VALUING ECOSYSTEM BENEFITS THROUGH REFORESTATION OF DEGRADED RAIN FOREST PATCHES IN SRI LANKA WHILST HELPING TO MITIGATE CLIMATE CHANGE

Lakmini Senadheera[1], W.M.P.B.S. Wahala[2] and Shermila Weragoda[3]

[1,3] Conservation Carbon Company, Colombo-05, Sri Lanka.
[2] Department of Tourism Management, Sabaragamuwa University of Sri Lanka.

[1] lakmini@susutainablefuturegroup.com, [2] sampathwahala@yahoo.co.uk
[3] shermila@carbonconsultco.com

Sri Lanka is one of the most vulnerable countries for climate change risks in many ways and there is growing acceptance that the environmental benefits of forests extend beyond traditional ecological benefits to address the mitigation of climate change.

The Hiniduma Bio-link Project owned and maintained by Conservation Carbon Company in Sri Lanka offers value-added carbon credits for socially and environmentally conscious organisations and individuals. It is a reforestation project to establish a biodiversity corridor between two large protected remnant Sri Lankan rainforest patches – Sinharaja and Kanneliya.

The Bio-link Project accomplishes this through the reforestation of traditional farmers' home-gardens in the lowland wet zone region through analog forestry. New trees were distributed among smallholder farmers who currently have their own land use practices of traditional tea planting, small rubber plantations, and coffee and paddy cultivation. Along with the baseline biomass estimation of the selected pilot project, the carbon savings from the newly planted trees were calculated. The expected sequestration potential per hectare is 152.14 tCO_2/ha after a 20% deduction for unexpected losses. The ecosystem services provided by the project will be sold as Plan Vivo Certificates, which represent long-term carbon sequestration. Crediting period of the project is 15 years. A baseline survey was conducted in each land and the base-load was calculated to be 299.47 tCO_2/ha. The certificates registered under the Plan Vivo registry for CO_2 sequestrated from the newly planted trees are eligible to be sold as Voluntary Carbon Credits in the international market.

Hiniduma Bio-link Project, as a case study of a successful Sri Lankan carbon mitigation reforestation project, going beyond carbon benefits, has identified other market based approaches to evaluate payments for ecosystem services.