

Water and climate change discussion series

Environmental Monitoring Group (EMG) has initiated a series of informal but structured discussions on *water and climate change*. The hope is to create a collective space where caring and committed people from civil society, academia, government and elsewhere can meet. In this space we will share information and perspectives. We will grapple with contradictions and uncertainty. We will explore how to build resilience in our communities and country to deal with the impacts of climate change on water and water services.

Your experience, insights and active minds would be highly appreciated. We will support the discussions with background material where appropriate and generate written pieces from them to help capture the movement of ideas.

Why the conversation?

The linkages between water and climate change raise a number of critical questions.

What will happen to rainfall patterns and soil moisture? How will we respond politically and as a society? What kind of mechanisms will be used to adjust – will they be friendly or antagonistic to vulnerable parts of our communities? And can we use the inevitable change to improve our relations with each other and with the planet?

Unsurprisingly the realisation that climate change severely affects water has led to numerous projects and responses, particularly in the Western Cape where water scarcity is predicted. There are three main areas of response: managing demand, augmenting supply and putting systems in place for unpredictable weather (including disaster management). These projects tend to be focussed on quantitative elements relating to the science (and modelling) of climate change, and to strategies to balance supply and demand at a macro-level. Work in the ‘grey’ areas of human relations, local dynamics and participatory response is weak. It is here that civil society will need to engage, as well as to monitor whether official responses are good enough.

Restricting how much water poor households receive is becoming more common in urban areas. This is one possible response to climate change. But it is not the best one. The best one, is one in which each person has the means and understanding to adapt as individuals and as a collective to the additional stress that climate change will place on water resources. The best one will build our resilience as individuals, communities and societies to a changing system. The best one will recognise that water is a public good, integral to a complex set of human and ecological systems that cannot be separated. The best one will realise the right each person has to water and dignity; and the responsibilities this leads to. It will see that extreme differences in access and use will threaten the entire system, reduce resilience and increase vulnerability of all humans.

Underlying what-we-must-do is the complex interplay between individual and society. As individuals we have a responsibility to act carefully and responsibly with respect to the water we use, but we also have a responsibility as members of a collective, as a society. Each of us with our friends, colleagues and communities can build the world we want to live in.

Finally, the fact we are dealing with *water* should give us some encouragement. One of four or five elements in many ancient cultures, *water* in its figurative sense provides a way of seeing that is flowing, creative and transformative. It finds ways round obstacles and welcomes change.

Bounding the conversation: three pillars

Three ‘pillars’ frame our seminar series. The first is that there *are* links between water and climate change. We have a good idea of the nature of these links and how a rise in the earth’s temperature affects the hydrological cycle – at least at a macro scale. Scientists and modellers continue to fine-tune and improve the resolution of their work so that the prediction of impacts is likely to become more accurate and more precise, although there is also intrinsic variability and uncertainty. From these predictions, we are able to investigate the knock-on or secondary effects. For example, changes in rainfall patterns and groundwater recharge affect the cost at which we can deliver water to urban households.

The second pillar concerns how we *respond* to the challenges that water and climate change links throw at us. What will we as a society do to build our resilience and contain the impacts within ‘manageable’ proportions? How will we ensure that values and needs from multiple perspectives in society are heard and met? We will call this pillar *governance*.

The third pillar is an understanding that if we turn a blind eye to the first two pillars – if we ignore the consequences of water and climate change links and refuse to respond as a society – vulnerable communities will have an even tougher time. There is no shortage of examples to illustrate this pillar. From the urban household where water might become too expensive to wash the bedding of chronically ill people, to a rural pensioner living on marginal land reliant on sufficient predictable rainfall, to urban immigrants building their homes in rising flood-planes.

Through the seminar series our hope is to explore these three pillars. We will do that by honing in to very specific questions, grappling with day-to-day realities of water services, and standing back to conceptualise the ‘big picture’ in new ways. By familiarising ourselves with the language, issues and challenges, we intend, together, to change the future.