

**CURRICULUM VITAE**

1. Family name: Tarigan
2. First names: Suria
3. Date/Place of birth: 5 March 1962/Kutambaru
4. Nationality: Indonesia
5. Current position: Professor in Land Resources Management at IPB University
6. Google Scholar <https://scholar.google.com/citations?hl=id&user=ukdzSPsAAAAJ>

## 7. 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: Watershed management

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

## 8. 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

9. **Other skills:**

Ecosystem services modelling with InVEST, SWAT

10. **Key qualifications :**

**Years of professional experience relevant to task:** a) 15 years' extensive experience in watershed management, sustainable agriculture projects and ecosystem services assessment, 10 years research experience in sustainable oil palm plantation projects. Involvement as an expert in ecosystem service modelling of cacao and coffee agroforestry in TEEBagrifood -UNEP. Researcher in jurisdictional certification on sustainable oil palm project. Capacity building team at TRADE Hub-UKRI Project.

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

Date: from (months/year) to (months/year)	Sept/2024 – Nov/2024
Project / location	Perum Jasa Tirta II/ Citarum Watershed
Source of funding	Perum Jasa Tirta II
Company	IPB Consulting
Position	Project leader
Description	Designing action plan for vegetation conservation in Citarum watershed

Date: from (months/year) to (months/year)	June/2023 – June/2024
Project / location	Riau and West Kalimantan Provinces
Source of funding	WWF
Company	CTSS – IPB University
Position	Expert in soil health and ecosystem services assessment
Description	Analysing impact of RSPO certification on agro-biodiversity and ecosystem service in oil palm plantations

Date: from (months/year) to (months/year)	March/2012 – 2023
Project / location	Landscape multifunctionality for optimizing local ecosystem services/Batanghari District, Jambi Province
Source of funding	DFG germany
Company	CRC990
Position	Ecosystem service analyst
Description	Landscape multifunctionality for optimizing local ecosystem services using transdisciplinary approaches

Date: from (months/year) to (months/year)	Oct/2023 – Oct/2025
Project / location	SustainPalm/Bengkulu
Source of funding	Dutch Ministry of Agriculture
Company	SustainPalm – IPB University
Position	Expert in carbon cycle
Description	Analysing impact of intercropping and agroforestry on carbon cycle in oil palm plantation

Date: from (months/year) to (months/year)	Oct/2022 – June/2023
Project / location	International Centre for Tropical Agriculture/South and Sout East S - Indonesia
Source of funding	Mondelez and USAID
Company	CIAT-IPB University
Position	Expert in cacao agroforestry
Description	Analysing impact of cacao agroforestry on ecological and economical sustainability

Date: from (months/year) to (months/year)	June/2022 – Jan/2023
Project / location	Biodiversity Net Positive Impact/East Java
Source of funding	PT Pertamina
Company	CTSS-IPB University
Position	Expert in biodiversity indicator
Description	Developing indicator for Biodiversity Net Positive Impact

Date: from (months/year) to (months/year)	Jan/2022 – May/2022
Project / location	GIZ/East Kalimantan - Indonesia

Source of funding	GIZ
Company	CTSS - IPB University
Position	Expert in sustainable oil palm
Description	Analysing impact of jurisdictional certification on sustainable oil palm

Date: from (months/year) to (months/year)	Jan/2020 – 2022
Project / location	TEEB Agrifood
Source of funding	UNEP-EU
Company	Bappenas – IPB University
Position	Expert in soil health and water ecosystem services in cacao agroforestry landscape
Description	Using TEEB framework to analyze policy scenario for cacao agroforestry revitalization

Date: from (months/year) to (months/year)	Jan/2019 – 2023
Project / location	TRADE Hub/Indonesia
Source of funding	UKRI-UK
Company	IPB University
Position	Expert in sustainable oil palm
Description	Analysing impact of trade in sustainable oil palm in collaboration with 50 international institute

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 irrigation and 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 – Now
Project / location	Riau, South Sumatra, Central Kalimantan
Source of funding	BRG (Peat Restoration Board)
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 watersehhd 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 agregated micro-hydro as renewable energy for all villages in sorrounding 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

## 11. Others (e.g. Main Publications):

- a) Kristanto Y, **Tarigan S**, June T, Sulistyantara B, Wijayanti P. 2024. Indirect use value of improved soil health as natural capital that supports essential ecosystem services: A case study of cacao agroforestry. *Agricultural Economics/Zemědělská Ekonomika* 70 (3)
- b) Nurrochmat DR, Nurrochmat NA, **Tarigan S**, Siregar IZ, Rizki DLY. 2023. Indonesia's options in becoming a high-income country: Accelerating the turning point in deforestation? *Forest Policy and Economics* 148, 102905
- c) **Tarigan S**, Buchori D, Siregar IZ, Azhar A, Ullyta A, Tjoa A, Edy N. 2021. Agroforestry inside oil palm plantation for enhancing biodiversity-based ecosystem functions. Di dalam: *IOP Conference Series: Earth and Environmental Science*. Volume ke-694. hlm 012058.
- d) **Tarigan S.**, et al. (2020). Relative contribution of evapotranspiration and soil compaction to the fluctuation of catchment discharge: case study from a plantation landscape. *Hydrological Sciences Journal* 65 (7), 1239-1248
- e) **Tarigan SD**. 2019. Biodiversity-based ecosystem services for the management of monoculture plantation landscape using a transdisciplinary approach: a review. Di dalam: *IOP Conference Series: Earth and Environmental Science*. Volume ke-325. hlm 012013.
- f) **Tarigan S.**, Wiegand K, Sunarti. 2017. Minimum forest cover required for sustainable water flow regulation of a watershed: a case study in Jambi Province, Indonesia, *Hydrol. Earth Syst. Sci.*, 22, 581-594, <https://doi.org/10.5194/hess-22-581-2018>.
- g) **Tarigan, S.**, 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.2016.05.11>.
- h) Merten, J.,Röll, A.,Guillaume, T.,Meijide, A., **Tarigan, S.**, Agusta, H., Dislich, C., Dittrich, C., Faust, H., Gunawan, D., Hendrayanto, Knohl, A., Kuzyakov, Y., Wiegand, K., Hölscher, D. 2016 Water scarcity and oil palm expansion: social views and environmental processes. *J. Ecology and Society* 21(2):5
- i) Klasen S., Meyer K., Dislich C., Euler M., Faust H., Gatto M., Hettig E., Melati D. N., Jaya I. N. S., Otten F., Perez C., Steinebach S., **Tarigan S**, Wiegand K.. 2016. Economic and ecological trade-offs of agricultural specialization at different spatial scales.*Ecological Economics* 122 (2016) 111–120.
- j) **Tarigan, S.D.**, (2016). 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.
- k) **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.

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]

(Prof. Suria Tarigan, MSc)

**Bogor, Oct 23, 2024**

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[Day/Month/Year]