International Conference

"Enhancing Climate Diplomacy in a Changing Political Environment"

Focus Region: Africa

The challenges Africa faces resulting from climate change are growing and interconnected. And although Africa has contributed the least to climate change, accounting for only 3.8% compared to overall global greenhouse gas emissions, it is among the most vulnerable areas and is already suffering harsh consequences. The continent has experienced 2000 natural disasters since 1970, with almost half occurring in the past decade. With a population of 1.2 billion, and expected increases to 2.4 billion by 2050 (according to the UN), population growth is an extra stressor for the negative impacts of climate change.

Main Environmental Challenges

In the region, **rising temperatures** are expected to increase between 2 to 4 degrees by 2080, with some areas such as North Africa, facing extreme temperature rises between 5 to 8 degrees; making this uninhabitable territory. Another circumstance can be seen in Sub Saharan Africa, where an increase of 1.5 – 2.0 degrees by 2030-2040 will exacerbate drought and aridity; contributing to a 40-80% decline in cropland availability and yielding productivity. Rising sea temperatures will also have a negative impact on biodiversity and local fishery; which contribute to coral bleaching. With much of Africa lying within tropical zones, it will experience larger than average **sea level rises**. For instance, sea levels are expected to increase by 45-82 cm at the end of the 21th century (under a high-emission scenario). This would deeply affect the stability of Africa's coastal regions and the Nile Delta area. In addition, sea levels rise causes significant coastal erosion which leads to displacement of coastal communities. Currently, coastal erosion has led to the disappearance of up to 2-3 km of inward lands and has had significant economic impact in West-Africa as seen in effects of mass flooding. This poses serious risks to large coastal cities such as Lagos, Dares Salaam, Accra, Abidjan and Maputo, where poverty and insufficient investments in drainage and flood defenses has and will increase the peril and consequences.

Floods have a direct negative impact on many aspects of society; affecting population, infrastructure, livestock, crops and goods, as well as far-reaching indirect economic, financial, political and institutional impacts. Furthermore, flooding can disrupt the provision of drinking water via the local supply networks. Low and erratic rainfall patterns is another serious matter, particularly in the Horn of Africa and the Sahel. Generally speaking, Eastern Africa is becoming drier, while the South-East is becoming wetter; with heavy rains becoming more common; damaging soils and plants. During this past summer, the rainy season, which normally is welcomed in parts of Africa as a timely break from the heat of the dry season, killed at least 1,250 people, affecting territories such as Sierra Leone, Niger, Congo and Nigeria. In the Sahel for instance, annual rainfall can fluctuate 30 to 40%, contributing to desertification and land degradation. In addition, 65% of Africa is dry land, and 1/3 of these areas are hyper-arid deserts. According to UNEP, the increasing temperatures, combined with population growth and livestock, puts 319 million hectares of land at risk of desertification. For example, in Ethiopia and Kenya, 70-80 % of the country is threatened by desertification.

Deforestation and land degradation are connected issues. FAO estimates that around 90% of rangelands and 80% of rain-fed farmlands in the Sahel region, Sudan, Ethiopia and Kenya are affected by degradation - including soil erosion, deforestation, and loss of woody vegetation. Rain fed crop yields could decrease by as much as 50% by 2020; while 94% of agriculture is dependent on rainfall. This creates large negative impacts on food security, and greatly increases health risks, that contribute to the spread of vector borne diseases, such as malaria and dengue. Some regions, such as the Sahel and parts of North Africa, are areas of extreme water scarcity, while other regions like

Central Africa (where fresh water remains at sufficient levels), are under threat. With current patterns, the effects of water scarcity could lead to a loss of GDP of up to 6% by 2050. And despite being the biggest resource of freshwater in the continent, with growing effects of climate change and population, it is calculated that by 2020, up to 250 million people will be exposed to increased water stress.

Main Security Threats

Climate change can be an accelerator for new and existing tensions and conflict. Climate change effects such as lack of rainfall and higher temperatures, or heavy rainfall and flooding, as well as damaged croplands have severe negative impacts on agricultural activity, contributing to famine. In February 2017, a state of famine was declared in South Sudan, but other regions, such as Nigeria and Somalia are also at risk. Forced migration due to climate change, for instance in areas where flooding and rising sea levels displaced entire communities, have accelerated in recent years. Migration can place additional pressure on regions already suffering from water and food scarcity, and thus contribute to social tensions. Climate change creates the conditions contributing to unstable regions. An illustration of this is the interlinkage between climate change and terrorism. The secondary consequences of climate change create conditions in which terrorist groups can proliferate, grow and rise. The increasingly negative impacts on the livelihood of local populations enable the recruitment to such groups. For example, in the lake Chad region, the Boko Haram's gaining traction in the area. The Lake Chad basin has decreased by 50%, resulting in increased tension over the remaining resources and destabilizing the region. Environmental crime, such as illegal trade in flora and fauna, pollution and dumping of toxic waste is on the rise, and has been exacerbated by the decreasing biodiversity.

Ongoing and planned initiatives in the region

<u>The Great Green Wall (GGWSSI)</u> is an African Union-led project to create an 8000 km long green wall of land restoration combatting drought in the Sahara and Sahel region, strengthening the ecosystems and improving the living conditions of local communities.

<u>Africa Climate Change Fund</u> is an initiative of the African Development Bank that supports regional member countries (RMCs) in their transition to a more climate-resilient and low-carbon economy; to prepare to access greater amounts of climate finance and use of funds received more efficiently and effectively; and to allow the bank to scale up its climate change activities.

Adaption of African Agriculture Initiative (AAA), supported by UNFCC, FAO and 25 African countries, addresses the challenges of sustainable agriculture, climate change and food insecurity in Africa. It promotes and supports good practices in the areas of soil management, agricultural-water control, climate-risk management, capacity building and funding solutions.

<u>Comprehensive Agriculture Development Programme</u> (CAADP), an initiative of NEPAD and Africa's framework on agriculture. The goal is an agricultural-led development to eliminate hunger, reduce poverty and food insecurity. This will put the continent on a higher economic growth path within an overall strategy of sustainable development and preservation of the natural resource base.

<u>African Environmental Education and Training Action Plan</u>, initiated by AMCEN in 2015 and running until 2024, it is one of UNEP's modes of facilitating and promoting environmental awareness, education and training.