

Environmental and Social Benefits in the BioCarbon Fund

May 15, 2004

This note summarizes the way the BioCarbon Fund proposes to achieve environmental and social benefits through projects that sequester and conserve carbon in forests, agriculture and other ecosystems.

Introduction

Projects that sequester carbon in vegetation and soils can create significant co-benefits along with mitigating climate change. These benefits include land-use and land management changes that lead to immediate improvements in local livelihoods and also to greater adaptability of agriculture and ecosystems to climate change.

Some developing countries will benefit from the Clean Development Mechanism (CDM) by hosting renewable energy and energy efficiency projects, but many countries, and especially the poorest ones, do not have the energy or industrial infrastructure that would allow them to benefit from the CDM in a significant way. However, almost all developing countries have agricultural and natural resources that allow beneficial their engagement in sinks projects. For many, and in particular large rural populations that are the home of so many of the poor, sinks are the only significant avenue to participate in from participating in the carbon market.

The carbon market presents regions that are primarily agrarian with the chance to implement a different approach to development assistance, namely performance- and trade-based assistance. A carbon buyer would pay a seller on delivery of verified achievements, such as the sequestration of carbon in trees and other forms of vegetation, plus other local environmental and social benefits. Access to the carbon market encourages the actors of degradation to reverse degradation, e.g. reduce clearing and burning forests, replant trees, and restore degraded landscapes. It creates a business incentive for them to do so.

Emissions due to deforestation and unsustainable agricultural practices contribute 20 percent of current GHG emissions and are a significant part of the global warming problem. To a large extent, the causes of deforestation and unsustainable agriculture are poverty-related.

Climate change is as much a development as an environmental problem as it compounds existing vulnerabilities. Poor communities living in rural areas will be the most affected because of their lack of capacity to respond. Climate change will further reduce access to drinking water, negatively affect the health of poor people, and pose a real threat to food security in many countries in Africa, Asia and Latin America. Carbon sink projects can help counter these trends by protecting productive ecosystems and earn communities a monetary compensation for doing so. The BioCarbon Fund will demonstrate how this can be achieved.

“Do no Harm”

Projects in both Windows will strive to achieve a range of local environmental and social benefits that can be measured and monitored. By adhering to all the environmental and social safeguards of the World Bank Group, projects will do no harm to the local people and their environment. The main safeguards (Operational Policies) include the following: Environmental Assessment (OP 4.01), Natural Habitats (OP 4.04), Pest Management (OP 4.09), Cultural Property (OP 4.11), Involuntary Resettlement (OP 4.12), Indigenous Peoples (OP 4.20), Forests (OP 4.36); as well as the Policy on Disclosure of Information.

Net Benefits

Beyond doing no harm, BioCarbon Fund projects will endeavor to meet, and exceed, the requirements of the United Nations Framework Convention on Climate Change (UNFCCC) decisions relating to social and environmental standards for CDM project design. These include adequate documentation on the present state of the environment, analysis of environmental and/or socio-economic impacts, a description of additional assessment of impacts considered significant by the Host Country, project participants or by the Fund Management Unit. Stakeholder consultations, and in particular, close cooperation with local communities, are essential.

Social Benefits

Local communities will have to be consulted and, preferably, involved in project design and implementation; communities have to be provided with proper access to information and have an outlet for grievances, etc.

The existence of social benefits in a sink project not only provides evidence that the project contributes to a country’s sustainable development, which is a requirement of the CDM, but is also a factor of permanence, i.e. it ensures that the carbon sequestration or emission reductions achieved by the project are more likely be maintained for the long term.

Examples of social benefits to local communities include the following: (i) additional, more stable, or less physically taxing employment, made possible by the implementation and operation of the project; (ii) new sources of revenue, in cash or in kind, from the sales of emission reductions from the project, and/or the project’s activities (e.g. acquisition of free or cheaper fuelwood and timber, sale of fruit or other agroforestry and non-timber forest products, diversification of economic activities, creation of long-term savings); (iii) the acquisition of new knowledge and techniques, e.g. for tree planting or conservation agriculture; and (iv) other related benefits, e.g. in terms of health or education, which are due to the project.

The baseline study of each project will include a social dimension, attempting to characterize the social features of the baseline (without-project) scenario. Where it is

BioCF Technical Note No.3

cost-effective and practicable, such social benefits will also be quantified, verified and certified along with the carbon sequestration or emission reductions against the monitoring plan.

Environmental Benefits

Carbon finance creates synergies between the UNFCCC, and the other “Rio Conventions”, namely the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Convention on Biological Diversity (UNCBD). Carbon finance represents a new financing source for revegetating drylands, providing alternative sources of energy and making drought-prone areas more resilient to climate change. In the area of biodiversity protection, carbon finance can play an innovative role by creating, at the individual or community level, financing incentives to reverse natural habitat loss.

Sinks projects with inherent local environmental benefits stands a higher chance of being sustained in the long run. For example, a community will want to improve its degraded ecosystem by replanting trees to avail itself of secure sources of fuelwood and timber, by revegetating abandoned agricultural lands, or by adopting agricultural practices which are less depleting of the soil.

Environmental benefits arise from sinks projects to the extent that these restore natural habitat for wildlife and protect soil against erosion; agroforestry increases the vegetative cover, and helps diversify crop mixes, which reduces susceptibility to pests; watershed management enhances water infiltration; and reduced tillage improves agricultural yields by retaining moisture, helping soils regenerate and limiting the need for chemical inputs.

A common guiding principle in BioCarbon Fund projects will be the landscape approach, whereby projects activities are integrated into the local landscape as opposed to converting the local landscape in a wholesale fashion. Projects could include various activities, e.g. a mix of agroforestry, small plantings of commercial-grade timber species, and forest conservation, or a mix of sustainable agriculture and biofuels. This landscape approach offers multiple benefits, from biological diversity to risk diversification, to the extent that it is less likely that a natural or man-made disturbance will adversely affect multiple project activities as dramatically as it would a single-activity, monolithic project.

As for the social aspects, the baseline study of each project will include a local environmental dimension, attempting to characterize the environmental features of the baseline (without-project) scenario. Where it is cost-effective and practicable, such environmental benefits will also be quantified, verified and certified along with the carbon sequestration or emission reductions against the monitoring plan.