

Environmental conservation project



Objective: The broader theme of this project is "Save our Planet" and to help fight the biggest challenge of our times – Climate Change. The goal is to conserve, protect and sustain our natural environment around us, as well as to bring about a change in the way our community thinks about, and acts upon, this important subject. The project covers a wide range of activities and initiatives that positively impact the health of our natural environment including, but not limited to, mangrove reforestation, organic farming, recycling education, coral restoration, beach and river cleanups, and building eco-friendly products that benefit the environment.

Background to this Program: We live in a time where the Earth is at its most vulnerable. Natural ecosystems have declined substantially resulting in loss of biodiversity, man-made pollution has reached unimaginable levels and climate change has become humanity's greatest challenge. It is clear we need to change the way we interact with nature and change fast. In order to preserve the earth for future generations, we not only need to reduce the amount of harm that human activities have on the environment but also support the natural world as much as we can.

Just like the rest of the planet, here in Sri Lanka, our beautiful natural environment needs to be protected and preserved for future generations, as well as for the vast natural flora and fauna that have been native to us for centuries. Environmental conservation is a vast topic that covers multiple areas in different parts of the world. For this project, we have chosen to conduct a range of initiatives that, we believe, will have a lasting impact in addressing the key environmental issues that affect the natural ecosystems of our beloved island.

What our Participants do on the Project: Volunteers participate in a range of activities spread across 5 important initiatives as per below:

1) REFORESTATION

a) Mangrove Restoration – Mangrove ecosystems are vitally important in sustaining marine environments. They protect coastlines, maintain water quality, control floods, offer breeding grounds for fish and other marine species, help in increasing the region's biodiversity, support rural livelihoods and fight climate change by absorbing carbon dioxide at a rate 3-5x than most forests. Protecting, preserving and growing their numbers is the need of the hour. This part of the project takes places in Koggala Lagoon, an important coastal waterbody in Galle District embellished with eight ecologically rich small islands. Volunteers will play a key role in assisting with the mangrove habitat restoration process in the area by helping plant new seeds in our nursery, nurture and monitor the growth of baby mangrove plants and assist in planting them in and around the islands on the lagoon when they are ready. Volunteers will also work closely with the local conservation team in doing a range of other tasks that are required to preserve and maintain the lagoon's ecosystem.

2) RECYCLING

- a) Recycling Education Recycling is still in a nascent stage in Sri Lanka, although the concept is catching on as locals gain a better understanding of its environmental benefits. Plastic pollution, in particular, is becoming a major problem that needs to be addressed. This part of the project involves volunteers conducting educational presentation sessions to local communities, schools and businesses highlighting the environmental issues plaguing the region, particularly plastic pollution, and the importance of recycling as a way of life to combat these challenges. These sessions will be aided by our local staff who will help with preparation of presentation materials and language translations with the local community.
- b) <u>Building EcoBricks</u> EcoBricks are a simple, low-tech solution to plastic pollution without the need for any machines, special skills or capital. They are single-use plastic bottles that have been cleaned out and packed tightly with other bits of single- use plastic to be reused as building blocks. This helps to extend the life of single-use plastic and avoid sending them straight to landfill, which helps in reducing plastic pollution. EcoBricks are very durable and don't break down, making it an ideal building material. In a developing country like Sri Lanka, they are used to construct walls, furniture and even

- rural buildings. Volunteers will spend part of their project time building EcoBricks which will be used to build the boundary walls in our organic garden and also outdoor furniture. We also intend to donate large amounts of EcoBricks that we make to our neighbouring communities so they can derive similar benefits as well.
- C) <u>Up cycling Glass Bottles</u> Instead of throwing away the used glass bottles, here we reuse them in different ways. For example, we create various beautiful decorations from glass bottles. That way we can use them to beautify our rooms and gift them to school children to promote the initiative locally. This is a good way to prevent glass, a non-easily degradable material, from entering the environment. Volunteers will spend part of their project time making different items with glass bottles which can be used as decorative items.

3) ORGANIC FARMING

a) Organic Farming – Organic farming practices reduce pollution, conserve water, increase biodiversity, reduce soil erosion, increase soil fertility, and use less energy. Using organic fertilizers (e.g., compost, green manure, etc.) instead of synthetic fertilizers and pesticides is much better for the natural ecosystem and provides sustainability over the long term. This creates fresh and healthy foods – straight from farm/garden to table. Volunteers will spend part of their project time in our organic garden helping grow fresh fruits and vegetables in a sustainable and environmentally conscious manner. Typical tasks will include planting new seeds, maintaining the nursery, making organic compost, monitoring crop growth, building organic fences and other maintenance tasks as necessary.

4) MARINE CONSERVATION

a) Coral Reef Restoration – This is the second eco-friendly product we build in this project. Coral reefs are often called the rainforests of the ocean, both due to the vast amount of species they harbour and to the high productivity they yield. Aside from the hundreds of species of coral, reefs support extraordinary biodiversity and are home to a multitude of different types of fish, invertebrates and sea mammals. Unfortunately, like many other places, coral reefs in Sri Lanka have dwindled in size recently due to the adverse effects of climate change and human activities. This part of the project involves building artificial coral reefs using durable and eco-friendly materials to mimic the effects of natural coral reefs. These are then placed in the shallow areas of the ocean where the natural reefs were once thriving. Over time, research has shown that these artificial reefs are generally able to provide a stable habitat for fishes and all the other plant and animal organisms that one would find on a natural reef, thereby restoring this lost marine ecosystem to a large extent.

5) ENVIRONMENTAL CLEAN-UPS

a) Beach Cleaning - Sri Lanka is home to some of the world's most pristine

beaches surrounded by the warm ecologically-rich waters of the Indian Ocean. Apart from providing humans with natural meditative beauty, beaches provide a host of environmental benefits including preserving our coastal and ocean ecosystem, acting as nesting sites for turtles and other species, providing vital feeding ground for birds and terrestrial wildlife, mitigating the damaging effects of climate change by protecting our coastlines from storms and strong waves, and more. Unfortunately, in recent years, increased human pollution, particularly plastic pollution, both on land and water, has contributed to unhealthier beaches in Sri Lanka and around the world, making the need for beach clean-ups an essential environmental need. Volunteers spend part of their project time doing beach clean-ups in groups carefully segregating plastic, glass and organic waste, which are then given to the local authorities for disposal or for recycling purposes. This project rotates around different beaches in and around the Galle and Unawatuna areas, thereby increasing the reach and scope of this initiative.

- b) River Cleaning Being a tropical island, water cleanliness is just as important as land cleanliness for our ecosystem. The Gin Ganga River is an important 116 km long water body originating from the virgin Sinharaja Rainforest and flowing down through several villages towards Galle and into the Indian Ocean. Keeping the river clean benefits local neighbouring communities, the surrounding flora and fauna, and ultimately the ocean. This part of the project involves volunteers riding in canoes (2 per canoe) and cleaning smaller tributaries of the river of plastic and other waste products that threaten the immediate ecosystem. Life jackets, canoes, oars, scooping nets and waste collecting bags are provided. It requires teamwork and a sense of adventure, all done in a beautiful rural natural setting surrounded by paddy fields.
- c) Reef Cleaning Reef cleanup refers to the efforts aimed at removing debris, plastic waste, and other pollutants from coral reef ecosystems. These cleanups are vital for preserving the health of reefs, which are under threat from pollution, overfishing, and climate change. By removing harmful materials, reef cleanups help protect marine biodiversity, maintain the reef's ecological balance, and promote sustainable practices for ocean conservation. Volunteers and divers often work together to collect trash, raise awareness, and support long-term reef restoration initiatives.
- d) **Forest Cleaning** Forest cleaning involves the removal of litter, invasive species, and pollutants from forest ecosystems to maintain their health and biodiversity. These efforts help reduce environmental degradation, prevent wildfires caused by accumulated waste, and support the growth of native plants and wildlife. Forest cleaning activities are typically carried out by volunteers, who work together to preserve the natural beauty and ecological balance of forests, ensuring they remain vital resources for future generations.

6) Tree Planting Campaign

a) **Tree Connect** - TreeConnect plants hope, strengthens ecological resilience, promotes environmental stewardship, grows life for a greener and a healthier earth to benefit all living beings to foster a sustainable future to come. TreeConnect 1.0 is an initiative that contemplates to plant 500+ native trees in

schools to create awareness and educate the young generation on the importance of planting and protecting trees.

The frequency of the above activities during any given week or month will depend on the local conditions on the ground at the time(for example, river cleaning may not be possible to do during the heavy monsoon season due to flooding or high tides). It will also depend on the needs/priorities of the various initiatives and activities at certain times of the year. In general, however, volunteers can expect to participate in a majority of these activities during their time on the project, if not all of them. We also expect this project to evolve over time with new activities and initiatives introduced which expand the general scope and reach of our environmental conservation efforts in our community.

Other Information:

Availability: All year round (no blackout dates)

Arrival & Departure Days: Saturdays

Project Workdays: Monday to Friday (weekends are free)

Age Requirement: Any participant 16 years or over can participate in this project (for participants aged 16 and 17 years, we will need parental/guardian consent if unaccompanied by an adult). This project is also suitable for families. Children aged 5 years and above can actively participate in the project with their parent(s) or guardian(s).

Project Capacity: Maximum of 12 participants at one time

Nearest Airport: Colombo Bandaranaike International Airport

Location of Project: Multiple locations in and around Galle District (e.g., Koggala Lagoon, Unawatuna, Baddegama, Dewata, Gin Ganga River, etc.)

Meals Provided: 3 freshly cooked meals every day (breakfast + lunch + dinner)

Support Provided: On arrival, a detailed orientation & training program is provided, including health and safety training, culture training and an area orientation tour around Galle. Our project coordinator provides project-specific training and guides volunteers on all project- related activities each day. Local transportation to and from the project is included every day. Every single activity, be it project-related or operational, is managed, guided and supported by our experienced local team.

Recommended Attire: Since this project involves a significant amount of field work in a tropical climate, we recommend participants to wear casual, light and comfortable clothing that suits the type of activities listed above. Clothing should be comfortable yet conservative – no excessive skin should be shown as locals tend to be on the conservative side being a majority Buddhist country. Quick-dry material (or wet suit) is recommended (but not mandatory) when in close contact with water (e.g., river cleaning on canoes). Footwear can be comfortable sneakers or sandals/flipflops. Sunscreen recommended since a lot of the work is outside. Light rain jacket recommended during the wet season (June-November). A light rain jacket is recommended during the wet season (June-November) and when we go to the school awareness program volunteers should be wearing long pants and a t - shirt that covers the knees & shoulders.