Background and Context

Africa's vulnerability to climate change impacts have been underscored by the severe droughts experienced recently in the Sahel in 2012 and the Horn of Africa in 2011. All these bring into focus the serious impacts of climate change in the continent and highlighting the urgent need for adaptation as a priority in providing sustainable solutions to reduce the vulnerability of a great majority of Africa's one billion citizens.

Africa’s population is expected to constitute about 23% of the global population by 2050. This places a huge demand on governments and states to provide opportunities for enough food and the new dietary demands. Both increasing population and changes in dietary preferences will further put strain on productivity in matching quantity and quality in food outputs over the next coming years. The questions however, are the types of measures/approaches required for the changing needs for food security. The challenge therefore is in charting new pathways to eliminate food insecurity, adapt to the changing climate and build sustainable systems. This will require innovative solutions that build on an internally driven process of change by individuals, communities and institutions coupled with adaptation to climate change.

With the shift towards Sustainable Development Goals (SDG) to replace the Millennium Development Goals (MDGs) after 2015, approaches that serve multiple purposes and provide cross-cutting benefits are highly needed in Africa and elsewhere. For example, achieving food security is unmanageable without adaptation to climate change measures and practices that not only support farmers in producing enough food to meet people's nutritional needs, but that also preserve ecosystems from degradation, for example, preventing soil erosion, water, nutrients and pollinators that underpin agricultural productivity, particularly in smallholder dominated landscapes. Approaches with the potential for informing and guiding policy and practices are imperative. One of these approaches is ecosystem-based adaptation (EbA), which provides flexible, cost effective, and broadly applicable alternatives for building robust food systems on less inputs and reducing the impacts of climate change. Practices such as agro-forestry, buffer strips, on-site water conservation, use of native species, etc. have demonstrated that ecological based approaches can provide just the right framework for catalysing transformative change on a larger scale.Adopting ecological based approaches could help build efficient food systems and resilient livelihoods, and ultimately achieve global food security in a changing climate. This raises the question of what ecological based approaches can do differently to get Africa and other regions out of food insecurity.  How can the emerging ecosystem-based approaches in addressing food shortages be consolidated and up-scaled? What scale of production is appropriate to achieve this?