

# Reducing Emissions from Deforestation and Degradation (REDD) in the Cofán Bermejo Reserve, Ecuador

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## Cofán Bermejo Reserve

- 55,451 hectare primary Amazon rainforest located in Northern Ecuador in South America
- Managed by Cofán since 2002; owned by Ecuador

## Cofán People

- Live sustainably off the land in small populations surrounded by abundant natural resources.
- Cofán Park Guards are responsible for protecting the Reserve

## Threats

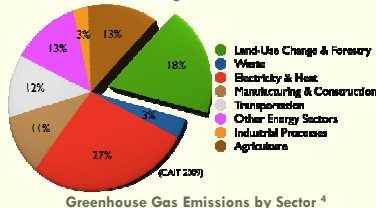
- Deforestation from oil exploration and road development leading to colonization
- Oil concessions span most of the Reserve. Oil supports 40 percent of Ecuador's economy creating a high threat of deforestation.<sup>1</sup>
- These activities degrade the forest and threaten the Cofán way-of-life.



Map of the Cofán Bermejo Reserve and Other Cofán Territories

## REDD

Forest conversion results in approximately 18-20 percent of global annual carbon emissions.<sup>2</sup> Tropical rainforests store a significant amount of carbon (200-300 metric tons of carbon per hectare).<sup>3</sup> REDD is a carbon-trading mechanism that provides incentive to reduce the emissions generated from deforestation and degradation. Funding generated from entering a REDD-based carbon market can be used to ensure protection of the Cofán Bermejo Reserve and the Cofán way-of-life through enhancing the Park Guard Program



Is it feasible and economically viable to develop a REDD project for the Cofán Bermejo Reserve?

## Feasibility Analysis

Legend:

- Components that will not hinder development of a REDD project
- Components in which REDD participation is contingent on external factors

### Political Climate

#### International

- Currently, REDD is not recognized by the UNFCCC
- Voluntary market standards can be used to develop certifiable, REDD-based carbon emissions reduction credits
- Voluntary market standards will likely influence future regulations

#### Ecuador

- Adopted a new Constitution recognizing the value of natural resources
- Socio Bosque provides incentive for forest protection
- Interest in developing national market mechanisms to protect natural resources, but uncertainty surrounds the distribution of market benefits

### Additionality

- Deforestation in the Reserve could occur at a conservative rate of 0.5% per year
- Reserves typically do not demonstrate additionality because the forest and its carbon stocks are assumed to be protected
- A case can be made for threatened reserves in developing nations (e.g. Cofán Bermejo) as they are often subject to forest loss through illegal deforestation and government concessions

### Leakage

- Forest extractive activities are limited to sustainable consumption by the Cofán and significant anthropogenic deforestation is not occurring
- Deforestation activities will not be displaced from the Reserve if a REDD project is developed

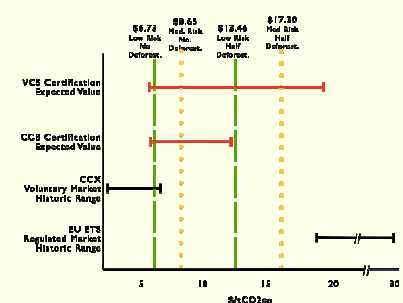
### Non-Permanence

- The risk of unexpected carbon loss for this Reserve is low to medium and can be addressed through the development of a REDD project

### Indigenous Culture Considerations

- A REDD project is compatible with the Cofán lifestyle and therefore will not negatively affect their indigenous or cultural traditions

## Does a REDD project make economic sense?



Cofán Bermejo Break-even Price Points. Expected and historic price ranges (dollars per metric ton of carbon dioxide equivalent) are represented with red lines for certification schemes (VCS & CCB) and black lines for existing carbon markets (CCX & EU ETS). Green dashed lines represent low risk scenario break-even price points; yellow dotted lines represent medium risk scenario break-even price points.

The money generated from the carbon credits of a REDD project would at least need to match the expected project cost (i.e. break-even). Based on a conservative cost-benefit analysis, a REDD project is viable if it can generate an income of at least 7.7 million USD. A medium risk project that prevents only half of the expected deforestation provides the least amount of saleable carbon credits. This scenario may be financially viable in a voluntary market and would almost certainly be viable within a regulated market context. Therefore, according to expected rates, it is likely that a REDD project does make economic sense and the Cofán could generate enough funding to support a more robust Park Guard Program.

## What are the options?

It is potentially feasible and economically beneficial for the Cofán to implement a REDD project for the Cofán Bermejo Reserve. Should the Cofán pursue a REDD project, they can:

- Work toward immediate entry into the voluntary carbon market and find a buyer that is interested in purchasing the carbon credits generated from a REDD project for the Reserve
- Bundle territories to strengthen the argument for additionality
- Wait for the UNFCCC to recognize REDD carbon emission credits in hope of generating more revenue.

If the Cofán decide to refrain from implementing a REDD project, they can use the other territories to generate funding by pursuing Socio Bosque or reforestation projects.

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