

RETHINKING CLIMATE CHANGE COMMUNICATION IN KENYA: A PHILOSOPHICAL PROPOSITION

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ABSTRACT: *Conversations on climate change have existed across various historical times. Ancient Greek philosopher, Aristotle, who is touted to be the earliest authentic scientists in history, made some valuable contributions in the understanding of climate and climate systems. However, it was his protégé, Theophrastus, who later on advanced scholarly arguments on the possibilities of climate dynamism. Nonetheless, climate change has only emerged as the most predominant theme of all discourses on environment in recent times. There has arguably been no single workshop or conference on environment in the last ten years that discussions and presentations on climate change have featured. The scenario in Kenya depicts a population familiar with the term climate change yet it is far from understanding the phenomenon. An argumentative dilemma regarding the basis of climate change communication in Kenya is therefore unavoidable. This paper therefore undertakes to interrogate the philosophical propositions that underpin climate change communication with a view of reinvigorating the conceptualization and execution of climate change communication in Kenya. Apparently, their indigenous knowledge perspectives of climate, the basic education curriculum, and the media communication channels inform the Kenyan population's understanding of climate change. These imperatives cannot hence be avoided when it comes to interrogating climate change communication in the country. It is therefore imperative to reengineer the way climate change knowledge is managed and disseminated; if at all, this knowledge is to enhance Kenyans' understanding of the climate change phenomenon.*

KEYWORDS: Climate Change Communication, Climate Variability, Climate Change Phenomenon

INTRODUCTION

It is almost impossible to understand the climate change phenomenon without some basic knowledge of the earth's climate system, which is propelled principally by heat energy derived from the sun. Greek philosopher, Aristotle is believed to be the earliest scholar to have attempted to make sense of the characterization of the earth's climate system. However, it is his student, Theophrastus, who advanced postulations on the existence of a push-pull relationship between factors of climate, hence climate dynamism (Koutsoyiannis & Angelakis, 2003). Their views would pervade climatology in the renaissance period and through to the modern era. Modern climate science began to transform when scholars such as Isaac Newton, Copernicus, and Galileo replaced the natural philosophy with experimental methods of understanding natural processes (Heymann, 2010).

The nineteenth century hallmarked the advent of modern scientific climatology when Alexander von Humboldt explored the empirical evidence of spatiotemporal nature of climate

based on the different climatic conditions of various geographic locations (Humboldt, 1866). His reference to climate as a phenomenon that is determined by space and time, inspired scientists to appreciate the global nature of climate while localizing its characterization (Golinski, 2003). Humboldt, among other meteorologists, up-scaled their work on quantitative meteorology beyond Europe, to capture the climatological data in the Americas and the Tropics (Humboldt, 1866). Their initiative aided in understanding the earth's climate system through their standardized quantitative measurements of temperature and rainfall intensity.

What followed was the establishment of various national meteorological services, which culminated in the first International Meteorological Congress, which was held in Vienna in 1873, and subsequent establishment of the International Meteorological Organization. However, the transformation of the International Meteorological Organization (IMO) into the World Meteorological Organization (WMO) in 1950 marked the onset of wider application of meteorological data such as in shipping, aviation and agriculture (Jarraud, 2004). Through the engagements of meteorologists and climatologists under the WMO umbrella, there was a push to standardize climate prediction and modelling. The result was the advent of concerted efforts to understand the climate change phenomenon. Ultimately, a joint initiative by the WMO and United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The IPCC is the scientific intergovernmental body of the UN that supports the implementation of the United Nations Framework Convention on Climate Change (UNFCCC).

Kenya has been at the forefront in cooperating with the international initiatives aimed at combating climate change and its impacts. Kenya is a signatory to the UNFCCC and boasts of housing the UNEP in its capital, Nairobi. However, her level of policy engagements at the international and national levels does not reflect positively on the level of climate change education in the country. Despite her high-level involvement in the international climate change platform, the extent to which the Kenyan public understand the climate change phenomenon, its attribution, impacts and vulnerabilities remains bleak.

Attribution of Kenyan public's understanding of climate change

A society's understanding of certain realities often times depends on their experiences during those instances, and how key opinion leaders define and communicate them. This is not different when it comes to how Kenyans understand the whole subject of climate change. Factors that have contributed to the public perceptions and understanding of climate change include:

Indigenous knowledge perspectives

Indigenous Knowledge (IK), according to Berkes (1999) is "...a cumulative body of knowledge, practice and belief, handed down through generations by cultural transmission and evolving by adaptive processes, about the relationships of living beings (including humans) with one another and with their forest environment" (p. 9). IK plays a major role in shaping the worldview of a significant fraction of the Kenyan population. This is undoubtedly so since 67.7% of Kenya's population lives in the rural areas (KNBS, 2010), where IK is routinely utilized. IK is an integral component of the development process of indigenous communities (Davies & Ebbe, 1993) and in this case various perspectives exist on what local people perceive to be '*good climate*' or otherwise. For instance, until recently among the *Bunyore* people in Western Kenya, there were diviners who were labelled as 'rain makers'. They were a special

category of people the community relied on to forecast weather for the community, especially as regards ploughing and planting time. This was an age-old practice, which had been handed down from several generations back.

The utilitarian approach to the application of forecasts from the ‘rain makers’ meant that there was uncertainty in distinguishing between weather and climate. The day-to-day weather is certainly extremely changeable since it encompasses what happens in the atmosphere at any given time, but climate refers to the average state of the weather over a selected reference period, often thirty years (Raphael & Hardaker, 2007). Indeed, Hulme (2009) puts it quite succinctly that ‘climate is what is expected while weather is what is got’. Figure 1 highlights the distinction in how weather and climate are conceptualized spatiotemporally. This distinction is not very obvious to the common person, who has a background influence of the indigenous knowledge perspectives on weather and climate as interchangeable terms.

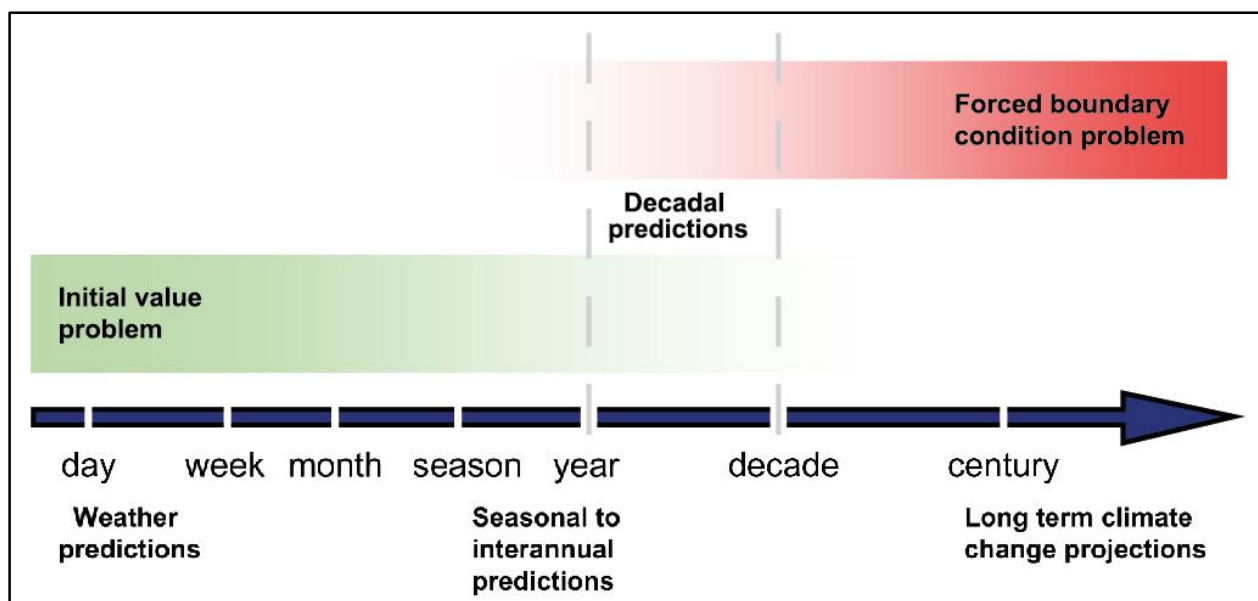


Figure 1: Distinction between weather prediction and climate projection (Source: IPCC, 2013)

The basic education curriculum

Education plays a very significant role in shaping the worldviews of the society. In fact, (Barraza & Alfredo, 2004) assert that children most commonly learn concepts on environment at the school level. Basic education in Kenya spans kindergarten, primary and secondary levels. There has been a remarkable increase in the number of children enrolled for basic education since the government implemented the ‘Free Primary Education’ programme in the year 2003. The gross enrolment rate in primary schools increased from 92.5% in 2002 to 106.9% in 2003 and peaked in 2009 at 111.9% (UIS, 2014). Basic education curriculum therefore holds a great sway on how Kenyans understand the climate change phenomenon.

Assessment of the basic education curriculum reveals that science and social studies subjects attempt to make meaning of climate change, albeit vaguely. Additionally, teachers at this level scarcely understand the totality of the definition of climate change. Many of them perceive climate change to be the periodic weather-related vagaries. Research shows that many people in sub-Saharan Africa are not able to distinguish between impacts attributable to climate change and those arising from sheer environmental degradation (Mutimba et al., 2010). This is partly

ascribed to the hazy presentation of climate change knowledge right from the basic education level.

Media communication channels

Kenya boasts of a very vibrant media, which has witnessed tremendous growth in recent years. Until, the year 2000 the state-owned Kenya Broadcasting Corporation (KBC) was the sole source of television content for the Kenyan mass. The country has since then seen growth of national television channels to over 50, and hundreds of radio stations. The coverage of climate change and environment themes by these media outlets remains a major pitfall in the understanding of climate change. Most reporters, anchors and opinion writers are preys of shallow armchair punditry of the subjects. The situation is compounded further by the rapid growth and uptake of the social media in Kenya; where anyone has an opinion about climate change, including inaccurate assertions.

Although some slight ambiguity in the meaning of climate change is good for public debate (Hulme, 2009), clarity holds greater promise in combating its causes and effects in the country and the region. For instance, crop failure due to unreliable rainfall is often a trigger for the media to attribute the mishap to climate change. However true this could be, the reference period in focus (normally a one year period or less) by the journalists scarcely qualifies the attribution. Agriculture is the mainstay of the Kenyan economy, hence a threat to this sector often times elicits emotional and unsubstantiated linkages between it and climate change. Agriculture accounts for 26% of Kenya's GDP and accounts for about 75% of rural labour force (Ministry of Devolution and Planning, 2013; KPMG, 2013).

Proposing a definition rethink

The latest report by the IPCC underscores that it is unequivocal that the climate system is warming, and since the 1950s, the extent of warming has been unparalleled for over thousands of years (IPCC, 2014a). It is therefore certain that robust responses to the climate change phenomenon need to be embraced, whether in mitigation or adaptation. Nonetheless, this response requires appropriate channels for awareness creation, which is defined by a paradigm shift in methodology and form. By the time the UNFCCC was opened for ratification at the Rio Earth Summit in 1992, there was consensus that human-induced climate change was real. Nonetheless, the topic had been linked to inherent political and cultural connotations, hence scientific evidence could not impress a consensus among the public at large (Weart, 2010).

A rethink on the meaning, attribution, vulnerabilities and response to climate change is must be knowledge-driven. A clearer definition of climate change encompasses an understanding of climate and weather, and a clear distinction between climate change and climate variability. The IPCC (2014a) defines climate change as the alterations in the state of climate, attributable to natural variability and/or human activity, identified by changes in the mean and/or variability of its properties over an extended period, normally assessed for over 30 years (Figure 2).

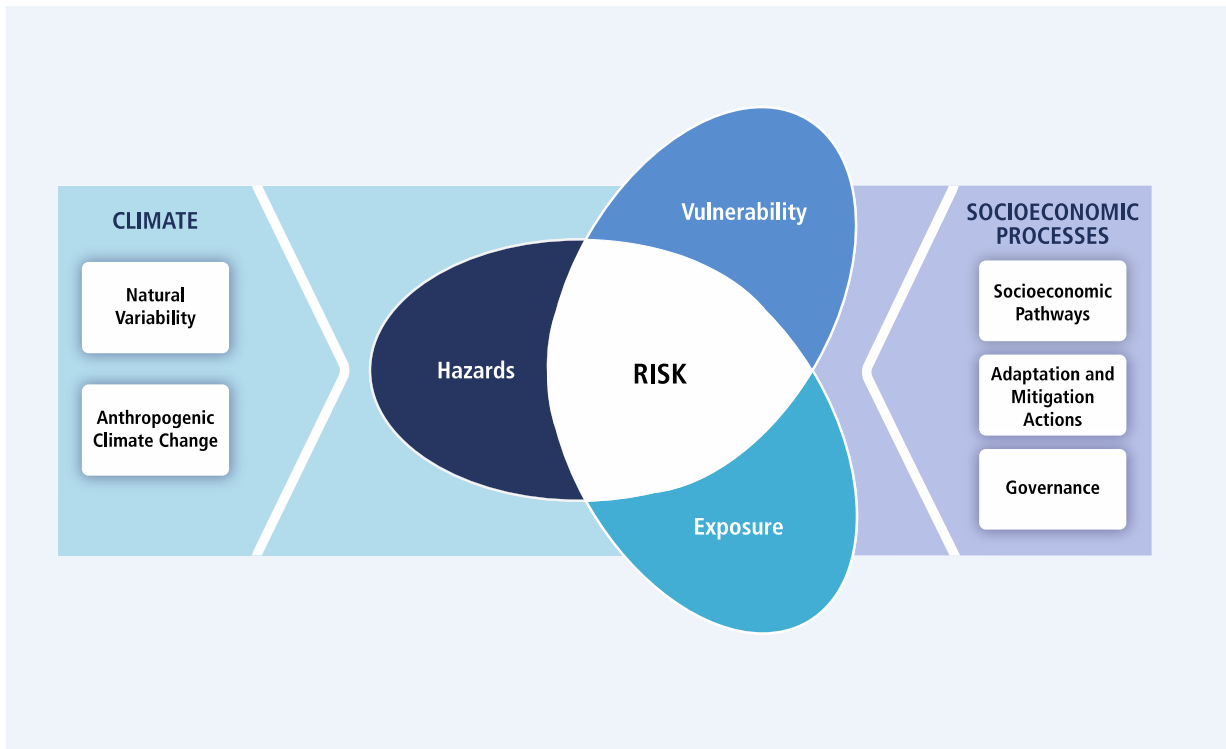


Figure 2: Climate-related risk resulting from the interaction of climate-related hazards with the vulnerability and exposure of human and natural systems. Changes in both the climate system (left) and socioeconomic processes including adaptation and mitigation (right) are drivers of hazards, exposure, and vulnerability. (Source: IPCC, 2014b).

In most instances, journalists and basic education instructors rarely advance this understanding in reporting climate-based catastrophes or just the climate change phenomenon. On the other hand, climate variability refers to variations in the mean state and other statistics of the climate on all spatial and temporal scales beyond that of individual weather events (IPCC, 2014b). Paradoxically, the inadequacy of information on the local climate change scenario in the major media outlets and the population at large is not a reflection of the lack of the lack of it. The government has churned out several pages of policy interventions on climate change, including the National Climate Change Response Strategy (NCCRS) and National Climate Change Action Plan (NCCAP). A draft Climate Change Bill that aims at creating a Climate Change Directorate has also been drafted and is awaiting legislation in parliament. The NCCAP for instance, outlines very robust strategies for a low carbon climate resilient development pathway for the country, which is knowledge driven (Government of Kenya, 2012). Figure 3 exemplifies the components of the NCCAP. Unfortunately, very little of this information has been cascaded to the common citizenry in a simplified form.

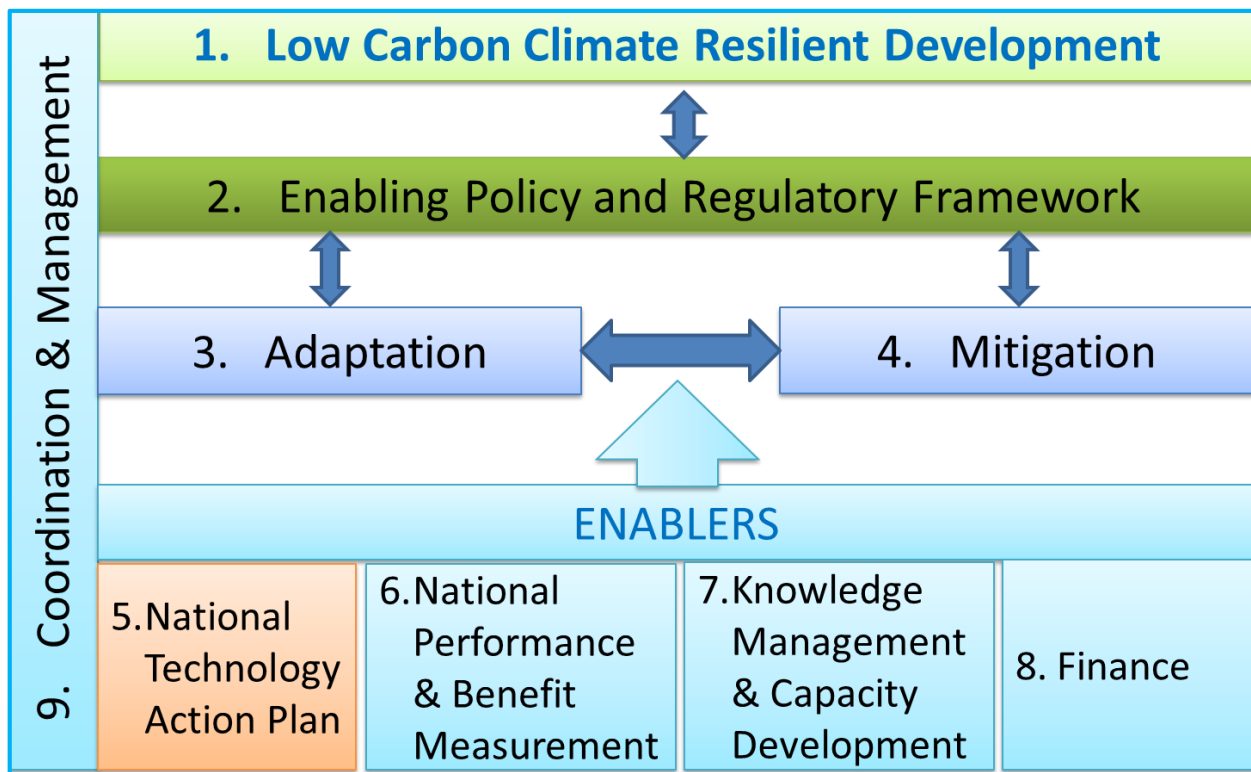


Figure 3: Schematic of the components of Kenya's National Climate Change Action Plan (Source: Government of Kenya, 2012)

CONCLUSION

The successful communication of climate change information is immensely dependent on the competent comprehension of the phenomenon by and how they can simplify it without necessarily losing its meaning. The folly in climate change communication in Kenya is not a consequence of the lack of information but inaccuracies in reporting and armchair punditry on the subject. A philosophical tempering of climate change content with an aim of simplifying it for the consumption of common populace is inescapable. Henceforth, the success of climate change communication in Kenya is highly dependent on a robust knowledge base and an accompanying pool of diligent communicators.

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