting recommendations and voting on them was fairly chaotic, and we feel that some of the strongest, most effectively framed ideas got lost to some extent. Where they are relevant to the top 10 recommendations listed here, we have included them in our reviews. We have also provided, at least in part, the original wordings of the recommendations, as in some cases, a great deal was lost in the rephrasing for the final voting website.

We propose that the Guiding Principles from the Dublin Statement on Water and Sustainable Development, presented at the UNCSD at Rio in 1992 be added for consideration for the final list of recommendations considered by the panel. These principles cover recommendations that were very high in votes, but because they were spread out across a number of recommendations, did not make the top ten. Important issues include more effective governance, recognition of the value of water, and the critical role of women and water more broadly.

RECOMMENDATIONS AND DISCUSSION

Each of the top ten recommendations is presented below, using the text from the voting web-site. We suggest alternative phrasing that makes it clear who needs to do what and in what timeframe. This is followed by a discussion drawing on the input from the Water Dialogue website, available science and our own assessment of the feasibility of implementation of each recommendation.

1. Implement the right to water

Suggested re-phrasing: **World leaders at Rio+20 should implement access to safe, clean water as a human right. This access need not – and should not – be unlimited, but it should be defined in such a way that all people, regardless of their socio-economic status, ethnicity, nationality or geographic location, are guaranteed a sufficient supply of potable water, either free or at a cost they can afford.**

We also believe this means water should not be subject to profit-making in the provision of basic water supply and sanitation, nor should anyone be allowed to contaminate another's drinking water source, nor should water rights be allocated to any one party if, because of it, another is deprived of a minimum daily drinking supply.

We realize this would be a major political challenge, but the issue came up again and again in our forum, especially under our most heavily read and discussed topic: 'Is there a crisis of water, or a crisis of political will?' While opinions differed, the general sense among participants was that even in places where there truly is water scarcity, political failures, injustices and the dominance of powerful interest groups all greatly exacerbate the problems. In this context, one forum participant wrote:

It is a question of power and power distribution. ... I have been in water scarce countries, where large percentages of the population have no water, but where you see that higher income parts of the population use (and abuse) of water. I have also see water rich countries, where still a tiny minority does not manage to get access. ... The framework of the human right to water and sanitation has the power to raise awareness to these unacceptable situations, put a focus on the most marginalized ... and 'force' or promote the necessary political will!

Another participant, who posted a discussion topic titled 'Water as a Human Right', noted that in Latin America in particular, governments' development policies rely on the exploitation and export of natural resources – whether through agriculture and forestry, or mining, all using 'gigantic amounts of water'.

This results in the deprivation of hundreds of communities that made traditional uses of this vital element. Thus the importance of deepening work based on the human right to water as a key milestone in recognizing the interdependence of rights, such as the right to a clean environment, and the rights to life, food and health.

Several other contributors, meanwhile, favored assigning an economic value to water in all its competing uses – a notion first suggested by moderator Annette Huber-Lee as a different way to ensure water access for the poor and proper financing for water infrastructure. This raised some red flags: one user expressed deep concerns about imposing a blanket price on water, which he viewed as a first step in privatizing water resources and concentrating them in the hands of international corporations. However, many saw the economic-good approach as useful, especially in targeting high-volume and wealthier users, though some also warned against imposing a prohibitive cost on the poor.

I agree that water is a basic right everywhere, and the concept of paying for it is very alien especially in rural settings. However, the economic value of water can be capitalized in urban settings only, which are the major consumers. ... [Paying for water would cultivate] a sense of responsibility and appreciation in the affluent households for the fact that probably the volume they use to water their gardens would be adequate to serve a small low income family for the day! Therefore the concept of economic value is necessary but has to be tweaked to protect the less fortunate, without having a huge dent on the affluent.

Other contributors agreed. One noted that water is both a human right and an economic good, 'and until we come to terms with it we will not solve the crisis'. His suggestion was that 'some currently undefined volume of water should be considered a basic right for survival', and water in excess of that level 'should be significantly more expensive, with a tiered cost structure'. Another contributor suggested differentiating between 'basic human and environmental needs, which can be seen as "rights", and other water uses, which should be treated as economic goods'. The former would be 'subsidized and provided regardless of cost'; the rest would be 'fully priced'. There are a number of countries that implement such a policy, including diverse economic conditions such as South Africa and Israel, so implementation is certainly feasible, given sufficient political will.

2. Strengthen solidarity financing mechanisms

Suggested re-phrasing: **National governments, local authorities, and public and private operators of water systems should dedicate 1% of water and sanitation revenues specifically for actions of international solidarity that support access to water for those most in need.**

This recommendation would support the ability of developing country governments to implement the right to water, as suggested above. While implementing the right to water should be possible in developed countries, initial seed financing may be crucial for developing countries. With respect to economic sustainability, it may be appropriate to set these funds up as loans at local to regional scales, to ensure local participation and investment.

Financing of water infrastructure or water access expansion in developing countries was not significantly discussed in our forum, though some mentions were made of the need for investment. Although many users voted for this recommendation, very few offered comments. One of who did suggested going farther, noting that even local and regional water authorities should start allocating a portion of their budgets to overseas development aid for water projects in developing countries.

3. Put water at the heart of future development goals

Suggested re-phrasing: **The Sustainable Development Goals developed in the Rio+20 process should explicitly address water issues – both directly, by setting time-bound targets for access to clean, safe water and sanitation, and indirectly, as a prerequisite for attaining many other goals.**

Science shows the strong linkages between reliable access to water and human development. For example, some studies have shown a correlation between water storage and GDP at the national scale, and fluctuations in GDP according to rainfall patterns in countries with little storage. Yet the MDGs, as originally formulated, missed many of these linkages. The SDGs can correct this omission.

Clearly, not every single SDG will involve water issues, and it is important not to assume that water consumption at the levels now common in industrialized nations is a prerequisite for development. However, explicitly addressing water issues will provide valuable guidance to nations – and those wishing to assist them – about water-related policies and investments needed to achieve each goal. In addition, this approach can highlight connections between goals, and encourage the pursuit of integrated solutions rather than discrete measures that might undermine one another.

It should be noted that although there was not extensive discussion in our forum about how to integrate water issues into the SDGs, there was a clear consensus about the importance of water to the SDGs. As one contributor put it, water is ‘the lifeblood of all people, regardless of age, gender, income, race, or ethnicity’, and thus it is ‘inherently linked to sustainable and healthy development’. Another wrote:

Water is a fundamental issue to achieve poverty eradication, food security, climate change adaptation and mitigation, public health, energy generation and use, sustainable rural and urban development and for providing ecosystem services.

One participant posted a discussion topic about water-related SDGs, noting that ‘we need new targets for achieving water security for sustainable future survival’ and offering several ideas discussed in UNESCO’s International Hydrological Program. The four recommended SDGs – each of which was accompanied by strategies to help achieve it – were:

- *Reduce loss of human life and property from water scarcity, floods and droughts by 50 percent from 2010 levels by 2030.*
- *By the year 2030, to have implemented water resources assessment services in 75 percent at the river basin, aquifers and country levels using the framework of the UN World Water Assessment Program;*
- *To have developed and implemented water, environment, food and energy security plans for river basins and aquifers for 75 percent of the countries by 2030.*
- *Provide access to safe water and sanitation for 75 percent of the population by 2030.*

As part of the discussion under this topic, another contributor cited a recent exercise by the UNCSD Major Group of Children and Youth (MGCY) that found an ‘urgent need to create water-related goals that show the inter-linkages of water resources with other economic sectors’. Examples of potential targets are:

- *Develop an international research program focused on water recycling technology to improve cooperation between scientific actors and urban planners.*
- *Increase by 50% the current coverage of wastewater treatment to reduce the amount of pollution liberated to rivers and groundwater resulting from industrial and productive activities.*

- *Incorporate the human right to water into all national water strategies.*

Yet another participant, while welcoming the notion of water-related SDGs, warned that setting goals specifically for water (as was done with the MDGs) ‘might limit the integration of water issues in other development processes/goals’.

The recommendation discussed here was posted by a different contributor, framed thus:

In the process of the creation of a new set of post-2015 development goals, water must be integrated within each goal, as a cross-cutting pre-requisite to the attainment of all other human, economic and environmental securities, in addition to being the object of a specific goal.

4. Assert the importance of integrated water, energy and land-use planning and management at all scales

Suggested re-phrasing: **National governments and river basin organizations need to adopt policies and structure institutions that are capable of evaluating and reducing tradeoffs and increasing gains by joint planning of energy, land, water and food to achieve sustainability across scales.**

This topic was extensively discussed in our forum, both in the context of the water-energy-land nexus, and in calls for greater support for integrated water resources management (IWRM).

The nexus discussion, started by moderator Annette Huber-Lee, began by citing the background paper for the Bonn2011 Conference: The Water, Energy and Food Security Nexus last November. The paper argued that the interconnected challenges posed by population growth, climate change, and development and poverty alleviation needs require an integrated approach to avoid working at cross-purposes.

‘The nexus approach means systemic thinking and a quest for integrated solutions to guide decision-making about resource use and development, to minimize externalities and ensure true sustainability’, noted Huber-Lee. ‘There is a growing recognition around the world that this is, indeed, the best approach, given the complex linkages and feedbacks involved. But successfully applying nexus thinking to specific locations and challenges is by no means a small task.’

Several users posted comments in support of the nexus approach – though one noted that ‘nexus thinking is in a very formative stage’ still, so a great deal more work is required. Another user wrote that while ‘there is no question a nexus exists among water-land-energy’, the question is ‘what human practices have the most negative effects’. One key area to explore, he suggested, is industrial agriculture.

Another contributor remarked that the nexus approach ‘is crucial to moving forward toward a green economy, which seems the best description of what sustainable economic development would be if all elements of the nexus plus climate change are taken into account’. But one shortcoming of the work so far, she added, is that it has focused primarily on the developing world. While there is a ‘clear and present need’ in for nexus approaches in those countries, she argued, developing nations, especially the United States, ‘need to explore nexus thinking much more strongly’.

Another posting focused on the ways in which the nexus is already being recognized in international discussions and declarations. Many groups – representing children and youth, women, trade unions, businesses, scientists and indigenous communities – have also supported incorporating the nexus in the Rio+20 discussions, the writer noted, as have some, but far from all, countries:

The European Union has already established the water and energy nexus as one of the main challenges for the green economy. However, many of the key players within the negotiation process, including the United States, Brazil, India, and China, have not included the water-energy nexus in their official position.

The IWRM discussion noted that IWRM grew out of a recognition that water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels. In the last two decades, IWRM has been widely embraced, reducing back-room deals favoring

powerful water user communities and making participatory water planning the norm, in developed and developing countries alike.

Huber-Lee herself acknowledged, however, that IWRM ‘is far from perfect; it has been argued, for example, that IWRM processes are often be too narrowly focused and fail to fully consider the needs of downstream users, or potential impacts on ecosystem services’. Several participants echoed such criticisms and questioned the extent to which IWRM has lived up to its goals. One wrote:

Though IWRM has shifted from technical management to public participation to ensure sustainable management of water resources, it is still dominated by engineering aspects and political interference.

Another participant noted that as of 2008, only 38 percent of countries had an IWRM plan, and there is also an ‘imbalance’ in the implementation of IWRM components within countries and regions. She wrote:

IWRM is a good first step to address water issues. However, it must be applicable at the basin level for it to be truly effective. At the same time, political considerations (whether the basin is transboundary) must also be addressed. ... Rio presents an opportunity to address both of these gaps: the recognition and promotion of transboundary agreements, and to promote the implementation of IWRM plans at the basin and national levels.

5. Secure water supply by protecting biodiversity, ecosystems and water sources

Suggested re-phrasing: **National governments need to adopt policies that recognize the role of natural capital in providing water, food, energy and livelihood security.**

The importance of protecting biodiversity and ecosystems came across in several forum discussions and recommendations, and many users noted their interest in these issues in their personal profiles as well. The item voted on here is based on a posting that called for:

Concrete actions to promoting the protection of ecosystems and sources of water supply, and ensuring the conservation and sustainable use of water resources in the legislative and executive segments of the countries, as well as joint initiatives between environmental agencies and different sectors of water resources users.

Another contributor posted a recommendation to ‘invite states and regional decision-makers to take into account the services rendered and the economic value of ecosystems’. This was based on the work of the World Water Forum, held in Marseille in March 2012, he wrote, adding:

The objective is to take into account the actual impacts of human activities and to avoid that degradation of ecosystems hinder growth and equitable development of future generations.

One user proposed strengthening mechanisms for payments for environmental services (PES) – especially for water resources – as a way to protect ecosystems. PES have proven more effective at preserving forests than annual declarations of protected areas, she wrote, and they not only boost families’ incomes, but they also build environmental awareness. The payments are still too small, however, she added, monitoring systems need to be developed, and resource users have not been fully engaged.

Another participant emphasized the importance of protecting water sources in mountainous areas, such as the Himalayas, to protect them from degradation. ‘We need to maintain the flow [of water] by adopting all possible measures of conservation’, he wrote.

And as part of another discussion, on the water-energy nexus – covered under a different recommendation – a team launching a new research project in the Colombian Orinoco region described the situation there:

The Orinoco has one of the world’s most diverse fish communities and some of the most ecologically diverse and fragile ecosystems in Colombia. A recent dramatic rise in public and private initiatives and investments in bioenergy, agro-industry, petroleum extraction and fisheries

has begun to transform the region, with significant water, energy, and land-use implications. [This research] will help us understand the potential impacts on local indigenous communities, biodiversity and natural ecosystems.

Finally, we should note a posting by moderator Francisco Barbosa about one major threat to biodiversity that has not been adequately addressed: invasive species. He wrote:

Biological invasions are said to be the second main cause of biodiversity loss, causing the extinction of native species and the degradation of ecosystems processes and functioning. Freshwater communities and ecosystems are special victims of the introduction of exotic species. Inland waters are often invaded due to transportation of goods in a world more and more globalized ... The impacts of these invasions are well known but so far the corresponding actions are not so efficient. Isn't it time to tackle [develop] task forces and actions to control and prevent the spreading of this huge ecological problem?

6. Adopt more ambitious global policies to address the needs for water that is really safe and for sanitation

Suggested rephrasing: **National governments need to adopt the goal of universal access to safe water and sanitation, set up realistic gradual targets and commit the required financial resources and institutional strengthening for implementation.**

This recommendation was based on a longer text that called for accelerated efforts to improve access to drinking water and sanitation both in rural and urban settlements, built on four key points:

- *Recognizing the needs of the billions of people without satisfactory access to drinking water because their water is unsafe.*
- *Deciding to monitor, both globally and nationally, the quality of water used by people to better identify the current water safety gap.*
- *Recognizing the urgency to reverse the deterioration of water and sanitation services in urban settings where these programmes are outpaced by urban growth.*
- *Recognizing that satisfying the Human Right to Safe Drinking Water is more demanding than just ensuring access to Safe Drinking Water.*

The writer noted that while fewer than 800 million people now lack access to ‘improved water sources’, water safety is not monitored globally, and ‘there are indications that at least 2 billion people use water that is unsafe’, and more than 3 billion people use water of ‘dubious’ quality.

Progress on sanitation, meanwhile, is slow, the writer added, with 2.6 billion people lacking private, hygienic toilets. Moreover, he wrote, ‘In the field of sanitation people need more than toilets. They also need their wastewater to be collected and transported safely.’ And in cities, rapid population growth is outpacing efforts to provide drinking water and sanitation.

Another contributor posted a short version of the same basic idea: ‘Achieve universal access to safe and clean drinking water and basic sanitation to support poverty eradicate and protect human health.’

Another participant urged world leaders ‘not to neglect sanitation once again, leaving it out from the international development agenda, as happened for example with the MDGs (the sanitation target was endorsed only in Johannesburg 2002)’. He also offered suggestions for Rio+20 and beyond:

- *The international community should increase awareness and commitment towards sanitation from actors at all levels (governments, NGOs, donors, international agencies, communities, etc.) via communication and advocacy campaigns.*
- *National governments should truly commit themselves to develop policies that improve sanitation situation. This includes putting sanitation up in the agenda (from national to local level), setting clear responsibilities, monitoring progress adequately, developing capacities, strengthening*

institutions, fighting corruptions, ensuring long-term engagement and periodically reviewing and improving the strategies.

- *NGOs, researchers, donors, consultants, universities and international agencies should encourage the process of innovation, reflection and learning around sanitation, helping develop bottom-up, software centered, demand driven, community-led and sustainable approaches that are adequate to the particular contexts of the interventions.*

Acknowledging that developed countries invest around 1.5% of their GNP to the whole water sector and that water quality problems – in spite of being part of the water availability equation – are not given as much attention as quantity issues, moderator Blanca Jiménez argued that an extra 0.5% of the GNP should be devoted to specifically remediate and prevent water quality problems. Given that developing countries' water infrastructure deficit is greater than in the developed ones, and that water quality deterioration is visibly affecting human health and the environment all around the world, but with extreme situations in developing countries and/or poor regions from arid and semiarid areas, she concluded that developing countries need to allocate at least 2% of their GNP to address quantity and quality issues.

7. Expand and strengthen global mechanisms for the monitoring of water, sanitation and hygiene

Suggested rephrasing: **The Sustainable Development Goals developed in the Rio+20 process should promote the expansion and strengthening of global mechanisms for action-oriented monitoring of integrated water resources management, water, sanitation and hygiene, as a means to empowering social organizations and contributing to the accountability of the water sector.**

This recommendation grew out of a posting on the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), which since 1990 has monitored progress towards global goals on drinking water and sanitation, including progress towards the relevant MDGs.

The current global indicators are widely known to fall short in some key areas, the writer notes, including water 'quality, safety, accessibility, reliability, affordability and equality in access as well as on the aspect of limiting the environmental impact of poor sanitation'. In May 2011 the JMP convened a stakeholder consultation to start formulating post-2015 goals, and it subsequently established working groups to focus on drinking water, sanitation, hygiene and, cutting across the first three, equity and non-discrimination. The groups are to present their findings in a broad stakeholder consultation in December 2012, where options will be chosen for consideration by the General Assembly in September 2013.

'The importance of this work cannot be understated', remarked another contributor, adding:

Without a proper framework for post 2015 monitoring, there is a very real risk that access to reliable and safe water and sanitation falls off the list of top priorities for development.

Understanding how and where coverage is lacking and making full use of nationally available capacity is one of the most important foundations for sustainable development.

However, under a different topic, another participant wrote that while the JMP is making 'great gains', 'other issues that are necessary for sustainable and safe water sources have entered the radar but fall outside of the scope of the JMP project. Some of these issues include human exposure to floods and droughts, water resource management, irrigation, and wastewater use.' Accordingly, he proposed monitoring these indicators:

- *Proportion of the population that has access to sustainable safe water supplies and hygienic sanitation;*
- *Percent of financial resources dedicated to integrated water resource management in relation to national spending;*
- *Percent of population that is protected from extreme weather events;*
- *Percent of population that has access to sufficient climate resilient safe water resources and hygienic sanitation facilities at all times;*

- *Percent of countries that have an infrastructure for implementing health impact assessments and environmental impact assessments;*
- *Percentage of more frequent water pollutants;*
- *Burden of disease attributable to unsafe water hygiene and sanitation.*

To be effective, monitoring should include also how national and global targets are being complied with – and should be widely disseminated to empower social organizations and contribute to the accountability of the public sector.

8. Promote sustainable water usage and health. People need access to sustainable water and hygiene to ensure the sustainable growth of a nation

Suggested rephrasing: **National governments need to promote sustainable water usage, considering better technologies, questioning commodities production patterns and prioritizing trans-generational equity.**

We should note that unfortunately, this recommendation was rewritten for the voting website in a way that dramatically changed its meaning. The original was the argument outlined above – for a series of indicators to supplement the JMP and improve monitoring of water-related issues. The new text also confused two separate issues: *sustainable consumption*, and *water access*. Given that we have addressed water access and health at length under another recommendation, here we focus on sustainable consumption.

Sustainability was a recurring theme in many of the forum discussions, and it also inspired several recommendations. One that received considerable support called for a multi-tier approach, including the ‘rationalization’ of water consumption in households, industry and agriculture; better wastewater treatment; desalination; construction of dams in areas with irregular heavy rains; rainwater harvesting; fog harvesting; and water pricing policies that make a ‘direct correlation between water prices and the amount of water consumed’.

Another contributor called for water governance systems that start from the premise that water is a common good that is divided when it is shared and that exists in a limited quantity. Such an approach would serve social justice, he wrote, but at the same time, ‘the procedures for investing in and managing the handling and distribution of water to all must directly encourage reduced consumption, notably through a fee structure appropriate to different usages’. He also offered these recommendations:

- *Each territorial level must dictate guiding principles for lower levels, with the two goals of efficiency and justice, according to its particularities*
- *We encourage the creation, within the Sustainable Development Council, an audit committee for water governance, charged with evaluating the progress of multilevel governance applied to water, in addition to obstacles to its implementation.*
- *We recommend experimentation at different systemic levels with negotiable quotas, the best means to create positive incentives for the optimal water management.*
- *We also recommend to establish a documentary resources website presenting the most interesting experiences, guaranteeing the exchange of these experiences, and making this ensemble the basis of training all actors involved in water governance*
- *States should be especially careful of the risk that international or intra-national conflicts tied to water management might proliferate.*

Another recommendation focused on the use of water for agricultural irrigation. Several participants agreed that waste in this sector must be minimized; one proposed replacing open-channel water distribution networks with pipe distribution systems, though another commented that this is very costly. Also, before making such a recommendation, the links between groundwater and surface water must be fully understood because the recharged water may be used by downstream irrigators.

Finally, one participant stressed the importance of helping consumers live more sustainably. One tool that could help, he suggested, is the susGen.com online platform, which aims to ‘change consumer behavior, help people to live a more sustainable life and therefore make our planet a better place for us and future generations’.

9. Build a common vision and adopt an action plan at the global level regarding wastewater management

Suggested rephrasing: **The Sustainable Development Goals developed in the Rio+20 process should call for a common vision and adoption of an action plan at the global level, acknowledging that (a) wastewater is the only water resource that is growing and its safe reuse in agriculture can ease overall pressure on water resources, and (b) that accelerated urbanization makes it necessary to close the “urban water cycle”.**

Several forum participants urged leaders meeting at Rio+20 to address wastewater issues. One focused on urban needs, noting that untreated wastewater from cities contaminates downstream water supplies, and citing a survey that found that in 2008 in Brazil, 44.8 percent of municipalities had no sewage collection network, and only 28.5 percent had sewage treatment facilities. The writer added: ‘this is a problem present from developed countries, developing and underdeveloped countries’.

A few contributors called for greater reuse of wastewater. One wrote: ‘Improve wastewater collection, the treatment and reuse of water, including the use of treated wastewater as a resource.’

The recommendation presented here is based on a longer proposal that started by calling for the UNCSD to put ‘the management of man-made water pollution’ on its global agenda. It continued:

It should target collection and de-pollution of water after use as well as the organization of successive uses of water. It should propose to country governments to take appropriate steps to adopt a shared vision of urban, industrial and agricultural wastewater management.

The writer noted that for more than half of mankind, wastewater is not collected safely, and 80 percent of wastewater is not treated before re-use or discharge into nature, ‘which leads to an increasing pollution of rivers, lakes, aquifers and seas’. Countries have very different wastewater policies, he added, and it is clear that it’s time for governments to ‘harmonize their views and adopt coherent policies on wastewater management’. Better wastewater management would also contribute to the green economy, he added, since it creates opportunities to produce energy, extract nutrients for agriculture, reuse water, enhance property values, and protect health, among other benefits.

In addition to the useful recommendations presented above, it must be acknowledged that – given that the world in general is rapidly urbanizing, and nearly 60% of its population is now living in cities, water has to be managed differently, closing the “urban water cycle”, by giving greater importance to practices such as water reuse, use of different sources of water (pluvial water and graywater, for instance), use of urban areas to store storm runoff to control floods and even as a landscape element, among other solutions. This approach can be an essential part of cities’ preparedness for climate change.

10. Improve water and sanitation facilities to ensure the education of children

Suggested rephrasing: **National governments need to include the cost-effective strategy of ensuring safe drinking water and sanitation facilities to improve education outcomes.**

Though this topic did not arise in the forum discussions, a recommendation to this effect won a great deal of support. The original text that users voted on was succinct:

Water and sanitation facilities are essential for the education of children. Governments are asked to adopt and implement regulations that require the presence of a drinking water tap and toilet in every school.

One user who supported the idea remarked: ‘Yes, it an inalienable basic human right for all children.’

This interest from participants is backed up by the FRESH (Focusing Resources on Effective School Health) partnership developed by the World Bank, WHO, UNICEF and UNESCO and launched at the World Education Forum in Dakar in April 2000 (http://www.unesco.org/education/efa/global_co/working_group/pres15_jones_barthes.shtml). The cost effectiveness of focusing resources on the school-age child is one of the reasons for prioritizing it in water public policy:

School health programmes help link the resources of the health, education, nutrition, and sanitation sectors in an infrastructure - the school -- that is already in place, is pervasive and is sustained. While the school system is rarely universal, coverage is often superior to health systems and has an extensive skilled workforce that already works closely with the community. The accessibility of school health programmes to a large proportion of each nation's population, staff as well as students, contributes to the low cost of programmes. The high effectiveness of these programmes is a consequence of the synergy between the health benefit and the educational benefit. The effectiveness is measurable in terms not only of improved health and nutrition, but also of improved educational outcomes, reduced wastage, less repetition and generally enhanced returns on educational investments.

SUGGESTED ADDITIONAL RECOMMENDATION

11. World leaders in Rio+20 should adopt the Guiding Principles from the Dublin Statement on Water and Sustainable Development, presented at the UNCSO at Rio in 1992, as follows.

Dublin Statement on Water and Sustainable Development Guiding Principles¹

Principle No. 1 - Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment

Since water sustains life, effective management of water resources demands a holistic approach, linking social and economic development with protection of natural ecosystems. Effective management links land and water uses across the whole of a catchment area or groundwater aquifer.

Principle No. 2 - Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels

The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects.

Principle No. 3 - Women play a central part in the provision, management and safeguarding of water

This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them.

Principle No. 4 - Water has an economic value in all its competing uses and should be recognized as an economic good

Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good

¹ Taken from <http://www.wmo.int/pages/prog/hwrp/documents/english/icwedece.html>

is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.

CONCLUSION

This forum provided a valuable opportunity for civil society to contribute to the Rio+20 debates. While participants' opinions varied, a few messages came through loud and clear:

1. Access to safe, clean water and sanitation is a human right, and world leaders must commit themselves to providing that access to all people.
2. Water cannot be squandered. We must manage water resources carefully, through equitable and participatory processes that protect people's access to basic supplies but also promote sustainable use.
3. Effective participatory processes require a level playing field. Capacity-building, especially at the grassroots level, but also at various levels of governance, is needed to ensure that Integrated Water Resources Management (IWRM) and participatory processes can be effective.
4. Water quality and wastewater must be acknowledged as part of the water availability equation: (a) quality degradation may permanently damage water-dependent ecosystems or render many groundwater aquifers useless before the wells run dry, and (b) wastewater is the only water resource that is growing
5. Water is a cross-cutting issue. It cannot be covered by one or two discrete goals; water resources must also be considered when discussing land use, energy, food, ecosystem services, among other issues.
6. We need better data and better monitoring, both to identify unmet needs, and to track progress.
7. Recognition of the economic value of water is key to ensure adequate and equitable access not only to water, but to food, energy and ecosystem services.

We greatly appreciate this opportunity, and hope that our contribution has been informative and useful.