









Joint Position of the SDG 6 Synthesis Report on Water and Sanitation (Draft – 2nd May 2018)

Working Group Water – German NGO Forum on Environment and Development, May 2018

Approved for publication

In the Working Group Water within the German NGO Forum on Environment and Development, different NGOs from the environmental and developmental sector are collaborating. We herewith comment on the latest Draft of the SDG 6 Synthesis Report on Water and Sanitation 2018.

General Comment

The German NGO Forum on Environment and Development welcomes the possibility to comment on the draft UN-Water SDG 6 Synthesis Report 2018. The human right to water and sanitation alongside with the protection of water-related ecosystems and the environment are key elements for the implementation of the SDG-Agenda as a whole.

The handling of our water resources is mainly driven by sectoral water demands. It still lacks a water management approach that integrates a wide array of policies and economic activities taking into account ecosystem requirements. This policy integration would much better reflect how we value water not only economically, but also socially and culturally – for people, for nature, for life.

Besides climate change, there are further aspects of a globally changing world that all influence the water cycle, such as population growth, land use and urbanization. In many regions, water scarcity and even rising temperatures are not caused by climate change or natural scarcity and droughts, but by poor water governance. Mismanagement of water services, caused by corruption, misplaced investments or lack of funding – no matter if public or private – often lead to a failure in providing safe drinking water and sanitation where they are needed the most.

Overuse and pollution of surface water and groundwater continue to pose a threat to human lives and to the prospects for humane living conditions and increasingly impair diversity and productivity of natural ecosystems.

Ever since the pronouncement of the first Water Decade in Mar del Plata in 1980, water has been high on the international agenda. If they are to be successful in the long run, national and global development policies cannot ignore to sustain the availability of natural resources.

As the 2030 Agenda for Sustainable Development clearly stresses, water is a key factor across many sectors. German NGOs under the umbrella of the German NGO Forum on Environment and Development advocate sustainable water policy in the context of development co-operation from a German and European point of view – in their own country and in their international activities.

Framework of implementation

Implementation of SDG 6 still lacks a comprehensive UN-based framework for implementation. Besides that the role of the UN International Convention on Non-Navigational Uses of International Watercourses (The UN Water-courses Convention should be mentioned and strengthened.

Target 6.4: Increase water-use efficiency and ensure freshwater supplies (p.11)

As the report states, agriculture is by far the largest water consumer. The main water problems caused by agriculture are well known: They include over-abstraction of ground and surface water (often for highly inefficient irrigation), massive eutrophication and pollution of groundwater, rivers, lakes, coastal waters and seas with fertilizers and pesticides as well as large scale ecosystem destruction particularly through drainage, often transforming farmed peatlands into hotspots for greenhouse gas emissions. An estimated average of 60 % of all irrigation water is wasted unproductively in developing countries.

Almost anywhere in the world, agriculture seems to have the right to pollute and to overuse available water resources. More sustainable agricultural water use will most importantly require economically sensible policies to better allocate water resources and implement the polluter pays principle. This includes to reconsider which water demands are paramount (re-assignment of property rights) and how external costs of farming can be reduced.

To increase water-use efficiency as a whole the polluter pays principle must be applied more consistently not only in agriculture. Energy producers, mining companies, other intensive water users should to pay adequate contributions for the use of water resources.

Subsidies for water-instance uses with adverse ecological effects should be quantified and corrected as quickly as possible.

Big polluters of water sources remain unmentioned in monitoring of SDG 6.3.1

It is one of the great achievements of the SDG 6 that it recognizes the need for addressing wastewater and even sets an ambitious target, of treating 50 % of wastewater in target 6.3.

The SDG 6 Synthesis Report 2018 estimates that only 25 % of the world population is connected to wastewater treatment systems (p. 55). Low and middle-income

countries have either no treatment or a decentralized one. The report thus gives the impression that only the conventional wastewater treatment used in industrialized countries is the 'right' way of wastewater treatment.

Treating wastewater with conventional wastewater treatment plants is expensive and highly energy intensive, and the centralized wastewater plants can often not respond with sufficient flexibility to population increases and weather events.

As with all environmental policies, preventing pollution at the source is the more efficient and affordable solution to wastewater management.

We recommend that the report makes a link to SDG14 on oceans, and states that the majority of marine-litter pollution is land-based pollution, which again, is to a large extend caused by wastewater.

The report focuses on household and industrial wastewater, but lacks to mention that most pervasive forms of wastewater pollution, that are the most costly to treat, are from harmful chemical substances and heavy metals, used not only by industry, but also in farming and by households.

We recommend that the report specifically mentions wastewater pollution from agricultural and household use of pesticides, biocides and (micro)-plastics. (micro-plastic fibers which enter into the waste water from washing synthetic clothes are the main source of micro-plastic pollution of oceans in the USA).

Indicator 6.3.1. looks at reuse of wastewater. The main focus is on the reuse of the water, for water scarce areas. It highlights a number of Arab states that have a wide-scale practice of wastewater reuse. However, the target also mentions reuse of nutrients from the wastewater, but this aspect remains unmentioned.

With the phosphorous reserves worldwide soon to be depleted (the key ingredient in synthetic fertilizer), the reuse of nutrients makes wastewater treatment economically important, not only the reuse of the water. However, wastewater sludge often contains heavy metals and other toxic substances, which call again for investment in preventing pollution at the source, e.g. by phasing out synthetic pesticides etc.

We recommend that the report specifically mentions the need for policies and practices that eliminate harmful diffuse sources of pollution and to invest in onsite and decentralized waste water solutions that allow local reuse loops for both nutrients and water from wastewater.

Small scale farmers threatened to be left behind in the implementation and monitoring of SDG 6.4.1. and SDG 6.4.2.

With regard to water and agriculture (target 6.4 and 6.6), the UN-Water report compiles extensive data, demonstration scope and challenge of achieving SDG 6 and interlinkages to related SDGs by 2030. However, "Executive summary", "Key messages" and baseline data, do not adequately reflect challenges, opportunities and policy implications related to water use by agriculture.

Water stress is a major driver of shrinking agricultural land and a key constraint to increasing food production for expanding global demand. Increased pressure on freshwater, destruction of water related ecosystems, combined with extreme weather events and climate change threaten the productivity of both: irrigation agriculture (representing 20 % of agricultural land, producing around 40 % of world food) and rain fed agriculture (representing 80 % of the world's cultivated area, producing 60 % of world food). Therefore, many regions facing water scarcity are forced to scale back irrigation, restore water bodies and inverse the damage caused by over-extraction of water by irrigation agriculture (WWDR 2018). At the same time, water storage and better water management practices in rainfed agriculture are essential to prevent the food and water crisis: Yields in rainfed areas are two- to fivefold lower than could be achieved with a current rainwater use efficiency at only 35 to 45 % (Comprehensive Assessment of Water Management in Agriculture 2007).

- The report fails to acknowledge challenges and opportunities related to water use by different farming systems. The responsibility of high input farming systems for the degradation of ecosystems and impacts on water cycles, local water use and food systems are not mentioned. Accordingly, recommendations focus on system immanent agro-technical solutions against water stress, such as more efficient and smart irrigation and farming technologies.
- In light of the universal and transformative agenda of the SDGs, encompassing obligations for industrial countries to decrease their global resource footprints, a problem analysis and baseline data on water and land use by globalized trade and agriculture is lacking. Benchmarks for better international coordination are needed to achieve a) the reduction of excessive water use and land concentration within production chains of globalized agriculture, b) increased support to reconstruct water bodies and c) appropriate cooperation for infrastructure development to assure adequate servicing of vulnerable populations, including subsistence and smallholder farmers in water stressed countries and regions.

National level statistics on water stress used in the baseline section of the Monitoring Report are hiding pressing problems on water catchment levels, affecting many more countries worldwide. Amongst them are water rich countries and major agricultural exporters such as Brazil. The report fails to introduce the SDG 6.4.2. monitoring

ladder, which calls for higher resolution data, i.e. modelling and remote sensing data (FAO 2017 Integrated Monitoring Guide for SDG 6. Step-by-step monitoring methodology for indicator 6.4.2 on water stress).

- Even though mentioned in the interlinkages section (SDG 2.3.), recommendations and key messages of the report do not even mention the required solutions for achieving better water resource management in rainfed agriculture, such as increased water harvesting and supplementary irrigation, water storage infrastructure, including improving soil moisture retention capacity. This gap is quite remarkable taken into consideration that rural smallscale farmers aremostly affected by hunger and food insecurity. They are threatened to be left behind in the implementation and monitoring of SDG 6.4.1. and SDG 6.4.2.
- Another major omission in this regard remains the inclusion of baseline data on challenges, opportunities and policy implications for sharing of water for the realisation of human rights especially with regards to the right to water and right to food of vulnerable rural populations. SDG implementation needs to tackle persisting inequalities in access and service levels, which were not adequately addressed by the Millennium Development Agenda (UN 2015: The Millennium Development Goals Report). Integrating a human rights based approach becomes even more important as SDG 6.4.1. and 6.4.2. will exacerbate competition for water amongst user groups and put pressure on small food producers. In theory, the increased participation and voice by local user groups (SDG 6b) may promote both sustainability as well as a fair balance of interests. In practice, imbalances in power structures impeach equitable distribution of resources favouring the economically powerful.

Future reports should focus more on preserving and rehabilitating water catchment areas as a precondition for sustainable water use in regions facing waters stress. This should be reinforced with successful case studies drawn from regions in the global South that suffer from water stress. The reports should provide recommendations for better water management according to ecosystems needs and human rights, in line with recommendations of major UN-reports of the last years (WWDR 2018, WWDR 2012, HLPE 2015, CAWMA 2007).

The dangers imposed by large dams are not fully addressed in the implementation and monitoring of SDG 6.6.1

We welcome the fact that the synthesis report mentions the problem that current data-collection systems do not differentiate between natural and artificial water bodies. We welcome as well the report's call for the prioritization of the restoration and protection of source watersheds such as forests and critical basins. Especially, the call for monitoring at the ecosystem level and at the basin scale are important steps forward.

However, given the great hazards associated with the implementation of numerous dams within a given river basin, we suggest that hydroelectric or other dams are repudiated more strongly in the future. As a recent study in the journal Nature has shown (Edgardo Latrubesse et.a (June 2017)l: "Damming the rivers of the Amazon basin", in: Nature 546/7658), the accumulated negative environmental effects of existing dams and proposed dams on the tributaries of the Amazon basin. If constructed, they will trigger massive hydro physical and biotic disturbances that will affect the Amazon basin's floodplains, estuary and sediment plume. This may have catastrophic consequences, as it threatens the health of other ecosystems (such as the Amazon rainforest or mangrove forests in the south Atlantic), whose demise would have far-reaching consequences on the regional and the world climate, food security and biodiversity. We recommend that in the monitoring of SDG 6.6.1 the Dam Environmental Vulnerability Index (DEVI) proposed by Edgardo Latrubesse et. al. is taken into account.

We also recommend that transnational initiatives to protect river basins, that need to be developed in accordance with the local (often indigenous) population, should be promoted more strongly. A good example and great opportunity would be the Cuencas-Sagradas-Initiative, recently proposed by indigenous organizations from Ecuador and Peru, that aims at the protection of the ecologically and culturally most important tributaries of the Amazon basin.

Also, economic uncertainties driven by climate change, land-use change and sensitivity to extreme drought events strongly affect projections of the economics of operation and power generation, so that dams may not even be able to provide the benefits that they are being built for, but only further the debt burden of developing countries building these dams. As a study from 2014 has shown, "overwhelming evidence [suggests] that budgets are systematically biased below actual costs of large hydropower dams—excluding inflation, substantial debt servicing, environmental, and social costs." (Atif Ansar et. al. (2014): "Should we build more large dams? The actual costs of hydropower megaproject development", in: Energy Policy 69).

Given the uncertainties and adverse effects of large hydroelectric dams on the fiscal policy of developing countries, combined with the potentially catastrophic ecological effects of these dams, hydroelectric and other dams should be declared an unsuited instrument for the fulfillment of any SDG.

Berlin, 30.05.2018

This position is supported by the German NGO Forum on Environment and Development, Bread for the World Germany, Counter Current, Grüne Liga, World Peace Service and Women in Europe for a Common Future.