Mozambique Moving Forward With National Natural Capital Program

BY JILL SCHWARTZ

Just as I am dozing off in the back seat, my body starts flopping to the beat of the bumpy road beneath me. I look up and see that it's because our driver has turned off of the asphalt two-lane road that led us out of Maputo, the capital of Mozambique, and onto a dirt path that's barely as wide as our car. Other than a few sparse, low-lying shrubs, the area is barren and appears lifeless.

"Wow," says WWF-Mozambique water specialist Herminio Mulungo, from the front seat. It's the first thing he's said that I have not needed him to translate from his native Portuguese to English.

Then "wow" again. And "wow" again. And again.

Herminio gets out of the car and walks to a rusty metal rowboat perched atop dry land.

"That's the reservoir out there," he says, pointing to a faint glimmer of water in the distance.

"Three months ago, the reservoir came all the way up to where we are standing. We
This empty portion of the reservoir is a dramatic sign of how Southern Mozambique is suffering from a terrible drought. The conditions are influenced by El Niño, which in 2015 inundated the land with rain, causing severe flooding followed by an extended drought.

I see other signs of the drought...

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**Natural Capital Protocol Will Help Businesses Account For Nature In Decisions**

The [Natural Capital Coalition](https://naturalcapitalcoalition.org) launched a framework earlier this month that will help businesses take into account risks and opportunities associated with their use of natural resources.

Corporate financial accounting practices have traditionally ignored companies’ dependence on natural capital—the benefits nature provides like air, soil and water necessary for both life and commerce. This puts companies at risk from natural disasters like flooding, drought, and other shortages. The [Natural Capital Protocol](https://naturalcapitalcoalition.org) provides guidance to businesses looking to avoid risks and to start integrating the value of nature into everyday decisions...

*Photo credit: Kaleb Nimz/Unsplash*

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**Research Highlights Connection Between Hydropower Sustainability And Watershed Conservation In Northern India**

Himachal Pradesh is a province in the mountainous Himalayan region in northern India. Its numerous rivers make it a major source for hydropower in a rapidly growing region—a boon to the state's economy. But the region’s many steep canyons and gorges also create challenges for building typical hydropower reservoirs.
Unlike in flatter areas, where reservoirs can store water behind a dam and release it at a controlled rate to provide a steady power source, in dramatic landscapes like the Himalayas, there's nowhere to build a reservoir.

Instead, engineers rely upon what's called a run-of-river system, where water is diverted from a river into a power plant, and then channeled back into the river. Run-of-river systems are also cheaper and easier to build than traditional large dams. The downside to this system is that it’s vulnerable to high sediment concentrations, since there’s no reservoir for sediment to settle into. Another drawback is that when a river stops flowing, so does the power.

Yet another downside is that during flash floods, the power facilities have to shut down to avoid being damaged. There’s nowhere to store the water and no way to capture energy, so it flows away, untapped.

Problems with sediment and flow can be partially mitigated by investing in watershed conservation activities upstream, a new study shows...

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Evaluating the impact of ecosystem service assessments on decision-makers
Poser, Stephen, Christy Getz and Taylor Ricketts
*Environmental Science & Policy* 64:30-37. October 2016. doi:10.1016/j.envsci.2016.06.003

**Landscape configuration is the primary driver of impacts on water quality associated with agricultural expansion**
Chaplin-Kramer, Rebecca, Perrine Hamel, Richard Sharp, Virgina Kowal, Stacie Wolny, Sarah Sim and Carina Mueller

**Natural Capital Protocol**
*by Natural Capital Coalition, July 2016*

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Guannel, Greg, Katie Arkema, Peter Ruggiero and Gregory Verutes

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Kennedy, Christina M., Daniela A. Miteva, Leandro Baumgarten, Peter L. Hawthorne, Kei Sochi, Stephen Polasky, James R. Oakleaf, Elizabeth M. Uhlhorn and Joseph Kiesecker
*Science Advances. July 2016. doi:10.1126/sciadv.1501021*

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Vogl, Adrian L., P. James Dennedy-Frank, Stacie Wolny, Justin A. Johnson, Perrine Hamel, Urvashi Narain and Anil Vaidya

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*by Jim Morrison, Smithsonian.com, July 13, 2016*

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*by Carolyn Shapiro, The University of Vermont Gund Institute for Ecological Economics, July 6, 2016*

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