

UN spotlights rainwater recycling, artificial wetlands, among 'green' solutions to global water crisis

With five billion people at risk of having difficulty accessing adequate water by 2050, finding nature-based solutions, such as China's rainwater recycling, India's forest regeneration and Ukraine's artificial wetlands, is becoming increasingly important, according to a United Nations report released Monday at the world's largest water-related event in Brazil.

"We need new solutions in managing water resources so as to meet emerging challenges to water security caused by population growth and climate change," said Audrey Azoulay, head of the UN Educational, Scientific and Cultural Organization ([UNESCO](#)), in the foreword of the [UN World Water Development Report 2018](#).

"If we do nothing, some five billion people will be living in areas with poor access to water by 2050," she added.

[Goal 6](#) of the [2030 Agenda for Sustainable Development](#) seeks to achieve universal and equitable access to safe and affordable drinking water for all and, also access to adequate and equitable sanitation and hygiene for all by 2030.

The report notes that the global demand for water has been increasing and will continue to grow significantly over the next two decades due to population growth, economic development and changing consumption patterns.

Due to climate change, wetter regions are becoming wetter, and drier regions are becoming even drier. At present, an estimated 3.6 billion people, nearly half the global population, live in areas potentially water-scarce at least one month per year, and this population could increase to some 4.8 billion to 5.7 billion by 2050.

The number of people at risk from floods is projected to rise from 1.2 billion today to around 1.6 billion in 2050, nearly 20 per cent of the world's population. The population currently affected by land degradation, desertification and drought is estimated at 1.8 billion people, making this the worst natural disaster based on mortality and socio-economic impact relative to gross domestic product (GDP) per capita.

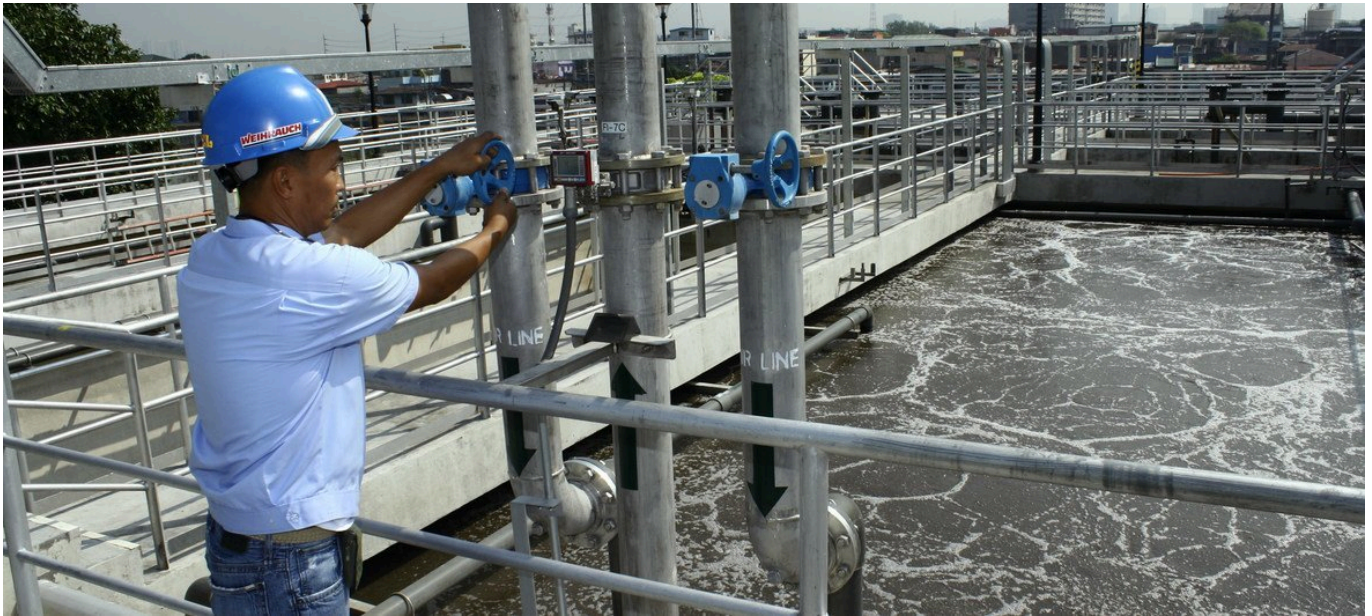
The UNESCO Director-General said the report proposes solutions that are based on nature to manage water better.

The report notes that reservoirs, irrigation canals and water treatment plants are not the only water management instruments at disposal.

So-called 'green' infrastructure, as opposed to traditional 'grey'

infrastructure, focuses on preserving the functions of ecosystems, both natural and built, and environmental engineering rather than civil engineering to improve the management of water resources, the report says.

In 1986, the province of Rajasthan in India experienced one of the worst droughts in its history. Over the following years, a non-governmental organization worked alongside local communities to regenerate soils and forests in the region by setting up water harvesting structures. This led to a 30 per cent increase in forest cover, groundwater levels rose by several metres and cropland productivity improved.



Danilo Pinzon/World Bank

A wastewater treatment facility in Manila, the Philippines.

Faced with an ever-increasing demand for water, China recently initiated a project, entitled 'Sponge City,' to improve water availability in urban settlements with the aim of recycling 70 per cent of rainwater.

Over recent years, Ukraine has been experimenting artificial wetlands to filter some pharmaceutical products from wastewater based on evidence that wetlands alone can remove 20 to 60 per cent of metals in water and trap 80 to 90 per cent of sediment from runoff.

"For too long, the world has turned first to human-built, or 'grey,' infrastructure to improve water management. In so doing, it has often brushed aside traditional and Indigenous knowledge that embraces greener approaches," writes Gilbert Hounbo, Chair of UN-Water and President of the International Fund for Agricultural Development ([IFAD](#)) in the foreword of the report.

Despite emerging initiatives, the use of nature-based solutions remains marginal and almost all investments are still channelled to grey infrastructure projects, the report points out.

The report is the fruit of collaboration between the 31 UN entities and 39

international partners that comprise [UN-Water](#).

The report, whose publication coincides with [World Water Day](#) annually observed on 22 March, was presented at the [World Water Forum](#), which kicked off Monday and runs through Friday in Brasilia.

The Forum aims “to promote awareness, build political commitment and trigger action on critical water issues at all levels.”

Also on 22 March, the UN will launch the [International Decade for Action: Water for Sustainable Development 2018 to 2028](#), which aims to further improve cooperation and capacity-building towards the SDGs.

[Is safety and a small plot of land too much for DR Congo’s beleaguered people to hope for? UN aid chief asks](#)

Holding up a picture of a mother who lost two of her children, as well as her husband when their village in restive eastern DRC was attacked and burned down by armed militia in January, UN Emergency Relief Coordinator Mark Lowcock – who undertook a mission the country last week – explained:

“This is Mwasi Kallunga and her seven children, including her 18-month-old baby. You all have this picture in front of you [...] They fled, walked for two straight days and now live in squalid conditions under a plastic sheet in a tiny so-called shelter in a congested, cramped, unsanitary, hilly camp at constant risk of fire and flood.”

Across the country, over 4.5 million people are displaced and most among them cannot even contemplate returning home due to the scale of violence and insecurity.

Furthermore, over the last year, humanitarian needs have doubled and an estimated 13 million people are in need of assistance, including 4.6 million acutely malnourished children – about half of them suffering severe acute malnutrition.

“There is also an epidemic of sexual violence, most of it unreported and unaddressed, and much of it against children,” added Mr. Lowcock, warning that without the work of humanitarian actors on the ground, “things would be much worse.”

Humanitarian work, however, remains severely challenged, including kidnappings and hijackings of aid workers as well as lack of funding for

relief programmes.

‘There is despair, but there is also hope’

In spite of the overwhelming challenges, the selfless solidarity of many Congolese families is remarkable, stated Mr. Lowcock, who is also the UN Under-Secretary-General for Humanitarian Affairs.

“They have so little, yet they welcome their brothers and sisters from within and outside the country into their homes when those people are displaced by violence.”

The same solidarity is needed from the international community, he urged, stressing that the humanitarian situation in the DRC has to be kept on the agenda and solutions to the root causes of the worsening crisis – including on the political front – must be found.

“I asked [Mwasi] about her hopes for the future. She wants to be resettled, given a small plot of land to farm, and to get her children back into school. It’s not so much to ask for, is it?”

Lebanon: UN humanitarian fund to step up support for the most vulnerable

At a time when resources for refugees from Syria is declining, the top United Nations humanitarian official in Lebanon, the country host to some 1.5 million Syrian and several thousand Palestinian refugees, has launched a funding allocation to ensure that critical relief programmes can be sustained.

“Preserving the stability of Lebanon means [preserving tolerance, diversity and stability in the region](#),” said Philippe Lazzariniat, the UN Resident and Humanitarian Coordinator in Lebanon, warning that the needs of the affected communities are fast outpacing the resources and capacities.

“More than ever, international solidarity needs to match the hospitality of Lebanon as host country. No country in the world can – or should – carry alone the challenge that Lebanon is facing. Responsibility-sharing is key.”

Launched Monday, the \$6.5 million Standard Allocation, will fund support programmes for Palestinian refugees from Syria, persons with specific needs, and sexual and gender-based violence survivors (the three most vulnerable groups).

According to the UN Office for Coordination of Humanitarian Affairs (OCHA),

the call for proposals under the Allocation will remain open until 6 April. Most of the funds through the Standard Allocation process will be used for priority projects in line with the [Lebanon Crisis Response Plan](#).

In addition to the Crisis Response Plan, the [Lebanon Humanitarian Fund](#) has allocated over \$40 million to support the humanitarian response in Lebanon since 2014, filling in with vital funds to sustain support for more than 850,000 individuals, including Syrian and Palestinian Refugees, as well as vulnerable Lebanese – 55 per cent of whom are women and girls.

However, lack of funding remains a major challenge and overall funding for the Lebanon Crisis Response Plan have fallen for three consecutive years.

In 2017, of the \$2.75 billion needed, only 43 per cent was received. In 2016 and 2015, funding level stood at 46 and 54 per cent, respectively.

[Alarmed by plight of Central African refugees in Chad, UN urges funding to scale up humanitarian response](#)

Thousands of refugees who have fled violence in the Central African Republic (CAR) to Chad are facing food and shelter shortages the United Nations refugee agency said Friday, warning that this is the largest influx in for years into the small landlocked country.

“The worry and real risk is that food shortages for the entire population over the next month may have [devastating consequences](#),” Babar Baloch, spokesperson for the Office of the UN High Commissioner for Refugees ([UNHCR](#)), told the regular press briefing in Geneva, where he said that some \$149 million is required to meet the urgent needs.

Late last year, clashes between armed groups *Mouvement national pour la libération de la Centrafrique* (MNL) and *Révolution et Justice* (RJ) in north-west CAR forced more than 70,000 people from their homes.

“Since last December, more than 15 Central Africans refugees have been killed on both sides of the border and at least 67 have suffered sexual and gender based violence while trying to go back to CAR to gather food and their scarce resources in exile,” he said.

UNHCR and partners have been providing life-saving relief such as healthcare, water and sanitation, shelter, food and nutrition assistance to newly arrived refugees since the start of the crisis.

However, without increased food aid, refugees could face prolonged period of food shortage while overwhelm humanitarian agencies' response ability.

Severe floods have not only affected harvest, but they also posed an urgent need for accommodation.

Therefore, UNHCR is building emergency shelter in the camps and villages that host them, while also working with the authorities, partners and donors on a relocation plan.

"The situation with refugees' health is also critical," said Mr. Baloch, stressing that "malnutrition levels are already high, especially with children."

More mobile clinics are also urgently needed and local health centres must be strengthened to ease the heavy toll taken by respiratory infections, malaria and other diseases.

Southern Chad, including Goré, one of poorest and most underdeveloped parts of the country, is already hosting some 43,000 Central African refugees and 45,000 Chadian returnees from CAR, is struggling to cope with an additional influx of 22,180.

Syria: UN envoy says 'only piece of good news' is brief ceasefire in Douma

The United Nations mediator for the Syrian conflict said Friday that a brief ceasefire in Douma in Eastern Ghouta is the only piece of good news for the Middle Eastern country, noting increased violence there.

Staffan de Mistura, Special Envoy for Syria, joining the Security Council via videoconference from Brussels, briefed on the implementation of its recent resolution demanding a ceasefire in that country, noting that, while progress has been made in Douma, more remained to be done to ease the humanitarian crisis and find a political solution to the conflict.

More to come...