



05.10.2017

Dear UNFCCC Secretariat,

We at Active Remedy Ltd appreciate that you have considered our input at COP22 and given attention to water scarcity in your synthesis paper on 'Human Health and Adaptation': *“With regard to strengthening intersectoral action and multilevel governance, the following ideas have emerged: (b) Work with a combination of traditional and indigenous knowledge practices and modern techniques, to establish problem-based solutions focused on reducing water scarcity.”*

Water scarcity is an incredibly crucial and pivotal issue for the vast majority of life on Earth both in the present and in the future. Focused attention and concerted global action needs to be taken imminently. In 2008 the FAO produced a thorough report highlighting this issue, entitled 'Coping with Water Scarcity'. In it they conclude that: *“the wide combinations of causes of water scarcity are all considered to be related to human interference with the water cycle.”* <http://www.fao.org/docrep/016/i3015e/i3015e.pdf>

We hope that this issue will be given due consideration at COP23 and that an action plan, which addresses water scarcity, DRR and negative climate impacts upon the health and well being of most of humanity and nature, will be agreed upon and actions for implementation will be agreed upon.

Below are some particularly interesting quotes and linked papers, which may be very useful when considering the critical importance of implementing such an action plan, because they highlight key focus points and pertinent research:

In 2001, after many years of research by eminent scientists the USGCRP released a report in which they clearly state: *“Water is at the heart of both the causes and the effects of climate change”* http://www.hydro.washington.edu/pub/CE/HYDRO/WaterStudyGroup/CH1_0201.PDF

In 2015 the FAO acknowledged that forests are far more than manageable reserves of resources, which can be used to fuel human consumption. They concluded that they are in fact essential components of the global water cycle and climate: *“Forest ecosystems are fundamental to maintaining the water cycle.”* (FAO, Forests and Water Action Plan, 2015) http://www.activeremedy.org/wp-content/uploads/2017/10/FAO_Forests_and_Water1.pdf

“Mountain forests also occupy a crucial position in terms of climate change, representing fundamental ecosystems for the health of the planet.” (FAO, Mountain Forests in a Changing World, 2011) <https://www.perth.uhi.ac.uk/subject-areas/centre-for-mountain-studies/documents/mountain-forests-report-2011>

Understanding this crucial and fundamental relationship between the global water cycle, forests and climate and using an ecosystem-based approach, offers a way forwards, for effectively dealing with water scarcity. In 2013 UNESCO emphasised the importance of

protecting and restoring mountain ecosystems: *“Given their important role in water supply and regulation, the protection, sustainable management and restoration of mountain ecosystems will be essential.”* (UNESCO, Climate Change impacts on Mountain Regions of the World, 2013) <http://unesdoc.unesco.org/images/0022/002246/224605M.pdf>

This is not an issue that will simply disappear or that can be dealt with at some later stage as it affects the well being of all life on Earth and all future generations. According to the FAO: *“Mountain regions supply half of the world’s population with freshwater”* (FAO, Mountains our Life our Future, 2013) http://www.fao.org/fileadmin/user_upload/mountain_partnership/docs/1_very_LOW_Fullversion_Mountain_Synthesis_Report.pdf

This understanding was affirmed by scientists, governments and UN departments and in 2015 an action orientated goal, was agreed upon in the UN document: ‘Transforming our World: the 2030 Agenda for Sustainable Development’: *“By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes”*

New evidence from the FAO/HLPE in their 2017 report on ‘Forests for Food and Nutritional Security’ that Active Remedy Ltd. contributed towards, clearly shows that mixed forests play a major role in the functioning of both water and carbon cycles and have a significant impact upon global food security: *“Forests perform vital ecosystem services, including the regulation of the water and carbon cycles and protection of biodiversity, that are essential to sustainable food production and FSN in the long term. These contributions vary according to types of forests and the way they are managed. They are of course particularly important locally for forest- dependent people, but also have considerable impacts at broader scales, including global.”* http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-11_EN.pdf

The FAO/HLPE report on ‘Food Security and Nutrition’ states: *“Promote participatory mechanisms for sustainable management of ecosystems and landscapes that are key to ensure the availability, quality and stability of water for FSN. These include collective and coordinated action within and across watersheds and ecosystems, innovative capacity building and frameworks for accountability of governance and management, including of decentralized governance and local adaptive management”*

http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_S_and_R/HLPE_2015_Water_for_Food_Security_and_Nutrition_Summary-and-Recommendations.pdf

It is time that we the global community work together in a more integrated, cooperative manor to address common water and climate related obstacles. It is vital that this is done considering the pivotal role of biodiversity and the functioning ecological mechanisms, which maintain Earths’ water and climate systems on a global scale. Through working together with a common integrated focus and adopting global scale, ecosystem approach solutions, guided by traditional and indigenous knowledge practices, many of the environmental dilemmas, which humanity is presently facing, could be resolved. Seeing that water crisis is already creating tensions between various countries and could be used as a cause for wars, it is crucial that imminent action is taken. As was concluded by a UN Water Task Force, in an analytical brief in 2013: *“Ensuring that ecosystems are protected and conserved is central to achieving water security – both for people and for nature. Ecosystems are vital to sustaining the quantity and quality of water available within a watershed, on which both nature and people rely. Maintaining the integrity of ecosystems is essential for supporting the diverse needs of humans, and for the sustainability of ecosystems, including protecting the water- provisioning services they provide.”*

<https://collections.unu.edu/eserv/UNU:2651/Water-Security-and-the-Global-Water-Agenda.pdf>

Having given these issues a great deal of attention we at Active Remedy Ltd. have created a model for the protection and restoration of ecosystems throughout mountain regions. Our model has been created in relation with mountain communities of the Himalayas and can be used for both local landscape and global plans of action. It works with a combination of traditional and indigenous knowledge practices and modern techniques, to establish problem-based solutions focused on reducing water scarcity and can be found in the UNFCCC Knowledge Portal:

<http://www4.unfccc.int/sites/nwp/pages/item.aspx?ListItemId=25551&ListUrl=/sites/nwp/Lists/MainDB>

The implementation of this project is a feasible possibility because it fits with the realisation of all the Sustainable Development Goals. However in order for it to be successful, it would need to be acted upon imminently as a broad collaborative effort between many UN departments, world governments and civil society.

Yours Sincerely

Tara Joy and Stella Joy

Directors Active Remedy Ltd.

<http://www.activeremedy.org/>