# CURRICULUM VITAE - N.S.ABEYSINGHA

#### PERSONAL INFORMATION

Name in full : Nimal Shantha Abeysingha.

Date of Birth : 1972 - 02 - 03
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#### **EMPLOYMENT INFORMATION**

Current employment : Senior Lecturer ii

Institute : Department of Agricultural Engineering and Soil Science

Faculty of Agriculture, Rajarata University of Sri Lanka.

Puliyankulama, Anuradhapura, Sri Lanka.

Lecturing Subjects : Watershed Management, Water resources of Sri Lanka,

Land Surveying, Climate change and Agriculture

Research interest areas : Hydrological Modelling, Watershed Management,

Meteorology.

#### **ACADEMIC INFORMATION**

#### Ph.D. in Water Science and Technology

Institute - Water Technology Centre, Indian Agricultural

Research Institute, New Delhi, India

Effective date -15 - 10 - 2014

Research Project - Based on Hydrological Modelling

### M.Sc. in Forestry and Environmental Management

University - University of Sri Jayawardenapura Sri Lanka

Department - Forestry and Environmental Science

Effective date - 01-06-2004

Research Project - Based on Watershed Management.

## **B.Sc. sp. Degree in Agriculture**

University - University of Ruhuna, Sri Lanka

Class - Second class upper division (Honor)

Specialization - Soil science

Effective date - 24-10-2000

Research project - Based on Soil Physics

## AREA OF EXPERTISE

Meteorology, hydrology and watershed management in relation to Agriculture and Environment.

### RESEARCH AND PUBLICATIONS

### Research articles – Full papers

- N.S. Abeysingha, Adlul Islam, and Man Singh (2018) Assessment of climate change impact on flow regimes over the Gomti River basin under IPCC AR5 climate change scenarios, Water and Climate change. DOI: 10.2166/wcc.2018.039
- 2. N.S.Abeysingha, K.B. Dassanayake and C.S.Weerarathna (2018) Will restoration of ecological functions of tank cascade system contribute to reduce CKDu in Sri Lanka?a Review. *Journal of environment management and sustainable development*, 7 (3), DOI: 10.5296/emsd.v7i3.13129.
- N.C Wijesundara., N.S Abeysingha, and D. M. S. L. B Dissanayake. (2018) GIS-based soil loss estimation using RUSLE model: a case of Kirindi Oya river basin, Sri Lanka, Modeling Earth Systems and Environment, DOI 10.1007/s40808-018-0419-z
- N. S. Abeysingha, M Singh, A.Islam, M Khanna., V. K Sehgal & H, Pathak (2017)
  Impacts of Climate Change on Stream Flow in the Gomti River Basin of India,
  Journal of Agricultural Engineering ISAE 54(4), http://www.isae.in / journal\_jae.aspx.
- 5. S.D.Kottagoda and N.S.Abeysinghe (2017), Prioritization of watersheds in *Kelani* river basin for soil and water conservation -Geomorphometric analysis, *Journal* of National Science Foundation 45 (3): 273 285

- N.S.Abeysingha, A.M.K.R.Bandara, Surendra Sing (2017) Effect of Eppawela High Graded Rock Phosphate (HERP) applied with Vinasse on yield and quality of Sugarcane (variety CO775), National Academy of Science Letters, and 40:253-256.
- 7. N.S.Abeysingha, J,M.N.S.Jayasekara, T.J.Meegastenna (2017) Streamflow trends in up and midstream of Kirindi Oya river basin in Sri Lanka and its linkages to rainfall, *MAUSAM*, 68, 1 99-110.
- 8. **N.S.Abeysingha**, J.P.H.U.Jayenethithi, E.J. Kosgollegedara, S.Hammer (2016), Variation in Soil Quality Parameters in the *Thaulla* Area of a Small Reservoir A Case Study of Ulankulama Tank at Anuradhapura, Sri Lanka, *Journal of Agricultural Physics*, 2016 (16, 1,2) 1-8.
- N.S. Abeysingha, Man Singh, Adlul Islam, V. K. Sehgal, (2016) Climate change impacts on irrigated rice and wheat production in Gomti River basin of India: a case study, Springer Plus, DOI 10.1186/s40064-016-2905-y
- 10. N.S.Abeysingha, Man Singh, V. K. Sehgal, Manoj Khanna, & Himanshu Pathak, Analysis of trends in streamflow and its linkages with rainfall and anthropogenic factors in Gomti River basin of north India, *Theoretical and Applied Climatology*, Accepted on 21 Jan 2015 DOI 10.1007/s00704-015-1390-5.
- 11. N.S. Abeysingha, Man Singh, V. K. Sehgal, Manoj Khanna, Himanshu Pathak, Priyantha Jayakody and Raghavan Srinivasan. Assessment of water yield and evapotranspiration over 1985 to 2010 in the Gomti River basin in India using the SWAT model, Current science, Vol 108, No 12, 2015.
- 12. **N.S. Abeysingha**, Man Singh, V.K. Sehgal, Manoj Khanna, and Himanshu Pathak, **Trend Analysis of Rainfall and Temperature of Districts of Gomti River Basin** in North India, *Journal of Agricultural Physics* 14, 2014, pp56-66.
- 13. H.A.S.Weerasingha, **N.S.Abeysingha** and B.D.S.K.Ariyawansha, The effect of High-Grade Eppawala Rock-Phosphate as a Phosphorus substitute on yield and quality of Sugarcane (*Saccharum officinarum*) in Sri Lanka, *Proceeding of the symposium on Miner export crops*, 16-17 August 2012.
- 14. **N.S.Abeysingha** and C.S.Weerarathne 'Preliminary study on quantification of Biological Nitrogen fixation in Sugarcane grown in Sevanagala in Sri Lanka' *Journal of National Science Foundation* 2010, 38(3), 203-206.
- 15. L. Samarappuli, P.Karunarathne, U.Mitharasena, and **N.Shantha**,; *Mucuna bracteata* Ideal cover crop for soil and water management in Rubber cultivation, *Tropical Agriculture Research and extension* 6, 2003.

- 16. B.R.G.I.T. Ranasingha, T.E.Weerawardena, **N.S.Abeysingha** (2016), Tea refuse as a material for compost production. Symposium proceeding 3<sup>rd</sup> international research symposium, Rajarata University of Sri Lanka.
- 17. **N.S.Abeysingha**, D. G. P.G. C. Senavirathna, H. M. G. N. S. C. Bandara, K.G.S. Nirmanee (2017) Assessment of Soil-related problems in low yielding areas of Gal Oya Sugarcane Plantation in Sri Lanka, *journal of Soil Science Society of Sri Lanka*. (Accepted for publishing, in Press)
- 18. **N.S. Abeysingha**, D.S.M.D. Silva and D. M. S. Duminda, Hydro chemical assessment of Agro-well water for irrigation in *Thalawa* block in *Mahaweli* system-H in Anuradhapura, Sri Lanka *–Journal of Agricultural sciences*, Sabaragamuwa University of Sri Lanka. (Accepted for publishing, in Press )

#### Full papers on the pipeline/ under review

- **1.** .**N.S.Abeysingha**, M.G.Wickramasuriya, T.J.Meegastenna, Assessment of meteorological and hydrological drought; a case study in *Kirindi Oya* River basin in Sri Lanka, Under review *Int. J. Hydrology Science and Technology, Inderscience*
- 2. K. G.M. W. Gunapala and **N. S. Abeysingha**, Chemical precipitation function of *Thaulla* area in small tank in Sri Lanka Under review in the *Journal of Environmental Monitoring* and Assessment / Springer

#### Research articles – Abstracts and Extended Abstracts

- D.S.M.D. Silva and N.S.Abeysingha, Variation of Groundwater Levels and Quality of Agro-wells in *Talawa* block in Mahaweli system-H in Anuradhapura – Sri Lanka, 7<sup>th</sup> international Groundwater Conference, New Delhi, 11-13, December 2017
- N.S.Abeysingha, J.P.H.U.Jayenethithi, E.J. Kosgollegedara, S.Hammer (2016),
  Variation of soil pramters in the Thaulla area of Ulankulama Tank at Anuradhapura, Sri Lanka. Symposium Proceedings, 23 International Forestry and Environment Symposium 2016, September 23 to 24 at Heritake Kandalama, Sri Lanka.
- M.G.Wickramasuriya, N.S.Abeysingha, T.J.Meegastenna, (2016) Assessment of dry/wet conditions using meteorological and hydrological drought indices in *kirindi oya* river basin. Proceedings of the Research Symposium, Faculty of Agriculture RUSL.

- S.D.Kottagoda and N.S.Abeysingha (2016), Prioritization of watersheds in kelani river basin for soil and water conservation - geomorphometric analysis, Proceedings of the Research Symposium, Faculty of Agriculture RUSL.
- N.S.Abeysingha, Man Singh, Adlul Islam, Manoj Khanna, V.K.Sehgal, and Himanshu Pathak, Potential climate change impacts on the surface water resources of Gomti River basin in India. International Conference on Natural Resource Management for Farming Systems and Rural Livelihood during 10-13 February, ICAR, New Delhi, 2015. Abstract.
- N.S.Abeysingha, Man Singh, Manoj Khanna, V.K.Sehgal, and Himanshu Pathak, Potential climate change impacts on the streamflow of Gomti River basin in India. Symposium Proceedings, 19th International Forestry and Environment Symposium 2014, 24 to 25 Sigiriya, Sri Lanka.
- N.S.Abeysingha, Man Singh, Manoj Khanna, V.K.Sehgal, and Himanshu Pathak, Modelling for spatial and temporal patterns of green and blue water flow in an Agricultural River basin in India. Extended abstract for the Symposium proceedings, CLCARP, International Research symposium, 11-12, August 2014. Colombo, Sri Lanka.
- N.S Abeysingha, Combined effect of Eppawela High-Grade Rock Phosphate (HERP) and Triple Super Phosphate (TSP) as a Phosphorus source for Sugarcane on RBE soils in Sri Lanka. 3<sup>rd</sup> International symposium, symposium Proceedings, Sabaragamuwa University of Sri Lanka, 2010.
- J,M.N.S.Jayasekara, N.S.Abeysingha, T.J.Meegastenna, Hydro-climatic trends in Kirindi Oya river basin, 7<sup>th</sup> Annual Research symposium proceedings, faculty of Agriculture, Rajarata university of Sri Lanka pp16
- D.G.P.G.C. Senavirathna, **N.S.Abeysingha**, M.G.T.S.Amarasekara, K.G.S.Nirmanee and H.M.G.N.S.C. Bandara, Assessment of Soil related problems in low yielding area of Gal Oya sugarcane plantation, 7<sup>th</sup> Annual Research symposium proceedings, faculty of Agriculture, Rajarata university of Sri Lanka pp76
- B.R.G.I.T. Ranasingha, T.E.Weerawardena and **N.S.Abeysingha**, Potentials of tea refuse as Material for compost production, 7<sup>th</sup> Annual Research symposium proceedings, faculty of Agriculture, Rajarata university of Sri Lanka pp81
- R.A.I.Chandrakumara, M.R.D.L.Kulathunge, S.H.S.A.Silva, N.S.Abeysingha and D.M.Jinadasa, Inorganic Phosphates with compost on soil phosphorus availability and on Nodulation, growth and yield of grain legumes on Non calcic brown soils. Research

- symposium 2010 proceedings, Faculty of Agriculture, Rajarata university of Sri Lanka pp36.
- S.S.Kumara, R.A.C.J Perera, N.S.Abeysingha and D.M.Jinadasa, Response of Maize to High grade eppawela rock phosphate, Eppawela single super Phosphate and organic manure. Research symposium 2010 proceedings, faculty of Agriculture, Rajarata university of Sri Lanka pp40.
- **N.S. Abeysinghe**, W.M.D Kumari, M.M.A.B Kithulwata, Bio fertilizer (*Azospirillum brazilense*) as a supplementary source of nitrogen fertilizer to sugarcane production in Sri Lanka, 2<sup>nd</sup> International symposium Proceedings, Sabaragamuwa University of Sri Lanka, 2008.
- N.S Abeysingha, D.M.S.H.K Ranasinghe and R. Attygala, Impact of Land Use changes in the catchment on the quality and quantity of water in the Rajangana reservoir., Ninth annual Forestry and Environmental symposium, Department of Forestry and Environmental Science, University of Sri Jayawardenapura Sri Lanka, 2004.

#### **CHAPTERS IN BOOKS**

- N.S. Abeysingha, Man Singh, Adlul Islam, V. K. Sehgal, (2016)Potential climate change impacts on the surface water resources of Gomti River basin in India, Advances in Soil and Water Resources Management for Food and Livestock Security in Changing climate, Publisher: Soil Conservation Socoety of India, Editors: Suraj Bhan, Sanjay Arora, pp.505-519
- Nimal S Abeysingha, Effective field class assessment, Assessing students in higher education through alternative methods-selected topics. Staff development center, Wayamba University of Sri Lanka (ISBN, 978-955-8746-68-4)
- Suryendra Singh, S. Elamathi, P. Anandhi, **N.S. Abeysingha**, B.K. Dwivedi, Nanotechnology–A new technology for food and agricultural industry, A hand book on nano-technology, Editors, B.K.Dwivedi, and S.D.Mishra, Proceeding of the 16<sup>th</sup> Indian Agricultural scientist and farmers congress on Nano-technological approaches for sustainable Agriculture and Rural development, 22 23 February 2014.

#### **News paper articles and Advisory Circulars**

 N.S Abeysingha, C.S Weerathne, Fertilizer application to Sugarcane cultivation, Advisory Secular 12, 2007; Sugarcane research institute, udawalawe, Sri Lanka.

- N.S.Abeysingha, Combat soil erosion for soil fertility in Dry zone, leaflets in Sinhala medium for the farmers community in the dry zone in Sri Lanka.
- Publish three news paper articles on Soil degradation and Biological nitrogen fixation associated with sugarcane in Sarubima supplement of Divaina Newspaper.

## **AWARDS**

- 1. IARI New Delhi, gold merit medal for the outstanding performance in the Ph.D. programme.
- 2. A gold medal for the best presentation in Crop science and Agronomy session, Second International Symposium held on 12<sup>th</sup> July 2008; Sabaragamuwa university of Sri Lanka.

# IMPORTANT WORKSHOP/ TRAINING ATTENDED

- Introductory SWAT workshop held on July 16 17, 2012 organized by Texas Agri Life Research and Indian Institute of Technology Delhi.
- 2. Training on SWAT modelling held on 16 20 December 2013 organized by National Institute of Hydrology, Roorkee, India.
- Asia pacific regional training of instructors on Ecosystem based Disaster Risk Reduction and Adaption held on 19 -22 May 2015 organized by the United Nations Environmental Programme at Bangkok, Thailand.
- 4. 18<sup>th</sup> Advanced short course on GIS and Applications held on 24 29 August 2015 at PGIS Peradeniya University.

# PROFESSIONAL QUALIFICATIONS AND EXPERIENCE

- Working as a Senior Lecturer in the Department of Agricultural Engineering and Soil Science, Faculty of Agriculture, Rajarata University of Sri Lanka since 01 October 2008.
- Worked as a coordinator to organize one week training programme on human resource development of the Agriculture Teachers in ISURU PASAL development.
- Worked as a student counselor for one year period with effect from 18 January 2011.
- Worked as a Research Officer in Chemistry division of Sugarcane Research Institute, Udawalawe/ Sri Lanka from 29<sup>th</sup> November 2004 to September 2008. (03 years and 09-month service)

- Worked as a temporary Lecturer in the Department of Soils and Water Resources Management at the Faculty of Agriculture, University of Rajarata Sri Lanka from 01<sup>st</sup> of July 2001 to 31<sup>st</sup> of August 2004.(03 years)
- Worked as a temporary Demonstrator for three months in the Department of Agricultural Chemistry at the Faculty of Agriculture, University of Ruhuna.
- Worked as an Academic Sub warden, of the Nivanthakachethiya Boys hostel University of Rajarata Sri Lanka.
- Worked as a Visiting lecturer in conducting the subject of Agro-meteorology (SWAM 2102) to the Department of Soils and Water Resources Management at the Faculty of Agriculture, University of Rajarata, Sri Lanka.
- Worked as a Visiting lecturer in conducting the subject of Environmental Quality Management (EMGT 2243) to the Department of Social Sciences at the Faculty of Social Sciences and Humanities, University of Rajarata, Sri Lanka.
- Worked as a visiting lecturer in the Department of Soils and Water Resources Management at the Faculty of Agriculture, University of Rajarata Sri Lanka in conducting lectures on Water resources of Sri Lanka and Catchment hydrology.

I solemnly state that the above particulars are true to the best of my knowledge.

Dr. N.S. Abeysingha

Senior Lecturer

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