

EDITORIAL

THE IRONY OF A "FIRE FIGHTING" APPROACH TOWARDS NATURAL HAZARDS IN SOUTH AFRICA: LESSONS FROM FLOODING DISASTER IN KWAZULU-NATAL

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The continuous distraction of rural livelihood activities, loss of lives and the displacement of large numbers of rural populations has brought about the question of the applicability of risk and disaster mitigation and management approach implementation in most developing countries in Southern Africa. The fact that floods are still causing a huge impact every year in Mozambique, Malawi and even South Africa, for example, explains the inadequacy in terms of the ability of these countries to deal with natural hazards. Recently, in April 2022, South Africa experienced one of the most devastating flooding disasters which led to the death of more than 400 people. The common explanation of disaster is that its impact causes human, material, economic and environmental losses in such a way that it exceeds the ability of the affected communities to cope using their own resources. In other words, if the communities which are affected by a natural event have the ability

to independently cope with the aftermath of a hazard, such an event would not be regarded as a disaster. That is, the occurrence of a hazard does not necessarily lead to a disaster, thus risk and disaster mitigation and management should focus on how communities can be prepared to cope independently during and after a natural hazard has occurred. This calls for more efforts towards disaster prevention, mitigation and preparedness in order to cater for disaster risk reduction measures, because these lessen the likelihood of harmful losses by avoiding endangering hazards or reducing vulnerability. In this way, prevention and mitigation are central to achieving the goal of disaster risk reduction, in which vulnerabilities and disaster risks are reduced and sustainable development opportunities are strengthened.

In order to give context to the risk, hazard and disaster management discourse, it is

important to conceptualise these concepts. According to Blaikie (2002), a risk is regarded as an expression (commonly in percentages) of the chance, probability or likelihood of a dangerous event taking place or a hazard happening. Hazard is that perceived dangerous event or source of danger that threatens life and/or property and disaster can be regarded as the realization of a hazard that destroys property, livelihoods and kills people (Blaikie, 2002). The understanding of these concepts allows us to have a proactive approach towards dealing with natural hazards. That is, the identification of risks which can lead to hazards and ultimate disasters allows us to develop preventative and mitigation measures for the identified hazard (Wentink & Van Niekerk, 2017; Dissanayake, Hettiarachchi & Siriwardana, 2018; Oloruntoba, Sridharan & Davison, 2018). In other words, disaster management's key components of 'prevention, mitigation, preparedness, response and recovery/rehabilitation' are the 'action clusters' for the cycle's flow of activities to deal with any natural or manmade hazards that we could experience (Douglas, 2017).

The question to ask will be: what is disaster/risk prevention, mitigation, preparedness and relief/response? Holloway (2003) provides some explanations:

- **Prevention:** Activities to provide outright avoidance of the adverse impact of hazards and related environmental, technological and biological disasters.
- **Mitigation:** Ongoing structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.
- **Preparedness:** Activities and measures to ensure effective response in an emergency and its impacts, including timely and effective early warnings and the temporary removal of people and property from a threatening location.
- **Relief/response:** The provision of assistance and/or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those affected.
- **Recovery:** Decisions and actions taken after a disaster with a view to restoring living conditions of the stricken community, while encouraging and facilitating adjustments to reduce disaster risk.

The understanding is that governments should strive to lean towards prevention and mitigation rather than relief and response. Unfortunately, most countries, including South Africa, are struggling to cater for the prevention and sometimes mitigation of disaster. What is apparent is an application of a "Firefighting" approach towards disaster. Instead of providing for solid disaster resistance, which includes early warnings and evacuation, proper infrastructure, adequate spatial planning and a conducive socio-economic environment among the majority of its population, what is evident are processes implemented to try and manage disaster rather than preventing a hazard from being disastrous. This is contrary to the disaster management legislation, the Disaster Management Act No. 57 of 2002, which provides for an integrated and coordinated disaster risk management policy that focuses on preventing or reducing the risk of disasters, mitigating the severity of

disasters, preparedness, rapid and effective response to disasters, and post-disaster recovery (Republic of South Africa (RSA), 2002). The focus has been on post-disaster recovery as opposed to the other more effective and proactive approaches.

Evidence to this fact was the recent flooding disaster which affected KwaZulu-Natal, Eastern Cape and North West Provinces. Eyewitness News (2022) reported that between the 8th and 21st April 2022, the slow-moving storm, Issa, brought long periods of heavy rain to KwaZulu-Natal, which caused flooding and mudslides in Durban and its surrounding areas, affecting over 40,000 people and leaving a trail of destruction. During this time and the following days, it was declared that more than 440 people had lost their lives due to the disruptions of the flooding incidents (British Broadcasting Corporation (BBC), 2022). The region was declared a state of disaster by President Cyril Ramaphosa due to the impact of the hazard which included destruction to infrastructure, damage to water and electricity supply and the displacement of households. Unfortunately, most of what exacerbated the impact of the flooding was a lack of proper preventative and mitigation measures to deal with the disaster. According to Eyewitness News (2022), the effects of the storms were caused by the fact that many homes in lower-income neighborhoods of Durban, which is the worst affected city, are built on open, unsafe ground in low-lying areas, leaving low-income families particularly vulnerable to flooding and landslides. Poor building standards have also increased the scale of the disaster, whilst weaknesses in spatial planning and storm drainage systems were found to be other challenges.

The lessons from this case study are that, as a country, we need to move beyond a response and relief (firefighting) approach towards dealing with natural hazards. The emphasis should be placed on 'disaster risk reduction' rather than 'disaster management'. What is clear is that disasters are conditioned by human activities. Hazards may be natural in origin, but it is the way in which societies have developed that causes them to become disasters. Effective disaster risk reduction roots itself in driving down prevailing vulnerability conditions through ongoing development programs, rather than limiting itself to a major response once a crisis becomes apparent.

Other than continuing to focus on disaster management cycles, effective disaster risk reduction should be based on careful risk identification and analysis before implementing prevention or mitigation actions. Furthermore, adequate capacity, skills and commitment should be raised within the risk, hazards and disaster sectors if disasters are to be prevented. Adequate infrastructure, proper spatial planning and adoption of technology to aid the processes of disaster prevention and mitigation should be emphasized. Most importantly, the socio-economic conditions of the majority of the South African population, which pushes them to settle in unauthorized, low-lying and flood prone areas, should be addressed. What is important to note is that not all natural hazards will lead to disaster, if the efforts to prevent and mitigate them are intensified. These also include addressing the ailing socio-economic conditions of the majority of the population which makes them susceptible to the harsh impacts of the natural hazards.

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