

Ecological restoration in the Uva Province in Sri Lanka

The Moneragala District in the Uva Province, is one of Sri Lanka's poorest. In 1995/96 and 2000, 36.4-51.8% of its people lived in poverty. Poverty in Moneragala is directly related to water scarcity. The combination of an inherently highly variable rainfall regime and the loss of forest cover, resulting from land use change to intensive agricultural cropping, has reduced groundwater recharge and drawn down the aquifer.

In 2009, the Neo Synthesis Research Centre (NSRC), in partnership with the Future in our Hands Development Fund, initiated a restoration project in the Heda Oya watershed focused on the micro-watersheds in Guruhela and Kodayana hamlets of Siyambalanduwa village in Moneragala District. The project is funded by Moro Foundation and facilitated by Art Gold in Sri Lanka.

The project seeks to increase the productivity of both watersheds through the conversion of farm gardens to forest gardens by using the land management technique of Analog Forestry. This technique, pioneered by NSRC in 1982, refers to the establishment of a tree dominated ecosystem that is similar in architectural structure and ecological function to the closest remaining natural forest in the area using plants that provide products with a market value.

In each of the 50 participating households, the entire family is involved in the restoration effort that increases perennial vegetation cover and groundwater recharge while introducing a wide variety of food crops into home gardens and increasing food security in the area. Already farmers have planted over 12,000 trees and shrubs representing 81 different native and naturalized species that provide fruits, fodder, medicine, timber, firewood and ecological services including facilitation of water infiltration into soil and the aquifer below. As these perennial species are maturing, farmers have begun organic cultivation of 27 annual crops, including vegetables, cereals, yams and tubers. Households began generating a cash income from these crops within three months of planting.

The project has been able to fulfill the objectives of Landcare to focus on the triple bottom line of ecological, economic and social sustainability in village development from a watershed restoration perspective. In keeping with these objectives, the project now pursues further collaboration with the community, local government and the corporate sector to replicate this work in other areas of the Uva Province.

