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## Mozambique: Floods that originated in South Africa

After the tragic floods in Mozambique, the time is ripe for people to start asking questions on what went wrong. What turned those floods into an epic disaster? What can be done to reduce the likelihood of it happening again?

David Lindley, national co-ordinator of the Rennies Wetlands Project (RWP) in South Africa, explains that "the cumulative impact of human activities without regard for nature has turned the recent floods from a natural phenomenon into a man-made disaster of epic proportions. Floods are a natural occurrence but nature has lots of checks and balances for preventing them getting out of hand," he points out. "Rivers do not occur in isolation but are part of intricate wetland systems consisting of grassland 'sponges' in the upper catchment areas, to marshes, reedbeds and floodplains in the middle catchment to swamp forests and estuaries at the bottom. These and many other types of wetlands are all linked together by rivers. Grasslands and wetlands are the river's safety valves. Grasslands are incredibly effective at increasing the infiltration of rain runoff into the ground. This reduces surface runoff flowing into rivers and streams during times of high rainfall, and maximises ground water seepage into these areas in the dry periods. When a river floods, wetlands spread out the water, slow it down and absorb it like a sponge, preventing the dangerously high peaks from occurring. It is these peaks which cause most of the damage, such as washing away bridges, and flooding towns." With approximately 50% of South Africa's wetlands destroyed through poor land management, the recurrence of devastating floods can only increase. Unless what's left is sustainably managed.

"What humans have done, in our infinite arrogance and lack of foresight, is to upset the integrity of our wetlands and mess with the dynamics of our rivers," Lindley says. The RWP has surveyed the upper catchment of the Sand River in Mpumalanga, for example, and found that 80% of the wetlands and most of the grasslands have been tilled for farming or overgrazed. It is no wonder that the Sand River is a raging torrent, if the upper catchment is in such poor condition. In the Northern Province, the same is true for wetlands of the Letaba River, which runs swollen and angry, overloaded with South Africa's greatest and most vital export - top soil. Vast tracts of bushveld have been overgrazed, leaving the soil bare, hard, and vulnerable to sheet erosion and flooding. This sad tale is bound to be true for those tributaries flowing into the flooding Limpopo. All over South Africa, floodwaters often have nowhere safe to go anymore. They cannot sink into the ground or be held back by marshes and floodplains. So they build up to monstrous proportions, wreaking havoc along their path and finally off loading their load of water onto land at the end of the chain -in this case the people of Mozambique. South Africa is externalizing it's cost of poor land management onto it's neighbours.

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