Written Statement
Input to the Preparatory Meeting of the UN 2023 Water Conference

Water for Climate, Resilience, and Environment

Submitted
by
Paulus Rahmat
Main Representative to the United Nations

VIVAT International is a Non-Governmental Organization with a membership of more than 23,000 from 11 Catholic Religious Congregations, working in 139 countries to promote human rights through advocacy at international and local levels. VIVAT International has Special Consultative Status with the ECOSOC and Observer Status with UNFCCC. It is associated with the United Nations Department of Global Communications.

VIVAT International welcomes the UN initiative to convene the Water Conference in March 2023, co-hosted by the Governments of the Kingdom of the Netherlands and the Republic of Tajikistan. It also endorses the five thematic issues for interactive dialogues on water matters.

Water is not only fundamental to life, health and sanitation, and well-being but also valuable for development and agriculture. VIVAT International recognizes people's right to clean, safe, drinkable water as a human right.

Today, we are facing water shortages due to climate change. The data shows that 2.3 billion people live in water-stressed countries, and 3.2 billion people live in agricultural areas with high water scarcity. Some 1.42 billion people – including 450 million children – live in areas of high or extremely high water vulnerability.1 While some people in many parts of the world suffer from water shortages due to droughts and durable dry seasons, others also grieve from overwhelming water catastrophes because of floods, erosion, and sea-level rise.

VIVAT members in the Philippines and Indonesia have made substantial and innovative efforts to address water crises and catastrophes through nature-based solutions and eco-friendly technology approaches.

Nature-based Solution

In responding to and anticipating the water catastrophe of floods and landslides, VIVAT members, church groups, school institutions, and indigenous communities in the Philippines work hand in hand on reforestation by planting one billion bamboo trees in the high- and lowland areas by 2030.

Bamboo has significance socially, economically, and environmentally. Bamboo effectively prevents floods and soil erosion because the dense bamboo roots form a water barrier. One hectare of bamboo can absorbs 30,000 liters of water annually. Bamboo also significantly contributes to

1 https://www.unwater.org/water-facts/water-scarcity
climate change because it captures a lot of carbon dioxide. The bamboo tree can sequester up to 1.78 tonnes of CO2 per clump per year.

Bamboo is a versatile and rapidly renewable resource with many livelihood applications. Bamboo materials can be used for building construction, which is quite strong, flexible, and resilient for earthquake-prone countries. It also produces briquettes, charcoal, incense sticks, and furniture that can increase a household's economic income, especially for women in rural areas.

**Eco-friendly Technology Approach**

In coping with the water crises, local farmers in the Manggarai regency in eastern Indonesia are challenged to be more creative and innovative. Assisted by a local NGO “JPIC SVD Ruteng”, they use the limited water resources for watering dry land by taking advantage of the hydro-technology of Barsha Pump, which is cheap, affordable, and environmental-friendly.

Using a small-scale hydro-Barsha pump, the local farmers can pump water from rivers in the lowlands for irrigating horticulture farms in the highlands. With that, farmers can plant crops during dry seasons and redouble harvests two or three times per year compared to previous years, which happened once only.

With nature-based solutions and using eco-friendly technology, local communities can become more resilient in water shortages and be more prepared to prevent water catastrophes due to climate change. Moreover, they contribute to climate mitigation and adaptation and increase crop production for livelihood, ensuring food security. However, these efforts initiated by local communities, farmers, indigenous peoples, and local NGOs are limited. Affirmative policies and actions by states and other like-minded stakeholders are needed to scale up the efforts.

Therefore, we recommend the subnational and national governments ensure financial support, increase capacity-building and provide cheap, affordable, and environmentally-friendly technology.