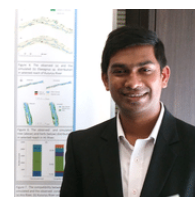


# Kelum Sanjaya

PhD

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*"Our task must be to free ourselves. . . by  
widening our circle of compassion to embrace  
all living creatures and the whole of nature and  
its beauty" Albert Einstein*

<https://scholar.google.com/citations?user=zKnRUWQAAAAJhl=en>, Citations: 74, h-Index:6, i-10 index: 2

<https://www.researchgate.net/profile/KelumSanjaya2>, RGscore : 11.66

## Education

2013–2016 **PhD**, *Saitama university*, Saitama, *Japan*.

2006–2011 **BSc**, *University of Ruhuna*, Matara, Sri Lanka, .  
Specialized in Limnology

## Doctoral thesis

Title *The influence of sediment deposition and erosion processes on the colonization of riparian vegetation in middle river reaches*

Description In my Phd research, I used GIS and remote sensing techniques to study the habitat changes of the Japanese rivers and the sediment erosion and deposition processes over time. In addition, the vegetation colonization processes after the gravel sediment deposition in river channels were studied to understand the influence of gravel sediment on riparian vegetation colonization. Moreover, an existing dynamic riparian vegetation model was modified and used to forecast the riparian vegetation processes with the changing flood regimes. Then this model was validated and applied to different rivers in Japan to describe the habitat deterioration of modern Japanese rivers.

## Experience

### Vocational

2017–up to date **Senior Lecturer**, *University of Ruhuna*, Matara, Sri Lanka, 81000.

2016-2017 **Temporary Senior Lecturer**, *University of Ruhuna*, Matara, Sri Lanka, 81000.

2011-2013 **Temporary Lecturer**, *University of Ruhuna*, Matara, Sri Lanka, 81000.

## Computer skills

Operating systems:	Windows	Statistical Packages:	Advanced knowledge of SPSS for windows, PRIMER v-5
Office packages:	Excel, Word, Access, Power point	GIS software:	Arc GIS, Ilwis, QGIS, SAGA GIS
Languages and Scripts:	Fortran	Numerical models:	HEC RAS, DRIPVEM for riparian vegetation modeling, ARIMA, Sedtrans5

## Awards

The Japanese government scholarship (MEXT) to pursue the degree of Doctor of Philosophy

Full scholarship for the training course on Regional Climate Change and Coastal Disaster Mitigation, 17 – 20 September, 2018, Tianjin, China

## Academic experiences

- Reviewer of the Journal of Wetland Ecology and Management
- Reviewer of the Journal of Hydro-Environment Research
- Reviewer of the Journal of Asian Journal of Agriculture and Food Science
- Participation of the “Science Writing Workshop” Jointly organized by Sri Lanka Association For Fisheries and Aquatic Resources (SLAFAR) and Bay of Bengal Large Marine Ecosystem Project (BOBLME) from 29th April to 2nd May 2013
- Participation for the national seminar on Ground water organized by International Water Management Institute (IWMI), Sri Lanka, 2013

## Publications

T Asaeda, Md Rashid, and K Sanjaya. Reservoir sediment flushing and downstream vegetation encroachment in the kurobe river, japan. In *Joint aquatic sciences meeting*, 2014.

T Asaeda and K Sanjaya. Effects of upstream dam construction on the habitat alteration of riparian zone in downstream urban area. In N Kim, editor, *Proceedings of the 4th international conference of urban biodiversity and design (URBIO 2014) - Cities and Water - Conserva-*

*tion, Restoration and Biodiversity*. the Korean Society of Environmental Restoration Technology (KOSERT), 2014.

T Asaeda and K Sanjaya. Does sediment shortage cause river forestation ? a numerical approach. In *36th IAHR world congress*, 2015.

T Asaeda and K Sanjaya. The response of riparian vegetation to sediment deposition in midstream river channel. In *11th International Symposium on Ecohydraulics*, 2016.

Takashi Asaeda, Abner Barnuevo, Kelum Sanjaya, Miguel D Fortes, Yoshikazu Kanekawa, and Eric Wolanski. Mangrove plantation over a limestone reef—good for the ecology? *Estuarine, Coastal and Shelf Science*, 173:57–64, 2016.

Takashi Asaeda, Md H Rashid, and K Sanjaya. Flushing sediment from reservoirs triggers forestation in the downstream reaches. *Ecohydrology*, 8:426–437, 2015.

Takashi Asaeda and Kelum Sanjaya. The effect of the shortage of gravel sediment in midstream river channels on riparian vegetation cover. *River Research and Application*, 33:1107–1118, 2017.

H.B Asanthi, H.C.C De Silva, K Sanjaya, K Deepananda, T Gamage, and D Weerakoon. Zooplankton diversity and physico chemical characteristics of udawalawe reservoir : a preliminary study of the seasonal dynamics of zooplankton. In *Eighteenth annual sessions of the Sri Lanka Association for Fisheries and Aquatic Resources*, page 62, 2012.

Hanae Itoh, Shigeru Yamauchi, Masahiro Sugano, Kelum Sanjaya, and Takashi Asaeda. Modeling of nutrient dynamics and vegetation succession, and comparison between with and without riverbed geomorphological simulation, September 19 – 22, 2016 2016.

K Sanjaya and T Asaeda. Does sediment play a significant role in delaying the encroachment of riparian vegetation? In *19th international symposium of Ecology and Civil Engineering Society of Japan*, 2015.

K Sanjaya and T Asaeda. Effect of mean flow velocity on stress response of *vallisneria spiralis* l. In *80th International conference, Japanese Society of Limnology*, 2015.

K Sanjaya and T Asaeda. Assessing the performance of a riparian vegetation model in a river with a low slope and fine sediment. *Environmental Technology*, (accepted), 2016.

K Sanjaya and T Asaeda. Effect of mean flow on stress response and growth in submerged plants with different leaf pattern. In *International congress of the East Asian Federation of Ecological Societies*, 2016.

K Sanjaya, H. B. Asanthi, and U. A. D. Jayasinghe. *Macro-benthos Diversity in a Headwater Stream Affected by Tea and Paddy Agricultural Runoff, Sri Lanka*, book section 17, pages 211–224. Springer International Publishing, 2015.

K Sanjaya, H.B Asanthi, and U.A.D Jayasinghe. The effect of agricultural runoff on benthic macro-invertebrate diversity in a stream ecosystem at deniyaya matara. In *Proc. of the International Symposium on Agriculture and Environment*, 2011.

K Sanjaya, T Priyadarshan, and TMN Wijyaratna. Effect of rainfall abnormalities on rice yield in hambanthota district, sri lanka. *Asian journal of Agriculture and Food Science*, 2(6):494–499, 2014.

K Sanjaya, T Priyadarshana, and N Wijayarathna. Determination of the potential water storage capacity in ancient abandoned tanks in walawe river basin, sri lanka. *International Journal of Research in Agriculture and Food Sciences*, 7:19–26, 2014.

Kelum Sanjaya and Takashi Asaeda. Application and assessment of a dynamic riparian vegetation model to predict the spatial distribution of vegetation in two japanese river systems. *Hydro-Environment Research*, 16:1–12, 2017.

Kelum Sanjaya and Atapattu Keerthi. Plant and benthic macroinvertebrates communities in the headwater region of a stream case study, waturawa ela tributary of ginganga, deniyaya. In *Academic sessions, University of Ruhuna*, 2019.

Kelum Sanjaya, Priyadarshana Tilak, and Wijeratna Nimal. An appraisal of the ancient concept of positioning the tank system in walawe river basin. In *Academic sessions, University of Ruhuna*, 2018.