ASSOCIATION OF SENATES, SHOORA
AND EQUIVALENT COUNCILS
IN AFRICA AND THE ARAB WORLD

رابطة مجالس الشيوخ والشورى والمجالس
المماثلة في أفريقيا والعالم العربي

ASSOCIATION DES SENATS, SHOORA ET CONSEILS
EQUIVALENTS D'AFRIQUE ET DU MONDE ARABE

Paper one

"Impact of climate Change on Peace and Security Imperatives in Africa and the Middle East "

by Prof. Charles Ukeje,
Institute for Peace and Security Studies
Addis Ababa University,
Ethiopia

Climate Change and Security Imperatives in Africa and the Middle East

> There is an urgent need to reexamine our priorities and underlying values in support of a just, sustainable and peaceful world. We must put the whole earth at the center of our planning and concern. We should design our economies to meet our social goals not vice versa. We should exercise compassion and commit ourselves to being good neighbors at local, regional, and global levels. The environment and its biodiversity should be considered crucial elements in peace building, and recognized as fundamental to the achievement of all human development goals
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> **Earth Dialogue Brisbane, 2006**

> "There is one issue that will define the contours of this century more dramatically than any other, and that is the urgent threat of a changing climate"
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> **United States President Barak Obama, 2015**

One of the most formidable challenges facing Africa and the Middle East in the 21st century is that which adverse climate change impose on us. In 2007/2008 Human Development Report on *Fighting Climate Change: Human Security in a Divided World*, brought home the hard, even if uncomfortable truth that the depletion of greenhouse gases; the biggest known cause of climate change and global warming, was happening at an unprecedented rate; such that if nothing is done, and urgently too, the entire risk severe and unimaginable outcomes (HDR, 2007/2008).

At the risk of being accused of scare-mongering, let me share with you some of the grim realities that climate change conditions have caused around the world; in Africa and Middle East, in particular:

- The thick smog in New Delhi, that prevented kids from going to school;
- The fast-pace of desert environment in much of the Sahel-Sahara belt of Africa, and corresponding drought and famine in East and Horn of Africa caused by El-Nino;
- Rise in ocean sea level that is threatening citizens of island nations and inhabitants of coastal communities

My Goal in this short reflection, Distinguished Senators and participants, is not just to return your attention to the myriad challenges imposed by changing climate conditions. More importantly, I intend to tease out some of the profoundly disturbing implications of changing climate for peace, security and stability in Africa and the Middle East. If anyone in this hallowed chambers still doubts the nexus long-acknowledged by scholars between climate-environment and insecurity, this is not only the time to remove the specks in our eyes but also to brace yourselves to begin to contemplate how best you can provide a wide range of remedies including those within our powers as legislators reverse the challenge our citizens and governments face.

Despite all the irreversible climate conditions we are witnessing, there are those who think, and work, on the basis of a conviction, that global warming associated with climate change is a well-orchestrated myth; that scientist have indeed sold us a dummy with their doomsday and frightening *facts and figures.* As we gather however, the World Meteorological Organization (WMO), has published a report showing that 2016 will likely be the first full year to exceed the mark of 1.2^0 C above pre-industrial levels which makes it perilously closer to the 1.5^0 C target set in the Paris Climate Pact.

While human emissions of CO^2 remained fairly static between 2014 and 2015, the onset of a strong El Niño-induced weather pattern causes a spike in the levels of the gas in the atmosphere. According to the Global Greenhouse Reference Network, the world has reached a "significant milestone" by witnessing the highest level of rise in carbon dioxide in the atmosphere since the pre-industrial times. Indeed it is clear that we are fast approaching the threshold of 2^oc beyond which the UN HDR warned in the 2007/2008 report that the world would see ecological damage that will be difficult to reverse. Unless bold steps are taken, and are backed with full (rather than lean and merely symbolic commitments), the fate of world, in general, and Africa and the Middle East, in particular, in terms of meeting pressing socio-economic and political developments will continue to hang on a precarious balance.

To be sure, climate change is for the most part, a human induced catastrophe. It is an indeed a direct product of how irresponsible we have been, as government and citizens, in taking all we can from nature without thinking or acting in ways that help restore to it a healthy balance. Climate change reflects unrestrained human actions and choices that have been the singular hallmark of our reckless pursuit of development; the type that enriches a handful while deepening the impoverishment of the vast majority of our population. We must therefore see the climate change contradictions we face today as part of our plundering of the riches of the earth without an iota of regard to ethics, standards and sustainability.

The warning signs have always been there. I am sure many of you would remember the English Clergy, R. Thomas Malthus, who almost four centuries ago, in 1798, worried about how population was growing at geometrical ration while nature's carrying capacity (resources) was increasing at arithmetic ratio. He rightly predicted that unless something drastic happens to reduce population (even though as a priest,

he had recommended pestilence, famine, natural disasters and wars), a time would come when the delicate balance in nature will jeopardize human existence. In more recent times, we have seen many neo-Malthusians, in the academic and policy circles. They have been the proverbial voices in the wilderness, proclaiming the coming of anarchy if we fail to pay critical attention to climate change issues.

It is true that our world has witnessed path-breaking scientific discoveries in virtually all spheres; from space travel to medicine. What our generation seems to have missed is, first and foremost, that consumed by the quest for scientific advancement, we have failed to also acknowledge that such advancement can only take us far, to a certain threshold. Because the earth and much of its resources are fixed and non-renewable, it is impossible to expand them beyond the carrying capacity. In the endless pursuit of material progress associated modernity, then, we are faced with the classical *tragedy of the commons*: every one wishes to claim nature's rich resources but no one is keenly attentive when it comes to taking care of it.

Six decades ago, the Charter of the United Nations Organization (UNO) was specific on the need for global commitment *to promote social progress and better standards of life in larger freedom*. This pledge was renewed when governments around the world again met in New York to adopt the Millennium Declaration which again reaffirmed commitment to "to free our fellow men and women and children from the abject and dehumanized conditions of extreme poverty" (Human Development Report, 2005: 17).

My sense is that if there is anything that threatens this global imperative or ambition, climate change (and its far-fetched consequences) should rank highest in depriving Africa and the Middle East this freedom. Unlike most equally pressing issues such as proliferation of arms, terrorism, unstable global markets, trafficking in drugs,

migration, to name a few, the global ecological space transcends economic, social and political fault lines. Human beings, the plants and animals on planet earth share the same atmosphere. On the scale however, the world's poorest in the so-called Global South, suffer the most from the adverse effects of climate change than those in the richer global North.

Contextualizing Climate Change Imperatives in the Middle East

The Africa and Middle East Sub-systems, bound together not just by accident of geography but also by centuries of economic, social and political, cultural and now also shared environmental concerns, no longer have the luxury of time than now to squarely face what UNDP has described as "fierce urgency" (UNDP, 2005:1), vis-a-vis the complex crisis that irreversible environmental challenges are imposing on us all as we continue to put up with the paralyzing lethargy, a lackluster disposition to climate change priorities.

Perhaps only in relative terms, Africa and the Middle East have similarities in their environment circumstances. Arguing that the Middle East, perhaps more than Africa, is hotter Professor Jos Lelieveld, the Director at the Max Plank Institute for Chemistry recently argued that in the "future, the climate in larger parts of the Middle East and North Africa could change in such a manner that the very existence of its inhabitants is in jeopardy" (Leliveld, 2016). To corroborate this point, Panos Hadjinicolaou of the Cyprus Institute for Climate Change insisted that "if mankind continues to release carbon dioxide as it does now, people living in the Middle East and North Africa will have to expect about 200 unusually hot days" in a year based on a model prediction conducted by the institute.

To be more specific, the World Bank recently cited key aspects of the latest scenarios from the Intergovernmental Panel on Climate Change (IPCC) which warned that by

2025, between 80 to 100 million people within the MENA region will be exposed to acute water-related stresses given that a significant portion of the region have large stretches of deserts. Because deserts mostly do not provide buffer against direct heat from the sun, this prediction could come to pass sooner, rather than latter, with far-reaching consequences for the region. In socio-economic and political terms for instance, the World Bank not only reported that changes in temperature and precipitation patterns may result in damage to tourism and other strategic economic sectors but also that a combination of the adverse impacts could slow down the reform process and ultimately offset the benefits generated by high oil prices (World Bank, 2016).

Rafaello Cervigi (2016) the Regional Coordinator for Climate Change at the World Bank further reiterates this point by noting how MENA countries which contribute six percent of global emissions is one of the highest in terms of vulnerability to climate change impacts in strategic sectors such as agriculture, water resource management and urban development. In this regards, as he argues at the same time they seek to reduce carbon emissions, an equally important agenda for the region is to enhance its resilience to climate variability and change.

The World Bank made a further projection that with the sea levels rising by 0.5 meters by the end of the century, low-lying coastal areas in Libya, Qatar, United Arab Emirates, Kuwait and Egypt would be at particular risk.

Situating Climate Change in the Context of Africa

At the 63rd General Assembly, the United Nations Secretary General Ban Ki-Moon soberly acknowledged the irony that the African continent contributes the least to global warming but stands to suffer the most from its adverse effects. Perhaps the

Secretary General was inadvertently stating the obvious, after all, since historically the weak majority often have to pay for the mistakes and follies of the affluent minority, including on matters pertaining to the environment.

Africa's predicament is exacerbated by the fact that, alongside climate change risks and vulnerabilities, the continent must also cope with myriad developmental challenges evident in inequality and poverty, disease and hunger, as well as unprecedented situations of violent conflicts that erode human security. As the least developed continent, Africa's capacity to mobilize requisite innovations to tackle resilience to climate change is also grossly limited. This means that, negative environmental impacts such as flooding and droughts often exacerbated by climate change threaten two critical components of freedom; from want and safety for majority of Africa citizens.

By virtue of the systemic challenges Africa faces, it is no wonder that none of its 54 Member States managed to meet any of MDG's; and they are unlikely to perform any better under the current SDG framework. By providence, majority of Africa countries are located in geo-physical space where the vagaries of adverse weather and climatic conditions very easily puts populations in grave danger. It is estimated, for instance, that 43% of sub-Sahara Africa is made up of arid and semi-arid environments vulnerable to climate variability (Sperling, 2009). Thus, while several parts of the continent are ordinarily prone to natural challenges, the effects of climate change have exacerbated whatever challenges they face. What this implies is that whereas Africa might face droughts and desertification due to low adaptive capacity, climate change imperative aggravate the situation in profound ways.

Since the 1970's, Africa has seen the devastating effects of perennial cycles of drought and its multiplier effects. These have resulted from high degree of climate variability coupled with steady loss of forest vegetation for reasons not far from weak policies that tolerated indiscriminate logging, alienated land for commercial agriculture and mineral oil exploration to name a few.

Climate Change and Insecurity:

By now, you, my distinguished audience would agree with that if all of the scenario painted above, bleak as they have visited countries in Middle East and Africa, they are likely directly or otherwise - to be major triggers for some of the conflicts in the two regions. Let me therefore, very briefly, draw your attention to the critical nexus between climate change and the security challenges the two sub-systems face. In doing so, I will limit myself to three aspects, simply to highlight their centrality to in the discourse around peace and security in Africa and the Middle East, and what policy options should be put in place in the short, medium and long terms.

The first aspect of the relationship between climate change and security relate to how the former is eroding livelihoods and pushing a growing number of citizens to the brinks at the same time that access to subsidized socio-economic opportunities is becoming weaker or non-existent. It is not coincidental to give one example that you might already be familiar with, the shrinking of the Lake Chad also left vast populations that depended on it in dire condition. That the Boko Haram movement blossomed in that proximate area is not far from fact that they found readily available recruits from the ranks of people who have lost all hopes and have simply succumbed to lives of drudgery; one in which a chance to throw stones, or carry AK-47, is a elixir.

Secondly, climate change is forcing people to move away from acutely impacted areas in search of better and sustainable subsistence for themselves and their families; journeys that put them in harm's way several times. This is not just the reality in the Horn of Africa but also in places like Nigeria, Ghana and across most of the Sahel where waves of migration by pastoralist groups head southwards for greener pastures for themselves and their livestock have led to contentious and often volatile exchanges with sedentary communities in towns and villages in Savanna and forest regions of Sub-Sahara. According to figures from the International Organization for Migration (IOM), most of the world's 200 million predicted climate change migrants will be from Africa. In 2008 alone, more than 700,000 Africans were displaced by climate change according to the Economist, 2009.

The third aspect is that faced with the fall-outs of climate change on citizens and their vulnerability, many governments are not tackling the root causes located in the contradictions of development and repressive but are acting in ways that they become as much the problem. This is particularly so in Africa where ethnic and social fault lines have been exploited for political purposes often leading to unmitigated consequences and outcomes that put pressure on state-society relations, and trigger insecurity. When government become paranoia, they create situations leading to the widening of fault lines between citizens facing threats and government having to tackle armed rebellion, insurgencies, terrorism and full-blown wars

The absence, or erratic nature, of rainfall due to adverse climate change have contributed significantly to the exacerbation of massive populations displacements as the livelihoods of more people are threatened on daily basis. Large swathes of pastoralist communities across Africa are perhaps the hardest hit by desertification and other adverse climate change conditions. For instance, El Nino has triggered another bout of drought that have had devastating outcomes for countries such as

Ethiopia, Kenya, Somalia, Eretria, Sudan and Chad. It is estimated that, the number of people affected by drought in Africa from virtually zero in the 1970's to a staggering 35 million in recent times (ECA, AU, 2008)

Let me bring my analysis into sharper relief by using water; that essential life-supporting liquid; to draw attention to the challenges Africa (and the Middle East) faces from adverse climate change. It is becoming obvious that the scarcity of and competition for, water is leading to water stress and conflicts in many parts of modern Africa. As climate change exacerbates, the already dire situation, it is once large and rich water bodies such as rivers, marshlands and lakes are drying up in ways that put farming and other subsistence activities in jeopardy. It is estimated, for example Lake Chad and its basin covered an area of 25,000 km^2 in 1964 but the droughts of the 1970's, and other adverse climatic patterns, the size has reduced to only about 1000km^2 today (LCBC, 2008:2). In a further grim reality, it is projected that 70 to 250 million people in Africa will be exposed to increased water stress by 2020 and that by 2050, Sub-Sahara Africa will be afflicted by 29% increase in water shortage, while river flow in the Nile region will decrease by 75% by 2100 (ECA, AU, 2008:9).

Given that water bodies are fixed, increasing competing demand for water use – for domestic, agriculture and industrial purposes - are likely to intensify conflicts over access and usage. The Human Development Report for 2007/2008 estimates that drought affected areas in Sub-Saharan Africa could expand by 60-90 million hectares with arid areas suffering loses of US$ 26 billion by the year 2060, a figure estimated to be in excess of bilateral aid to the continent in 2005 alone (HDR, 2007/2008).

It is to be expected, if two perspectives on droughts and water are kept in view, that climate change should directly induce food shortages consequent upon general

decline in agriculture and livestock production. If we bear in mind that agriculture is still the mainstay of the Africa economy, one in which more than two-thirds of the continents population still rely for subsistence, we can then gain a better perspective regarding on why dwindling agriculture production are posing a real and present danger to majority of Sub-Sahara African populations. In the long run, at worst, failure of agriculture will complicate poverty and health issues in Sub-Sahara Africa compared to other parts.

Apart from drought and water-induced stress, there is also the risk of rising sea levels resulting in incidences of flooding. Almost a decade ago, the Human Development Report (2007/2008:9) projected that as global temperatures increases by 3-4^{o} C, the world would witness flooding that might (permanently, or temporarily) displace over 330 million people on a world wide scale. A study by the Intergovernmental Panel on Climate Change (IPCC) further shows a looming disaster for Africa, with the estimate that one quarter of Africa populations living within 100km of the coast in most large cities are prone to flooding from Lagos to Mombasa, millions will face threats from the rise in sea levels and coastal erosion not to mention the prospect that their of sub-mergence under water could affect health, infrastructure, ecology and tourism in those countries, but also island nations such as Seychelles, Madagascar, and Cape Verde, etc.

Finally, climate change is accelerating loss of biodiversity, habitats and ecosystems that by 2085, an estimated that 25-40% of species habitat could be lost, while 80-90% of species might reduce in size or shift as a result of the effects of climate change (ECA, AU, 2008). This could have devastating impacts on the livelihood of the people who depend on such environments for livelihood; including indigenous people and their cultural and spiritual values.

What, then, are the Prospects for the Future?

While much of Africa and the Middle East are still at the cross-roads on how best and quickly they should respond to the to the myriad effects of climate change and the equally profound and diverse threats such poses to peace and security, we must understand as law makers that our two Sub-systems; and indeed our entire plant, sits on a keg of explosives. It is not surprising, then that after much prevarication, a global consensus is only now emerging amongst government to keep global temperatures between 1.5 and 2^0 Celsius to pre-industrial levels. Commenting on this landmark achievement at the COPA in Paris, the United Nations Climate Chief; Patricia Espinosa, remarked that the just-concluded Paris Climate Pact represents "a moment to celebrate" but also to further "look ahead with sober assessment and renewed will over the task ahead". It is instructive the Paris Climate Pact came into force on November 4th 2016, less than a year after it was agreed. It should be recalled that the last major climate deal – the Kyoto Protocol - took an entire eight years to come into force. Despite its premise around "common but differentiated responsibilities", the Kyoto Protocol has not so much been able to address the fundamentals of man-made inequalities that exist between nations in addressing climate change problems. It is not surprising, then, that a functional solution to the problem of climate change remains elusive despite the fact that many countries attest to its existential nature (Bortscheller, 2010).

The above notwithstanding, it is important to acknowledge that the Paris Climate Pact agreement is the first of its kind tying rich and poor nations in a common quest to protect the climate even though it made targets for cutting carbon emissions a voluntary responsibility. It must have learnt some hard lessons from previous United Nations deals that were made mandatory only for countries that failed to meet agreed targets to simply quit. It is noteworthy though, that the Paris deal is bidding as it contains commitment for governments to keep returning to the issue to ratchet up the clear energy targets. Lastly, the Paris deal committed 100 USD Billion a year

towards climate finance for developing countries by 2020, with an understanding to notch-up the figures in the future.

Beyond the rhetoric that have slowed progress towards applying effective and sustainable climate change measures, there are a number of key, practical and expedient issues to return to. Although it might seem ordinary, the first step for stakeholders in Africa and Middle East is to return to the point I made earlier: an acknowledgement that climate change is real – not some abstract bogus or high-sounding myth peddled by scientist. By taking this first step, it then becomes easier to recognize the urgent imperative for innovative, pragmatic and revolutionary approaches beyond cosmetic policies currently applied in many of our countries.

Further, whereas government (Executive and legislative branches in particular) must/should take the lead in the quest to reverse the adversities associated with climate change, this is definitely one task too important to be left in the hands of government alone. It is, in fact, a collective responsibility that all hands must be on the deck with the private sector, non-governmental institutions, and individual citizens, multilateral and inter-governmental institutions playing their parts. In doing so, there is need to build a critical mass of shared knowledge and capacity, scale-up the incubation of new mitigation and adaptation measures, and hope that the earth rebounds.