Water Smart Climate Change Strategies are the Need of the Hour: A Policy Brief

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Water scarcity resides at the forefront of climate change. Paris Agreement acknowledges a clear trade-off between climate change and water conservation. Climate policies should be developed to address the rise in water scarcity and the deterioration of water quality due to climate change. A participatory approach is vital for promoting water retention in forests and farm fields, harvesting rainwater, protection of water catchments, erosion control, pollution control, and reduction of runoff which are integral parts of a systems approach. Nature-based resilient vegetation will be an ideal solution for smallholder farmers living where there is adequate rain but insufficient surface water bodies; in addition to rooftop rainwater harvesting systems already in the country. Hence climate policies that promote the conservation of water resources through human activities should be given the utmost priority. The approach of directing excess water through rainwater harvesting to infiltration pits surrounded by natural vegetative ecosystems is a nature-based human-mediated solution for increasing soil moisture retention, maximizing infiltration, and minimizing surface run-off. Arjun (*Kumbuk* – local name) tree (*Terminalia arjuna*) can be introduced as a nature-based resilient vegetation as it protects water catchment areas. This nature-based solution is unique to ecosystems, limiting its replicability. Therefore, countries should apply nature-based solutions with native plants available in their ecosystems. Plant type and structural characteristics, hydrological significance, root strength characteristics, ecological significance, and economic value, are considered in selecting respective species for the region. The synergy between water conservation and climate change mitigation and adaptation has been a neglected topic in climate change policymaking. Most of the policies leave space for a trade-off between water and climate change rather than considering the synergy between these two vital areas that will determine our future. A strong message must be conveyed to Sri Lankan policymakers and practitioners to take cognizance of this reality when formulating climate change policies and implementing them.

Keywords: Arjun Tree, Nature-Based Resilient, Vegetation, Water Scarcity