**Call for Inputs**

**Too Dirty, Too Little, Too Much: The Global Water Crisis and Human Rights**

**Questionnaire**

The Special Rapporteur invites and welcomes your answers to the following questions:

1. Please provide examples of ways in which water pollution, water scarcity and floods are having adverse impacts on human rights. Adversely affected rights could include, among others, the rights to life, health, water and sanitation, food, culture, livelihoods, non-discrimination, a safe, clean, healthy and sustainable environment, and indigenous peoples’ rights.

* Water is one of the most valuable and essential natural resource for human being. The scarsity or pollution of water can be disasterous in many ways. I could turned as a threat to human survival. An arcitle Hasan K., Shahriar A., Jim K. U. Water pollution in Bangladesh and its impact on public health. 2019 stated that- Bangladesh is one of the most densely populated countries, facing severe water pollution and scarcity. Although 97% of the total population has access to water, the quality of water is always questionable (WHO, 2018). Bangladesh is a riparian country, consisting of more than 230 large and small rivers (Figs. 2 and ​and3).3). But these rivers are now choked by the pollution caused by mainly human intervention (Majumder, 2009). Groundwater is not also safe as the threat of arsenic contamination is very high all over the country. 97% of the total population in rural areas depend on the tubewells for drinking water; as a result, 35 to 77 million people have been chronically exposed to arsenic in the first decade of the millennium (Flanagan et al., 2012). 8.5% of the total death in Bangladesh is caused by water, sanitation and hygiene-related issues (UN-Water, 2013).

The recent disaster Amphan and 4 times continuous attack of flood in Bangladesh caused a lot worse situation than expected. Almost 50 lac people been severely affected. Due to the Amphan that swept over 48 districts, 1 lakh 76 thousand 7 hectares of land across the country was destroyed. Immediately after the disaster, 37 districts of the country were severely affected by the flood. According to government, the loss in agriculture sector is Tk 1,323 crore. 12 lakh 73 thousand farmers have been affected. The amount of crop land submerged in the flood waters is 2 lakh 57 thousand 148 hectares, of which the amount of damaged land is one lakh 58 thousand 814 hectares. Cearly the mentioned losses directly hit the production of crop which cause scarcity in food security system.

1. How has climate change exacerbated water-related problems?

* Climatic changes can be blissing sometimes but most of the time it makes the worst scenario in disaster-prone areas like Bangladesh mostly in coastal zone. A study Rabbani M. G., Huq S., Rahman S. H., mpacts of Climate Change on Water Resources and Human Health: Empirical Evidences from a Coastal District (Satkhira) in Bangladesh shows us the adverse impact of climate change on water resources. The changes of the climate system or climate induced hazards pose direct and indirect impacts on water resources and human health in most of the areas of the country and especially in the coastal areas. About 74 percent of the people have access to improved drinking water sources while only 80 percent of the people are covered with improved sanitation (Planning Commission 2009). The water resources and safe water supply are threatened by both climatic and non-climatic factors. A number of climate factors or climate induced hazards including cyclone and storm surges, floods, droughts, saline intrusion, erratic behavior of rainfall and non-climate factors such as arsenic contamination, industrial pollution affect both surface and groundwater resources. The increased snow melt from the Himalayan glaciers, due to increase in temperature would force more water to flow through the Ganges, Meghna, Brahmaputra river systems and their river networks creating additional flooding, water logging extending over the central flood plain of the country (Rahman et al. 2007). On the contrary, some areas are increasingly affected by lack of rainfall and drought conditions during the pre-monsoon season in particular. However, increased climate induced water related hazards (intensity and magnitude) due to climate change may affect large areas with multifaceted physical, social, economic and environmental impacts including high incidences and casualties, reduction of agricultural yields, loss of productive land, climate forced migration, damage of property, deterioration of quality and quantity of water and water associated products in the country.

1. To protect a wide range of human rights, what are the specific obligations of States and responsibilities of businesses in terms of addressing water pollution, water scarcity and floods? Please provide specific examples of constitutional provisions, legislation, institutions, regulations, standards, policies and programmes that apply a rights-based approach to preventing, reducing, or eliminating water pollution, water scarcity and floods. Please include, inter alia, any instruments that refer directly to the right to a healthy environment and/or the rights to clean water and adequate sanitation.

* The Constitution of the People‌‌‍’s Republic of Bangladesh stated it’s obligation on Article 18A of Fundamental Principles of State Policy. It has been stated that, “The State shall endeavour to protect and improve the environment and to preserve and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens”. That part has been included in the 15th amendment of the constitution. Besised the High Court in Bangladesh delivered a historic judgement on February 3, 2019 declaring rivers as legal entity and assigning the National River Protection Commission (NRPC) as the legal guardian to act as their parents in protecting the rights of waterbodies, canals, beels, shorelines, hills and forests. Indeed, this is the most comprehensive verdict by any court in the world that gives such specific directions to protect the rights of rivers or any other natural entity.

The implementation of Operationalizing Integrated Water Resources Management (IWRM) in Compliance with the Bangladesh Water Rules, 2018 and Assessment of water resources availability and lowest safe yield of the aquifer in 54 districts of Bangladesh for effective implementation of Bangladesh Water Act, 2013 will play a significant rule in achieving SDG 6.

Bangladesh is taking steps to be the first country that considers the Valuing Water in policy and investment decisions in order to achieve the SDG goals and sustainable socio-economic development. The Bangladesh Water Multi-Stakeholder Partnership (BWMSP) has been formalized with the approval of the Hon’ble Prime Minister and includes high-level representatives from the government, private sector, NGOs, civil society and academia. Acknowledging the importance of valuing water for Bangladesh, the BWMSP has chosen Valuing Water as one of its priority areas and formed a High-Level Committee on Valuing Water chaired by the Principal Coordinator (SDGs Affairs), Prime Minister’s Office.

1. If your State is one of the 156 UN Member States that recognizes the right to a safe, clean, healthy and sustainable environment, has this right contributed to preventing, reducing, or eliminating water pollution, water scarcity and floods? If so, how? If not, why not?

* According to the Bangladesh Profile as UN Member, Bangladesh has developed Draft Environmental Quality Standards (EQS) for (1) water pollution; (2) air pollution; (3) noise pollution; (4) sewage pollution; and (5) industrial pollution. By approving the EQS, the Government will ensure compliance through monitoring. The development of indicators is also needed in this respect. Conservation and sustainable use of biological diversity are under active consideration for the following areas: terrestrial biological diversity (including forests), agricultural biological diversity, freshwater biological diversity and coastal and marine biological diversity (including mangrove ecosystem). Activities has been set to fulfill the agenda like- Preparation and implementation of land and water use and siting policies, Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents, The Government supports the establishment and improvement of local, national, subregional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use etc.

The National Water Plan, started in 1983, focused on the assessment of water resources and demand by different users. It assembled a substantial amount of information, developed a range of planning models and analytical tools and recommended strategies and programmes, many of which were adopted by the Government. The Plan also produced a water policy and other proposals to institutionalize the process of water planning and long-term water resources management. Despite these achievements the Plan fell short of a comprehensive national water plan. It was inadequate for evaluating large-scale programmes, impacts and requirements; failed to evaluate properly and integrate a number of major projects and programmes within the sector: inadequately addressed requirements in other Ministries, viz. fisheries, navigation, public health, industries, municipalities, etc.

1. Please provide specific examples of good practices in preventing, reducing, or eliminating water pollution, water scarcity and floods. These examples may occur at the international, national, sub-national, or local level. Examples may involve water quality and quantity monitoring; guaranteeing procedural rights (e.g. public access to water quality information, public participation in decision-making about proposed uses of water, access to remedies); water use and water quality legislation, regulations, standards, and policies; and initiatives to reduce water consumption and/or water pollution from specific sectors (e.g. agriculture, electricity generation, industry, transportation, domestic use). Where possible, please provide evidence related to the implementation, enforcement, and effectiveness of the good practices.

* **Water Reservoir**

In case of good practice the case of Mongla, a coastal area of Bangladesh could be mentioned. Most of the villages in Mongla are severely suffering for the scarcity of pure drinking water. The water is filled with extreme salinity. So they have built water reservoir which can reserve rain water during rainy season. Moreover, the reservoirs are situated beside natural water resources like ponds with which the tanks are connected. The pond water can dragged into the tanks through pumping system and been refined inside the reserviors through 4 layers purifying system. The reservoir also been a good support during flood and disaster period for local people.

According to the Bangladesh Voluntary National Reviews (VNRs) 2020 some good practices mentioned as-

**Alternate Wetting and Drying (AWD) Method of Irrigation**

Boro rice in Bangladesh is fully irrigated and the Aman rice is partly irrigated. An estimated 3,000 to 5,000 litres of water is required to produce one kilogram of rice. Alternate Wetting and Drying (AWD) could save about 15-30 per cent irrigation without reduction in yield. This is now practicing in different areas in the country.

**Excavation and Re-excavation of Ponds for ensuring Safe Drinking Water and help keeping local weather cool**

Under this scheme, one pond per mauza would be protected from contamination; it would provide a source of drinking water with minimal treatment and water for other domestic uses without treatment. The protected ponds should not receive any surface discharge and should only be replenished by rain and groundwater infiltration.

Development of WASH blocks at School

The Government of Bangladesh has set a standard WASH for Schools in Bangladesh especially in the Government Primary Schools. Primary Education Development Programme is one of the milestone programmes taken by the Directorate of Primary Education (DPE) where innovative solution called Wash Block has been initiated with the provision of separated toilet facilities with running water supply for boys and girls. DPE is implementing this project and the Department of Public Health Engineering (DPHE), the lead agency in water supply and sanitation, is working as the co implementer.

**Bangladesh Valuing Water Initiative**

The High Level Valuing Water Committee - with support from the Technical Valuing Water Committee and the Ministry of Water Resources - has solicited a PFS for a study on “Developing Operational Shadow Prices for Water to Support Informed Policy and Investment Decision Making Processes”. The multi-stakeholder process in developing the study proposal ensured that the project is tailored to Bangladesh’s needs and current situation and created support for the implementation and future adoption of the project results across the public and private sectors. It is implemented by WARPO and expected to be completed by July 2020.

1. Please identify specific challenges that your government, business, or organization has faced in attempting to employ a rights-based approach to address water pollution, water scarcity and floods and the impacts of these problems on human rights.

* One major challenge in every sector is illegal power practice. Powerful people usually forcefully possess lands or natural resources and restrict the access of common people. Sometimes the government regulations or law enforcement bodies also become unable to stop the ill practice. As a result, the poor and marginal group are being more deprived and vulnerable for any kinds of natural disaster or climatic changes. Another challenge is unplanned city dwelling, especially in urban slum areas. Mass gathering is staying in the slum dwellings in a very congested manner with less facilities of water supply and sanitation. This situation is mostly causing their health hazards as well as environmental pollution which needs to be taken care of. The geographical location of Bangladesh also a challenge itself which made us the disaste-prone area. The coastal people and people living in hill tracks are almost suffering from every kind of climatic change. The preventive measures only could reduce the problems, but unfortunately there’s no permanent solutions for the problems.

From voluntary review reports of 2020 some challenges related to water management been stated as-

* SDG 6 aims to tackle challenges related to drinking water, sanitation and hygiene for populations, as well as to water-related ecosystems. Without quality, sustainable water resources and sanitation, progress in many other areas across the SDGs, including health, education and poverty reduction will also be held back.
* Ensuring proper allocation and efficient use of funds according to the plan of action is challenging.
* The Urban-rural disparity in access to water and sanitation is an area of significant concern.
* Monitoring and supervising the progress of SDG through setting appropriate indicators, coordinating among stakeholders and establishing feedback mechanisms to review decisions and control measures.
* Considering the impact of climate change and people living in hard to reach areas, appropriate technology with affordable prices is one of the key constraints in serving the poorest and marginalized people.

1. Please specify ways in which additional protection is provided (or should be provided) for populations who may be particularly vulnerable to water pollution, water scarcity and floods (e.g. women, children, persons living in poverty, members of Indigenous peoples and traditional communities, older persons, persons with disabilities, ethnic, racial or other minorities and displaced persons). How can these populations be empowered to protect and improve water quality and availability?

* The vulnerable group must should be included in various types of planning related to water management both from government and private sectors. Some ways out could be like followings-
* While important policies and plans are aligned with the Integrated Water Resources Management (IWRM) concept and principles, adequate attention needs to be given to ascertain as to what extent they have been translated fully into action, particularly at the programme and project levels. Indigenous knowledge, practices and community voice needs to be recognized and integrated into the development of water-related policies and mechanisms. Better and stronger collaboration among ministries, agencies, institutions is needed for the full attainment of IWRM.
* Developing mechanisms on WASH governance and capacity development at national and sub-national levels with priority at the initial five years of the SDG era is more important.
* Reaching the poor and hard to reach areas and climate-vulnerable areas through targeting inclusive and innovative interventions

1. How do you ensure that the rights of environmentalists working on water issues (environmental human rights defenders) are protected? What efforts has your Government or business made to create a safe and enabling environment for them to freely exercise their rights without fear of violence, intimidation, or reprisal?

* According to the Constitution of Bangladesh, Article 39(1) guarantees the freedom of thought and conscience, article 39(2) (a) protects the freedom of speech and expression of every citizen, while freedom of the press is assured under article 39(2)(b). So every citizen has legal rights to express their own points of view and the government will ensure their safety as they have obligations for this. From our part, Civil Society Organizations (CSOs) and NGOs are always giving moral and physical support to the environmentalists. We are taking part in their public events either physically or virtually and declaring our solidarity as creating a safe and enabling environment is not only the responsibility of the environmental humans rights defenders but also all citizens are liable for ensuring a healthy environment.

1. There is substantial evidence that the actions of high-income States (from high levels of material consumption to high levels of greenhouse gas emissions) are linked to adverse effects on water availability and water quality in low and middle-income States. What are ways in which high-income States should assist low-income States in responding to and preventing water pollution, water scarcity and floods?

* As stated before,there is an ill-practice of power from the high-income states which directly affects the other people, especially the lower-income group. The solution ismore likely ethical. If the high- income group become more considerate aboutother people in the society, the discrimination will be diminished. They shouldbe more aware about their day to day consumption like air conditioner, privatecar, gas cylinders etc. so that the environmental hazard could be lessened.Government can also impose high rated taxes to reduce the use of materials whichcauses environmental degradation. The illegal power practice should becontrolled strictly through the law enforcement authority. Implementation ofexisting laws and regulations should be ensured as well. Achieving SDGswill critically depend on the availability of resources including externalresources. The private sector can come forward to create a business model with regardto achieving SDG 6 which could include both high and low-income groups.

1. For businesses, what policies or practices are in place to ensure that activities, products, and services across the entire supply chain (extraction/sourcing, manufacturing, distribution, sale, and end-of life management) minimize water use and water pollution and meet human rights standards, especially those articulated in the Guiding Principles on Business and Human Rights?

* According to an article of Global Arbitration News, businesses today operate transnationally which means across borders and across continents. So it related human rights issues cover a wide range of impacts that a company, its contractors, its suppliers or business partners may have on people. The realtions could include damage to people’s health through pollution, environmental accidents and health and safety failures, child labor or forced labor, underpayment labor, Provision of unsafe or unhealthy working conditions, involuntary displacement of communities, including indigenous communities, discrimination against employees, for example by race, gender or sexuality, depletion or contamination of water sources that local communities depend upon etc.

With reference to Human Rights and Business Country Guide Bangladesh (2016) The National Water Policy (1998) and the National Sanitation Strategy (2005) recognise water and sanitation as human rights. Most of Bangladesh urban population lacked access to water and sanitation. Oftentimes the government reportedly subsidized water for industrial use, leading to water scarcity for communities depending on it.

The SIDA Helpdesk for Environment and Climate Change reported in 2013 that water pollution as a result of the presence of arsenic particles, the agriculture sector and poor sanitation contributed to health problems. In relation to the textile sector, Bloomberg reported in 2014 that the government estimated that about 22,000 cubic meters of untreated effluents, including hexavalent chromium, were released by tanneries each day in Buriganga River, Dhaka’s main waterway. 40,000 tons of toxic chemicals were reportedly found in the river, impacting on people who depended on the river to bathe or use to irrigate their crops, according to Human Rights Watch in 2015. Intensive shrimp farming required substantial water change of the pond, polluting the surrounding water quality by the discharging of effluents such as ammonia, nitrate and nitrite, which has reportedly spread water‐borne diseases from farm to farm, according to a study published by the Journal Reviews on Environmental Science and Biotechnology in 2013. Bangladesh reportedly reduced water supplies for drinking; domestic needs and irrigation; and increased gastrointestinal infections.

The National Human Rights Commission, Bangladesh (NHRCB) has the mandate under Section 12 of the National Huma Rights Commission Act (NHRC) 2009 to handle complaints relating to allegation of human rights violation which of course include business activity. There is no doubt that there is a link between business activity and human rights in the global standard. With this, the Commission can inquire into a complaint concerning alleged business-related human rights abuses. The Commission while inquiring into the complaints relating to businesses may call for report or information from the Government or any authority of the Government or any other organization. Further, Section 14 of the NHRC Act 2009 also empowers the Commission to take steps to resolve it through mediation and arbitration.