

The reality and rhetoric of integrating climate change adaptation into economic sectors in Zimbabwe

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Abstract

The impacts of climate change have become more frequent and severe in the last three decades. As emissions rise and the earth warms, the rhetoric on climate change is increasing. Transforming the rhetoric of climate change integration into realities around food, water and energy security is indispensable to enhancing communities' climate resilience. Using the institutional analysis and development (IAD) framework, this paper analyses the challenges and opportunities in enhancing climate resilience in Zimbabwe. To this end, the study shows that conceptual, institutional and sectoral silos reduce the creation of holistic policy and programme implementation in Zimbabwe. This paper concludes by recommending a resilience framework that can be used for integrating climate resilience into sectors by means of integrated systems thinking.

Key words: *Climate resilience, Integration, Institutional, Zimbabwe*

Introduction

Zimbabwe mostly consists of semi-arid land with a highly variable climate. The predicted increase in temperature and evaporation, the increase in rainfall variability and the increased frequency of floods and droughts will further exacerbate the existing challenges that are already being faced by Zimbabwe as a developing country (David & Hirji, 2014). Consequently, it is recognised as one of the most vulnerable countries to climate change (MEWC, 2017). Extracts from the Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC, 2014)

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indicate that the impacts of climate change are projected to impede economic growth and efforts to reduce poverty. These impacts will have a widespread effect on socio-economic development, affecting the climate sensitive sectors such as water, agriculture, energy, health and environment (Browns et al, 2012). The increased frequency of droughts and floods has already affected food security (World Bank, 2018). It is therefore crucial to enhance climate action towards building the resilience of communities.

The concept of building climate resilience has emerged as a plausible pillar among humanitarian/development actors and Government entities as a longer-term and more efficient strategy for substantially promoting sustainable development at national or local levels. Whilst there are mixed views and concepts in understanding resilience, with some circles saying it is too broad a term or it has been over-used, there remains some common understanding that the enhanced capacity to withstand climate change impacts can ultimately lead to resilient communities (Manyena, 2009). Strong governance systems play a vital role in supporting resilience building (Zhakata, Jakarasi & Moyo, 2016).

Climate change adaptation can be protective in nature (proactive) or opportunistic(reactive), but with early adoption of well-planned adaptation strategies, both money and lives can be saved (GoZ, 2006; UNDP, 2015). Resilience analysis focuses on the capacity of individuals or systems being able to survive during an adverse situation or recover from such an event (Schipper and Langston, 2015). Resilience can be incremental, transformational, spontaneous or autonomous (IPPC, 2014). Climate change adaptation and resilience building have been discussed in five capacities - preventive, anticipative, absorptive, adaptive and transformative (Manyena, 2009) - which are important in dealing with climate shocks and disasters. Adaptive and transformative capacities allow to communities to cope and bounce forward after facing climate disasters (ibid).

This paper seeks to critically analyse the extent to which conceptual framing of climate resilience perpetuates a) institutional and sectoral silos, and (b) policy and programme implementation discord in enhancing climate resilience in Zimbabwe.

Methodology

This paper uses the institutional analysis and development (IAD) conceptual framework to analyse Zimbabwe's governance systems (Ostrom, 2004). This includes the review of existing policies, institutions and linkages which expose the rhetoric and realities that Zimbabwe uses to enhance climate resilience. Interviews were also conducted with key informants from the government and non-government sectors. 30 key informant interviews were held with officials

from the Ministries Agriculture, Mechanisation and Irrigation Development, Environment, Water and Climate, Transport and Infrastructure Development, Environmental Management Agency and Non-state Actors such as the United Nations Development Programme, World Bank, Infrastructure Development Bank of Zimbabwe, Environment Africa and World Wide Fund among others. 22 multi-level focus group discussions (FGDs) with sectoral and mixed participants were also held with stakeholders from government, civil society, academia, private sector and communities to discuss possible structures, linkages and enablers for building climate resilience. Nine FGDs were held at provincial and district level, eight FGDs were held at ward level and five FGDs were sectoral with at least 450 participants contributing to the process of consultations. One National Workshop was held in Harare with all stakeholders from different sectors and multi-level governance structures.

Findings

In Zimbabwe, incorporating climate resilience in various sectors has been hindered by a lack of integration. Firstly, the research showed that there are conceptual differences in the way terms such as 'adaptation' and 'resilience' are framed by different sector stakeholders (e.g. energy, agricultural, water and health). These sectors are managed under different Ministries and have different regulatory and legal frameworks governing them according to their various mandates. A case in hand was the construction of the Tokwe-Mukosi dam to support the agricultural sector through water provision for irrigation purposes, but with minimal consideration for the environment. The dam filled in one season rather than expected five years due to climate change, which saw record rain fall during the 2013/2014 season. Due to lack of integrated planning, communities, property and livestock upstream had to be airlifted after being marooned whereas those downstream were also threatened with displacement during the construction as the dam-wall neared breaching. Planners were anticipating phased relocation over the years as they expected the dam to take at least 5 years to fill up. Another case is Zimbabwe's mining policy which overrides other policies, often at the expense of agricultural, environmental and cultural resilient issues. This is largely premised on the basis of its importance of the sector to economic growth which allows the Mines Minister to issue special grants for mining over any land use, including agriculture or housing. This threatens the adaptive capacity of communities who may be detached from their livelihoods or isolated in the planning process especially when the project proponent does not develop practices of equitable access and benefit sharing of mineral resources within the community or seek free, prior and informed consent of communities before project implementation.

Secondly, Zimbabwe only established the Climate Change Management Department in 2013, which became operational in 2015, hence there were no enablers such as climate policies and

institutions with climate change being embedded in different sectoral policies. As a result, most actions on resilience were previously spontaneous and more reactive to extreme weather events, and climate-proofing each sector was incremental and done according to the relevant mandate. This meant that historically there has been a lack of integration of climate policies across sectors.

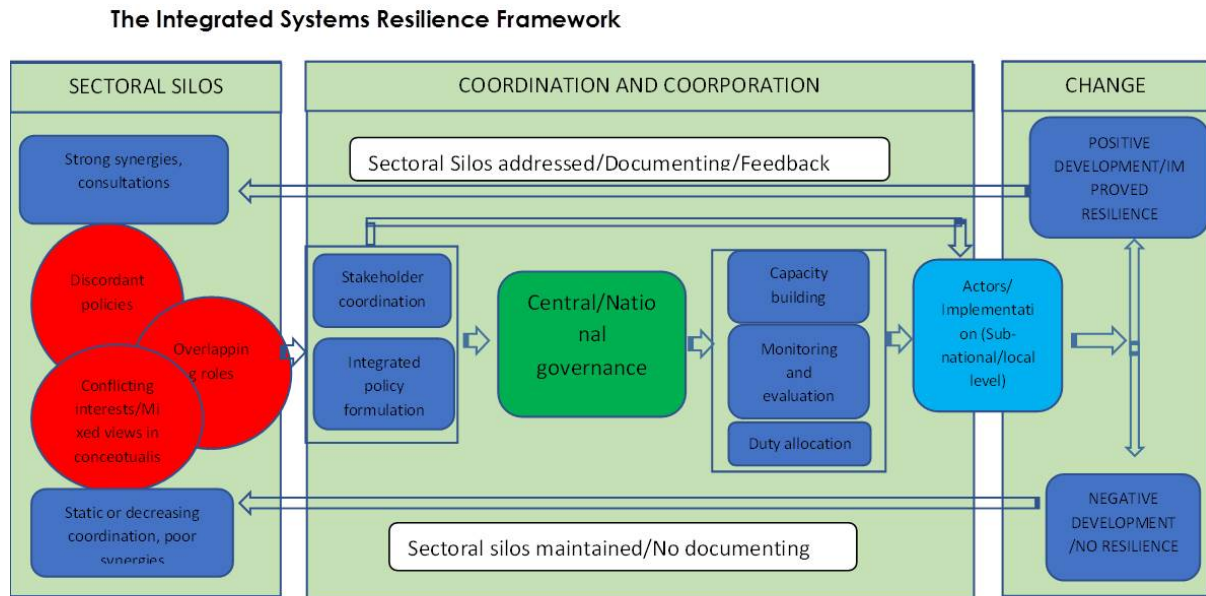
Thirdly, while the Climate Change Management Department has provided, high level coordination and cooperation towards resilience building, there is still need for an integrated approach and long-term commitment to strengthen the synergy between sectors and stakeholders. This will ensure that interventions are designed in an integrated manner that ensures multiple partners and sectors work together to address key leverage points and adopt complementary, transformational and effective strategies.

Lastly, the current system lacks monitoring, evaluation and strong feedback mechanisms that allow for sharing of experiences and lessons learnt. This has resulted in duplication of effort and inefficient use of resources as the outcomes continue to be undesirable in most communities.

Contribution to Policy and Practice

In order to deal with the above, a resilience framework that can be used in integrating climate change adaptation into sectors through integrated systems thinking is needed. Such a framework approaches resilience holistically, rather than thinking about it in individual parts (Moore et al, 2010). Hence, it is important to look at climate change adaptation and resilience building beyond the five capacities (preventive, anticipative, absorptive, adaptive and transformative) to include sub-capacities or sub-actions such as learning, planning, feedback mechanisms, allocation of resources, collaboration, networking, organising, improvising and innovation.

The proposed resilience framework provides a platform through which all stakeholders can work together to implement development interventions differently so that households, communities and wider systems are better able to manage the impacts of climate change (see **Figure 1**).



*Figure 1. The Integrated Systems Resilience Framework
(Source: Adopted from Manyena, 2018, unpublished)*

The framework highlights three key areas of focus:

- i) Dealing with sectoral silos and institutions;
- ii) Enhancing coordination and implementation; and
- iii) Strengthening lessons learnt and feedback mechanisms (documenting empirical evidence of adaptation actions).

The National Government plays a key role in supporting the harmonisation and coordination of different sectoral policies and ensuring that the implementation of the established policies has positive outcomes and impacts. This framework provides for logical programming by providing a platform for stakeholder consultations and integrated policy formulation across different Ministries and other players. The ability for Ministries to talk to each other will assist in removing silos, building document evidence and knowledge sharing hence connecting the missing dots. Communities and practitioners will build on practices that have worked, hence advancing adaptation actions and making them sustainable.

Conclusion

Climate change adaptation and resilience building are long-term endeavours that require integrated coordination and cooperation. This framework approaches resilience planning and implementation holistically rather than thinking about it in individual parts. This framework will provide for transition from adaptation to resilience premised on engagement, lessons

learnt and feedback loop to ensure that climate action is integrated into all socio-economic and political sectors and considers all players in a manner that does not subject other sectors to further stresses. The ability for resilience to look at the broader system of addressing climate change will enable discourse and engagement across different Ministries and stakeholders, eliminating the silos that adaptation had introduced in different sectors.

Resilience building may be improved by taking the following considerations into account:

- Strengthen multi-stakeholder engagement to enhance and reinforce integrated action and eliminate duplication of efforts;
- Provide platforms for information sharing and inform decision-making, policy formulation, coordination and alignment;
- Strengthen existing institutions by providing platforms for exchange of information and capacity building such as having climate change focal points in different ministries/sectors or cross-pollinated project boards that bring in diversity of expertise;
- Support technology development and transfer to manage the challenges that are faced by communities; and
- Measure the level of change after project or programme implementation. Enhanced resilience will show positive development supported by integrated governance systems and negative change will show discordant policies, poor planning and implementation.

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