

CONTENDING WITH THE EL-NINO PHENOMENON IN ZIMBABWE AND SOUTHERN AFRICA: AN EDITORIAL

Vongai Z. Nyawo, B. Lantern and T. Moyo

The theme for this *Dzimbahwe Journal of Multi-Disciplinary Research* Volume 4, Issue 1 is **CONTENDING WITH THE EL-NINO PHENOMENON IN ZIMBABWE AND SOUTHERN AFRICA**. This volume contains is in two sections A and B. Section A, which is the larger part, hosts 9 articles produced by contributors who responded to a Dzimbahwe call for papers for 2024 while Section B carries articles that pursue other causes of poor performance by institutions. The background and introduction to the El-Nino theme are that, in Sub-Saharan Africa, food insecurity is linked to several factors, chief amongst them being insufficient water for agriculture and domestic use. Water insufficiency is caused by hot and dry conditions created by the El-Nino phenomenon. El-Nino refers to climatic interaction linked to sea surface warming. The warming phase of the phenomenon called El-Nino-Southern Oscillation (ENSO) stimulates draught conditions which are prevalent in Zimbabwe (Brazier 2015:6). Three very strong El Nino events occurred in 1982-1983, 1997-1998 and 2014-2016. 1997-1998 was the worst in modern records for Zimbabwe. It left swaths of low-level underwater and killed a number of people. It also triggered water borne diseases. The 2023-2024 El Nino was marked by delayed onset of rainfall and a prolonged dry spell which has impacted negatively on food production. ENSO creates both dry and hot conditions that negatively affect food crops (Hao et al 2019). El-Nino results in adverse effects on fishing, agriculture and local weather conditions. The FAO (2016) states that the El-Nino phenomenon poses a global threat to the agricultural livelihoods of millions of people. In southern Africa, of which Zimbabwe is not an exception, the impacts of El-Nino have been felt across all sectors such as food security, nutrition, agriculture, water, sanitation, energy, health and education which lead to suffering of vulnerable populations and to economic contraction. Zimbabwe's agricultural sector heavily relies on rainfall for crop production making it particularly vulnerable to the adverse impacts of El-Nino-induced low rainfall seasons. During these periods, reduced precipitation and increased temperatures exacerbate drought and heat stress risks, leading to reduced crop yields especially maize, insufficient rainfall and prolonged dry spells negatively affect crop yield resulting in lower productivity and compromised food security. Crops such as maize, a staple in Zimbabwe are particularly susceptible to drought stress reducing yields and causing potential crop failures.

The call rendered scholars a platform to explore the implications of the El-Nino-induced rainfall seasons on Agriculture in Zimbabwe and other southern African countries. It further opened room for scholars to examine specific risks of drought, floods and heat stress to crop production including reduced yields and water scarcity. Increased fire hazards during dry seasons and the consequential challenges farmers face such as crop loss and environmental degradation are also investigated. The call invited different stakeholders such as scholars, farmers, policy makers, faith communities, civil society groups, research institutions,

government and the private sector to come up with possible initiatives or strategies so as to boost food security in southern Africa. The call focuses on the Great Zimbabwe University's niche of Culture and Heritage, examining historical farming methods in dealing with the El-Nino phenomenon.

It is in this context that the Great Zimbabwe University *Dzimbahwe Journal of Multidisciplinary Research* encouraged authors to provide their unique perspectives on these and other related topics:

- El Nino and water-harvesting strategies
- El Nino, Health and Nutrition
- El Nino, Gender and Food Security
- El Nino, Food Assistance and Politics
- El Nino, Science and Technology
- El Nino and Economic Impacts
- El Nino and Weather Engineering
- Representation of El Nino in Social Media Genres
- El Nino and Indigenous Knowledge Systems (IKS)
- El Nino, the Media and Arts
- El Nino and Development
- El Nino, Religious Beliefs and taboos

This first contribution by **Etwin Machibaya** is being produced posthumously. The contributor, a lecturer in the Languages, Communication and Media Studies Department in the Robert Mugabe School of Heritage and Education of Great Zimbabwe University, passed on in November 2024 while her article was still being processed for publication. May her soul rest in perfect peace. In her contribution, Machibaya observes that the effects of climate change are visible globally as well as in Zimbabwe and in particular in the agriculture sector. Rural communities face problems like shortages of food, water and loss of livestock due to El Nino. Her research attempts to establish Indigenous Knowledge Systems (IKSs) employed by women in Chivi District to reduce the impact of El Nino and reduce food poverty. Furthermore, the study probes the effectiveness of these strategies and the challenges associated with their employment.

Kajongwe and Nyawo argue that minimal attention has been given to the effectiveness of integrating human capital technocrats in El Nino disaster management mitigation for sustainable livelihoods in Zimbabwe which this study sought to bridge. Major findings of the study demonstrate that climate change expert perspectives underscore indigenous people's

copied strategy of choice of livelihood through diversification. Findings highlight that climate change experts identified some early warning signs of the indigenous knowledge system (IKS) indicating drought like specific birds not making sound during rainy season, shrubs/plants not flowering and a lot of fruit from *Pericopsis angolensis* trees and subsequently proffer solutions of diversification for livelihoods. It is recommended that a forum of interaction between the scientist and keepers of IKS be created to contribute to climate and weather forecasting processes and other climate change adaptation intervention at local level and likely contribute towards achieving both SDG 13 and Agenda 2063.

Nyatsanza and Ngundu produced a theoretical article that investigates through the praxis cycle the role of the Catholic Church in response to El Nino induced drought. The first objective of this article emanates from the open call by the Zimbabwe Catholic Bishops' Conference (ZCBC) to the whole nation expressed in the Scripture text "You give them something to eat yourselves"- (Mark 6: 37). Acknowledging the effects of El Nino in this current agricultural season, the Bishops are calling on everyone to unite in order to assist in feeding millions of hungry people in this country in response to the devastating effects of El Nino. Scriptures assist the Church to inform and teach the people about their responsibility in helping the less fortunate members of our community. The second objective is how the Church pursues agricultural development and strategies to respond to future challenges. The Church takes the responsibility of initiating practical ways of implementing agricultural strategies through various agencies to respond to the El Nino as well as to future challenges of food security. The two aspects were mentioned in the Statement on Drought by ZCBC on 4th April 2024. The guiding question in this research is: How can the Church respond to the devastating effects of El Nino induced drought? Through analysis of the effects of El Nino, the Church strives to empower communities to take action.

Rutsiga sought to assess El Nino induced drought from the perspective of the indigenous knowledge system of hunhu/ubuntu philosophy and ethic. Through the philosophical analysis method, the researcher admits and acknowledges that the problems confronting the Southern African countries are many, ranging from drought, war, hunger, corruption and many others and these problems create confusion, suffering and frustration. In such situations, fundamental questions need to be pursued for deeper knowledge and solutions and the pursuit of fundamental questions constitutes the stock-in-trade of philosophy. The argument is that the basic premises governing the African people's world-view and existence have to be taken into account on the issue of El Nino induced drought. The African world-view must be deemed absolutely necessary in order to infuse the academic field with hunhu's/ubuntu's rational interpretation of El Nino induced drought. The ethical theory of hunhu/ubuntu helps Zimbabweans to reason more clearly about principles of action and unravel the logical knots in their reasoning about the ethical problem of El Nino induced drought. Hunhu/Ubuntu is the proper and correct tool picked to probe since it is the home-grown philosophy that would guide Zimbabweans and enables them to deal with the problem of El Nino induced drought in a human manner by drawing on the humanistic values they have inherited and perpetuated throughout their history. The application of hunhu/ubuntu addresses the questions of epistemic justice and the need to expand the analytical framework beyond the Western orthodoxy that

has often and always been the analytic framework within which to engage with problems in Africa and post-colonial societies in general.

Sibanda and Muzenda focused on an assessment of the impact of El-Nino in primary schools in Mashonaland East Province, with particular reference to five selected schools in Mudzi District. The main findings being that awareness campaigns are being done in schools, schools have sources of water albeit being inadequate and nutrition gardens are also present. Their study concluded that poor performance in class, learner absenteeism, reduced crop yields, shortage of food and water are effects of El-Nino in primary schools. It can be concluded that water is paramount hence boreholes and water harvesting are vital, prioritising of projects, feeding program is a must and assistance with fees payment grants for learners are possible solutions to reduce the impact of El-Nino in primary schools.

Muzenda assesses the impact of El Nino on sustainable management of school-based projects, in 5 selected Schools in Harare North District, Zimbabwe. The study exposes how significant the impact of El Nino was on sustainable management of school-based projects. Challenges hindering secure stable (consistent) management of service provision of the projects in the respective Education Institutions are exposed. The study is guided by the Theory of Project Management and by the interpretivist paradigm, using the descriptive survey research design 'A qualitative methodology was adopted because of the nature of the research question. Findings indicate lack of support at multiple levels of learning. The study concluded that, school management of curriculum projects, parental financial support to learners and students' welfare have all been affected by drought conditions in Zimbabwe. Learning environments are no longer viable due to the impact of El Nino. on the schools' projects, the conditions which hinder effective project implementation and flow of resources include shortage of resources, lack of adequate water supplies, inflation and poor funding. As part of best practices, it was recommended that more funding and mitigatory measures are needed.

Musebenzi observes that the right to development has been recognised as a universal and inalienable right that is central to the realisation of other fundamental human rights. Persons with disability are entitled to the right to development without discrimination based on their disability as provided by Sustainable Development Goal 4. The El Niño-Southern Oscillation is a significant climate change occurrence upsetting worldwide life-threatening weather patterns with large-scale socio-economic effects. El Niño influences on weather patterns and its related biophysical and socioeconomic effects are intricate. Climate change affects disproportionately women with disabilities as they are a vulnerable group. Women with disabilities are deprived of the realisation of the right to development due to a lack of proactive laws, lack of equitable policies and sensitization programmes. Against this backdrop, this article examines the legal status of the right to development in international law and its inclusion as a socio-economic and cultural right. This article examines the international, regional and national legislative and institutional frameworks for the realization of the right to development for women with disabilities in a climate crisis induced by the Eli Nino

phenomenon. Gaps in the legislative and institutional frameworks on the realisation of the right to development in a climate crisis were identified.

Mashiri, Majoni and Zvirikuzhe sought to find out why poor performance continue to exist in Zimbabwean State Universities (ZSU) despite the training and development of academic staff. The study adopted a quantitative research strategy and used a sample of 351 academic members from 13 ZSUs. Data from respondents was collected through structured questionnaires. The study confirmed the existence of poor performance among academic staff despite the interventions and efforts by the institutions in training and developing them on how to deliver in teaching, research, community service, innovation and industrialisation. It was in the findings of this study that poor performance was driven by inadequate institutional capacity to support academic staff due to a turbulent economic environment. The study recommends that Zimbabwe State Universities (ZSUs) should do more than training and development, fund activities such as research, innovation and industrialisation. Training and development (T & D) practices should fit needs of individual academic members, students and the environment. The study further recommends that innovative teaching methods should be used for large classes and universities' training and development should move in tandem with technological advancements.