

**Carbon Sequestration in Small Farms in Coto Brus, Costa Rica (Coto Brus Project)**

**Project description and proposed activities**



Land Uses in the Coto Brus Region-Costa Rica

The Coto Brus Valley is a part of tectonic depression between Cruces Hills and Cordillera Talamanca. It has been covered since 1949 with coffee plantations (is said to be planted best coffee in Costa Rica). Its name was derived by Indian words meaning "province" - Coto and the name of Indian tribe Brus. In 1952, a 10,000 hectares of land centered around what is now the San Vito town, was colonized by Italians. Previous to that colonization attempt, Coto Brus was a frontier area covered by rain forest and occupied by only a few Costa Rican and Panamanian squatters in the vicinity of present day Agua Buena, Cañas Gordas, San Sabalito towns. Farmers in the Coto Brus County of Costa

Rica will be induced, to introduce forestry production activities in their farms through the Payment for Environmental Services Program (PESP) implemented by FONAFIFO. The project will generate a net anthropogenic absorption of near 37,655 tons of CO<sub>2</sub> per year and a total of 2,259,276 tCO<sub>2</sub> in 60 years, which would not occur in the absence of the proposed project. In a period of three years 240,000 trees will be planted in agroforestry systems, 3000 ha will be dedicated to reforestation through natural regeneration, and 1800 ha to commercial reforestation, using mainly native species of the region.

Costa Rica, is presently implementing the PESP using mainly its own resources. FONAFIFO will pay to the farmers the environmental services of biodiversity protection, protection of water resources and scenic beauty generated by the reforestation activities, and these payments will be complemented with the additional incomes coming from the carbon sales. The additional incomes from carbon sales will allow FONAFIFO: i) to create a new PESP modality, that is: reforestation of degraded lands through human induced promotion of natural seed sources (natural regeneration), and ii) to improve the cash flow pattern typical of reforestation activities, to make it appropriate for small and medium land owners needs.

**Developer**

FONDO NACIONAL DE FINANCIAMIENTO FORESTAL (FONAFIFO)

**Organizational category:** Government agency

**Type of Project**

Greenhouse gases targeted CO <sub>2</sub>	Sequestration	Rehabilitation of degraded lands to forest Rehabilitation of lands to agroforestry Plantation for wood products/Small scale landholders
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**Location of the project**



The geographic location of the project is latitude North 8° 42' 11" to N9° 05' 18", and longitude West 82° 41' 50" to 83° 05' 6" (DATUM WGS84). The area is located in the watershed of the Coto Brus River, and it has a total area of 94 317 ha, and it is located within the Coto Brus County of the Puntarenas Province, Costa Rica.

### Environmental benefits and risks

The major environmental benefit from the project is the recovery of the forest cover in 4800 ha which are presently dedicated to pasture (due to reforestation and natural regeneration). These new forests will provide raw material for the forest industry, decreasing the illegal logging and damage of the remaining natural forest.

Generation of additional environmental services derived from forest ecosystems, such as, biodiversity, water resources, and scenic beauty protection, and mitigation of natural disasters. Local benefits for the community are the increase of family income by improving the rural local economy, training of landowners and generation of employment, and the protection of their water resources.

#### Baseline scenario

The base line is near 88,080 metric tons of CO<sub>2</sub>

#### Estimate of carbon sequestered or conserved (in metric tonnes of CO<sub>2</sub> equivalent – tCO<sub>2</sub>e)

Up to a period of 14 years	Up to a period of 20 years	Up to a period of 60 years
857,355 tm CO <sub>2</sub> e	1,217,281 tm CO <sub>2</sub> e	2,259,276 tm CO <sub>2</sub> e

### Socio-economic benefits and risks

There are 113 rural communities in the project area. Their main economic activities are based on agriculture and cattle-raising.

The project incorporates activities that energize the local economy, generating incomes from PES payments, and employment. Near 94.6 % of the carbon incomes will be invested in the project area in the form of payments to the farmers for the environmental services produced by them.

**Indicative Carbon Credit Value:** US\$ 3.76 /ton CO<sub>2</sub>e

Description	Amount (US\$ millions)	Source
Equity	0	Unidentified
	320,264	FONAFIFO
	4,575,200	Carbon Sales
Debt – Long-term	0	
Debt – Short term	0	

#### Emission Reductions Value

(= price per tCO<sub>2</sub>e \* number of tCO<sub>2</sub>e)

Period	Value (US\$)
For 14 years	US\$ 3,222,404
For 20 years	US\$ 4,575,200
For 60 years	US\$ 8,491,580