

Natural Disasters and Development Opportunities: Cyclone Idai, challenges, integration and development alternatives in Zimbabwe and sub-Saharan Africa in the New Millennium.

By

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Abstract

Stating the geophysical atmospheric conditions relating to Cyclone Idai and the impact it had on human and wild life, infrastructure and the economy, this study gives a definition and the challenges engendered by that disaster while proffering development alternatives for Zimbabwe and Sub Saharan Africa in general. Best articulated from a climate change dialogue perspective, cyclones and anticyclones constitute vibrant atmospheric processes or wind systems characterized by extreme weather conditions and patterns that have contrasting attributes. A cyclone can be described as a low-pressure system, whereas an anticyclone is a high-pressure system. Effectively, a cyclone, commonly known as a low, constitutes an area of low pressure where air masses meet and rise. The low, which typifies a cyclone, indicates bad weather, like heavy rain, hail and thunderstorms. As such winds in a cyclone blow counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere. With respect to an anticyclone which is commonly referred to as a high, it constitutes an area of high pressure where air drifts apart and sinks, effectively indicating fair or fine weather. Because of the effective impact of the force related to the rotation of the earth, winds in an anticyclone blow clockwise in the Northern Hemisphere and counterclockwise in the Southern Hemisphere. Depending on the magnitude of the low (low pressure area) and the high (high pressure area) both wind systems could be catastrophic for human life, assets, domesticated animals, wild life and the economy in general. Such was the impact of Cyclone Idai. The study is developed around several key questions relating to the origin of cyclones, zonation, disaster management phases, transformation opportunities, impact on rural and urban communities and post cyclone industrialization and infrastructure development. Grounded in the theory of disaster management and transformation, the work employs descriptive and quantitative data analysis as well as qualitative data analysis and modelling. Contributions by Claire Gillespie (2018); Zimmermann and Stössel (2011); Van der Waldt (2013); Tau, Niekerk and Becker (2016); Contreras (2016) are central to this study. Considering the preparedness phase as critical in responding to cyclones, this contribution proffers alternatives that are more

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preventive, catastrophe evading strategies which could have been adopted by stakeholders as a measure to guarantee zero life loss and minimum property loss in the event of a warning issued of an impending cyclone. It proposes “emergency human-centered strategies” in the recovery phase, whereby development and transformation of cyclone affected rural–urban zones should be adopted in step with the global community practice.

Keywords/phrases: cyclone; anticyclone; restoration; transformation; industrialization and catastrophe free strategies; catastrophe free alternatives; mitigation.

Introduction

The United Nations Sustainable Development Goals (UNSDGs) have pronounced in Goal 13 that member states across regions of the world should “Take urgent action to combat climate change and its impacts” on one hand while on the other hand among many, Goal 9 pronounces the rationale to, “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”. Cyclone Idai which struck Zimbabwe, Malawi, Mozambique and the Democratic Republic of the Congo [DRC] during the 13-20 March 2019 period, causing floods and extensive destruction to homes and cities, makes a constructive return to the development essence of Goals 13 and 9 become imperative. Beira in Mozambique, according to Medecins Sans Frontieres (2019) was hardest hit by the cyclone with more than 75 percent of the city affected. It would appear then that according to the UNSDGs, nations have an obligation to wage a combative engagement with “climate change induced” destructive weather and yet remain on a platform of a speedy return to restoration and normalcy. Restoration in receptive and progressive communities would above all have to assume a transformative character not short of industrialization and modernization. Rural and urban communities as well as forest parks affected by Cyclone Idai would be best reclaimed under Goal 9, which calls for the building of resilient infrastructure while promoting inclusive and sustainable industrialization and innovation.

Cyclones and anticyclones are extreme weather conditions with opposing characteristics, effectively, a cyclone, would be commonly known as a ‘low’, constituting an area of low pressure where air masses meet and rise. As such the ‘low’, which typifies a cyclone, indicates bad weather, like heavy rain, hail, wind and thunderstorms. What this means is that winds in a cyclone blow counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere. As regards an anticyclone which is commonly referred to as a ‘high’, constitutes itself as an area of high pressure where air drifts apart and sinks, effectively indicating fair or fine weather. Naturally, due to the effective impact of forces closely related to the rotation of the earth, winds in an anticyclone blow clockwise in the Northern Hemisphere and counterclockwise in the Southern Hemisphere. A key objective of this investigation is; understanding the cyclone phenomenon as a natural atmospheric turbulent process; pronouncing the phases of disaster management; mobilization of post disaster phase restoration efforts; development cooperation based on the establishment of modern disaster resilient infrastructure and industrialization in affected rural and urban communities. The study is informed by the theory and practice of disaster and crisis

management espoused by Elias Opongo O (2018); Asghar, Alahakoon, and Churilov (2006); Bendito and Barrios (2016); Alexander (2016); Claire Gillespie (2018); Zimmermann and Stössel (2011); Van der Waldt (2013); Jha, Miner and Geddes (2012); and Lisa Schipper (2016) and Andrew Heywood (2011). They make relevant debates within the discussion framework whose content and methodology of investigation complement.

Categorically novel in this study is its effort to derive value from the development cooperation strategic frameworks in the United Nations Sustainable Development Goals (UNSDGs); Millennium Development Goals (MDGs); Southern Africa Development Community Regional Indicative Strategic Development Program (SADC RSIDP 2020) and the Agenda Africa (2063), which effectively avail governments opportunities to fully exploit the applicable phases of disaster management as nations refocus on fully fledged industrialization and modernization programs in the recovery phase. With Cyclone Idai and many other such disastrous weather conditions across world regions, first and foremost, nations, Zimbabwe included, should seriously take cognizance of early warning systems from the national, regional, continental and global meteorological institutions as a strategy for loss evasion and minimization.

Equally and on emergency note, the home parliaments, the legislature should speedily adopt emergency disaster budgets and motions to guarantee zero deaths, in the prompt disaster preparedness phase. Urgency should be accorded to disaster resilient infrastructure (roads; bridges; traditional homes, businesses, industrial and commercial structures; livestock holding pens and wildlife holding formations; radio and television communication; aerodromes and airports; alternative disaster resistant holding camps in rural and urban communities) all built on modern construction and technological standards. Changing socioeconomic cultural landscapes in which new settlements and modern rural settlements and urbanizing resettlement zones under the influence of transformative development cooperation programs should be the main feature of the restoration phases as reclamation efforts. Last but not least, the study recommends translating all assets, livestock and wildlife in rural and urban communities to adapted, repackaged insurance policies.

Literature

Considerably overwhelming are secondary sources on disaster management, cyclones and anticyclones, transformation, rehabilitation, cooperation and integration which inform constructive policy relevant to the debate on Cyclone Idai. In the journal *Southern Africa Today*, Vol 20, Number 4, June 2018, there is the article ‘Realigning infrastructure with industrialization SADC assesses progress’ which speaks of infrastructure as key to regional development with program reviews to guarantee alignment with plans to industrialize the region and the African continent. Industrialization could be a factor in the recovery phase in disaster management in Chimanimani and Inyanga that could fully be exploited given that Zimbabwe is a signatory to the SADC Charter and its Conventions. Economic revival programs after Cyclone Idai could benefit from the availed infrastructure development assistance. In another recent publication in *Southern*

Africa Today, Vol 21, Number 2, February 2019, entitled “SADC Integration–The need for implementation of regional strategies”, regional integration is seen as the major strategy for consolidating sustainable development and deepening regional ties to the benefit of citizens belonging to a shared community in southern Africa. *Global Politics* by Andrew Heywood, takes a globalist perspective and qualifies the hazards and immense development opportunities the world avails to receptive individuals, states and nations in a global future characterized by the non-existence of borders. The long, medium- and short-term socioeconomic revival and restoration programs in disaster regions could benefit much from shared resources. Chikowore G. made an informative contribution in 2017 on “The transformative essence of Japan’s Official Development Policy: Significance for millennium regional economic cooperation and integration in Southern and sub Saharan Africa 1980-2015 and Post 2015 Agenda Phase” published by the University of Zimbabwe Publications. This article gives insight into the productive use of disaster related aid. The revival of development in cyclone affected areas in developing nations could benefit from marshalling international aid on clear terms aligned to the broader industrialization programs in Southern Africa. This contribution proposes best strategies based on identification of priority sectors for regions. A Garret Nagle 2010 publication entitled “Development: Access to Geography” published by Hodder Education AN Hachette UK Company is relevant to the debate on restoration and development of disaster affected zones and national development in general. It emphasizes themes relevant for policy formulation and constructive debates on resettlement and development, environment and development, strategies for development as well as development and underdevelopment. This submission adds to the theory of disaster management as one of the several formal, secondary materials published specifically on Cyclone Idai.

Methodology

On methodology, this work benefits from the theories of disaster, crisis and risk management, aid, cooperation, integration, development and transformation from work done by Claire Gillespie (2018); Zimmermann and Stössel (2011); Kaulemu David (2011); Asghar and Churilov (2006); Bendito and Barrios (2016); Elias Opongo O (2018); Alexander (2016); Jha, Miner and Geddes (2012); Lisa Schipper (2016); SADC Today (2019); Andrew Heywood (2011); and Garret Nagle (2010). The methods employed interdependently in the study are descriptive and comparative data analysis, qualitative and comparative data analysis aided by explanatory tables and illustrative figures. Nevertheless, founded on a descriptive research design the work is augmented by descriptive analysis; explanatory data and an illustrative figure constitute the methodological core of this study.

Origin of cyclone: zonation.

Outcomes of atmospheric air masses movement over the land and seas between the equatorial and polar regions of the planet earth, Claire Gillespie (2018) broadly defined cyclones and anticyclones as a reflection of extreme weather conditions with diametrically opposing characteristics. Claire denotes the major difference between the cyclone and anticyclone noting that a cyclone constitutes

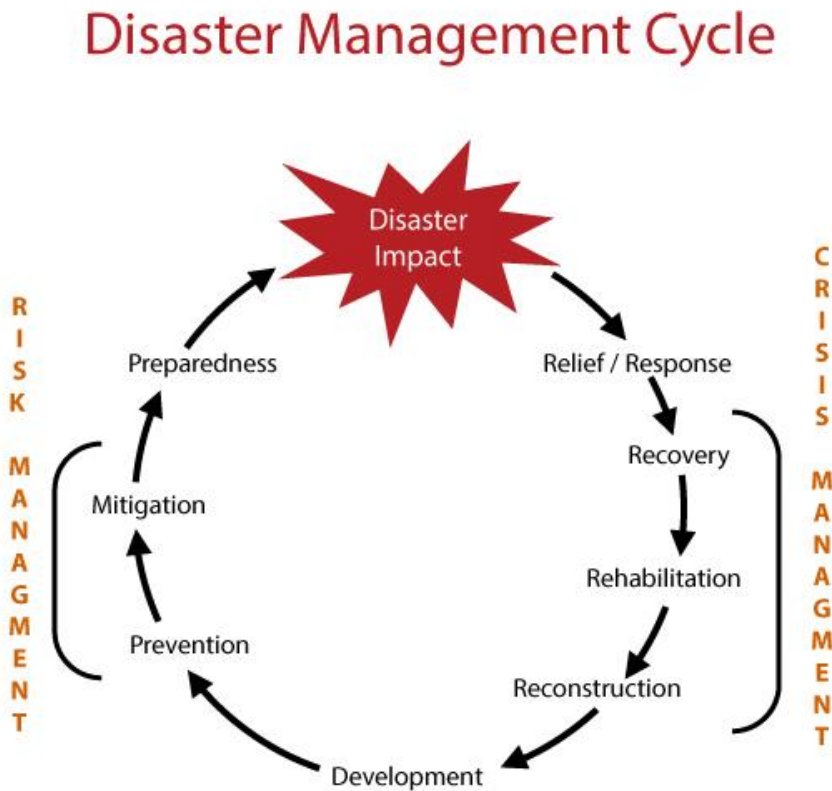
itself naturally as a low-pressure system where air masses meet and rise typically presenting bad weather. According to the Gillespie 's argument, in a cyclone winds blow counterclockwise in the Northern Hemisphere while in the Southern Hemisphere they blow in a clockwise direction. In cyclonic air masses and pressure dynamics, air near the ground is pushed toward the low-pressure center of the cyclone, and it then rises upward under pressure, expanding and cooling as it moves higher with humidity also increasing leading to cloudiness and high humidity within the cyclonic formation.

As regards the anticyclone which is commonly referred to as the 'high' meaning an area of high pressure where air moves apart - that is laterally - and sinks represents fair weather. In anticyclonic air masses dynamics winds blow in a clockwise direction in the Northern Hemisphere while in the Southern Hemisphere air masses, winds blow in a counterclockwise direction, as the force of Coriolis takes effect. Atmospheric air masses at the anticyclone center are pushed away from their high-pressure area and are simultaneously replaced by a downward blast of air from higher altitudes, Claire (2018). In that atmospheric dynamic, air masses compress and inherently heat up as they gush downwards, losing humidity and naturally leading to fewer clouds within the anticyclonic air masses. Inherently, an anticyclone is thus related with fine weather and not cloudy or rainy weather. One other critical and fascinating dimension of cyclones as they originate in the warm oceanic tropical zones, they inherently become known as tropical cyclones, storms and depressions. Tropical cyclones become a classification should the wind speed reach 34 knots or 39 miles per hour while again if the speed exceeds 65 knots or 74 miles per hour they become known as hurricanes and occur mostly in the eastern Pacific, the Atlantic Ocean and its adjoining seas. Equally, in the western Pacific Ocean and its adjoining seas, a hurricane becomes known as a typhoon, (ibid). The tragic experience of Cyclone Idai is related to the first instance where atmospheric air masses dynamic leads to cloudy, stormy and rainy weather.

Disaster management phases

Tragic losses commensurate with a destructive cyclone normally increase in severity depending on the manner in which the various players in disaster management respond to early warning systems, and the subsequent disaster resilient infrastructure that is prevailing in the area.

Fig 1. Disaster management phases for community reintegration and transformation.



Source: Municipal Corporation of Greater Mumbai. Disaster Management Department 31 March 2017. URL//dm.mcgm.gov.in disaster-management-cycle.

A natural disaster such as Cyclone Idai, inherently combines a crisis management and risk management side within which the disaster management four cycles or phases find expression, Figure 1. Relates to the crisis management side in which are the mitigation and preparedness phases which occur as disaster management improvements are made in anticipation of a disaster event. Cyclone Idai's destructive scale could have been greatly reduced, had it been that the mitigation and preparedness phases were accorded the deserved commitment by the affected governments of Zimbabwe, Malawi, Mozambique and the Democratic Republic of the Congo

(DRC) by the adoption of emergency bills in parliament and marshalling support locally and globally. The crisis management side of Cyclone Idai would have involved response and recovery phases which are a critical part of reconstruction and rehabilitation from which obtains development, (see Figure 1). Even as the phases are thus clearly delineated as noted in the commentary by the Greater Mumbai Municipal Corporation-Disaster Management Department (2017), the four disaster management phases do not always, or even generally, occur in isolation or in this precise order, as they often overlap and the length of each phase depends on the severity of the disaster. Clearly, the four disaster management phases which should conspicuously reflect a development-oriented restoration of the devastated zones, would take advantage of the windows availed by development cooperation programs which includes “Mitigation” which involves minimizing the effects of disaster. In practice this among other meaningful interventions includes building codes and zoning; vulnerability analyses; and public education.

The second phase is “Preparedness” which largely entails planning how to respond to an impending threat. As such among other critical interventions this involves preparedness plans; emergency exercises and training; and attention to warning systems. Coming third is the “Response phase” which implies efforts on minimization of the hazards created by a disaster. Interventions under this phase generally pertain to search and rescue; emergency relief, (see Figure 1). The last but not least disaster management phase is the “Recovery” which refers to efforts on returning the community to normalcy or daily routine. These interventions take the form of temporary housing; grants; medical care; and infrastructure development. Depicted in Figure 1, within the disaster management cycle or phases is the element of development which contextually has a narrower and broader definition depending on an understanding of the world and interpretation of reality.

A narrower definition would involve the grassroots level whereby communities are the main players and the participatory strategy is typically local while in the later, that is, broader definition the international dimension informed by profound knowledge of opportunities availed through development cooperation programs as the SADC RISDP 2020; Africa Agenda 2063 and the UNSDGs/Agenda 2030 with multiple local and international stakeholders is presupposed, *SADC Today* (2019). Under normal circumstances, the broader definition should inform the Cyclone Idai recovery process by focusing the territorial socioeconomic and cultural structure towards modernization driven by innovation and entrepreneurship. Affected territories certainly could not remain and return to the same old monotonous and passive development model but have to essentially assume a dynamic transformative development model focused on industrialization and urbanization in step with global trends. In this case the tendency to plan on a short, medium- and long-term transformation of affected zones in step with the world for such experiences is quite inevitable. Such a strategic approach is crucial especially under the efforts on consolidating and deepening regional integration and industrialization programs founded on the commonly adopted

concept of integrated infrastructure development across Southern and sub Saharan Africa. [*Agenda Africa 2063* (2015)., *SADC Today* (2018)].

Destructive magnitude of Cyclone Idai, as a humanitarian crisis.

According to the United Nations report by the Mercy Corps (2019), Cyclone Idai was categorized as the deadliest storm system in 2019 and even the worst disaster ever to strike the southern hemisphere. An estimated 3 million people were affected, with more than 1,000 deaths across the region and hundreds more missing. Mercy Corps (2019) further noted that almost 3 million people in southern Africa were affected by the trailblazing Cyclone Idai. In Mozambique the impact of Cyclone Idai left more than 200 people dead and more than 1,400 injured. An astronomic 17,000 houses were totally destroyed, which meant displacement of families and individuals in their thousands. The disaster preparedness phase for Zimbabwe remains highly questionable since more than 344 deaths were reported, with hundreds of people missing especially in Chimanimani. Again, in Zimbabwe 270,000 people were affected by the accompanying flooding and landslides and at least 90,000 families needed shelter. As Cyclone Idai further trailblazed through parts of Malawi, more than 840,000 people were impacted, with 56 deaths and 577 injuries while more than 94,000 people were estimated to have been displaced (ibid). Cities, towns and townships, schools were destroyed in combination and in some instances razed from their sites. Infrastructure, roads and bridges extensively collapsed in some sections inherently dictating a refocus of development processes and programs in the affected rural and urban communities.

The destructive potency of the cyclone in general assumed an irreversible character as it indiscriminately destroyed human life; assets; homes; infrastructure, industrial structures, wildlife, forests, agricultural produce, aviation and related national resources directly and indirect inflicting extensive damage to national economies. Considering that Zimbabwe, Mozambique, Malawi as well as the Democratic Republic of the Congo where the Cyclone Idai fizzled out, are all within the highly indebted poor countries, and are in the low-income economics categories, the cyclonic impact intensified the gravity of socioeconomic and cultural backwardness - that is poverty, hunger and disease. This will be through the immense geometrical increases in per capita debt burden for these sovereign states especially if the crisis management side of the Recovery Disaster Management Phase namely the rehabilitation, reconstruction and development programs is incompetently managed by the governments of Zimbabwe, Mozambique, Malawi and the Democratic Republic of the Congo (DRC). According to the World Bank Report (2018) which resonates with the USA Population Reference Bureau World Population Data Sheet (2018), Zimbabwe is a highly indebted low-income economy with a 1850 US\$ GNI per capita that is far below the average global that is at 16927 US\$ GNI per capita. Equally, percent urban is 32 far lower than the global average of 55 percent. This denotes that industrialization is at a staggering lower level with a lot more to be done.

With an incompetent management of the impact of Cyclone Idai, the likelihood of deterioration of the socioeconomic cultural backwardness is most likely. Malawi also a low income highly indebted poor country registered in 2018 a GNI per capita US\$ 1880 almost 8.4 times lower than the global average 16927 US\$. Percent urban for Malawi remains far below at 17 against a global urban percent average of 55, meaning industrialization is very low yet there is a great opportunity of promoting industrialization especially infrastructure development in the disaster hit areas. Mozambique has an even lower 1200 US\$ GNI per capita, almost 16.9 times lower than the global average at 16927 US\$ GNI per capita with an even lower percent urban of 32 matching that of Zimbabwe signifying lower levels of industrialization and even great unawareness of transformative opportunities in development cooperation programs. Finally, the DRC with a population of 84.3 million has one of the lowest GNI per capita level of US\$870, astronomically below the global average by 19.5 times. Urbanization level is 45 percent and lower than the global average at 55, [USA Population Reference Bureau World Population Data Sheet (2018)]. The socioeconomic cultural indicators of the cyclone devastated nations are still way backward and the impact of the tragedy may exacerbate the situation if their multi stakeholder short, medium- and long-term planning is not institutionalized by the governments of the affected nations.

Recovery: Local and international players

The Cyclone Idai recovery phase for Zimbabwe, Mozambique, Malawi and the Democratic Republic of the Congo which encompasses rehabilitation, reconstruction, and development emerged at a very propitious time and could benefit these nations under the multilateral arrangements when the African Development Bank, ranked fourth overall after UK Department for International Development (DFID); and the United Nations Development Program disbursed a record 7.7 billion US\$ for projects across Africa, (*African Business*, July 2018: 74). Considering also the rising momentum in bilateral arrangements in which China has emerged as a leading global donor in recent years where between 2000 and 2014 it committed more than 350 billion US\$ in official aid to over 4300 projects in over 140 nations, while the USA committed slightly more to the tune of 394 US\$ billion, the Cyclone Idai affected nations could subsequently well stand to benefit from these commitments in bilateral arrangements with China, the USA and other countries which avail the facility, (ibid:74). Programs on promotion of industrialization and deepening regional integration could well gain momentum if comprehensive national socioeconomic cultural development programs accessible by multi-stakeholders are proposed in these four Cyclone Idai disaster ravaged countries. An *African Business Supplement*, IC Publication July (2018:74), indicated a potential for growth, that could give momentum to the rehabilitation, reconstruction and development efforts of the Cyclone Idai impact in Zimbabwe, Mozambique, Malawi and the DRC noting that regional initiatives in Africa would grow with the greatest drivers coming from the Program for Infrastructure Development in Africa created in 2012

complemented by the New Partnership for Development (NEPAD) in Africa platform called the Continental Business Network.

The United Nations Sustainable Development Goals, especially Goal 13 stipulates taking advantage of urgent action to combat climate change and its impacts, while on a complementary note the Millennium Development Goals, in Goal 7 set to ensure environmental sustainability as it recognizes upholding of the United Nations Framework Convention on Climate Change as the primary international, intergovernmental forum for negotiating the global response to climate change by states. The position emerged as a resolution or outcome from the sixth session of the Conference of Parties to the Convention serving as the Meeting of the Parties to the Kyoto Protocol, held in Cancun, Mexico, from 29 November to 10 December in 2010. Complementing efforts on combating the impact of climate change by the African Union, *Africa Agenda 2063*, Aspiration 1, pronounces “A prosperous Africa based on inclusive growth and sustainable development” whose Point 17 asserts an Africa that will participate in global efforts for climate change mitigation which support and broaden the policy space for sustainable development on the African continent. Point 17 further states that Africa shall continue to speak with one voice and unity of purpose in advancing its position and interests on climate change. The complementary positions pronounced in the UN Conventions, Millennium Development Goals and the African Union-Aspirations and SADC RISDP make it very propitious for advancement of the Post Cyclone Idai recovery and reconstruction phase on a parameter of industrialization of the affected provinces with new urban centers and modern settlements emerging based on an innovative exploitation of the opportunities availed through development cooperation programs.

New development landscapes, transformation opportunities: rural and urban communities

Even as the Cyclone Idai tragedy struck certain provinces of Zimbabwe, Malawi, Mozambique and the Democratic Republic of the Congo, the programs for the restoration phase should usher both rural and urban communities into a new industrialization and modernization phase driven basically on cross-sector infrastructure development strategies for urban and rural communities. Post Cyclone Idai industrialization recovery programs spanning all sectors but based more on available local resources should potentially lead to new rural-urban development landscapes. Small to medium scale manufacturing enterprises [SMEs] should be the complementary underlying strategy on socioeconomic cultural recovery of the cyclone affected rural and urban zones. The post Cyclone Idai industrialization programs have great windows to exploit in the United Nations Context of Sustainable Development Goals. Especially there are three key goals conveniently exploitable for industrialization driven recovery programs in the affected zones of the Cyclone Idai affected nations of Zimbabwe, Malawi, Mozambique and the DRC. The conveniently exploitable United Nations Sustainable Development Goals are Goals 9, 11 and 17. Goal 9 stipulates “Building resilient infrastructure, promote inclusive and sustainable industrialization and faster innovation”. Medicines San Frances (2019) reported that a city of 500,000 inhabitants was destroyed, while homes collapsed and some with their inhabitants literally

carried away by the fiery floods, having no trace whatsoever of the former location or site as having been inhabited.

With Goal 9 emphasizing on resilient infrastructure, innovation, inclusive and sustainable industrialization, there is certainly need on the recovery phase to migrate from the traditional “Dagga and Pole Technology [DPT]” in rural construction of homes, industrial and business structures to cement–wire and metal pillars reinforced footing and walling; reinforced roofing and animal holding structures guaranteed through rural–urban inspectorates. As the situation stands most DPT constructed structures across rural communities and to a large extent in towns the shanty zones, roofs collapsed, and the structures together with inhabitants were tragically washed away to unknown destinations. Recovery processes in Zimbabwe, Mozambique, Malawi and the DRC would also conveniently benefit from the Goal 11 which stipulates making cities and human settlements inclusive, safe, resilient and sustainable. Under this provision partnership across governments, private sectors, municipalities, industries from regions and nations of the world as a strategy would facilitate industrialization and recovery of the Cyclone Idai affected regions at the same time elevating these nations from their predominantly highly indebted poor economic ranking and low income economy ranking to upper middle and high income advanced economies ranking.

Last but not least UNSDGs, Goal 17 pronounces “Strengthening the means of implementation and revitalization of global partnership for development”. In all circumstances and cases where Cyclone Idai inflicted destruction, a new approach and phase in development planning should be effected and effectively establish Tourism and Recreation Industrial Complexes with pronounced local and international economic specialization; Agro sugar and tea based industrial complexes with again a local, regional and international economic specialization; Holiday resort zoning; Transport/infrastructure complexes; Mining and manufacturing industrial complexes with pronounced local, regional and international economic specialization. Partnership in development driven by industrialization and modernization would be central to recovery programs in these Cyclone Idai devastated zones and nations. Certainly it would be a great loss on the part of Cyclone Idai affected nations not to develop special integral programs and plans on socioeconomic cultural, scientific and technological transformation of the rural and urban communities exploiting the Development Cooperation window even as this is the Fourth Industrial Revolution phase where massive multiple sector advancements are being registered across regions and races of the world.

Conclusion

In concluding this intriguing conversation, it is critical to indicate the constructive and summative essence of an abstract that focuses on conversational highlights signaling on either continued reading or seeking alternative sources on the destructive nature of cyclones on one hand and the inherent development and transformative opportunities it avails to rural and urban communities in a fast changing global space on the other. Comprising an expanded argument of the abstract the introduction to the conversation highlights key issues including the alternative strategies on

recovery programs that are industrialization driven as affected zones need to graduate from the “Dagga and Pole Technology” to wire-metal pillar and cement reinforced; disaster resistant reconstruction programs for domestic/home, industrial and commercial structures. Grounded in the theory of transformation and development the literature review comprises contemporary and relevant work best articulated on a critical descriptive analysis and a corresponding descriptive research design which lead to a cross-sector industrialization driven recovery programs as a logical outcome for the Cyclone Idai affected zones. Losses of human and wild life; properties and economic operations could be averted on the basis of a well-managed preparedness phase in disaster management while recovery and development has to have both a local and global orientation for mobilization of multiple development stakeholders from across the world with wide ranging capabilities, and resources to speed up modernization and industrialization. New landscapes in formerly passive zones and Cyclone Idai affected rural and urban communities should be characterized by combinations of productive industrial enterprises mostly in the small to medium enterprises range. New landscapes in the recovery phase should essentially focus on an overall transformation of the socioeconomic cultural, scientific and technological disposition and livelihoods of the population in the affected regions in particular and in the rest of the affected nations in general. Development cooperation driven industrialization should be the overall recovery strategy in all Cyclone Idai affected regions as efforts have to be essentially focused on shifting these nations to higher ranks of socioeconomic cultural; scientific and technological development in step with the global developments.

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