

***CURRICULUM VITAE***

**Nandani Dhammika Kumari Dayawansa**  
*B.Sc, M.Sc, PhD*  
**Department of Agricultural Engineering**  
**Faculty of Agriculture**  
**University of Peradeniya**  
**Peradeniya**  
**Sri Lanka**



## PERSONAL DETAILS

**NAME (with initials)** : N.D.K. Dayawansa  
**NAME IN FULL** : Nandani Dhammika Kumari Dayawansa  
**PERMANENT ADDRESS** : No. 46 C, Pragathi Mawatha, Uda Eriyagama,  
Peradeniya, Sri Lanka.  
Tel: 0094-81-2387216

### ADDRESS FOR CORRESPONDENCE:

Department of Agricultural Engineering  
Faculty of Agriculture  
University of Peradeniya  
Sri Lanka.  
Tel: 0094-81-2395471

**E-MAIL ADDRESS** : dammid@pdn.ac.lk  
**DATE OF BIRTH** : August 16, 1967  
**PLACE OF BIRTH** : Kadugannawa, Sri Lanka.  
**SEX** : Female  
**CIVIL STATUS** : Married  
**NATIONALITY** : Sri Lankan

## ACADEMIC QUALIFICATIONS

(in chronological order)

### SCHOOL EDUCATION

**SCHOOL** : Girls' High School, Kandy, Sri Lanka  
**YEARS ATTENDED** : 1979-1987  
**EXAMINATIONS PASSED** : GCE (Ordinary Level), 1983  
: General Certificate (Advanced Level)  
Examination in 1986

**UNIVERSITY EDUCATION - B.Sc**

**UNIVERSITY** : University of Peradeniya,  
Peradeniya, Sri Lanka

**YEARS ATTENDED** : 1987 - 1993

**EXAMINATIONS PASSED** : B.Sc. Agriculture (First class)  
in 1993

**FIELD OF SPECIALIZATION** : Agricultural Engineering

Duration of Specialisation : Two academic terms

Subjects for Specialisation : Soil & Water Engineering  
Soil Conservation Engineering  
Post Harvest Technology

Title of the Research Project : GIS Based Erosion Model for the  
Kotmale Sub Catchment

**POSTGRADUATE EDUCATION - M.Sc**

**UNIVERSITY** : Asian Institute of Technology (AIT),  
Bangkok, Thailand.

**YEARS ATTENDED** : 1996-1997

**EXAMINATIONS PASSED** : M.Sc. in Remote Sensing and GIS with  
Grade Point Average of 4.0/4.0

**FIELD OF SPECIALIZATION** : Remote Sensing and Geographical  
Information Systems (GIS)

Title of the thesis : The Identification of Non-Point Source  
Pollution Risk Using GIS and Remote  
Sensing Techniques.

### **POSTGRADUATE EDUCATION - PhD**

**UNIVERSITY** : University of Newcastle upon Tyne, UK  
**PERIOD ATTENDED** : September, 1998 - March, 2002  
**FIELD OF SPECIALIZATION** : Hydrology and Water Quality  
Title of the Thesis : The Development of Nutrient Pollution Models for use at the Catchment Scale.

### **PROFESSIONAL QUALIFICATIONS AND WORK EXPERIENCE**

#### **EMPLOYMENT HISTORY (in chronological order)**

- (i) **POST** : Temporary Demonstrator  
**EMPLOYER** : University of Peradeniya, Peradeniya, Sri Lanka.  
**PERIOD** : May, 1995 – July, 1995.  
**DUTIES** : Conducting practical for the undergraduates.
- (ii) **POST** : Lecturer/ Senior Lecturer in Agric. Engineering  
**EMPLOYER** : University of Peradeniya, Peradeniya, Sri Lanka.  
**PERIOD** : July, 1995 - to-date.  
**DUTIES** : Conducting lectures and practical for undergraduates and postgraduate students, research supervision, conducting research.
- (iii) **PRESENT POSITION:** Professor

### **DISTINGUISHED AWARDS/ PRIZES**

- a. Tim Kendall memorial prize for the best performance in the M.Sc. program, AIT, Thailand, August, 1997.
- b. Yoh Kurosowa prize for the best performance among women graduates, AIT, Thailand, August, 1997.
- c. Winner of the Young Engineers section of the 'IESL/IWMI Best Technical Paper Competition', 2002.
- d. Best Presentation award in 'Soil and Water Management' session of the PGIA Annual Congress, 2002.
- e. Best Technical Paper Award at the International Conference on Natural Disaster Management and Infrastructure Management, 7-8 November, 2012, Colombo, Sri Lanka.

- f. Presidential Award for Scientific Research published in the year 2008
- g. NSF Awards for Supervision of research Degrees (SUSRED) – 2017.

### **POSITIONS HELD**

- a. President, Geo-Informatics Society of Sri Lanka, 2005/2006.
- b. Secretary, Board of Study in Agricultural Engineering, Postgraduate Institute of Agriculture, University of Peradeniya, January, 2010 – January, 2016
- c. Chairperson, Board of Study in Agricultural Engineering, Postgraduate Institute of Agriculture, University of Peradeniya, January, 2016 -January, 2019, February, 2022 todate.
- d. Programme coordinator, Geo-Informatics postgraduate programme, Postgraduate Institute of Agriculture, University of Peradeniya, 2006 & from 2013 todate
- e. Programme coordinator, Agricultural and Biosystems Engineering postgraduate programme, Postgraduate Institute of Agriculture, University of Peradeniya, 2004-2006.
- f. Coordinator, Crossing Boundaries Project, Postgraduate Institute of Agriculture, University of Peradeniya, 2009-2011.
- g. Coordinator, IDRC-SAWA Fellowship Project, Postgraduate Institute of Agriculture, University of Peradeniya, 2012 – to date.
- h. Chairperson, Publication and Public Relations Sub Committee, Faculty of Agriculture, University of Peradeniya, 2013, 2014.

### **LIST OF PUBLICATIONS**

#### ***JOURNAL ARTICLES***

Wickramasinghe, M.R.C.P., Dayawansa, N.D.K., Jayasiri, M.M.J.G.C.N. and Ranjith Premalal De Silva, A study on external pressures of an ancient irrigation cascade system in Sri Lanka, *Agricultural Systems*, Volume 205, <https://doi.org/10.1016/j.agry.2022.103593>.

Jayasiri, M.M.J.G.C.N., Dayawansa, N.D.K. and Sudhir-Yadav (2023). Assessing the roles of farmer organizations for effective agricultural water management in Sri Lanka, *Agricultural Systems*, Volume 205, <https://doi.org/10.1016/j.agry.2022.103587>.

Jayasiri, M.M.J.G.C.N., Sudhir-Yadav, Dayawansa, N.D.K., Propper, C.R., Kumar, V., Singleton, G.R. (2022). Spatio-temporal analysis of water quality for pesticides and other agricultural pollutants in Deduru Oya river basin of Sri Lanka. *Journal of Cleaner Production*, 330, 129897, <https://doi.org/10.1016/j.jclepro.2021.129897>.

Jayasiri, M.M.J.G.C.N., Yadav, S., Propper, C.R., Kumar, V., Dayawansa, N.D.K. and Singleton, G.R. (2022). Assessing Potential Environmental Impacts of Pesticide Usage in Paddy Ecosystems: A Case Study in the Deduru Oya River Basin, Sri Lanka. *Environmental Toxicology & Chemistry*, 41:343-355, <https://doi.org/10.1002/etc.5261>.

Jayasiri, M.M.J.G.C.N., Yadav, S., Dayawansa, N.D.K. & Ingold, K. (2022). Managing agricultural water resources: Addressing the complexity of innovation, social perspectives, and water governance in Sri Lanka. *Irrigation and Drainage*, 1–15. <https://doi.org/10.1002/ird.2693>

Hemachandra, E.M.G.P., Dayawansa, N.D.K. and De Silva R.P. (2021). Application of Standard Precipitation Index (SPI) to assess rainfall variability in a major agricultural area in Dry Zone of Sri Lanka. *Tropical Agricultural Research*, 32(3): 276-286.

Wickramasinghe, M.R.C.P., De Silva, R.P. & Dayawansa, N.D.K. (2021). Climate Change Vulnerability in Agriculture Sector: An Assessment and Mapping at Divisional Secretariat Level in Sri Lanka. *Earth Syst Environ*, <https://doi.org/10.1007/s41748-021-00206-9>

Hemachandra, E.M.G.P., Dayawansa, N.D.K. and De Silva, R.P. (2020). Developing a Composite Map of Vulnerability to Rainfall Extremes in Sri Lanka. In *Water, Flood Management and Water Security Under a Changing Climate* Springer, Cham., (pp. 63-84).

Gunawardena, D.L.K. and Dayawansa, N.D.K. (2020). Assessment of Water Availability for Agriculture and Other Uses–Development of Indices for Deduru Oya River Basin in Sri Lanka. In *Water, Flood Management and Water Security Under a Changing Climate*. Springer, Cham., (pp. 187-200)

Dayawansa, N.D.K. and Ranjith Premalal De Silva (2020). *Geo-Informatics: Contribution from spatial sciences for agricultueal development and food security, Agricultural research for sustainable food systems in Sri Lanka, Volume 2: Pursuit for advancements*, R.P. De Silva, G. Pushpakumara, P. Prasada and J. Weerahewa (Eds), Springer Nature Singapore, (pp 239-254).