## Short biography of H.M. Badra S. Herath

Mrs. Badra Herath has 22 years of service as an academic attached to the Department of Geography, University of Sri Jayewardenepura. Now she is working as a Senior Lecturer (Grade I). Prior to her present academic carrier, she worked as an Environment Associate to the Ministry of Forestry and Environment and to the Ministry of Industrial Development in Sri Lanka. After graduation with a BSc Special (Hons) in Agriculture, University of Peradeniya she has earned her BSc in Environmental Economics/ Natural Resource Management from the Postgraduate Institute of Agriculture (PGIA), University of Peradeniya. She has nearly completed her PhD Degree at the PGIA in collaboration with University of Central Queensland. She has obtained a postgraduate training on GIS and Remote Sensing at the University of Twente (Former ITC), the Netherlands by earning a nuffic fellowship offered by the government of Netherlands. She was a Research Associate to the Economy and Environment Program in South- East Asia and a Research Associate of the South Asian Network (EEPSEA-2000-2003) for Environment and Development in South Asia (SANDEE-2012-2016). She was a member to the National Coordinating Committee to the Disaster Management coordinated by the Ministry of Disaster Management of Sri Lanka. At present she is one of the resource persons to revise and updating of Forestry Sector Master Plan of Sri Lanka. In addition to her academic duties, she is working as the Principal Coordinator of the MSc Degree Program in GIS and Remote Sensing conducted by the Department of Geography through the Faculty of Graduate Studies. Having her multidisciplinary knowledge, she has been contributing to conduct following course units for the undergraduates students of the Department of Geography since the inception of her academic carrier.

Course units undertaken for the undergraduate students

- 1. Agriculture Geography
- 2. Agro-climatology
- 3. Biogeography
- 4. Disaster Management
- 5. Natural Resource Management
- 6. Introduction to Geographic Information System (GIS)
- 7. Introduction to Remote Sensing
- 8. Application of Geospatial Technologies for Natural Resource Management
- 9. Soil Science
- 10. Theoretical and Applied Geography

## **Research publications**

Hearath, H.M.B.S., Pushpakumara, N.G., Haesom, M. and Wickckramagamage, P.(2022) A Geospatial and Socio-economic Assessment of Tree Density of Trees Outside Forests Sources in Agro-ecological Regions: Home gardens in Upper Mahaweli Catchment in Sri Lanka. Conference Proceedings of PGIA Annual Congress. Postgraduate Institute of Sri Lanka

- Herath, H.M.B.S. , D.K.N.G. Pushpakumara, M. Hewson and P. Wickramagamage. (2021). Spatial and Temporal Changes of Homegarden Land Use as a Tree Resource Outside Forests in Upper Mahaweli Catchment of Sri Lanka: Biophysical and Socioeconomic Determinants of Major Changes. Tropical Agricultural Research (2021) 32(2): 229-242.
- Hearath. H. M. Badra S.(2021). Geospatial assessment on land-use changes of Home Gardens in Upper Mahaweli Catchment in Sri Lanka. Vidyodaya Journal of Humanities and Social Sciences. VJHSS (2021), Vol. 06 (01).
- Rathnapala, P. P. R. P. S. & Herath, H. M. B. S.(2022). A Comparative Study on Post-Harvest Losses Associated with Upcountry Vegetable before and During COVID -19 Pandemic Situation: A Case of The Welimada Divisional Secretariat Area. Vidyodaya Journal of Humanities and Social Sciences. VJHSS (2021), Vol. 07 (01).
- Sewwandi, H. A. G. R. & Herath H. M. B. S. (2022) A Comparative Study on Socio-Economic Impact of COVID- 19 Pandemic on Fisheries Industry in Tangalle Divisional Secretariat Division. Vidyodaya Journal of Humanities and Social Sciences. VJHSS (2021), Vol. 07 (01).
- Hearath, H.M.B.S., N.G. Pushpakaumara & Thisara Sathsara (2017). Integrated assessment using GIS and Remote Sensing on land use changes and household vulnerability to climate change impacts: The case of Kandy world heritage city, Sri Lanka. International Conference on Climate Change.
- H.M.B. Hearath and Thisara Sathsara. 2016. A Multi- Scale Spatial Assessment of Resilience Capacity to Natural Disaster in Sri Lanka: Case of Flood Hazards in Mathara District. Page No 16. Interdisciplinary International Conference Regional Co- operation, Conflicts and Constructiveness in South Asia: Strengthening SAARC, Department of Geography, Parvatibai Chowgule College of Arts and Science (AUTONOMOUS) and Indian Council of Social Sciences Research, New Delhi.
- H.M.B. Hearath and Thisara Sathsara. 2016. An Integrated Assessment of the Community Resilience to Natural Disaster in Sri Lanka: Case of Landslides and Subsidence in the Matale District, Sri Lanka. Page No 41, National Conference Proceedings of Conference on Geospatial Science and Disaster Management, Institute of Human Resource Advancement (IHRA) University of Colombo Sri Lanka. ISBN: 978 9- 55046- 087-8
- H.M.B. Hearath and Thisara Sathsara. 2015. Dynamic of Traditional Food System of Unique Himbiliyakada Village in Matale District, Sri Lanka, , Page No 43, Changing Socio-Economic Dynamics in Sri Lanka. Proceedings of the International Research Conference, Faculty of Arts University of Colombo.
- Hearath, H.M.B.H., M.S.L.R.P Marasinghe, "Forest Fire Susceptibility Mapping Using Geographical Information Systems (GIS) and Remote Sensing (RS) for Protected Areas: Case of Horton Plains National Park, Sri Lanka" International Research conference on Humanities and Social Sciences IRCHS) 2012, Proceedings of the Faculty of Humanities and Social Sciences University of Sri Jayewardenepura Gangodawila Nugegoda
- Hearath H.M.B.S.2012. "Integrated approach for forest fire management using Mobile GIS" 4th International Conference on Geo-Information Technology *for* Natural Disaster Management, held in Colombo, Sri Lanka Organized by University of Uva Wellassa, Sri Lanka.

Hearath H.M.B.S. and E.A.P.N.Edirisinghe. 2011. "An assessment on deforestation for strengthening the implementation of climate change policies: Case of dry zone forests in North Central Province in Sri Lanka". International Conference of Science and Technology for Development held in July 06th ,Calgary, Alberta, Canada.

Hearath H.M.B.S , E. A.P.N.Edirisinghe. 2010.An integrated approach to restore world heritage biosphere reserve: case of Singharaja rain forest Sri Lanka. 12<sup>th</sup> Commonwealth Forestry Conference held in June 2010 in Edinburge,

Hearath, H.M.B.S.Hearath, L.H.P.Gunerathne, Ayoni Nirosha. 2010. "Indigenous Knowledge in Climate Change Adaptation Measures Practiced by Dry Zone Farmers in Sri Lanka". Third international conference on Climate Change and Developing Countries, organized by University of Mahathma Gandhi, Kerala, India.

Hearath H.M.B.S and Tilan Gunasekara 2009. "Sustainable Agriculture and Environmental Protection: Case of vegetable cultivation in slope lands in Walimada district", International conference on Economic Development and Environment, Proceedings of Geographer's Association in Sri Lanka.

Hearath H.M.B.S., and Chamila Priyangani. 2009. "Impact of Export Agriculture Crops in Rural Economy: A comparative analysis of Cinnamon and pepper cultivation in Rathnapura District". Proceedings of Geographer's Association in Sri Lanka, 2009.

Hearath, H.M.B.S and Randeni Leel, 2004 "Pollution Control in Industrial Estates in Sri Lanka: Private Sector participation for sustained environmental performance", Economy & Environmental Program in South- East Asia. WWW/ EEPSEA.org,2004.

Hearath, H.M.B.S. 2003 "An Economic Approach to Manage Industrial Water Pollution: Case of Kelani River Basin in Sri Lanka", Ministry of Policy Planning and Implementation. ISBN-955-9017-08 - X.

Hearath, H.M.B.S. 2002. "An Analysis of Pollution Management Policies in Relation to Regional Development in Sri Lanka", Proceedings of the Third Annual Session, Faculty of Graduate Studies, University of Sri Jayewardhenepura, Sri Lanka.

Hearath, H.M.B.S., Kotagama, H.B.1997., "Economic Management of Non-renewable Natural Recourse: An Empirical Application on a Phosphate Deposit in Sri Lanka", Tropical Agriculture Research, Vol./8..