



TECHNICAL SITE VISITS

WEDNESDAY 11 MAY 2016

Southbound One (S1)

Wastewater Treatment Plant Moratuwa

Located 20km off the city of Colombo is Sri Lanka's largest wastewater treatment plant. Situated within a trade zone, the plant contributes to the treatment of 17500m³ of water daily. Initiated through an Asian Development Bank funded project, the plant is now administered under the Water Board of Sri Lanka.



Madu Ganga (Balapitiya) Boat Tour

Located 70 km south of Colombo, Madu Ganga (Madu River) is a relatively unspoiled lagoon with 61 hectares of relatively undisturbed mangrove habitat, as well as 20 hectares of mangrove scrubs and 63 hectares of mangrove mixed swamps. There are 248 species of vertebrate fauna in Madu, of which 20 species are endemic and 30 species are nationally threatened. The traditional kraal fishing method is prominent here. Madu was declared a RAMSAR site in 2003. Refreshments and lunch served at the nearby Kadolana Eco Village.



Handungoda Tea Estate

Sri Lanka's tea industry is world-renowned. Handungoda Tea Estate is an exquisite tea plantation in the hills above Koggala, 6km inland. It is considered the closest commercial tea plantation to the sea (in the world). The estate is known as the Virgin White Tea Factory—it produces a tea completely untouched by human hands. Where the average large plantation worker will pick 23kg of black tea in a day, the workers here manage but 150 grams of the virgin white leaves. The plantation does not use any pesticides or insecticides. This stop will include a plantation tour. Participants will sample and learn how they produce over 25 varieties of tea (using 150-year old machinery). The property also includes rubber (and rubber factory), cinnamon, pepper and coconut plantations.



Galle Fort

Situated on a natural harbor on the southern west coast of the country, Galle Fort is a UNESCO World Heritage Site (1988), under criteria iv, for its unique exposition of "an urban ensemble which illustrates the interaction of European architecture and South Asian traditions from the 16th to the 19th centuries". The fort remains a working community, and includes boutique shops, cafes, hotels, and galleries. Participants will explore the fort and arcade.



Southbound Two (S2)

HSBC Rajagiriya Wastewater Treatment

HSBC Data Processing Lanka pvt Ltd houses approximately 300 employees. HDPL is keen in following sustainable practices such as waste water treatment by which the company fulfills about 50% of water consumption. The company's policy of waste management is equally admirable with efforts in place for reuse and recycling. The staff helps the process at the very initial stage by separating garbage at the point of the disposal itself.



Koggala Lagoon and Lake

Presentation and tour of Practical Action's Sustainable Lagoons and Livelihoods Project and the co-governance model, which includes law making and policymaking processes to decentralize lagoon governance, thereby, all levels of decision makers and stakeholders are gathered into a single decentralized institutional framework to make unified decisions on utilization, conservation, management, and protection etc. of a lagoon. Participants will also tour Koggala Lake and see a traditional stilt fishing demonstration.



Hundungoda Tea Estate

Sri Lanka's tea industry is world-renowned. Hundungoda Tea Estate is an exquisite tea plantation in the hills above Koggala, 6 km inland. It is considered to closest commercial tea plantation to the sea (in the world). The estate is known as the Virgin White Tea Factory—it produces a tea completely untouched by human hands. Where the average large plantation worker will pick 23kg of black tea in a day, the workers here manage but 150 grams of the virgin white leaves. The plantation does not use any pesticides or insecticides. This stop will include a plantation tour. Participants will sample and learn how they produce over 25 varieties of tea (using 150-year old machinery). The property also includes rubber (and rubber factory), cinnamon, pepper and coconut plantations.



Galle Fort

Situated on a natural harbor on the southern west coast of the country, Galle Fort is a UNESCO World Heritage Site (1988), under criteria iv, for its unique exposition of "an urban ensemble which illustrates the interaction of European architecture and South Asian traditions from the 16th to the 19th centuries. The fort remains a working community, and includes boutique shops, cafes, hotels, and galleries. Participants will explore the fort and arcade.



Southbound Three (S3)

Weather Permitting | If weather does not cooperate, the afternoon will be pushed to the morning and the tour will include elements of S1 and S2. Each participant is responsible for whale tour cost.

🔹 **Mirissa Blue Whale Watching Tour**

In 1979 the International Whaling Commission declared the Indian Ocean (north of 55° S latitude) a Marine Mammal Sanctuary and encouraged international cooperation to protect the populations of great whales in the area. Sri Lanka lies within the sanctuary and is frequented by blue, sperm, humpback, minke and Brydes whales. The blue whale is the largest animal on the planet, weighing as much as 200 tons (about 33 elephants). The blue whale has a heart the size of a Volkswagen Beetle. Its stomach can hold one ton of krill and it needs to eat about four tons of krill each day. They are the loudest animals on Earth. There are about 10,000-25,000 blue whales worldwide. (source: WWF). Mirissa is considered one of the best locations in the world for blue whale watching (Dondra Point).



🔹 **Women's Participation in Improving Fish Drying Techniques with Fuel Efficient Stoves (GEF SGP)**

A GEF SGP project has promoted alternative energy sources for food processing in the Matara community. Women from 50 fisher families of two fishing villages are actively involved in project activities. Project introduced 10 sawdust-based ovens among 50 women to make Maldive Fish (cured tuna fish). As a result hygienic condition of the products increase, and time and labour needs decrease. 100% direct beneficiaries are women.



🔹 **Galle Fort**

Situated on a natural harbor on the southern west coast of the country, Galle Fort is a UNESCO World Heritage Site (1988), under criteria iv, for its unique exposition of "an urban ensemble which illustrates the interaction of European architecture and South Asian traditions from the 16th to the 19th centuries. The fort remains a working community, and includes boutique shops, cafes, hotels, and galleries. Participants will explore the fort and arcade.



Eastbound One (E1)

◆ MAS Fabric Park

MAS Intimates Thurulie is considered the world's first clothing factory powered by carbon-neutral sources. MAS Intimates Thurulie was designed in compliance with USGBC standards for green buildings and complies with LEED Platinum standards. The building is a visionary departure from the traditional factory. It meets very high standards for ethics and environmental stewardship in manufacturing. Participants will tour the MAS building and visit the Park's wastewater treatment facility and its sustainable practices for the Maha Oya River.



◆ Pinnawala Elephant Orphanage

This orphanage was established in 1975 by the Sri Lanka Wildlife Department in a 25-acre coconut property adjoining the Maha Oya River. The orphanage was originally founded to afford care and protection to the many orphaned elephants found in the country's jungles. In 1978, the orphanage was taken over by the National Zoological Gardens. Each animal is given about 75 kg of green matter each day and 2 kg of rice bran and maize. Participants will visit the orphanage during the afternoon bathing period.



◆ Elephant Dung Paper Factory

On average an elephant will eat 200-250kg of food each day and produce 50 kg of dung each day, which can then be made into paper. One elephant makes about 115 sheets of paper a day. Participants will learn about the elephant dung paper making process, including nutrient reduction / pollution control efforts.



◆ Spice Garden

Sri Lanka is famous for its spices and spice gardens. The wealth and variety of Sri Lankan spices provided ideal grounds for traditional Ayurveda. Ayurveda is an ancient form of medicine, the Science of Long life, using natural remedies to achieve physical and mental well-being. Herbs, spices and their natural oils figure prominently in Ayurveda massage and alternative therapies. Sri Lankan spices are used in a range of perfume, soap and other cosmetics, aromatherapy essential oils and Ayurveda toothpaste based on 24 herbs and spices.



Eastbound Two (E2)

Weather Permitting | Each participant responsible for rafting cost

💧 **Kelani River Mini Hydropower Tour and Presentation**

Participants will receive a presentation on sustainable hydropower practices in the Kitulgala region, and will view the Seetawaka mini hydropower project. A full presentation will discuss the ecological conditions above the weir and ponding area, the diverted reach, the power house and below the tail race canal. Impact assessments will also be highlighted. Participants will meet the owners of the project and the members of the surrounding community.



💧 **Kitulgala White Water Rafting Tour**

Situated about 80km from Colombo, Kitulgala has good conditions for rafting, including five major rapids and four minor rapids. Participants will raft the Kelani River. Participants can alternatively partake in a jungle hike of the area.



Eastbound Three (E3)

🔹 Rambodagalla Ornamental Fish Breeding and Training Centre

Rambodagalla Ornamental Fish Breeding and Training Center is administered under the National Aquaculture Development Authority under the purview of Ministry of Fisheries and Aquatic Resources. The center is situated in Rambadagalla in the District of Kurunegala. The center provides training in ornamental fish farming and assist in aquaculture while engaging in research on ornamental and aquatic plant culture. One of the main activities of the center is supplying quality ornamental fish brooders and parent stock of ornamental aquatic plants. Participants will tour the facility.



🔹 Kalaweva National Inland Fisheries and Aquaculture Training Institute

National Inland Fisheries and Aquaculture Training Institute (NIFATI) is the premier government sector training institute in Sri Lanka, for inland fisheries and aquaculture. It is situated in Kalawewa in the district of Anuradhapura, which is the ancient capital of Sri Lanka. Training Institute is located on a picturesque site in the Vijithapura village, adjacent to the Kalawewa reservoir (built in 400 AD), which together with its water distribution canals is considered as an engineering marvel of ancient Sri Lanka. NIFATI was established in 2009 under the Aquatic Resource Development and Quality Improvement Project (ADB funded) of the Ministry of Fisheries and Aquatic Resources Development. Participants will tour the facility.



🔹 Chilaw Town Septage Management Facility

Under the Asian Development Bank assisted Dry Zone Urban Water & Sanitation Project Chilaw town has been provided with a septage treatment facility. The treatment system consists of a flow through pond system with an anaerobic, facultative and maturation ponds. The capacity of the facility is 39 M3 per day. The facility is 10 km away from the UC limits and it is design to run with a minimum inputs of 6 trucks per day. The urban council is able to maintain the septage treatment facility with the income received from the charges. Although the daily requirement of sludge inflow is around 30 cm per day, it has been reported that the total truck loads produced in the year 2014 was 120 which is less than 1.2 % of the households considering the number of household 9547. The total cost of the plant is Rs. 203 million and it was commissioned in May 2015. Participants will tour the facility.



Northbound One (N1)

Weather Permitting | Each participant responsible for bar reef tour cost

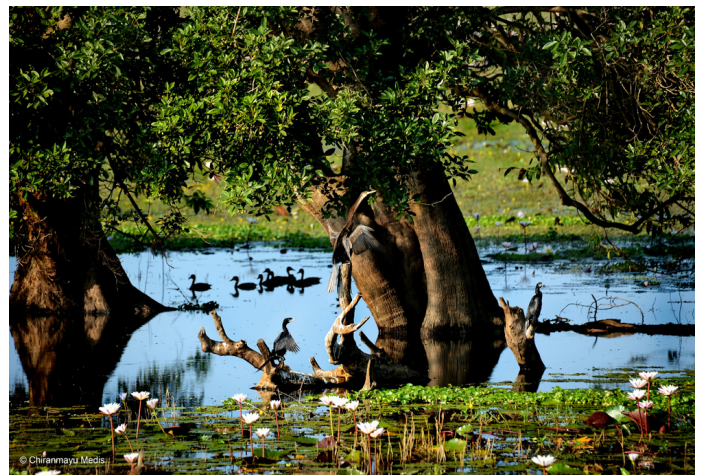
🔹 Kalpitiya Bar Reef Marine Sanctuary

Kalpitiya Bar Reef was declared a marine sanctuary in 1992. The Bar Reef, off the western coast of the Putlam district, is the largest and most bio-diverse coral formation in Sri Lanka, being home to 156 species of coral and 283 of fish. The local residents of the region rely heavily on the Bar Reef Marine Sanctuary, an area of rich biodiversity that suffers from over-fishing and illegal exploitation. They are starting to look at how to diversify their livelihoods in the face of climate change that is creating an uncertain future for all. The reef system suffered from mass coral bleaching in 1998 and remains vulnerable to the impacts of climate change. Arrangements are being made by the authorities to demarcate the core area of the Marine Sanctuary with the agreement of the local community. Under the Bay of Bengal Large Marine Ecosystem (BOBLME) project, education, awareness and assessment in support of Bar Reef Marine Sanctuary management for the protection of coral reefs and their associated biota and safe guard abundant fish stocks has been a main focus.



🔹 Anawilundawa Wetland Sanctuary

Anawilundawa Sanctuary is one of six RAMSAR wetlands in Sri Lanka. The sanctuary covers 1,397ha lying between the coastal line and the Negambo – Puttalam railway line. This wetland consists of six large manmade tanks and three peripheral tanks interconnected to create a complex irrigation system built by King Parakramabahu, the Great. The history of this tank system goes back to 12th century. The setting provides an ideal wetland habitat and refuge for a multitude of water birds, including migratory birds. A total of more than 130 bird species have been recorded in this wetland. Birds found here include the Lesser whistling duck, kingfishers, Herons, Open-bills, Black-headed ibises; migrants including various sandpipers, Snipes, Pintails and Garganeys. Flitting around are many species of butterflies such as the common and Plain tiger, Common and Crimson Rose, Joker and common Chocolate Soldier.



Northbound Two (N2)

🔹 Kalpitiya Lagoon

Situated on the top of the Puttalam lagoon, Kalpitiya lagoon is home to a rich mangrove vegetation. Mangrove provides livelihood to the local community who practice traditional fishing methods. Recent initiatives among the communities in the region include oyster farming and mangrove restoration. Whereas mangroves are crucial in maintaining the ecosystem balance of the region, the awareness among local populations on the non-economic benefits of the lagoon and its mangrove vegetation is insufficient. Recent initiatives therefore include raising awareness among the local communities on the scientific value of the lagoon and its ecosystem.



🔹 Sri Lanka Mangrove Conservation Project (Nursery)

The Small Fisheries Federation of Sri Lanka (Sudeesa) administers the mangrove nursery with a view to conserving the fast depleting mangroves of the region. Funded by Seacology, the nursery houses 11 mangrove plant species. The plants grown in the nursery are distributed to parties who are engaged in mangrove conservation. Sudeesa is also involved in mangrove restoration as the health of the mangroves directly affects the livelihood of small fishers.



🔹 Anawilundawa Wetland Sanctuary

Anawilundawa Sanctuary is one of six RAMSAR wetlands in Sri Lanka. The sanctuary covers 1,397ha lying between the coastal line and the Negambo – Puttalam railway line. This wetland consists of six large manmade tanks and three peripheral tanks interconnected to create a complex irrigation system built by King Parakramabahu, the Great. The history of this tank system goes back to 12th century. The setting provides an ideal wetland habitat and refuge for a multitude of water birds, including migratory birds. A total of more than 130 bird species have been recorded in this wetland. Birds found here include the Lesser whistling duck, kingfishers, Herons, Open-bills, Black-headed ibises; migrants including various sandpipers, Snipes, Pintails and Garganeys. Flitting around are many species of butterflies such as the common and Plain tiger, Common and Crimson Rose, Joker and common Chocolate Soldier.



🔹 Chilaw Town Septage Management Facility

Under the Asian Development Bank assisted Dry Zone Urban Water & Sanitation Project Chilaw town has been provided with a septage treatment facility. The treatment system consists of a flow through pond system with an anaerobic, facultative and maturation ponds. The capacity of the facility is 39 M3 per day. The facility is 10 km away from the UC limits and it is design to run with a minimum inputs of 6 trucks per day. The urban council is able to maintain the septage treatment facility with the income received from the charges. Although the daily requirement of sludge inflow is around 30 cm per day, it has been reported that the total truck loads produced in the year 2014 was 120 which is less than 1.2 % of the households considering the number of household 9547. The total cost of the plant is Rs. 203 million and it was commissioned in May 2015.

