Abstract No. 06

ECOLOGICAL RESTORATION OF DIYAKOTHAKANDA

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Diyakothakanda is a steep hill slope in the Low Country rain forest area. The site is totally denuded land subjected to manmade forest fires, erosion due to long-term exposure, and heavy runoff. Exposed rocks throughout the site are evidence of prolonged erosion.

The main goal of this project is the increase in biodiversity of the area through ecological restoration, re-installing the original assemblage of the forest structure to the site. Using principles of relay floristics, sun-loving, fast-growing pioneer species such as *Macaranga pelata* and *Macaranga indica* are to be planted on the site to provide the necessary shade to eliminate the layer of bracken and to promote suitable environmental conditions for the establishment of later successional and primary rainforest trees. Eight-thousand mixed-species pioneer seedlings are being grown in polythene pots in a village nursery to be ready for planting in November 2016. These seedlings will cover 25% of the total project site of 2 hectares. The growth of these pioneers will be carefully monitored. They will be weeded as needed. A further 16,000 plants to cover the entire area is planned for November 2017.

The community has established and staffs the nursery. Planting and monitoring activities will be with the participation of the community and five area schools. The project is developing capacity in environmental conservation among school children in the selected schools and has built awareness in the village community of the need for environmental conservation in general and the need to protect and conserve forests within the village in particular. This project serves as a model for forest restoration.

Keywords: *Ecological restoration, Pioneers, Primary species, Rainforest, Community*