

KNOWING MORE ABOUT OUR ENVIRONMENT WILL HELP US TAKE BETTER CARE

Move over drought, here comes the rain....or is it?

Greetings colleagues! We are all quite happy because we have had a little bit of rain even though it is very late in the season. However, experts tell us that the dry spell has not yet passed as we are experiencing the el niño weather phenomenon which brings about long dry and hot weather which can cause a ripple effect to both social and economic aspects of survival. This spells trouble especially for farmers, and if farmers are in trouble, the rest of us, the consumers of products coming from their labour are also in trouble because this means food insecurity and an increase in food prices.

Usually after an extended dry spell, most of the first rains will not soak into the soil properly as the soils have crusted. We will get a lot of overland flow and flooding which can be very destructive including contributing to the loss of lives. There is now potential for all those events that are classified as disasters which, if planned for properly, would be relatively easy to manage. There are a lot of potential disasters associated with the heavy rainfall and accumulated runoff, which despite having this happen more frequently than not, we have still not improved our ability to manage the disastrous consequences.

1. If there is a lot of erosion there is loss of the top soils which are the productive part of the land. Loss of top soil means reduced land productivity.
2. Gravel road servicing the rural communities are going to be washed away, making travel in and out of the rural areas even more difficult than it already is.



3. Houses, predominantly mud structures, will get wet from the foundation especially if they are located on flat lands close to or in wetlands. If an area is seasonally wet, it does not make sense to build a house in that area during the dry season and expect it to remain standing when the rains come.

4. There will be a lot of sediments carried into the rivers and streams, resulting in very muddy water courses.

Dams are going to be silted, thus their capacity to hold water will be severely limited, which will result in scarce clean water even during the rainy season and possible hike in prices as cleaning costs

go higher. In addition, the water going into these dams will have high sediment loads that are bound to increase water purification costs.

5. Disruption of breeding cycles for mud and bank dwelling organism if we have flash floods. Fishing as a recreational and protein supplementing activity will be limited.

6. On a more positive note, there is high potential for adventure tourists to want to visit our area especially the fast flowing Kinira and Umzimvubu rivers in the upper catchment to do some paddling. This is also a good season for bird watching.



Crowned cranes frolicking in Ongeluksnek wetlands.



Paddling the Kinira River (Photo: Nicky McLeod)

7. Ground water is going to be recharged so there will be better yields from boreholes and springs.

8. There will be better quality grazing for livestock, improving the potential for our farmers to get better prices at the market.



With the advent of the rains, the condition of the livestock will improve and the farmers will get better prices on the market.



Matatiele wetlands have been declare a water factory and when there are goodsoaking rains, good ground water recharge is expected.

What we can plan to avert the disastrous consequences of the late and heavy rains

As we all know rain is a blessing, but it can also cause havoc on the land and livelihoods. The negative impacts associated with late heavy rains can be a major cost for both government and citizenry, but there is some light at the end of the tunnel if we direct our efforts towards addressing those issues that are within our reach.

Proper management of the upper catchment:

It is worth noting that us as the people that live in the Upper catchment of one of the strategic water courses in South Africa, and the last undammed river, the great Umzimvubu, have a responsibility to make sure that the source of the river is restored and well maintained. Some of the efforts being made within Alfred Nzo District and Matatiele Local Municipality include:

- Wattle management for restoration of grasslands and water resources,
- Community capacity building in land and livestock management,
- Citizen science that is enabling the communities to have a better understanding of cause and effect especially related to all our actions,
- Open discussions and development of strategies around building climate change resilience,

Raising dam walls higher and higher will not solve the water availability problem, instead it will create even more problems related to stream flow reduction and water availability for downstream users.

This means all of us have to be a little more aware of our surroundings and the consequences of our actions, in addition to implementing measures that will reduce the shocks of some of the negative environmental changes taking place around us.

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ABOUT THE AUTHOR

Sissie Matela is a Soil Scientist (pedologist) and an Accredited Environmental Assessment Practitioner. Her passion is the application of science in rural community capacity building and natural resource management and integration of sustainability principles into development initiatives.

Her work has mainly been in Environmental Impact Assessments, soil and water conservation in food and forage production, environmental management, ecotourism and development planning. She has engaged extensively with the traditional rural communities in Lesotho and South Africa training them and facilitating implementation of development programs that have components in natural resource management, and participative approaches to community development.

