

Central African Regional Program for the Environment

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Proposal Title: Sustainable Management of African

Mahoganies Through Studies of Regeneration Requirements in

Southwestern Central African Republic

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Abstract

The forests of southwestern Central African Republic have some of the highest densities of western gorillas (Gorilla gorilla gorilla), elephants (Loxodonta africana), and bongo (Tragelaphus euryceros) within Central Africa. These semideciduous forests have been subjected to timber exploitation for over 25 years and represent one of the most threatened forest types in the world. The Government of the Central African Republic has designated protected areas within the region but also relies on timber revenues. In order to reach the goal of biodiversity conservation within the region, sustainable forest management outside protected areas is necessary. However, experience throughout West and Central Africa has indicated that there are significant obstacles to regeneration for many target species, including Entandrophragma spp. (African mahoganies). Once these extremely valuable species are mined out of the forest, loggers reenter concessions to take less valuable species. Ultimately this can destroy the canopy and habitat of forest dwelling large This project is designed to study the barriers to regeneration of mammals. Entandrophragma spp. in the Dzanga-Sangha region through a series of nursery and out-planting experiments. The practical objective is to help design forestry practices consistent with sustainable management, an overriding goal of the CARPE program. The rationale is that there will be an economic incentive to protect forests with abundant regeneration of high quality timber from the devastating effects of the reentry and exploitation of secondary species within these forests. To reach this goal the project proposes to study regeneration requirements of different Entandrophragma spp.

The objectives of the study are:

- 1. To understand the resource requirements of *Entandrophragma* spp. seedlings through experimental treatments under controlled and uncontrolled conditions.
- 2. To make silvicultural recommendations based on these findings to improve timber exploitation techniques within the Dzanga-Sangha region.
- 3. Contribute to the sound management of the Dzanga-Sangha Dense Forest Reserve.