Interventions by Oyun Sanjaasuren

GWP Chair at the Johannesburg event on Valuing Water

30 May 2017

Many of us have heard of the so-called "paradox of value", the apparent contradiction that, although water is on the whole more useful, in terms of survival, than diamonds, diamonds have a higher price in the market. This question is also known as the diamond-water paradox and it was first presented by the economist Adam Smith in the 1700s. Why does an economy put a much lower value on something vital to sustaining life compared to something that simply looks shiny and sparkles?

The explanation by the economists has been that for diamonds, because they are harder to find and attain, our satisfaction for adding a diamond to our collection is much higher than someone offering us water. Of course, if one is dying of thirst when lost in the desert, then this paradox does not make sense, and a drink of water would be much higher valued than a diamond found in that desert.

The reality is that we aren't willing to pay a lot of money for water. So the subject of valuing water is complex – and controversial. The traditional water allocation approach treated water as a free and replenishable resource with zero cost at the point of supply. With increasing scarcity of water resources and multiplicity of demand from different sectors for a share of this scarce resource, the traditional approach is being challenged.

The valuing water discussions must account for aspects such as basic human consumption, well-being and health, cultural traditions, rights, and responsibilities of accessing water; as well as economic considerations of full-cost recovery. We must account for uses such agriculture, industry, power generation, and navigation, among others. We need to make sure that water is replenished in nature and that ecosystems are restored. There are many dimensions and colors to valuing water.

GWP – is a neutral multi-stakeholder platform

GWP, a network of more than 3,000 partner organizations in more than 180 countries with its 13 Regional Water Partnerships, is privileged to be a partner in this discourse, in this 'listening', the 'ground-truthing', 'feedback' exercise for this High Level Panel on Water initiative. GWP has 20 years of experience in advocating for better water governance through IWRM (grounded in the Dublin-Rio principles), advocating that these different dimensions of water, the multiple uses and users of water are accounted for; that they are on the table when the big decisions are taken about the wider policies including education, housing, jobs, taxation, etc. Often water is not at the table although we know that these decisions have consequences for water resources.

Stakeholders are valuable partners and draw attention to emerging issues and challenges. They also provide expertise, knowledge, and innovative solutions and often amplify voices that might otherwise not been heard. Agenda 2030 is about involving all relevant stakeholders, particularly those from developing countries. The purpose of today's meeting is to be collaborative, and I know you will all want to participate and have something to share.

Valuing Water must start from valuing Nature

When we discuss this topic, restoring the economy's natural support systems is key. We have taken water for granted, to think it is an unlimited resource. This is not true anymore. The world is rapidly approaching a point where this model is no longer sustainable.

Global Water Partnership (GWP), Global Secretariat, PO Box 24177, 104 51 Stockholm, SWEDEN
Visitor's address: Linnégatan 87D, Phone: +46 (0)8 1213 8600, Fax: + 46 (0)8 1213 8604, e-mail: gwp@gwp.org

The economic growth model that existed for the past centuries was based on inexpensive and plentiful natural resources, the model where natural capital, including water, was not valued, pollution was overlooked and the concern over environmental degradation was not important. This inexpensive natural capital was extracted, over-used, and wasted. This is the "develop now, figure-out later" model. I am afraid we are approaching the "figure out now" stage. Part of the solution is valuing ecosystems, including valuing water.

Humanity is turning resources into waste faster than waste can be turned back into resources and depleting the very resources on which human life and biodiversity depend. Natural resources such as forests, land, and fresh water are not able to regenerate fast enough. As the 2015 Rockefeller-Lancet report on Planetary Health reported, out of the nine key planetary boundaries, three have already been crossed (rate of biodiversity loss, climate change, nitrogen cycle). It now takes the earth one year and six months to regenerate what we use in a year.

(In China, after suffering record losses from weeks of non-stop flooding in the Yangtze River basin in 1998, the government noted that when forest policy was viewed not through the eyes of the logger but through those of society as a whole, it simply did not make economic sense to continue deforestation. The flood control services of standing trees, they said, was three times as valuable as the timber from trees cut.)

The most important role of water valuation is in demand management and better allocation among its various uses. Improved water resources management requires decisions based on economic efficiency, social equity, and ecological sustainability. Ultimately the value of water does not depend solely on its quantity but on at least four other factors – quality, location, reliability of access, and time of availability.

GWP has considerable experience providing a platform at national and regional levels where a diversity of actors can come together in dialogue. For example, in 2013-2014, GWP undertook a series of 29 national consultations on the framing of a dedicated water goal as part of the post-2015 development agenda.

In August 2013, GWP released a policy brief that examines the role of economic analysis in planning for a more water secure world. The brief, titled 'The Economic Value of Moving Toward a More Water Secure World,' highlights elements that should be considered in any such economic analysis.

The brief includes sections outlining basic economic concepts, describing state and household perspectives, and discussing policy relevance. The key messages of the brief include: economic analysis should include the costs and benefits of both infrastructure interventions and changes in water allocation to various users; the value of a unit of water varies widely across different types of water uses; States and households value water security improvements differently; and generic, global estimates of the economic value of increased water security are not useful for guiding investment decisions at country or regional levels.

The brief concludes that in order to produce policy-relevant economic analyses of water security decision makers must adapt to the dynamic nature of the value of increased water security along development paths; authorities must do the analytical work to understand complex hydrological systems and determine the costs and benefits of various policy interventions; and efforts should be made to capture complex system values rather than user values.

GWP's Technical Committee has also come up with interesting papers on water as a social and economic good, on social equity but also its economic value; and with the OECD on principles of investments in water, etc.

Agenda 2030

Unless it is managed well, water resources may potentially become one of the biggest limiting factors for the implementation of Agenda 2030.

While global population doubled between 1950 and 2004, global water use roughly tripled, and consumption of coal, oil, and natural gas increased nearly five times. If these trends continue, we can expect global population to reach 9 billion by 2050 and 10 to 11 billion by the end of the century. Urban population is also increasing dramatically: 70% of global population will live in cities by 2050 (this means one billion new urban dwellers out of our current global population of 6 billion). According to the OECD, global GDP will nearly quadruple by 2050 and per capita consumption will triple by 2050 as will the global middle class. This is going to put a major stress on water and energy demand. Water scarcity is already a major problem for the world's poor, and climate change will make this worse. According to IISD reports, even without climate change, the number of people affected by water scarcity is projected to increase from 1.7 billion today to 5 billion by 2025.

Talking about scarcity

Rather than resource scarcity, the challenge is that of governance, good water governance and one of the obvious examples is food waste. Seventy per cent of fresh water is used for agriculture. Indeed, agriculture is the largest user of fresh water. One-quarter of that water is lost through food waste. So if we can save half of the food that is lost (SDG target 12.3), we will be saving precious water resources and energy, and then we can contribute to the better livelihoods of people.

Innovative thinking is required:

- Raise water productivity
- Reduce food loss and waste
- Invest in disruptive, breakthrough technologies

The Mongolia context (served as Minister of Environment and Green Development)

2013: as Minister, I introduced higher tariffs for water by industries (2-3 times higher water royalties); not for households or herders, mostly for mining companies and other industries. Different tariffs for different regions, different for surface and underground water.

Revenues from use of natural resources including water (+ logging, hunting) must go directly to local budget (as opposed to the central one) and at least 50% must be used for environmental rehabilitation and restoring ecosystems.

Although Mongolia has relatively good access to improved water and sanitation in urban areas, access is lower among the poorest communities, such as in rural areas and urban and peri-urban ger districts. Costs are significantly higher and consumption significantly lower in these ger districts. This imposes financial, time, health, and environmental costs on these communities. These problems are exacerbated by underlying water scarcity issues, driven by an uneven natural distribution of water resources and a semi-arid climate, which is most notable in water intensive industries such as textiles, mining, and minerals processing, the latter two located primarily in the Gobi Desert.

The major water distribution utility in Mongolia is the Water Supply and Sewage Authority of Ulaanbaatar City (USUG), which provides water at a price of US$ 0.28 per cubic meter (m3) for those connected to the network, one of the lowest prices in the region. However, these rates are

subsidized, as the unit cost of water and wastewater is approximately US$ 0.40/m3, which is average among comparators, and USUG reported US$ 4.6 million losses in 2012.

Households in ger districts, especially in UB, have no direct connections to the piped water network. More than 600 kiosks have been developed across the ger areas of UB, and over 80% are managed by USUG, with the balance managed by the private sector. For those without piped water, the costs are much higher. The World Bank reports ger district kiosks charge US$ 0.71 per cubic meter, roughly 2.5 times the cost paid by apartment dwellers connected to the piped system. This is somewhat lessened by the fact that their consumption is around 5-10 liters/person/day, below the WHO-recommended level of 20 liters/person/day, leading to water costs encompassing only 3% of the average household budget in ger districts. While bottled water use is not known, 43% of ger district households boil water before drinking.

Water resources, both ground and surface, are unequally distributed across the country and water scarcity is an emerging issue in two locations – Ulaanbaatar and South Gobi region. UB inhabits a third of the country's population and attracts most of the economic activities as the capital. Water supply is predominantly from groundwater resources and direct use from surface water is less than 1% of the total water usage.

The South Gobi region has no surface water resources and depends on groundwater, which is almost non-rechargeable. The region has three water basins and two of them have main economic activities with competing demands driven by large mines such as Oyu Tolgoi and Tavan Tolgoi. These mines have launched operations and more projects, including Sainshand Industrial Park, are planned, requiring the development of new water resources.

While water resource decline has been prominent in UB and the South Gobi region, it reflects more generalized water shortage concerns. One oft-cited statistic produced by the Ministry of Nature, Environment and Tourism in 2007 found that in the preceding four years, the number of dried up lakes, streams, and springs had increased by 30%. In 2009, consumption was broken down by the following uses: industry (38%), irrigated crops (23%), livestock cleaning and watering (21%), municipalities (13%), and the cooling of thermoelectric plants (5%).