



Multi-stakeholder Platforms and Drought Mitigation in South Africa

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KEYWORDS Agriculture. Drought. Multi-level Collaboration. Private Sector. South Africa

ABSTRACT South Africa is a drought-prone country and has been serially exposed to the impacts of the phenomenon. Extant literature shows government expenditure on mitigating the problems consequent upon drought. However, there is gap in literature about whether government's intervention is facilitated by a participatory process that involves relevant stakeholders in the management. The study sought to evaluate the degree of involvement of non-government actors in drought management in South Africa. The study adopted participatory resource governance as theoretical thrust and used interview and desktop method for data collection and analysis respectively. The findings of the study revealed that government has largely focused on provision of drought relief which, though important, is incapable of leading to holistic mechanism through which future drought exposure may be mitigated. The study recommends wider engagement of relevant, credible stakeholders that will allow for broad-based ideas and skills with regards to managing drought at provincial and municipal levels.

INTRODUCTION

From distant past till these contemporary times, droughts have been a major global problem that continues to threaten human and animal life, and their subsistence. It is a major natural disaster which cuts across all regions of the world (Ujeneza and Abiodun 2015; Glantz 1987). It is alarming that, already, dry lands cover one-fifth of the world's land area and the expectation is that less water availability will remain a challenge (Sohl et al. 2014). The supply of natural resources such as food, water – for domestic use, farming and herding, forest resources and seafood, to mention but a few, is seriously threatened by drought (Bradford and Bell 2017). During the 1999 drought, according to Sohl et al. (2014), Syria lost almost half of its wheat and barley harvest, while Jordan lost it all. Two years earlier, in 1997, Jordan slaughtered one-third of its national herd due to severe drought (Sohl et al. 2014). For the world's population that stands at 7.6 billion with 1.09 percent average growth rate - which implies the addition of an estimated 83 million people per year - (World Population Clock 2018), these dry spells pose very serious human security crises to livelihood. Drought happens to be a “threat multiplier” that creates knock-on risks and human security problems

such as loss of land, coupled with persistent poverty, displacement and migration, and may trigger competition over increasingly scarce natural resources which can result into societal tensions (Assembly 2010).

A drought can be short-term staying for just few weeks, or become extended for years before climate conditions return to normal (Ashraf and Routray 2013). When drought persists for several years, its impact can be devastating on water supplies and agricultural sector. Often, it has more severe effects on agrarian and/or rural communities than non-agrarian people (Ashraf and Routray 2013; Jury 2002; Washington and Downing 1999). This may not be unconnected with the fact that access to water is integral to agriculture. Drought, for instance, affects crop production because of inadequacy of moisture available at the right time for the growth and maturation of crops (Glantz 1987). It remains a major threat to food security and human survival generally. Case in point, the global agricultural drought of 1980s and early 1990s distressed many countries, especially African, and created one of the gravest famine situations in recent history (Gommes and Petrassi 1996).

South Africa is one of the countries in the world worst hit by drought problem. The country has had multiple experiences of drought in

the last few decades and the expectation, according to World Bank (2012) is that the country falls within one of the regions of the world (Southern Africa) that will still experience increase in the intensity of droughts. This is informed by the growing concern at the global arena that droughts may be increasing in regularity, intensity, and duration given changing climatic conditions and documented increases in extreme climate events (Sivakumar et al. 2012). It is noteworthy that South Africa is a hugely agricultural society that specializes in the production of food crops and animal husbandry, and it stands to reason that continued drought intensity will impinge negatively on agricultural activities since almost all agricultural activities are water-dependent. This study therefore examines stakeholders' role at mitigating the challenges posed by drought.

Objectives of the Study

- (a) To evaluate how government has facilitated the incorporation of all stakeholders in water use and management towards addressing the challenges of drought.
- (b) To assess the mechanisms put in place by the stakeholders to address the drought phenomenon.
- (c) To identify the challenges militating against stakeholder participation in drought management.

A Glimpse at Literature

The results of the study undertaken by Theunissen (2005) in South Africa designed to compare the drought impacts of 2003 and 2004, showed that wheat yield was thirty-nine percent lower, the area where it was planted twelve percent lower, major dam water levels twenty-five percent lower with other dams entirely empty. In forestry, which accounts for about five percent of South African gross domestic product, water stress events have had serious, negative impacts in slowing down the growth of trees (Jury 2002). This condition characterized the entire past drought episodes in South Africa. The earliest intervention of the government in addressing the problems associated with drought was the establishment of National Drought Committee which task essentially is about provision of drought assistance schemes.

The drought assistance schemes were developed into phased interventions (Williams 2016). The first level, according to Williams (2016), entailed rebates on transport costs, loans and ultimately subsidies at increasing rates as the drought continued. The drought assistance scheme served to protect natural resources and provide for livestock farmers during a disaster drought. There were acknowledgements, especially from government, as to the functionality of the drought assistance schemes in contributing to sustaining selected agricultural production and communities. However, as argued by Williams (2016), by the middle of 1980s, it was clear the policy had failed to protect natural resources as envisioned. The follow-up intervention derives from government's Departments of Water Affairs and Agriculture, Forestry and Fisheries which have provided agricultural relief assistance in terms of assisting pastoralists with livestock feed and stock water. In 2015, the Department of Agriculture, Forestry and Fisheries assisted a total of 78,863 with livestock feed (Draft National Indaba Concept Note 2016). In a related case, South African government expended R285 million on drought relief across the provinces on 2007/2008 drought (Ngaka 2011). The 2015-2016 drought, similar to the one of 1992-1995, was quite severe in intensity and reputed by national authorities to be the worst in 23 years in South Africa and resulted in significant declines in harvest and huge financial interventions from government (Baudoin et al. 2017; DAFF 2016).

Theoretical Framework: Participatory Resource Governance

Participatory resource governance is a polycentric arrangement that pulls together different actors and networks that help formulate and implement environmental policy and/or policy instruments (Pahl-Wostl 2009; Johnson and Knox 2002). It is a multi-level learning and collaborative approach (Folke et al. 2005; Gleick 2003) that harnesses the experiences, skills, ideas from different stakeholders or social actors with specific interests and concerns to make the most of environmental resources and address the attendant problems (Borrini-Feyerabend and Tarnowski 2005). In another words, participatory resource governance ensures that previously excluded actors are empowered to take part in governance,

and it creates new forms of cooperation (Mirumachi and Van Wyk 2010). In practice, participatory resource governance entails a process by which social actors – concerned organizations, groups, and individuals come together to discuss, agree upon, and support in practice a course of action with regards to natural resources – forest, water, fisheries, wildlife ((Borrini-Feyerabend and Tarnowski 2005); Poffenberger 1990). At the root of participatory resource governance is the fact that for every single natural resource, there is plurality of stakeholders or social actors who usually possess relevant and at the same time diverse interests, or concerns. Another equally important factor is that different stakeholders possess diverse capacities and comparative advantages required for the optimal management and/or governance of any given set of natural resources. The argument is that effective resource management requires as many competencies and inputs as possible. These roles or capacities are not mutually exclusive but are rather complementary. The third fact posited, which according to them is often overlooked, is that indigenous and local communities possess peculiar capacities – knowledge, skills, institutions, and resources rooted in local history and local conditions. Fourthly, they submitted that knowledge about the ecosystem is very limited as is the case with every complex system. Connected to that complexity and uncertainty is the fact that natural ecosystems are constantly in state of flux, and the change is inevitable, all-pervasive, taking place at all ecosystems scales, and is pivotal to ecosystem life. Fifthly and lastly, environmental issues are a consequential subject because the management of natural resources comprises important economic and livelihood decisions in any given society, thus making it a realm of political power. The control of natural resources – land, water, mineral resources, biological resources, space, and the permission to use these resources is what secular power is all about. As argued by Schroeder (1999), Ribot (1999) and Tarnowski (2002), there is often inequitable distribution of authority, power and benefit sharing, and that accountability in natural resource management is the exception rather than the rule.

Clearly, water is a resource that has a wide of interests and stakeholders which include, but are not limited to, government – and its agencies, commercial crop and animal farmers, tradi-

tional communities, academics etc. Thus, the management of the resource and the attendant issues should be a collective and participatory process giving each interest the opportunity to be involved in every sphere of the process for managing the drought phenomenon.

METHODOLOGY

The study relied on qualitative techniques for data collection and analysis namely interview and desktop research. The principal method for data collection was key informant interview drawing 20 interviewees from the stakeholder chain including farmers, pastoralists, researchers, government agencies – Department of Agriculture, Forestry and Fisheries and Department of Water Affairs, and civil society. The decision to adopt this purely qualitative approach is informed by the necessity to feel the pulse of the stakeholders by giving them the latitude to express themselves. The population of the study includes farmers, herders, staff of relevant government agencies who are knowledgeable in water-related issues, academics/researchers with competence in water management and environmental journalists. KwaZulu Natal, one of the nine provinces in the country, was selected as the study area because of its reputation as both a farming and pastoral society.

FINDINGS

The research findings will be thematically presented under the following headings: (a) lack of comprehensive stakeholder participation (b) the problem of bureaucratic drought management (c) interventions are skewed.

Lack of Comprehensive Stakeholder Participation

Drought, as a climate change issue, affects a broad spectrum of social actors including farmers whose livelihood depends on rain-fed agriculture; herders or pastoralists who need water and grazing routes for their flock; government which responsibility it is to protect lives and property, and the economic domains within which life subsists. There are other interests and concerned stakeholders such as members of the academia, environmental journalists and civil society. The plurality of stakeholders stands to

reason that each cluster or sector of stakeholders has different competences and peculiar ideas that can be put forward towards mitigating the impacts of drought. However, the findings from the interviews conducted revealed that not all the potentials and competencies available in each cadre of drought management stakeholder chain are being harnessed in KwaZulu Natal, and in the country as a whole. The findings revealed that for a natural phenomenon as drought with its complexities in terms of its varied conceptualizations and the potentiality for being unpredictable in occurrence, a system of continuous learning and knowledge sharing among stakeholders is imperative. The study further showed that although national, provincial and municipal government in South Africa have drought committees, their compositions do not adequately reflect the need to harmonize and bring together representations from all credible stakeholder sectors. More often than not, governmental action tends to focus on relief schemes in terms of financial interventions such as subsidies, provisions of seedlings and livestock feed, food parcels to affected households to mention but a few. The intervention is believed to be largely at government's discretion.

The Problem of Bureaucratic Drought Management

In many parts of the world, response to an outset of drought is often time-lagged, that is, the intervention comes later than it is expected. The number one reason adduced by the interviewees for this is government bureaucracy which is often at the centre of drought intervention. They opined that government has to vote monies to mitigate drought, provide relief materials and underwrite significant amount of losses incurred by farmers and other categories of people whose livelihoods may have been impacted by drought. All these governmental actions are carried out by government's departments and agencies which spending powers are guided by appropriations. The issue however is that, response to a natural disaster as severe as drought cannot solely depend on government bureaucracies and appropriations. The unexpectedness in occurrence, the severity of drought and its propensity to endure or be intermittent require a mitigation mechanism that will not rely on budget cycle. The impacts of drought are

more often than not linked to such socio-economic indices as loss of harvest or livestock, reduction in revenue, and ultimately lower gross domestic product (GDP). Therefore, it is reasonable that the private sector should be an integral stakeholder and at the forefront of drought mitigation. However, drought management squarely rests on the shoulder of the government, although with nominal involvement of representations from some sections of the stakeholder chain. For instance, the benefits of involving such critical private sector leaders as banks and insurance company have not been reasonably explored.

Interventions are Skewed

There was consensus by the interviewees on the fact that at the outset of a drought season, the individuals mostly impacted are farmers and pastoralists. Most of the interviewees, however, believe that there are other individuals whose industrial and domestic water needs are impinged by drought and the attendant tight water distribution policy of government. According to them, more often than not, governmental relief response is skewed in favour of farmers and herders. Their belief is that the stress that dry spells put on economic activities transcends farming and pastoral activities even though they are the first to be impacted. Agro-allied industries and water dependent industries are also affected. Therefore, any response to drought that leaves them out is skewed. Importantly, these industries can be relieved through subsidies and tax holidays just as farmers, pastoralists and farming households are incentivized during a drought season.

DISCUSSION

The findings of the study revealed that the management of drought largely rests on the government – national and provincial. This finding is in agreement with earlier research findings that established lack of participatory process of knowledge generation in South Africa towards managing drought, and existence of narrow composition of crisis committees that have been put in place which has often led to the emergence of powerful actors capable of subverting the democracy of water reforms (Reid and Vogel 2006; Brown 2011; Stone 2014). Their belief is that few

people who oversee the management of water-related issues at provincial and municipal levels have often pursued their own interests to the detriment of collective will. The challenge of accountability of individuals saddled with the responsibility of managing natural resources or mitigating natural disasters remains a major concern across the world (Tarnowski 2002). The study found that national and provincial authorities have been known to make provision for drought relief, however, some environmental scholars believe that even the relief efforts and/or interventions are inadequate and more often than not, do not come on time most of the times (Ngaka 2011; CSIR, 2010). So there is even an issue of reliability and consistency in terms of government efforts at providing relief assistance to individuals who have suffered and may suffer losses resulting from drought.

CONCLUSION

The paper has looked at the phenomenon of drought and its impact on lives and livelihoods in South Africa. The proneness of the country to drought in the future thus requires the need to be prepared for a possible occurrence. Often, the responsibility of mitigating drought in South Africa rests solely on government and its agencies which function has focused on relief scheme. However, while government should lead the process of addressing the challenges posed by drought, other stakeholders in water use and management have roles to play too in terms of their ideas, skills and resources that can make mitigation strategies more effective.

RECOMMENDATIONS

1. A broad participatory process that aggregates all credible stakeholders and mobilizes them towards mitigating drought in South Africa is an imperative the country needs to ensure. This will ensure greater survivability in the midst of drought. Even if the government will intervene in any manner, such should be derived from wider engagement of relevant, credible stakeholders that will allow for broad-based ideas and skills.
2. The study recommends that climate finance should not be borne by government alone but stakeholders, particularly those whose

livelihood depends on rain-fed agriculture and water because of the limitedness of budget expenditure by government and the fact that drought is an ever-present emergency.

3. Private sector should be adequately involved in terms of crop insurance and provision of credit and emergency fund for agriculture and agro-allied industries.
4. Relief safety nets are also recommended to be extended to formerly excluded actors who are vulnerable to the impacts of drought.

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Paper received for publication in April, 2019

Paper accepted for publication in May, 2019