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Water: The Key to Climate Change Adaptation

A changing climate will have increasingly grave consequences for the world's poorest, most vulnerable people. Who says so? The Intergovernmental Panel on Climate Change (IPCC) and the 2007/2008 Human Development Report (HDR), Fighting Climate Change: Human Solidarity in a Divided World.

While ecosystems and humanity have for millennia felt the impacts of natural climate variability, today's insidious, human-induced climate change will worsen the vulnerability in part because it will worsen the global water crisis through melting glaciers, rainfall changes, droughts and stronger, more unpredictable natural disasters. And this will affect poverty reduction and livelihood security. For example, a global temperature increase of 3-4°C will change the hydrological cycle, worsen the local effects of floods and result in hundreds of millions of environmental refugees. Changed run-off patterns and glacial melting might in the next stage leave an additional 1.8 billion people with water scarcity by 2080, when the glaciers have become smaller leading to less spring run-offs. Further, the IPCC warns that even if we cut greenhouse gases radically, historic emissions

will go on intensifying climate change.

So making human development climate proof is a matter of sheer survival for billions of people. They need robust strategies that incorporate protection against variability and build resilience into the system for there to be progress towards the Millennium Development Goals.

But climate proofing development is challenging. It is about the distribution of resources. Desmond Tutu, the former Anglican Archbishop of Cape Town, has warned that we are drifting into global apartheid: climate adaptation is becoming a euphemism for worldwide social injustice. The rich world has, as always, the capacity to protect itself from harm: the poor and vulnerable face the daily harsh reality of climate change. According to the HDR, by mid-2007, less than 10 percent of the USD 279 million committed to financing for adaptation through multilateral funds and initiatives set up under the UN Framework Convention on Climate Change were actually delivered. In London, that same amount, USD 26 million, is spent on flood defence each week.

Climate proofing may also tempt us to think we need completely new measures, instead of implementing old friends like Integrated Water Resources Management (IWRM) and efficient and sustainable water use. Nor must we let climate proofing itself worsen climate change. It demands new investments in sustainable transport, energy and agriculture.

Finally, we must avoid thinking the choice is between mitigation and adaptation. The HDR, published by the United Nations Development Programme, emphasises the need for urgent action on mitigation and international cooperation on adaptation. So far, that cooperation has been marked by chronic under-financing, weak coordination and a failure to look beyond project-based responses.

The HDR says any adaptation in developing countries focuses on climate proofing infrastructure. That is critical, but adaptation is about far more. Climate change risk assessment must be built into all aspects of policy planning. Building the resilience and coping strategies of the poorest and most vulnerable demands a fundamental reappraisal of poverty reduction strategies and commitment to firm action on inequalities...

There are no blueprints for successful adaptation. Countries face different risks, start from different levels of human development and vary widely in their capabilities. The report says successful national adaptation



There are no blueprints for successful climate change adaptation. Countries face different types and degrees of risk, start from different levels of human development and vary widely in their technological and financial capabilities. Photos: Getty Images.

planning occurs when there is information on climate risk, infrastructure for climate proofing, insurance for social protection and institutions for disaster risk management.

Conclusions and Recommendations

The message is clear: climate change is happening now, and it is the poor and vulnerable who will suffer most. Water is central to both climate change and human development, and most of the effects of climate change will hit us through water. The developed countries, mainly responsible for historic greenhouse emissions, have not yet delivered on their commitment. Action on mitigation is too slow, and promises to finance adaptation have been largely ignored. If we are to tackle climate change, ample new and additional resources are needed. This need must be met in several ways. Official development assistance must be climate proofed while still focusing on poverty reduction. The private sector must assume some responsibility - there is a vital need to identify win-win solutions for active business involvement. And economic instruments, like carbon taxes, may be needed, since they can both steer behaviour towards lower emissions and become a financial source for adaptation measures.

Sustainable water resource management is key to adaptation. Building resilience and coping with variability as well as efficient and ecosystem-adapted water use are building blocks in this. Even without the prospect of accelerating climate change, adopting these measures would be necessary. The threat of human induced climate change has now made their adoption more important and urgent. Adapting to climate change is seldom about finding new methods. It is rather about getting sustainability in place. Adaptation means implementing good practices and acting on recent research. The focus must be on the poor and vulnerable communities. An obvious danger is that marginalised communities' adaptation needs will be overlooked in the face of demands from more powerful groups with a stronger political voice.

Building awareness, about the threat as well as about the possible responses, is crucial. Awareness must lead to new behaviour. This can become a great opportunity for business and society. But it will require brave and strong leaders who are willing to take tough decisions on difficult trade offs. So far the political will for real change has been too weak – and rich citizens in rich communities in all countries have been too slow to act as well. It will take determination and real commitment to turn the tide.

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Sustainable Water Resource Management: A Key to Climate Change Adaptation

What is clear from the latest research is that sustainable water resource management is a key to climate change adaptation. Given the depth of today's water crisis, better management would be necessary anyway. Climate change changes the playbook. Building resilience and coping with variability as well as efficient and ecosystem-adapted water use are building blocks in adaptation efforts. Fortunately, finding new methods isn't the question: it is rather about implementing sustainability approaches which we already know can work. And approaches need sustainable financing. The current situation, where less than 10 percent of the USD 279 million committed by governments around the world to financing have actually been delivered, is neither sustainable nor sensible.