

CURRICULUM VITAE

1. Family name: Tarigan
2. First names: Suria
3. Date and Place of birth: 5 Mar 1962; Kutambaru
4. Nationality: Indonesia
5. Current position: Associate Professor in Watershed Management at Bogor Agriculture University
6. Education:

Institution	Bogor Agriculture University
Date: from (month/year) to (month/year)	1991-1985
Degree(s) or Diploma(s) obtained	Diplom Degree Research Topic: Soil and Water Conservation

Institution	ITC, The Netherlands
Date: from (month/year) to (month/year)	1991-1992
Degree(s) or Diploma(s) obtained	Master Degree Research Topic: GIS and Watershed management

Institution	University of Indonesia
Date: from (month/year) to (month/year)	1997-1998
Degree(s) or Diploma(s) obtained	Master Degree in IT Research Topic: GIS and Spatial Data Infrastructure

Institution	Bonn University
Date: from (month/year) to (month/year)	1993-1998
Degree(s) or Diploma(s) obtained	Doctoral Degree Research Topic: Watershed management

7. Language skills; mark 1 (basic) to 5 (best) for competence:

Language	Reading	Speaking	Writing
Indonesian (mother tongue)	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
Others: Deutsch (German Language)	Excellent	Excellent	Excellent

8. **Other skills:**

Spatial data processing with GIS

9. **Key qualifications :**

Academic qualification/Degrees: PhD in watershed management from Bonn University, MSc in Watershed Management and GIS from university ITC The Netherlands, diploma in Soil and water conservation from Bogor Agricultural University.

Years of professional experience relevant to task: a) 10 years experience as watershed management expert in developing mitigation planning for degraded watersheds, sustainable use of peatland; b) 2,5 years as Deputy Director of PETUAH Consortium (Green Knowledge Management in sustainable agriculture, sustainable oil palm management and peatland); c) 9 years as Program Manager of SFB 552 (Sonder Forschung Bereich) – Stability of Rain Forest Margin (STORMA) Research Collaboration Univ. Goettingen – Bogor Agriculture University – UNTAD

10. **Professional / specific developing countries experience:**

Date: from (months/year) to (months/year)	July/2019 – 2020
Project / location	Smartseeds
Source of funding	NSO The Netherlands
Company	Ewindo – IPB University

Position	Expert in Soil Moisture Data Modelling using Satellite Data (SMAP) for Horticulture Irrigation Information System in Java and Sumatra
Description	We used satellite data (SMAP) for irrigation planning

Date: from (months/year) to (months/year)	Feb/2019 – Dec/2019
Project / location	Riau, South Sumatra, Central Kalimantan
Source of funding	BRG
Company	IPB University
Position	Project leader
Description	Development of Knowledge Management System for Tropical Peat Restoration (kms-troper.ipb.ac.id)

Date: from (months/year) to (months/year)	June/2015 – 2018
Project / location	Green Prosperity-Green Knowledge Projects
Source of funding	MCAI (Millennium Corporation America-Indonesia)
Company	PETUAH Consortium
Position	Deputy Director for Green Knowledge Information System (www.greenknowledge.id)
Description	Green Knowledge Management Project is funded by MCAI-USA. The main activities of the project is collecting, verifying, and disseminating green knowledge project related to sustainable agriculture, peatlands, and renewable energy (www.greenknowledge.id)

Date: from (months/year) to (months/year)	March/2014 – August/2014
Project / location	Development of Mitigation Planning for Batanghari watershed in Jambi as intructed in PP37/2012 on Integrated Watershed Management
Source of funding	BPDAS Batanghari Jambi
Company	BPDAS Batanghari jambi
Position	Hydrologist/Watershed management expert
Description	Based on the new regulation on Integrated Watershed Management, (PP37/2012) the watershed should be classified using new criteria. Using teh criteria, Batanghari watershed is categorized as highly degraded watersehd required urgent mitigation plans.

Date: from (months/year) to (months/year)	June/2013 – December/2013
Project / location	Feasibility Study of watershed management and aggregated micro-hydro in Mamasa watershed - Green Prosperity Project&NREL (Nat. Lab. For Renewable Energy) –/Merangin Tembesi, Jambi Provinces
Source of funding	Green Prosperity (MCA-I)
Company	NREL
Position	Hydrologist/Watershed management expert
Description	Introducing agregated micro-hydro as renewable energy for all villages in sorrounding Mamasa watershed will stimulate them to understand the role of forest for their waters resources and livelihood and striving for forest conservation.

Date: from (months/year) to (months/year)	June/2013 – December/2013
Project / location	Feasibility Study of watershed management and aggregated micro-hydro in Muara Tembesi upper watershed - Green Prosperity Project&NREL (Nat. Lab. For Renewable Energy) –/Merangin Tembesi, Jambi Provinces
Source of funding	Green Prosperity (MCA-I)
Company	NREL

Position	Hydrologist/Watershed management expert
Description	Introducing aggregated micro-hydro as renewable energy for all villages in surrounding Taman Nasional Kerinci Sebelat (TNKS) National Park will stimulate them to understand the role of forest for their waters resources and livelihood and striving for forest conservation.

Date: from (months/year) to (months/year)	June/2013 – December/2013
Project / location	Feasibility Study of Peat Management and Sustainable Land Use: Muaro Jambi District, Jambi - Green Prosperity Project&NREL (Nat. Lab. For Renewable Energy) –/Merangin Tembesi, Jambi Provinces
Source of funding	Green Prosperity (MCA-I)
Company	NREL
Position	Hydrologist/Watershed management expert
Description	Feasibility study on sustainable management of peatland in Berbak National Park in Muaro Jambi

Date: from (months/year) to (months/year)	March/2012 – Now
Project / location	Modelling impact of oil palm expansion on catchment hydrologic characteristics /Batanghari District, Jambi Province
Source of funding	DIKTI, Ministry of Education
Company	IPB
Position	Hydrologist
Description	Farmers in the study area perceive that expansion of oil palm plantation recently had negative impact on water resources where swampy area and springs become dry. Scientific research was required to study how far the oil palm plantation influences water resources in the area

Date: from (months/year) to (months/year)	November/2010 – June/2011
Project / location	Water management in peatlands/Central Kalimantan
Source of funding	PT SMART Tbk
Company	PT SMART Tbk
Position	Hydrologist
Description	Utilization of peatlands for oil palm plantation requires good water management to minimize carbon emission from peatland. Using cascaded stop-log in the drainage systems to maintain desired water level will reduce carbon oxidation and emission.

Date: from (months/year) to (months/year)	May/2010 – Dec/2010
Project / location	6'cis Watersheds /West Java (Cisadane, Ciliwung, Citarum, Cidanau) (http://6cis.org/)
Source of funding	ADB
Company	DHV
Position	Erosion and GIS expert
Description	Erosion mapping using GIS, Integrated Water Resources Management (IWRM) in the 6 CI's River Basin Territory, Ditjen SDA, Dep. PU (in collaboration with DHV The Netherlands). The project was an integral part of a bigger project the so called Java Spatial Modeling.

Date: from (months/year) to (months/year)	Nov 2009
Project / location	Jakarta / Indonesia (http://sim-rlps.dephut.go.id/portal/index.php)
Source of funding	Ministry of Forestry

Company	Bogor Agriculture University
Position	Expert in Watershed Information System
Description	Minsitry of Forestry organizes annual meeting involving watersheds management experts and provinces committee of Forum DAS. In this particular meeting I was invited as speaker highlighting watershed information system and integrated watershed management.

Date: from (months/year) to (months/year)	May/2009 – Dec / 2009
Project / location	Jakarta / Indonesia
Source of funding	USAID
Company	Bogor Agriculture University
Position	Expert in Integrated Watershed Mangement
Description	Developing Watershed Management Framework, Ministry of Forestry Integrated watershed management in Indonesia involves multi- sectors, multi-stakeholders and multi-spaces. This framework describe mechanism to synergize those multi-elements to speed and effectively rehabilitate degraded watershed in Indonesia.

11. Others (e.g. Publications):

- a) Tarigan, S.D., et al. (2016). Mitigation options for improving the ecosystem function of water flow regulation in awatershed with rapid expansion of oil palm plantations. *Sustain. Water Qual. Ecol.* <http://dx.doi.org/10.1016/j.swaqe.2016.05.001>.
- b) Tarigan, S.D., (2016^b). Modeling effectiveness of management practices for flood mitigation using GIS spatial analysis functions in Upper Cilliwung watershed. *IOP Conf. Series: Earth and Environmental Science* 31 (2016)012030 doi:10.1088/1755-1315/31/1/012030.
- c) Budiyanto, S., Tarigan S., Sinukaban N., Murti Laksono K.. 2015. The Impact of Land Use on Hydrological Characteristics in Kaligarang Watershed . 8(2):125-130 Intl. J Sciences and Engineering. DOI: 10.12777/ijse.8.2.125-130
- d) Harjianto, M., Sinukaban, N., Tarigan, S., Haridjaja, O. 2015. Erosion Prediction and Soil Conservation Planning in Lawo Watershed Indonesia 5(6): 40-50 J of Environment and Earth Science.
- e) Prasetya, N.A., Hikmatullah, Asisah, Saleh, B.C., Tarigan, S.D. 2014. Identification and Evaluation of Potential Land Resources to Support the Development of Agricultural Commodities for Food Crops Zone. *J Trop Soils*, 19(1): 53-61, ISSN 0852-257X, DOI: 10.5400/jts.2014.19.1.53.
- f) Tarigan, S.D., Wiegand, K., Dislich, C., Meyer, K., Tarigan, H., Slamet, B., Sunarti, Hendrayanto. Forest cover required for sustainable water flow regulation in a watershed with rapid oil palm expansion. *J of Water Resources Management* (in review).
- g) Tarigan, S., Sunarti, Widyaliza, S., 2015. Expansion of oil palm plantations and forest cover changes in Bungo and Merangin Districts, Jambi Province, Indonesia. *Elsevier Procedia Environmental Sciences* 5(6):199-205.
- h) Tarigan, S., Wiegand, K. 2012. Pengelolaan penggunaan lahan untuk stabilisasi tepian hutan tropis menggunakan agent-based land-use modelling. *Jurnal Ilmu pertanian Indonesia*. 17(2): 113-119.
- i) Tarigan, S., Tukayo, R., 2012. Impact Of Land Use Change On Irrigation Water Supply In Northern Java Coast (Pantura). *J. Tanah Tropika* Vol 18 No.2, ISSN 0852-257X. Lampung.
- j) Tarigan S.. 2012. Methods in Delineating Degraded Land. *J. Tanah Tropika* Vol 17 No.3, ISSN 0852-257X. Lampung.
- k) Tarigan, S.D. and Tukayo, R.C. 2013. Impact of Land Use Change and Land Management on Irrigation Water Supply In Northern Java Coast (Pantura). *J. Tanah Tropika* Vol 18 No.3, ISSN 0852-257X. Lampung
- l) Tarigan, S.D., 2012. Methods for Delineating Degraded Land. *J. Tanah Tropika* Vol 17 No.3, ISSN 0852-257X. Lampung
- m) Henny, H., Murti Laksono, K., Sinukaban, N., Tarigan, S.D., 2011. Kesesuaian Lahan untuk Sayuran Dataran Tinggi di Hulu DAS Merao, Kabupaten Kerinci, Jambi. *J. Hidrolitan* Vol 2 No. 1. ISSN 2086-4825 Universitas Jambi
- n) Henny, H., Murti Laksono, K., Sinukaban, N., Tarigan, S.D., 2011. Erosi dan Kehilangan Hara pada Pertanian kentang dengan Beberapa Sistem Guludan pada Andisol di Hulu DAS Merao, Kabupaten Kerinci, Jambi. *J. of Soil and Land Utilization Management*. Vol VIII, No.2. Tahun 2011.

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



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[Signature of staff / expert]
(Dr. Suria Tarigan, MSc, Mkom)

Bogor, January 13, 2020

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[Day/Month/Year]