

Managing the Global Water Crisis: As China Goes, So Goes the World

By **ROBERT SANDFORD**

WHENEVER high-level conversations turn to national or regional strategies for managing water-related climate impacts, many are compelled to look again and again to China as a model for imagining and then creating a sustainable future for all of humanity. Why? Because as China goes, so goes the world.

In assessing China's progress in the direction of sustainability, it is useful to examine a recent commentary, "China's War on Pollution – and What Comes Next," which was released by the International Institute for Sustainable Development (IISD) in July of 2018. The report correctly acknowledges that what China does is key to the advancement of sustainable development globally. It observes that China has set ambitious targets aimed at meeting the UN's 2030 Agenda for Sustainable Development, which includes a strong commitment to the Paris Climate Accord. These actions, the commentary notes, fall under an evolving concept China is sharing with the world pursuing the goal of creating an "Ecological Civilization."

The IISD commentary also shared disturbing findings that the stock of natural capital globally is declining at an alarming rate: by as much as 25 to 30 percent in the past decade alone. This loss has to be seen as a huge threat to China and its aspirations for renewal economically and socially, but also to the rest of the world as well.

A clear-sighted analysis of the pillars of the ecological civilization promise, however, reveals that the order of China's national priorities is beginning to change. The three pillars of sustainable development are economic growth, social development and improvements in the environment. This is hardly surprising as this is

the order of priorities widely held by countries around the world. China is different, however, in that it appears presently to be able to quickly focus on new priorities and move rapidly in new policy directions. Any analysis of the ecological civilization must also take into account its culture within the context of its proactive current governance model. China gets things done.

In a broader context, the idea of an ecological civilization is the ultimate expression of true sustainable development. In essence, the United Nations 2030 Agenda for Sustainable Development is both a moral and biological ecology. The sustainable development goals (SDG) form an organic whole. Each of its 17 distinguishing elements stand in direct relation to each other. Because of the centrality of water to life, however, SDG-6 pertaining to water is foundational to all of the other goals and is particularly relevant in the context of the most dangerous of all threats to the entire global sustainability project: climate disruption. It will be principally through the management of water that humanity will be able to manage the climate threat. The reasoning behind this view is very simple. Liquid water, snow, and ice respond directly, visibly, and measurably to temperature. If we follow what is happening to our water, it will tell us what is happening to our climate, and to our world. But it is not just what water is that is important, but what it does. One of the most important scientific discoveries of this young century is that intact natural systems absorb climate effects. Researchers in Canada have shown that intact systems there have already absorbed 4°C of warming without significant changes in hydrological regimes. What this suggests is that while hard engineering is central, a reliable drinking water supply and sanitation for all must be seen as a crystal around which the larger idea of an ecological civilization can grow.

Our global situation now is such that we can no



Villagers of Yangzhuang in Linquan County of east China's Anhui Province irrigate their field as a drought drags on in the region.

longer afford to address the intractable problems we face one at a time. It is in this context that there is opportunity for leadership. While forward thinking, hard engineering will always be critical to providing reliable water supplies and sanitation, if that engineering is developed hand-in-hand with the restoration of the ecosystem function that will help absorb climate impacts and lessen damage to hard infrastructure from extreme events, it will then be able to help address many of the world's most pressing sustainable development challenges simultaneously.

To that end the UN is calling for a "Restoration Imperative." In addition to deep greenhouse emissions reductions, this imperative urgently calls for not just the protection but rapid restoration of the critical natural system function so that we can restore balance in the world and step back from the climate crisis.

The goal, as China has so clearly pointed out, should be to create a global ecological civilization. Let restoration be our imperative. China need not do this alone. There is much we can learn from working together on common problems faced by all. The Global Water Futures research program centered in Canada, for example, is working with the Chinese Academy of Sciences to help determine the future water supply for the Tibetan Plateau and headwaters of China's major rivers as the

global climate changes and snow, permafrost and glaciers are diminished and lost. The benefits of such shared research will benefit all. We have the InterAction Council's Dublin Charter for One Health to guide us. In addition to this, we also have, at last, a comprehensive definition of what sustainable development really means and embraces as well as a firm timetable for achieving sustainability globally. But we must all recognize the urgency of taking action.

Sustainable development has been defined in many ways, but the most frequently quoted simple definition is from "Our Common Future," also known as the "Brundtland Report": "Sustainable development is development that meets the needs of

the present without compromising the ability of future generations to meet their own needs." What crossing a threshold into a new climate regime means is that we must first – and to a very real extent – restore the world as we have known it before we can begin fulfilling the terms of Brundtland's definition of what it means to be sustainable. We literally have to go back in order to go forward again. What the loss of hydro-climatic stability tells us is that true sustainability may be beyond our grasp if we don't take the right actions – beginning with how we manage water – now.

Sustainable development as defined by the 2030 Transforming Our World agenda makes it clear that unless we all take the same common goals seriously and implement meaningful and measurable actions at the national level in every country in the world, now, we will not achieve sustainability globally. This means there can be no laggards particularly in the developed world. It also means that the world cannot afford to leave anyone behind. And once again, as China goes, so may go the world. ■

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