

# Zambia's adaptation to climate change

The conflicting discourse within policy documents reflects a country's challenges in addressing both adaptation needs and economic development



## April 2018

Ali Romdhani

Monica Coll Besa

Dianne Scott

Sukaina Bharwani

# Key findings

- Qualitative discourse analysis of key government planning documents shows how Zambia's
  policy-makers struggle to conflate climate change challenges, achieve economic growth, and
  improve living standards for more of its citizens.
- Discourses promote two competing visions for the roles of natural resources: one presents
  a vision of resources as a wellspring for economic development and growth, and another
  presents resources as assets to be used to improve the living standards and well-being of
  the Zambian people.
- An "ecological modernisation" discourse which combines economic growth with environmental protection, and suggests that climate change presents an opportunity for rather than a threat to development has not been fully integrated into Zambian policy documents.
- Overall, integration of climate change in Zambia's policies remains erratic, with some projects, such as the newly built Maamba coal-powered station, contradicting ongoing mitigation efforts. Measures designed to spur economic development or lead to climate change adaptation often contradict one another. Competition over water use in Lusaka for hydroelectricity, irrigation or drinking water reflects the contradictions.
- Results indicate that Zambia's ambition to achieve middle-income status offers a key entry
  point for engaging with decision-makers to increase the likelihood that resilient development options will be explored and, ultimately, realised. This goal shapes other discourses by
  strongly grounding policies in an aspirational, economic development perspective that offers
  potential for change.

# Introduction

Climate change is slowly being introduced into Zambian development policies, such as urban planning and national development strategies. The shift is taking place because climate change-related droughts and floods have had significant effects on the country, and because international aid is increasingly directed toward climate change policies. As a result, understanding how government deals with climate change at the policy level, and understanding how government frames its views are crucial matters in the development of resilient development pathways.

Climate change is taking a toll on Zambia in many ways. Insufficient infrastructure for water and sanitation causes significant disease outbreaks, particularly during flooding episodes. Drought leads to shortages in hydroelectricity generation, and to crop failures. The cost of adaptation measures is estimated to be between USD 4.33 billion to 5.44 billion (MTENR 2010). Nonetheless,

Photo (above): Fishermen on the Kafue River © JOSECITO312 / FLICKR

Figure 1: Key policy documents

#### Vision 2030

Zambian Vision for 2030 (2006) Office of the President

## **SNDP**

Sixth National Development Plan (2011)

Ministry of Finance and National Planning (MoFNP)

#### Budget

The Budget Speech for 2016

Ministry of Finance and National

Planning (MoFNP)

#### **NCCRS**

National Climate Change Response Strategy (2010)

Ministry of Tourism, Environment and Natural Resources (MTENR)

## **Master Plan**

The Master Plan for Lusaka (2009) Lusaka City Council (LCC), the Ministry of Local Government (MLGH) and the Japanese Cooperation Agency (JICA)

Certain ideas and framings have the potential to shape state action in Zambia.

these estimates are significantly lower than a business-as-usual pathway, in which the costs associated with failing to address climate change-related issues could reach USD 6.6 billion over the next decade (MTENR 2010).

This brief explores how certain ideas and framing potentially shape state action in Zambia. The analysis is based on a review of five key policy documents from Zambian institutions, with a special focus on Lusaka, the nation's capital. The brief highlights key findings from discourse analysis, which involves understanding the discourse in one political arena in relation to other discourses in other political arenas and against the social, economic and political background. Discourse can reveal how "the words and concepts of development both express and form the mindsets and values of dominant linguistic groups, disciplines and professions, and organisations" (Chambers 2004).

The findings show that climate change discourse is weakly integrated into institutional discourse on development planning. However, a sustainable resource-management approach has stronger resonance in development planning, largely because the sustainability framing fits neatly within an ecological modernisation (or green growth) discourse, in which economic growth and environmental protection are portrayed as working together (Hajer 1995).

## **Development**

Zambia is striving to make the "transition from underdeveloped nation status", and each policy document reviewed highlights the same goal, which is to become "a prosperous middle-income nation by 2030" (Office of the President 2006).¹The designation, which is very important to Zambian institutions, forms an overarching goal for government's action, and tends to dominates other forms of development discourse.²

Limited financial and technical capacities seem to present the main constraints for development in Zambia. For instance, the Lusaka Master Plan, written with the expertise of the Japanese Development Agency (JICA), envisions that USD 3.1 billion would be needed to achieve the planned projects, but notes that the country has only roughly 14% of that amount (USD 421 million) to invest <sup>3</sup>

## Climate change

Selected policy documents do not show a high degree of cohesion regarding climate change issues. However, common ground does emerge, indicating that climate change poses a serious threat to development, and that more sustainable resource management is necessary to promote future economic development.

Zambian institutions consider climate change using different lenses. For instance, the Ministry of Finance focuses mainly on disaster risk management and focuses more on economic growth, framing the environment as a reservoir of "natural [resources] which could provide an impetus to economic development" (Ministry of Finance and National Planning 2011). By contrast, the Ministry of Environment proposes a more holistic perspective, and speaks of a more equal and sustainable management of resources. On climate change, it mentions that "the mission is to ensure that the most vulnerable sectors of the economy are climate proofed"(MTENR 2010). To do so, the environment ministry proposes the establishment of a coordination body, the National Climate Change and Development Council. Because this body has yet to be established, an Interim Inter-Ministerial Climate Change Secretariat is playing the same role until a new climate change policy is drafted (Climate Change Secretariat Zambia).

<sup>1</sup> This goal refers to the World Bank Atlas classifications, which place countries into one of four income groups: low, lower-middle, upper-middle, and high. As of 2018, Zambia is classified as a lower-middle-income country.

<sup>2</sup> The goal to become a "prosperous middle-income nation by 2030" is stated in every reviewed policy document; moreover, every stated objective is aligned with this 2030 vision.

<sup>3</sup> The Lusaka Master Plan is a comprehensive planning document that covers a wide range of topics, including urban planning, strengthening legal structures and government institutions, and environmental and social issues.

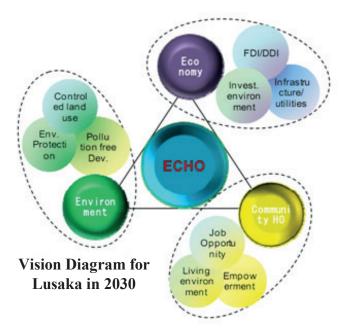
At the Lusaka-city level, the strategy is referred with the acronym ECHO as "Economically strong, Environmentally friendly; Community Hope and Opportunity" (Lusaka City Council et al. 2009). (See Figure 2.) So far, progress on this strategy has largely been focused on the economic components, such as a ring road to improve city transportation. But with additional funding, the ECHO umbrella could offer a way to engage with decision-makers as the environmental rationale on is already laid out in this strategy.

Overall, the question of sustainability is seldom addressed in a meaningful way. For example, even though the word "sustainability" often appears, no direct reference refers to any evident contradictions between development and environmental preservation.

## Water

Though Zambia holds 15% of the Southern African region's water supply, water issues represent an ongoing concern, with Zambia struggling to provide its people with safe drinking water and adequate sanitation. Overall, the management of water depends largely on whether it is considered as a resource or utility. Water as a resource serves economically productive uses like irrigation and electricity generation. Water as a utility serves to increase the living standards, mainly for those who are the neediest in society.

Figure 2. The Lusaka ECHO vision



Source: the Lusaka Master Plan

The irony for Lusaka is that while water is plentiful for the time being, its availability is quite limited, largely due to infrastructure issues. Moreover, the multiple actors engaged in the use of the Kafue River are involved in potentially unsustainable activities in the long term. Longer dry spells could spur tensions around the multiple uses of the Kafue River, forcing difficult choices between electricity generation, water for sanitation and drinking water, and for the irrigation of nearby farms.

At the city level, the Lusaka Green Belt project – a series of connected natural parks, cemeteries and gardens – is planned, but not yet completed. (See Figure 3.) "Greening" the city could offer different benefits such as enhancing ecosystem services, reducing vulnerability to flooding, and improving human habitats (Munang et al. 2013). This project could serve as an ecosystem-based adaptation measure, and therefore, as an entry point for resilient development pathways.

## **Energy**

Even though only 22% of Zambians have access to electricity, it remains the third-biggest export from the country. Of this, 99% is hydropower and could in theory be expanded fourfold due to the high hydroelectricity potential. Biomass provides for the remaining 75% of energy consumption, and deforestation, therefore, remains an important issue.

As Zambia's long-term planning policy, Vision 2030, states, "Energy is one of the important driving forces behind the development of an economy as it cuts across most economic and social activities" (Office of the President 2006). However, the view of electricity as a resource for economic development, rather than for a public utility, remains dominant; the government intends to increase tariffs, build a coal mine and export more electricity. Moreover, this is in direct contradiction with the Environmental Ministry's objective "to develop a less carbon-intensive and climate change-resilient energy infrastructure and grow using a low carbon path" (MTENR 2010) . At this point, the "electricity as a utility" discourse remains weak, as electrification of poorer areas remains highly inadequate.

Overall, energy in Zambia is an important tool for development, both economically as an export, and socially as a utility. However, electrification initiatives involve raising tariffs, and, potentially, the burning of large amounts of fossil fuels.



Zambian farmers load potatoes into a truck. Climate change is likely to lead to longer dry spells that may force difficult choices over how to use water resources in Zambia. © AFRICA924 / GETTY

Proposed Park System
Capital Central Park
Thematic Park (Safari, Cemetery, etc)
Community Park (Ward, Zone, etc)
Proposed Green Network
Green-Water Corridor
Recreation Network
Walkway, cycling, etc
Environment Protection Areas
Forest Reserve
Fringe Forest Belt
Agro-Green Belt

Figure 3: Lusaka's proposed Green Belt

Source: the Lusaka Master Plan

adaptation policies.

# Discourse coalition and integration in policies

Discourse analysis shows that the climate change discourse has been weakly integrated into Zambian policies. The discourse of climate change has been undertaken in a way that fits the Zambian development model but does not challenge it. The ecological modernisation discourse as promoted by international organisations, such as the World Bank, frames climate change as an opportunity for economic development; however, most Zambian policy documents analysed frame climate change as a threat. This stance is consistent with other studies of the region, where governments tend to focus on the risks posed by climate change (England et al. 2015).

Though some new funding sources have presented themselves, no measures have yet been taken to invest in green growth as such. For example, opportunities include Reducing Emissions through Deforestation and Degradation (REDD+) program, to reduce global emissions cause by deforestation; and Clean Development Mechanism (CDM) activities under the United Nations Framework Convention on Climate Change (UNFCCC); yet, these are mentioned only twice in Zambia's National Climate Change Response Strategy document. Within the studied documents, no evidence suggests that the government is looking at expanding into new markets or protecting the environment, but rather managing resources and funding development by exploiting these resources.

Based on the discourse analysis conducted, a market-led conception of development remains significant in the climate change discourse, and to some extent, this appears to prevent a greater involvement of the state in climate change. Even at the Lusaka level, the integration of climate change is quite moderate: the Master Plan evidences some concerns for the water sector's adaptation that are aligned with the concerns expressed by donors, such as the Millennium Challenge Corp. involved in the Lusaka sanitation programme (Millennium Challenge Corporation 2011). However, the use of water for public services is challenged by more profitable use, such as electricity generation design for export, which confirms the difficult integration of climate change

The will to become a middle-income nation provides powerful motivation for policymakers.

Overall, Zambian institutions share a similar, but not fully coherent, perspective with international donor agencies. This provides a potentially enabling environment to attract funding, which is crucial to the Zambia's aspirations to become a middle-income nation.

# **Policy Considerations:**

- The forthcoming coordination body responsible for climate change issues, the National Climate
  Change and Development Council (NCCDC), represents is a positive step toward better climate
  change integration across different ministries and scales of governance, but some actors may
  hamper the process to maintain their political influence over environmental issues, which have the
  potential to change many rules.
- Engagement on the ecological modernisation discourse (commonly referred to green growth) may benefit from focusing on opportunities that are reachable, such as the growing market for organic production (Borregaard et al. 2003).
- Water rather than energy issues seem to offer more potential for engagement at the city level, because the city has a greater influence in dealing with water issues. Energy, still dominated by national-level actors, also contains a high degree of economic interest.
- The will to become a middle-income nation provides a powerful motivational narrative in Zambia. Engagement through this lens could provide a good entry point for collaboration with decision-makers.
- An effort should be made to provide different development pathways to promote more sustainable urban patterns of growth in Lusaka. With additional funding, the city's "Economically strong, Environmentally friendly; Community Hope and Opportunity" (ECHO) planning umbrella could offer a way to engage with decision-makers because the environmental rationale on is already laid out in this strategy.



The Kafue River in Zambia at sunset. @ ACHIM / FLICKR

## **ABOUT THIS RESEARCH**

This brief summarises "Discourses of Climate Change and Development Policies in Zambia", a University of Edinburgh master's degree dissertation, available at https://www.researchgate.net/publication/316276617\_Discourses\_of\_Climate\_Change\_and\_Development\_Policies\_in\_Zambia. The research was embedded in the Future Resilience for African CiTies and Lands (FRACTAL) project, in which the SEI Oxford Centre is a partner. FRACTAL is part of the Future Climate for Africa (FCFA) programme funded by the UK Department for International Development, and the Natural Environment Research Council.



## Published by:

Stockholm Environment Institute Linnégatan 87D, Box 24218 104 51 Stockholm, Sweden Tel: +46 8 30 80 44

#### **Author contact:**

ali.romdhani@outlook.com

## Media contact:

karen.brandon@sei.org

Visit us: sei.org Twitter: @SEIresearch @SEIclimate

Stockholm Environment Institute is an international non-profit research and policy organisation that tackles environment and development challenges.

We connect science and decision-making to develop solutions for a sustainable future for all.

Our approach is highly collaborative: stakeholder involvement is at the heart of our efforts to build capacity, strengthen institutions, and equip partners for the long term.

Our work spans climate, water, air, and land-use issues, and integrates evidence and perspectives on governance, the economy, gender and human health.

Across our eight centres in Europe, Asia, Africa and the Americas, we engage with policy processes, development action and business practice throughout the world.



Participants at the third Lusaka Learning Lab in November 2017 exploring the issues surrounding water supply and climate change in Lusaka. On the left, Peter Chisanga (Ministry of National Development Planning) and on the right, Mununga Mungalu (Lusaka Water and Sewerage Company). © LIZ DANIELS, SEI

# References

Borregaard, N., Dufey, A. and Ladrón de Guevara, J. (2003). Green Markets–Too often a lost opportunity for developing countries. *Trade Knowledge Network*, CIPMA, RIDES, IISD, Santiago, Chile.

Chambers, R. (2004). Ideas for development: reflecting forwards. *IDS Working Papers* 238.

Climate Change Secretariat Zambia (n.d.). The Interim Inter-Ministerial Climate Change Secretariat. http://www. znccs.org.zm/about-us.php [Accessed 28 March, 2018.]

England, M. I., Dougill, A. J., Stringer, L. C. and Vincent, K. (2015). Climate Change Adaptation Planning and Policy Coherence across Sectors in Southern Africa. UMFULA-FCFA.

Hajer, M. A. (1995). The Politics of Environmental Discourse: Ecological Modernization and the Policy Process. Clarendon Press Oxford.

Lusaka City Council, Ministry of Local Government and Housing and Japan International Cooperation Agency (2009). Comprehensive Urban Development Plan for the City of Lusaka. Summary Millennium Challenge Corporation (2011). Water Supply Investment Master Plan Lusaka, Zambia.

MTENR (2010). National Climate Change Response Strategy. Zambia Ministry of Tourism, Environment and Natural Resources. http://www4.unfccc.int/nap/Documents/ Zambia%20Climate%20Change%20Response%20 Strategy.pdf

Munang, R., Thiaw, I., Alverson, K., Mumba, M., Liu, J. and Rivington, M. (2013). Climate change and Ecosystembased Adaptation: a new pragmatic approach to buffering climate change impacts. Current Opinion in Environmental Sustainability, 5(1). 67–71. DOI: 10.1016/j. cosust.2012.12.001

Office of the President (2006). Zambia Vision 2030. Government of the Republic of Zambia.