

Chapter 3

The Fight Against Climate Change From an Indigenous System Perspective

Stewart Lee Kugara

University of Limpopo, South Africa

Thizwilondi Joanbeth Madima

University of Venda, South Africa

Ndidzulafhi Esther Ramavhunga

University of Venda, South Africa

ABSTRACT

The 21st century has witnessed that climate change has become an acute daily agony. In Africa, to be specific, it has made the attainment of the Millennium Development Goals (MDGs) and Sustainable Development Goals a myth. It is argued that the implications of climate change are evident in numerous ways on the African continent: incessant floods, cyclones, droughts, and heat waves. These have introduced disastrous outcomes: a heightened threat of food security, inadequate water resource availability, diminished biodiversity, decline in human health viability, and increasing land degradation. At the centre of all this, a more robust understanding of climate change and appropriate palliatives is called for. In South Africa, conservation by the state and numerous stakeholders on the thorny issue of climate change has tended to favour and privilege Western scientific interpretations at the expense of the “indigenous” interpretations as informed by their indigenous epistemologies.

INTRODUCTION

The 21st century has witnessed that climate change has become an acute daily agony. In Africa, to be specific, it has made the attainment of the Millennium Development Goals (MDGs) and Sustainable Development Goals a myth. It is argued that the implications of climate change are evident in numerous

DOI: 10.4018/978-1-7998-7492-8.ch003

ways on the African continent; incessant floods, cyclones, droughts and heat waves. These have introduced disastrous outcomes; ‘a heightened threat of food security, inadequate water resource availability, diminished biodiversity, decline in human health viability and increasing land degradation’. At the centre of all this, a more robust understanding of climate change and appropriate palliatives is called for. In South Africa, conservation by the state and numerous stakeholders on the thorny issue of climate change has tended to favour and privilege Western scientific interpretations at the expense of the ‘indigenous’ interpretations as informed by their indigenous epistemologies. Against this backdrop, this book chapter thus represents an attempt to rethink climate change by adopting the VhaVenda ways as its case study. In other words, it is premised on Africanising the fight against climate change.

This chapter is outlined as follows:

- Exploring the notion of climate change – African and Western paradigms.
- Appraising African indigenous environmental conservation.
- Examining the practical manifestations and application of Tshivenda environmental conservation ways and tools.
- A critique on Africanising the fight against climate change.
- Tools of knowledge management to foster the African indigenous knowledge fight against climate change.

BACKGROUND

Climate change influences the capacity of indigenous communities to fulfil inherent environmental needs (Ogbodo, et al., 2018). Even though changes have been happening over many years, indigenous communities have been adjusting to these progressions for the duration of their life utilizing indigenous environmental knowledge. The latter knowledge is maintained to be generally modest, promptly accessible to indigenous communities and it is a climatically smart apparatus for sustainable development and the administration of environment (Hammed, et al., 2018). According to Kolawole, et al., (2016),

Environmental problems vary spatio-temporally, but rural farmers, through continued experimentation, trial and error, and sustained interactions with their local environment, have developed a vast local knowledge about nature in their locale that they use in coping with and solving their problems, amongst which are climate-related problems.

Climate change is ‘any change in climate over time, whether due to natural variability or because of human activity’ (Ngwenya, et al., 2016). According to a study by Kamara, et al., 2018), ‘climate change is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’ (Kolawole, et al., 2017). Indigenous people’s knowledge and view of climate and ecological change is a component of customs and norms, given to them by their progenitors. In most African countries, indigenous climate and ecological knowledge is underpinned on customs and culture which enable them to appropriately plan and make designs to cope with the effects of environmental change in all sectors.

Views of these changes by indigenous communities are focused on observations in temperature, precipitation, and vegetation designs, which are frequently supported by mixing such insights with

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/the-fight-against-climate-change-from-an-indigenous-system-perspective/289285

Related Content

Online Knowledge Sharing Among Chinese and American Employees: Explore the Influence of National Cultural Differences

Wei Li (2009). *International Journal of Knowledge Management* (pp. 54-72).

www.irma-international.org/article/online-knowledge-sharing-among-chinese/4053

A Knowledge Management Tool for the Interconnection of Communities of Practice

Élise Lavoué, Sébastien Georgeand Patrick Prévôt (2013). *Dynamic Models for Knowledge-Driven Organizations* (pp. 56-76).

www.irma-international.org/chapter/knowledge-management-tool-interconnection-communities/74070

Is Knowledge Management Really an Oxymoron? Unraveling the Role of Organizational Controls in Knowledge Management

Yogesh Malhotra (2002). *Knowledge Mapping and Management* (pp. 1-13).

www.irma-international.org/chapter/knowledge-management-really-oxymoron-unraveling/25374

Impact of Accreditation on Engineering Education

Tayeb Brahimi, Akila Sarireteand Sajid Khalifa (2018). *Enhancing Knowledge Discovery and Innovation in the Digital Era* (pp. 91-106).

www.irma-international.org/chapter/impact-of-accreditation-on-engineering-education/196506

Ecological University for Transformative and Critical Intellectual Capital Advancement and Scholarship in South Africa

Ndwakhulu Stephen Tshishonga (2019). *The Formation of Intellectual Capital and Its Ability to Transform Higher Education Institutions and the Knowledge Society* (pp. 64-85).

www.irma-international.org/chapter/ecological-university-for-transformative-and-critical-intellectual-capital-advancement-and-scholarship-in-south-africa/231056