

# Water: The Missing Link to Solve Climate Change

## A Global Action Plan

Martin Winiecki and Leila Dregger, November 2015



As governments prepare for the next round of climate change talks, pioneers are working on very different solutions in many places around the world. While many environmental movements still hope for the negotiations in Paris to produce new decisions, local initiatives are already implementing concrete measures with great success. They have recognized the meaning of a factor usually underestimated in climate change debates – water. A growing circle of experts confirms their pioneering work. Water is the puzzle piece that could enable us to find a quick and efficient solution for the climate catastrophe on a global scale.

**November 2015:** After five years of extreme drought, the long-desired rain is finally falling in California. What could actually be a blessing quickly develops into the next catastrophe. Torrential rain pours down onto desiccated land. In Lancaster, for example, 80 liters of rainwater per square meter fell in only half an hour. The rain hits sealed, developed, overgrazed, parched and hardened ground. Where once humus-rich forest floors absorbed and stored these waters, it now rushes down the slopes carrying with it the last remaining fertile soil. Straightened river beds are deluged, flooding streets and basements, causing millions of dollars in damages. The land is left even more bleak and barren.

What happens in California is the symptom of a global phenomenon. Forests are cut down; water is driven out as quickly as possible through drainage; soil is sealed; cities create “hot spots” whose thermal lift no longer allows the clouds to discharge its rain.

This is what Michal Kravčík calls the “old water paradigm.” The Slovakian water engineer has been gathering data and practical experience for decades. (Read about the New Water Paradigm [here](#).) His conclusion, which he will present at the climate summit, is that **rainwater runoff does not only damage soil. It is also responsible for sea level rise and global warming.** His suggestion is both simple and fascinating: **we could prevent climate change if every person on Earth stored 100 cubic meters of rainwater in the ground.** This is the core of the Global Action Plan that he presents.

What is the basis of this suggestion?

In Slovakia he first observed increased rainwater runoff due to impervious surfaces and drainage created for urban development and industrial agriculture. Together with his team, he gathered and analyzed the exact figures of this phenomenon, projecting these numbers on a global scale and comparing them with what is being measured worldwide in terms of climate change. The results are astonishing; the annual loss of 127,000 square kilometers of forest and the additional soil sealing of 55,000 square kilometers per year have reduced the water that is able to circulate in small rainwater cycles. He estimates that, throughout the last century, around 37,000 cubic kilometers of water for these climatically crucial cycles was lost. This equals three times the water volume of Lake Superior. If you calculate the effect this has on the oceans, you end up with a sea level rise of around 10 centimeters.

Kravčík also made another calculation. Rainwater and humidity are vital parts in the cooling system of the atmosphere. During evaporation, 1 cubic meter of water uses 680 kilowatt hours of solar energy. The loss of significant amounts of water and the desiccation of soil and of air therefore produces potential heat, which amounts to, as Kravčík calculated, the gigantic figure of 25 million terawatt hours. This is 1600 times more heat produced annually than all of the planets’ powerhouses combined. This calculation provides us with a well-founded alternative explanation for global warming.

The Spanish meteorologist Prof. Millán Millán comes to similar conclusions. After thirty years of research he clearly sees that deforestation, intensive agriculture and impermeable surfaces near the coasts transform rain patterns on a large scale, impacting global warming and sea level rise. (Read more [here](#).)

In addition to scientists understanding and formulating this phenomenon, there are fascinating attempts at a solution being carried out on almost all continents – examples which can be scaled up worldwide. Rajendra Singh, the “Water Gandhi” from Rajasthan, India, is one of these. Thirty years ago, he began greening parts of

the Thar Desert. He succeeded in completely revitalizing an area of 8600 square kilometers of extremely dry desert. Singh mobilized the village communities to build thousands of water retention spaces according to traditional methods, so called “johads.” The scant precipitation (around 200mm) that still fell annually, often coming down all at once in a very short period of time, could thereby be captured and sink into the ground, and sufficed to reanimate nature. His initiative allowed 1200 villages to obtain a secure material basis. A hundred thousand people are now self-sufficient in terms of water and food. Five rivers that had completely dried out were brought back to life, and are constantly flowing the entire year through. In order to protect these waters from being exploited by multinationals, the village communities established “river parliaments” and could thereby keep the water in their hands. Singh’s initiative confirms the observations of Michal Kravčík. After restoring the hydrological balance in such a vast area, the weather patterns changed fundamentally. The rains returned and increased. Nowadays they are as spread and balanced as they were long ago. Honoring his trailblazing efforts, Rajendra Singh was awarded the 2015 Stockholm Water Prize, also known as the “Nobel Prize for Water.” (More about his work [here](#).)

Kravčík himself has worked on solutions too. In Slovakia, he prevented the construction of new reservoir dams by testing an alternative with his “Water and People” program. In a nationwide citizens’ initiative, supported by the government at the time, thousands of people joined hands to build small “check dams” constructed with stone and wood, which do the exact opposite of what is usually done with water. They slow down the runoff of rainwater and thereby allow it to enter the body of the Earth. The campaign was a great success. It not only created hundreds of new jobs, it also revitalized villages and made the land fertile again. Nevertheless, the new government stopped the program in 2007. In September 2015, government agencies financially stalemated Kravčík’s NGO in such a way that it currently finds itself on the brink of collapse. Projects that offer people the possibility of self-sufficiency and decentralization are too revolutionary in a world ruled by systems of power that rely on centralization and dependency. They are therefore being systematically persecuted, silenced and destroyed. Please find out more about his call for support [here](#).

Akin to Singh and Kravčík, the Austrian “rebel farmer” Sepp Holzer also teaches rainwater retention by building Water Retention Landscapes. All around the world such projects were manifested with his advice and assistance. One of them is located in Tamera, a peace research center in Portugal. Tamera demonstrates how, within a short time, a landscape threatened by increased aridity can be made fertile again, using quite simple techniques. They built lakes that capture the rich winter rains and filter them back into the aquifers. Bernd W. Mueller, head of Tamera’s Global Ecology Institute, says, “Since we can keep the winter rain on our land, the water can unfold its full healing potential. The wildlife is responding and is returning. The vegetation is recovering. We can grow our food in the direct surroundings of the water retention spaces. The water, which used to run off and which is now stored here, is at the same time also having an impact on the whole

groundwater system. Within one year, a spring developed close to the first lake which now gives water throughout the year. We have a more constant water situation, which is of course a huge benefit for nature.” (More: *The Secret of Water as a Basis for a New Earth.*)

Another way of retaining rainwater is “Holistic Planned Grazing,” developed by Allan Savory. Thereby, small retention spaces are created by the impact of large grazing herds, which are led over the land according to a particular grazing plan. (More: [//savory.global/.](http://savory.global/))

In the documentary film “Hope in a Changing Climate,” John D. Liu shows how the Chinese Loess Plateau, an area as vast as Belgium, could be restored by decentralizing water management.

In the US, Andy Lipkis of “TreePeople” shows that it is possible to retain rainwater even in urban centers. By developing an intelligent system that leads rainwater from roofs and streets into newly opened spaces on roadsides and next to houses, he highlights a key element of sustainable urban design. More about his and TreePeople’s work [here](#).

Witnessing many failed climate summits and a dramatically escalating global weather situation, such unexpected answers to climate change gain extraordinary meaning. The renowned Canadian environmental activist and author Maude Barlow writes, “While no doubt greenhouse gas emission-driven climate change does have an important and negative impact on watersheds, warming temperatures and speeding up evaporation, there is another story that needs to be told. The fact that destroying water-retentive landscapes is in and of itself a major cause of climate change is not part of the analysis or discussion in climate change circles. (...) There is an urgent need to create a global recovery plan for water.” (Source: [//www.huffingtonpost.ca/maude-barlow/world-water-day\\_b\\_6911660.html](http://www.huffingtonpost.ca/maude-barlow/world-water-day_b_6911660.html))

The knowledge for such a plan exists. It is essentially based on a simple, but new water paradigm, one expressed in all the methods described above: avoid any rainwater runoff! After all the destruction we have done to the Earth, we need to interact with her in a healing way to ensure that she can again absorb the rains that come. Every property, every region, every country must transform into what it has once been naturally – a Water Retention Landscape. This is how aquifers fill themselves and how springs supply nature, animals and people with enough high-quality water all year long. In this situation, there will be neither floods nor desertification, neither climate catastrophe nor hunger, but biodiversity, stable ecosystems and an abundance of water, food and energy. If the massive El Niño rains expected in California and other regions this winter, could fall into prepared

water retention spaces, a natural paradise could start to blossom as early as next spring. Water retention is the basis for a free humankind on a free Earth.

We can no longer wait for governments to solve climate change. While conference after conference passes without much progress, while weather catastrophes become ever more tremendous and deadly, there are concrete solutions at hand. Please help to get this information and knowledge into the hands of the people around the world! The time is ripe for great change. May new groups and communities of people come together all over the world to secure our basis of life – healthy water and intact nature.