

IESL Uva Chapter

1.0 Executive Committee for Year 2019/2020

N o	Name	Membership No	Committee Post
1	Eng.T.M.S.S.D. Tennakoon	M-5784	Chairman
2	Eng. Gunapala R.M.P.G.L	M-7613	Secretary
3	Eng. D.A.I. Fernando	AM-13264	Treasurer
4	Eng. H M D T Wijayabandara	AM 20194	Editor
5	Eng. W.G.C Sanjeewa	AM-14568	Assistant Secretary
6	Eng. H.M.S.K. Hennayake	AM-15431	Represent of CEB
7	Eng. P.A.S. Anuradha	M-6267	Represent of MWS&DB
8	Eng. H.M.L. Mohan Kumara	AM-14443	Represent of SLT
9	Eng. P.H.D Hemachandra	AM-12478	Represent of CECB
10	Eng.(Ms.) S.A.N.Samanmali	AM-15495	Represent of Irrigation
11	Eng. M.I.A. Sajeer	M7897	Represent of RDA
12	Eng.S.D.A.S Peiris	AM-15567	Represent of Provincial Council
13	Eng. J.M.A.C.Gunatne	M-6247	Represent of I-roads
14	Eng. (Mrs.) H.T.M. Satharasinghe	AM - 20116	Represent of Uma Oya
15	Eng. A.R.L.Samaraweera	AM - 22258	Represent of Other Org:

2.0 Event 01: Tree Plantation Program in Demodara Catchment, "Haritha Uyana" in Monaragala & Wellawaya – 01st January 2020

Ecosystem degradation in Sri Lanka has taken place very critically mainly due to deforestation, improper land use planning, and settlements, land degradation (erosion), improper waste disposal, overuse of agrochemicals, etc. For instance, between 1990 and 2010, Sri Lanka lost an average of 24,500 ha or 1.04% per year. In total, between 1990 and 2010, Sri Lanka lost 20.9% of its forest cover or around 490,000 ha. In Badulu Oya catchment context, according to the data from Land Use & Policy Planning Department, Badulla; more than 5,000 hectares of forest lands have been converted to build-up lands and agricultural lands in Badulu Oya catchment within last 25 years. As a

result, the infiltration of rainfall has been reduced and the surface flow has increased. Ultimately the groundwater availability has decreased and also people frequently experience floods in Badulla area.

By understanding this situation IESL Uva chapter commenced an Ecosystem Conservation program for Badulu Oya upper catchment. As the first step, the IESL Uva chapter in collaboration with NWSDB (RSC-Uva) conducted a tree plantation program on the 1st of January, 2020. More than 330 trees including Mee, Kubuk, Mahogany, Areca nut, Kudu Dawula, and Fruits were planted in Demodara, Badulla, Bandarawela, Mahiyanganaya and Monaragala areas.

3.0 Event 02: Technical session on “How Corrosion Control Design Criteria can Assist Practicing Engineering Professionals is proposed to held 22nd January 2020”

Program on “How Corrosion Control Design Criteria Can Assist Engineering Professionals” was organized by IESL-Uva chapter in collaboration with Dockyard General Engineering Services (Pvt.) Ltd. It was held on the 22nd of January, 2020 at Hotel Malindi, Bandarawela.

90 engineers were working in various engineering disciplines participated in the program. The event was commenced by planting two trees at Malindi hotel premises.

4.0 Event 03: Talk to school awareness program for Schoolchildren at Bandarawela Central College – 07th February 2020

IESL-Uva chapter in collaboration with YMS, IESL conducted the “Talk to school program” on 07th of February, 2020 at Central College, Bandarawela with the participation of 350 students from the school.

The introduction of the program was done by Eng. Sobana Thennakoon, Chairman of the IESL-Uva chapter. Then Eng. Lionel Sri Gunapala the secretary of the IESL-Uva chapter presented an inspirational talk on “Becoming an Engineer”.

Introduction to IESL and YMS was conducted by Eng. Prasad Rathnayake, DGM (Uva)-CEB. The presentation on “Engineer for National Interests” was delivered by Eng. Ruwan Liyanage, DGM (Uva)-NWSDB. And a presentation on Energy management was done by Eng. Loshan Lilantha, CEB.

Finally, school management appreciated the effort done by IESL to empower the next generation of the country through this kind of programs and marked concluding remarks of the successful event.

5.0 Event 04: Awareness Program of “Catchment protection, water quality and basic health practices” for Valluvar Tamil Vidyalaya– 28th February 2020

IESL Uva chapter organized an awareness program on “Catchment protection, water quality and basic health practices” for students of Valluvar Tamil Vidyalaya, Thelbadda, Badulla on 28th of February 2020.

60 students from Grade 2 to 5 participated in the program. Mr.K.Starlin from NWSDB and Mr.Suresh Kanna from the Health department, Badulla participated as resource persons for the Program

6.0 Event 05: Donation of Medical Safety Items for COVID 19 Pandemic to Badulla & Monaragala District Hospitals –22th April 2020

Theatre slippers, KN 95 Masks and PPE kits were donated to both district hospitals in Badulla and Monaragala. The donation was given by the members of the Uva chapter.

7.0 Event 06: Donation for Manufacturing of Ventilator by Members of the Chapter - 24th April 2020

Team of this project completed prototyping of Venturi V1.0 mechanical ventilator collaboration with PGH Badulla and obtained appreciable feedback from consultants and doctors.

Therefore, they have been designed Venturi V2.0 mechanical ventilator which is a more reliable and advanced ventilator that can compete with Industry-standard ventilators which cost around 3.5Million rupees. The aim to build 5 (five) “Venturi V2.0” ventilators and donate them to government hospitals. The average cost for manufacturing each Venturi V2.0 is around 765.30USD / 150,000.00LKR and it was donated by the chapter.

8.0 Event 07: Donation for Manufacturing of "Oxygen concentrator device" by Members of Chapter - 24th April 2020

With the risk of Covid-19 in Sri Lanka increasing day by day, a machine was designed to treat critically ill patients. A low-cost oxygen generator was designed and developed by a group of engineers (Eng. E.M.P.P. Ekanayake, Eng. H.V. Perera, Eng. M.V.D.D.M. Jayasinghe, Eng. R.M.V. Chathurange, Eng. R.M.D.C.N. Bandara, Eng. P.M.S.M.Lakmal and Eng. R.M.H.S Rathnayake), in collaboration with Provincial General Hospital, Badulla was demonstrated at PGH-Badulla on 20th April 2020.

The machine was able to generate oxygen using ambient air with purity up to 79.7% in 60% percent optimization and able to produce 95% purity in 95% optimization. The machine can treat up to 30 patients with a 5 l/min flow rate and cost about USD 790 per machine. The machine can be coupled with ventilators and also be used directly for patients who require oxygen.

9.0 Event 08:"Live Virtual Musical Fiesta" was done at SLT Studio, Bandarawela, on 06 July 2020

- Six songs were recorded and sent to program.

10.0 Event 09:Technical Session on 3rd September 2020 @ Capital Resort

- Energy-Efficient Communication for a Greener Tomorrow by Dr Himal Suraweera
- Broad Impact of Artificial Intelligence on Engineering by Dr Roshan Godalyadda
- Renewable Energy and The Smart Grid by Dr Parakrama Ekanayake

11.0 Future Program

- Technical Session on Painting and Paint Industry - Third week of September 2020
- Uva Chapter Cricket Festival at Palwattha Ground – First Week of October 2020
- Techno exhibition – October 2020.
- “B” Paper Examination – October 2020
- Annual General Meeting 2020/2021 - November 2020



EXECUTIVE COMMITTEE OF IESL UVA CHAPTER FOR THE SESSION 2019/2020



Tree Plantation Program in Demodara Catchment, "Haritha Uyana" in Monaragala & Wellawava



Awareness Program of "Catchment protection, water quality and basic health practices" for Valluvar Tamil Vidyalaya



Donation of Medical Safety Items for COVID 19 Pandemic to Badulla & Monaragala District Hospitals



Donation for Manufacturing of "Oxygen concentrator device" by Members of Chapter