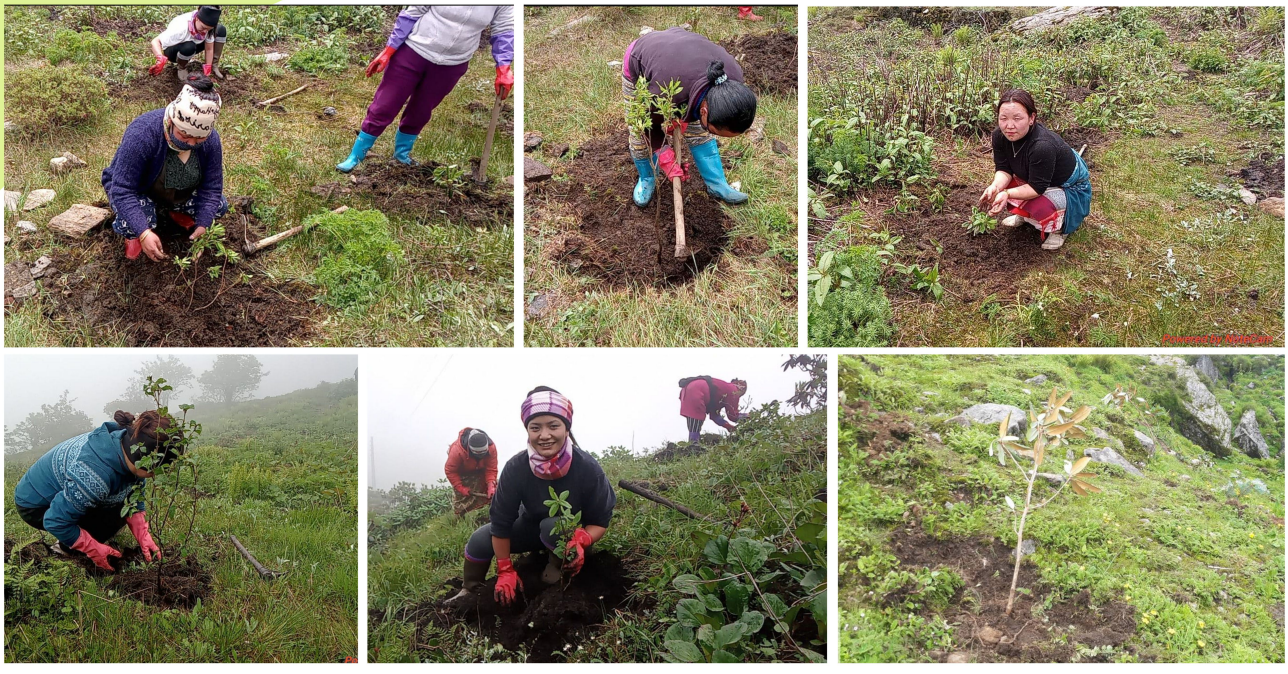
Trees for Ecotourism Tsomgo,

Sikkim, India



Project Purpose

Trees for the Himalayas™

Location

The plantation project is implemented in the Tsomgo watershed catchment area in East Sikkim.

Aim

- Enhancement of Biodiversity
- Carbon Sequestration
- Promotion of Ecotourism
- Generation of Rural Employment
- Improvement of Wildlife Habitats

Why Trees?

The Sikkim Human Development Report 2014 recognised tourism as one of the potential sectors for growth and livelihood creation. Among all of Grow-Trees' plantation projects, the Tsomgo plantation project is located in the highest eco-zone. The project is implemented between 12300ft and 13000ft above mean sea level. Tsomgo, being a popular tourist destination, sees several hundred (500 to 1000) tourist vehicles on a daily basis, with over 300,000 (3 lakh) visitors per year creating environmental stress on these fragile mountain ecosystems.
The trees will contribute to vehicular population reduction, ecological restoration, wildlife habitat conservation, and improving the quality of life of local populations by making them more self-sufficient. The tourism sector has emerged as a vital industry of Sikkim in recent decades, providing direct employment to at least 40,000 people. Improved forest health will have a substantial impact on boosting alternative tourism and enhancing local livelihood, providing a win-win situation in terms of social, environmental, and cultural issues.

The Tsomgo catchment is a prominent water tower in the region, serving as a primary feeder to the forests and a critical source of water for animals and habitation downstream, including Gangtok, Sikkim's capital. The trees will aid in the reduction of flooding hazards, the improvement of groundwater quality and quantity, the protection of farmers' crops, soil conservation, and the rejuvenation of the water table.

Tsomgo Lake, which shares a catchment region with Kyongnosla Alpine Sanctuary, is a richly diverse ecosystem that is home to Red pandas, Himalayan Black Bears, Musk Deer, and migratory birds. Trees provide refuge and food for a variety of birds and animals and prevent wildlife from accessing human settlements, resulting in reduced human-animal conflict. As a result, the planted species provide a variety of functions, including animal repellant, fodder, livelihood diversification, and biodiversity advantages.
Despite the fact that tree growth in the Tsomgo region is slower than in other areas, it is nevertheless very beneficial in the long run since it serves to counteract atmospheric carbon pollution, resulting in a sustainable green ecosystem.

Tree Species

Gurash (Rhododendron arboreum), Lal chimal (Rhododendron bardatum), Tengre salla (Picea smuthiana), Kapasay (Acer cambelli), Gobre salla (Abies webbiana), Uttish (Alnus nepalensis), Katus (Castonopsis tribuloides), Bhadrasay (Elaoocarpus sikkimensis), khanakap (Evodia meliaefolia), Nabro (Ficus hookeri), Rani chap (Michelia excelsa), Phusre chap (Michelia lanuginose), Arupati (Prunus nepalensis), Gogun (Saurauia nepalensis), Kharana (Symplacos theifolia), Asara (Woodferdia floribunda), Pamsi/fambal (Persaamericana), Bajho (Acorus calomuslinn), Chirayito (Swertia), Burookhati (Astilbe rivularis), Chimping (Heracleum wallichii).

Social Impact:

The tree plantation will help in promoting sustainable eco-tourism and wildlife tourism by improving the overall ecological health and enhancing wildlife habitat in a particular area. It will help to restore degraded forest patches in the project sites of East Sikkim's Tsomgo range.
The plantation project creates employment for the rural and tribal communities of Sikkim, including women self-help groups. Indigenous communities are the ones that know their forests the best and that’s why they are encouraged to get involved in plantation activities, from pit digging to tree upkeep after the trees have reached maturity.

As the Tsomgo region has a limited number of trees, the project intends to prioritise afforestation initiatives by planting local species. Local species like Rhododendron and Silver Fir improve the landscape since they can resist extreme weather conditions like snow and help to minimise and adapt to climate change. Through trees, the local communities will be able to attain sustainable income sources in the form of timber-based produce and non-timber forest products.
Upon maturity, each tree can absorb approximately 20kg of CO_2 per year which is considered globally as a conservative estimate for sequestration potential of trees. The trees will also help in conserving the local flora and fauna by providing them with adequate food and natural habitat sources.