

Ecological Restoration of Tsunami affected lands in Sri Lanka – the case of Kalmunai

Melvani, K.1

Abstract

The impact of the Tsunami of December 2004 was worst felt in the Ampara District of Sri Lanka. The highest death toll was recorded here and the damage to houses and property was equally catastrophic.

A primary reason for the intensity of the impact was due to the fact that the high population density in these areas had resulted in the construction of houses on the fringe of the beach and therefore the removal of all beach vegetation.

Aside from the fact that many people lost loved ones and all their worldly possessions, the Tsunami also destroyed their livelihoods and the means to survive. The worst affected were the farmers; they lost their crops, the soils of their farmlands were rendered saline and they suffered the contamination of their water sources. In January 2005, the Neo Synthesis Research Centre (NSRC) began relief work in Kalmunai that is located in the Ampara District. They distributed food, supplied drinking water, constructed and cleaned wells, constructed toilets and assisted many schools. They also distributed livelihood assistance to carpenters, masons, weavers and male tailors. The benefits of their work were directly spread among 8616 adults and 8009 children.

While it was relatively easy to deal with the material needs of the people, the greater challenge was to heal the ravaged land. To grow back its vegetation, clean its water sources and bring back the farmlands to their original arability.

In 2006, the Neo Synthesis Research Centre took up this challenge and established a 3 km conservation forest along the coast; planted phyto-remediation plots around 1001 drinking water wells and established 165 plots for ecological farming. The sand-based landscape of these lands were designed to include the cultivation of vegetable crops using organic regimes of cultivation, tree crops that provided utility benefits like the provision of food, fuel wood, timber, green manure, fodder, medicine etc and a littoral forest that could withstand imminent sea level rise.

Already after two years, benefits are being gained whereby the beneficiaries are more food secure; their soils have regained their arability; the water in their wells has become potable and the coastline is afforded protection from a wall of native vegetation.

The healing of the land took place much faster than was thought. The restoration strategies employed involved the participation of the communities

¹ Managing Director, Neo Synthesis Research Centre, 118/7, Polgasowita Road, Siyambalagoda, Polgasowita, Sri Lanka, Email: neosynth@sltnet.lk, nsrc@sltnet.lk or Internet www.earthseva.org