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THE ABC INITIATIVE

THE AFRICA BIO-CARBON INITIATIVE MAN AND THE BIOSPHERE PROGRAMME UNESCO



Background

- Due to a range of factors that includes chronic poverty, endemic tropical diseases, and the prevalence of natural resource-based livelihoods dependent on fragile ecosystems, Africa is acutely vulnerable to the effects of global climate change. The United Nations Framework Convention on Climate Change (UNFCCC) represents a coordinated effort by 192 countries to address the challenges of global climate change. Through the Kyoto Protocol to the Convention, 182 countries have committed to reducing global greenhouse gas emissions that are the primary driver of anthropogenic global warming. To help countries meet these commitments, the Kyoto Protocol introduced market-based emissions control mechanisms that led to the creation of the global carbon market.

This market is today worth tens of billions of dollars, but few of these dollars have reached Africa, as the continent that is home to some of the populations most vulnerable to climate change remains proportionately underrepresented in the global carbon trade. In the words of Yvo de Boer, the Executive Secretary of the UNFCCC:

“There is a real risk of Africa becoming the forgotten continent in the context of the fight against climate change unless we manage to design a regime going into the future that takes into account in a much more comprehensive way what Africa’s specific needs are not only on adaptation, but also on fuelling clean economic growth.”

This is the stimulus for The Africa Bio-Carbon (ABC) Initiative.

The ABC Initiative

A project of UNESCO’s Man and the Biosphere Programme (MAB) in line with the UNESCO Strategy for Action on Climate Change, the ABC Initiative seeks to develop strategies and models for bio-carbon sequestration projects in Africa. By tapping into the ability of biota and soils to act as a carbon sink – sequestering greenhouse gases potentially released by land use, land use change and forestry (LULUCF) – bio-carbon sequestration projects offer exciting opportunities for linking a number of interconnected objectives. Using the African sites in UNESCO’s World Network of Biosphere Reserves (WNBR) as platforms for demonstrating and propagating innovative sustainable practices, the ABC Initiative fulfils the principal mandate of the Madrid Action Plan for Biosphere Reserves, combining the climate change adaptation and mitigation goals of the UNFCCC, the biodiversity conservation goals of the Convention on Biological Diversity, and the poverty reduction and sustainable development targets of the Millennium Development Goals.

UNESCO Biosphere Reserves

UNESCO Biosphere Reserves are places uniquely suited to pioneering initiatives for climate change mitigation and adaptation. As explained in the Seville Strategy of the WNBR, reserves are managed to promote conservation, sustainable development, and logistic support (demonstration projects, environmental education, and research and monitoring) through a zoning system that defines core, buffer, and transition areas for each reserve.

In the context of climate change action, the core area provides a conservation area that sequesters carbon and serves as a living laboratory for observing the effects of global climate change on ecosystems. The buffer zone is an area appropriate for reforestation, ecological restoration projects, and other LULUCF schemes. Finally, the transition zone can nurture innovations in agriculture and energy technologies as well as afforestation and reforestation projects that sequester carbon, help local populations adapt to climate change, and promote the preservation of biodiversity and the sustainable development of local communities.

For those 'pre-Seville' African biosphere reserves that have yet to adopt a three-zone system, the ABC Initiative presents an opportunity to refine their biosphere reserve status in order to integrate them into climate change strategies and enhance their contributions to sustainable development. Models for climate change mitigation and adaptation developed in African biosphere reserves can be disseminated beyond reserve boundaries in host countries and their neighbors, and throughout the WNBR.

Plan of Work

Over its first six (6) months, the ABC Initiative will carry out a survey of African carbon markets and biosphere reserves. This survey will seek to identify bio-carbon sequestration opportunities and obstacles and to develop implementation strategies that overcome barriers to market participation and build local capacity to initiate and manage bio-carbon projects. The results of this initial phase of research will be summarized in a strategy paper and may also give rise to several distinct project proposals. The specific goals and primary topics of inquiry for this period will be as follows:

To develop a foundation of background knowledge, the Initiative will provide a general overview of climate change and carbon markets in Africa, maintaining a special sensitivity to the concerns of indigenous peoples, women, children, and other marginalized groups. The Initiative will summarize the climate change scenarios facing Africa today and describe the most likely effects of climate change and the primary drivers of African climate change. Additionally, it will describe the kinds of projects underway in African carbon markets, where the projects occur, and the overall volume and praxis of the African carbon trade. On a more specific level, the Initiative will summarize bio-carbon sequestration in its various forms (e.g., green charcoal production, reforestation, REDD) as a climate change mitigation and adaptation strategy, and provide a general overview and specific cases of current African bio-carbon projects.

The ABC Initiative then will look in detail at African biosphere reserves. In coordination with the African MAB Network's Climate Change Thematic Commission, the Initiative will identify the challenges posed by climate change for biosphere reserves, and how these challenges are being confronted. The Initiative will evaluate the potential for bio-carbon sequestration projects in African biosphere reserves; consider opportunities for combining bio-carbon

projects with other rural energy, industrial ecology, and biomass utilization initiatives; discuss particularly promising locations; and work with stakeholders to suggest viable diversified bio-carbon options at the level of exemplary individual reserves. In this context, the November 2008 workshop in Kigali on “Biosphere Reserves and Sustainable Development” will be an important opportunity for gathering information, building networks, and planning projects.

Designing ABC Projects

Finally, the Initiative will consider implementation options for proposed projects, including potential partners (e.g., MAB’s Regional Post-graduate Training School on Integrated Management of Tropical Forests and Lands (ERAIFT) in Kinshasa, non-governmental organizations, the Congo Basin Forest Partnership, and other UN agencies^{*)}, possible sources of funding, and other logistics. Comparative case summaries will be used to suggest project models and inter-regional partnerships, for example with the Mata Atlântica Biosphere Reserve in Brazil, where bio-carbon sequestration projects are ongoing. In this context the 2009 MAB/Pro-Natura International Forum on Bio-Carbon Sequestration and Conservation represents an excellent opportunity for fostering inter-regional collaboration and facilitating the exchange of experiences and models.

At the end of this initial phase, the groundwork will be laid for the selection and execution of a series of experimental bio-carbon projects in African biosphere reserves, with the expectation that successful projects will not only benefit the local communities and ecosystems, but will also serve as models for combating climate change in a way that protects biodiversity and promotes the sustainable development of the world’s poorest and most vulnerable populations.

^{*} The ABC Initiative relates strongly to the five focus areas on climate change designated by the Secretary General for the UN System – REDD, Technology Transfer, Finance, Capacity Building, and Adaptation – as well as the cross-cutting areas of Science, Assessment, Monitoring and Early Warning, and Supporting Global, Regional and National Action. These connections will facilitate partnerships with the conveners and other UN bodies involved in the relevant focus and cross-cutting areas.