

SCIENTIFIC CURRICULUM VITAE

1. Personal details

Full name	BANG NGUYEN TRAN	Birth date	01 st May 1982
Academic title	Dr	Sex	Male
Administrative position	Lecturer/Research fellow	ID Number	110
Department	Department of Agro-Ecology, Faculty of Natural Resources and Environment (FONRE)		
Institution	Vietnam National University of Agriculture (VNUA)		
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2. Qualifications

No.	Years	Academic Institution	Major/specialty	Academic degree
1	4	The University of Melbourne, Australia	PhD in Forest Ecology (Environmental Science)	PhD
2	2	The University of Melbourne, Australia	Master of Applied Science (Geographic Information System)	Msc
3	4	Vietnam National University of Agriculture (former named Hanoi University of Agriculture no 1), Vietnam.	Engineer of Land Management	Engineer

3. Professional experience

No.	Years	Institution	Address	Position
1	1	Department Agro-Ecology, Faculty of Natural Resources and Environment, Vietnam National University of Agriculture (VNUA)	Trauquy, Gialam, Hanoi, Vietnam	Lecturer/ Research fellow
2	1	School of Ecosystem and Forest Sciences, The University of Melbourne	Melbourne, Australia	Research assistance
3	1	Environmental Remote Sensing Research Group, Department of Geology, Geography and Environment at the University of Alcalá, Madrid, Spain.	Madrid, Spain	Visiting fellow

4	4	School of Ecosystem and Forest Sciences, The University of Melbourne	Melbourne, Australia	PhD Scholar
5	9	Department Agro-Ecology, Faculty of Environment, Vietnam National University of Agriculture (VNUA)	Trauquy, Gialam, Hanoi, Vietnam	Lecturer/ Research fellow
6	2	School of Engineering, The University of Melbourne.	Melbourne, Australia	Msc Scholar
7	8	Center for Agricultural Research and Ecological Studies, Vietnam National University of Agriculture	Trauquy, Gialam, Hanoi, Vietnam	Research fellow

4. Language (Rating: A-Poor/deficient; B - Fair; C – Sufficient; D – Fluent)

Language	Reading	Writing	Speaking	Certificate/degree
English	D	D	D	D
Vietnamese	Mother tongue	Mother tongue	Mother tongue	Mother tongue

5. Expertise and research interests

5.1 Main research orientation

I have nearly 20-year international working experience in research and teaching in the field of AgTech which including the majors in advanced Geographic Information System (GIS) and Remote sensing in forest ecology, climate changes, and carbon stock management. My primary research interests are in the processes that underpin forest wildfire disturbance impacts on different forest types and species, and the ways in which we support ecosystem functions for better forest recovery processes. I lead the wildfire research project, which aims to better quantify fire severity from space and to improving accuracies for mapping fire severity via machine learning, and to interpret and predict changes in high-severity fires patterns associated with management practices and natural drivers like wildfire, weather, and climate.

My overall vision is to enhancing forest fire management by (i) resolving critical knowledge gaps regarding post-fire forest recovery, fire severity pattern changes and detection; and (ii) generating high quality evidence that will be translated to best remote sensing and environmental modelling practices for post-fire forest management, nationally and internationally. To realize this vision, I have developed a pioneering, five-year research program with three linked themes with the following objectives:

Theme 1: Identify novel approaches for monitoring post-fire vegetation recovery that are ecologically relevant using remote sensing techniques.

Theme 2: Investigate important environmental factors influencing patterns of post-fire forest recovery.

Theme 3: Investigate predictive forest biomass and forest ecosystem services for future forest management.

5.2 List of research projects

No.	Project name	Funding agency & amount	Project duration	Position in the project (manager, coordinator, secretary, researcher)
1	Assessing the benefits of variable sowing density on Alpine Ash ecosystem fire resilience.	Funded by the Integrated Forest Ecosystem (IFER) Research program, supported by the Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.	2021-present	Research fellow
2	Understanding and predicting Victoria's Forest biodiversity and community dynamics.	Funded by the Integrated Forest Ecosystem (IFER) Research program, supported by the Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.	2021-present	Research fellow
3	Quantifying fire-severity patterns using optical remote sensing data in temperate eucalypt forests of south-eastern Australia.	Funded by Melbourne Research Scholarship, Australia; Vietnam International Education Development (VIED), Vietnam, and the Integrated Forest Ecosystem Research program, supported by the Victorian Department of Environment, Land, Water and Planning, Melbourne, Victoria.	2016-2020	Principal Investigator/Researcher
4	Adapting the Melon Production Model to Climate Change in Giao Thuy District, Nam Dinh Province, Vietnam.	Funded by The European Union - EU.	2015-2016	Research fellow
5	Increased Accessibility, Landscape Changes, Rural Transformations, and Urbanization: Impacts of the East-West Economic Corridor from Da Nang, Vietnam, to Khon Kaen, Thailand.	Funded by NASA Grant, USA: NNX13AC51G (ROSES-2010 NNH10ZDA001N-LCLUC).	2014-2016	Research fellow

6	Evaluating potentials of Agroforestry models – A case study in Diem hamlet, Chau Khe commune, Con Cuong district, Nghe An province, Vietnam.	Funded by The Netherlands Initiative for capacity development in Higher Education (NICHE).	2015	Principal Investigator/Researcher
7	Characterizing agro-ecological zones with local knowledge in Ha Tinh province of Vietnam.	Funded by World Agroforestry Centre (ICRAF), Vietnam	2015	Principal Investigator/Researcher
8	The Vietnam Forest and delta (VFD) Program - Mapping of Forest and non-forest cover land for Thanh Hoa & Nghe An province of Vietnam in the period 2000-2013/2014.	Funded by The United States Agency for International Development (USAID) and lead by the Winrock International.	2014-2015	Research fellow
9	Supporting the integration in Agricultural Curricula of Climate Change concerns at Universities of Agriculture, Hanoi University of Agriculture, Hong Duc University and Hue University of Agriculture and Forestry.	Funded by The Netherlands Initiative for capacity development in Higher Education (NICHE).	2011-2015	Research fellow
10	Impact assessment of sea level rise on agricultural land use in Giao Thuy district, Nam Dinh province, Vietnam.	Funded by The Netherlands Initiative for capacity development in Higher Education (NICHE).	2014	Principal Investigator/Researcher
	Environmental Modeling for Management textbook publication, Vietnam.	Funded by Ministry of Education and Training – MOET, Vietnam.	2012	Key researcher/Lecturer.
11	TRIG Project at Vietnam National University of Agriculture.	Funded by Ministry of Education and Training – MOET, Vietnam.	2012	Research fellow
12	Biodiversity Conservation Project for Haiduong province, Vietnam.	Funded by Hai Duong Provincial People Committee, Vietnam.	2012	Research fellow
13	Coupled natural-human systems and emerging infectious disease: anthropogenic environmental change and avian influenza in Vietnam.	Funded by East West Center, USA EWC/CNHS.	2009-2013	Research fellow
14	Historic observation of land cover changes and spatial distributions of agricultural land use patterns. Case study in Con Cuong district, Ca River Basin,	Funded by Australian Development Scholarship for my master's degree research study at The	2009-2010	Principal Investigator/Researcher

	Nghe An province, Vietnam 1991-2007.	University of Melbourne.		
15	An investigation of agricultural land change over time in Bao Thang commune, Ky Son district, Nghe An province, Vietnam.	Funded by Danish International Development Agency – DANIDA.	2007-2008	Research fellow
16	Best Practice Marketing for Communities in Mountainous and/or Drug Crop Producing Regions, Vietnam.	Funded by Rockefeller Foundation, USA.	2006-2007	Research fellow
17	Building a Pilot Environmental Information System (EIS) for Nghe An province, Vietnam.	Funded by Danish International Development Agency (DANIDA).	2005-2007	Lecturer/Facilitator
18	Vietnam Upland Forum (VUF) Project: Land Use/Cover Mapping, Vietnam.	Funded by FORD Foundation, USA & Vietnam Upland Forum - VUF, Vietnam.	2005-2007	Research fellow
19	The land cover changes overtime and natural resource management issues in Mau Duc Commune, Con Cuong District, Nghe An Province, Vietnam.	Funded by FORD Foundation, USA	2005	Research fellow
20	Improving Trans-border Watershed Management and Planning in Laos and Vietnam.	Funded by Rockefeller Foundation, USA.	2004-2008	Research fellow
21	Comparative production effectiveness of main farm types in Dak Lak Province, Vietnam.	Funded by Dak Lak Provincial People Committee, Vietnam.	2004	Research fellow
22	University Support to Environmental Planning and Management in Cambodia, Laos, and Vietnam (USEPAM).	Funded by Danish International Development Agency - DANIDA.	2003-2007	Research fellow
23	Composite Swiddening Agricultural Research Project in Vietnam.	Funded by FORD Foundation, USA.	2000-2006	Research fellow

5.3 Publications and accomplishments

No.	Authors	Year	Title of papers/book	Name of publishers/No.Vol, page	ISSN/ISBN	IF	Notes
1	Article (s) in ISI-covered journal						
1.1	Tran, B. N. , Tanase, M. A., Bennett, L. T., & Aponte, C.	2020	High-severity wildfires in temperate Australian forests have increased in extent and aggregation in recent decades.	PLoS ONE 15(11): e0242484.			
1.2	Tran, B. N. , Tanase, M. A., Bennett, L. T., & Aponte, C.	2020	Are high severity fires increasing in southern Australia	Proceedings of the IGARSS 2020 - 2020 IEEE International Geoscience and Remote Sensing Symposium, Waikoloa, HI, USA,			
1.3	Tran, B. N. , Tanase, M. A., Bennett, L. T., & Aponte, C.	2019	Fire-severity classification across temperate Australian forests: random forests versus spectral index thresholding.	Proceedings of the International Society for Optics and Photonics (SPIE) Remote Sensing 11149, Remote Sensing for Agriculture, Ecosystems, and Hydrology XXI (111490U).			
1.4	Tran, B. N. , Tanase, M. A., Bennett, L. T., & Aponte, C.	2018	Evaluation of spectral indices for assessing fire severity in Australian temperate forests.	Remote Sensing, 10(11), 1680. doi:10.3390/rs10111680.			
1.5	Ngo A.T., Tran HMT, Nguyen BT , Bich Nguyen YT.	2017	Adapting the Melon Production Model to Climate Change in Giao Thuy District, Nam Dinh Province, Vietnam.	Tropicultura. 2017; 34:50-60.			
1.6	Leisz, S.J.; Rounds, E.; The An, N.; Thi Bich Yen, N.; Nguyen Bang, T. ; Douangphachanh, S.; Ninchaleune, B.	2016	Telecouplings in the East–West Economic Corridor within Borders and Across.	Remote Sensing. 2016, 8(12), 1012. doi:/10.3390/rs8121012.			
1.7	Søren Brofeldt, Ida Theilade, Neil D. Burgess, Finn Danielsen, Michael K. Poulsen, Teis Adrian, Tran Nguyen Bang , Arif Budiman,	2014	Community Monitoring of Carbon Stocks for REDD+: Does Accuracy and Cost Change over Time?.	Forests (5): 1834-1854.			

	Jan Jensen, Arne E. Jensen, Yuyun Kurniawan, Simon B. L. Lægaard, Zhao Mingxu, Meine van Noordwijk , Subekti Rahayu, Ervan Rutishauser, Dietrich Schmidt-Vogt, Zulfira Warta and Atiek Widayati,						
1.8	Danielsen, F., T. Adrian, S. Brofeldt, M. van Noordwijk, M. K. Poulsen, S. Rahayu, E. Rutishauser, I.Theilade, A. Widayati, N. The An, Tran Nguyen Bang , A. Budiman, M. Enghoff, A. E. Jensen, Y.Kurniawan, Q. Li, Z. Mingxu, D. Schmidt-Vogt, S. Prixia, V.Thoumtone, Z. Warta, and N. Burgess	2013	Community Monitoring for REDD+: International Promises and Field Realities.	Ecology and Society 18(3): 41.			
2	Article in other international Journal						
2.1	Doan U. T. T., Simelton E., Ngo A. T., Tran L. T. K., Tran B. N.	2015	Case study: Huong Khe district, Ha Tinh province, Viet Nam. Characterizing agro- ecological zones with local knowledge. Working Paper 201. Hanoi, Viet Nam	World Agroforestry Centre (ICRAF) - Vietnam. doi: 10.5716/ WP15050.PDF			
3	National/International Conference(s)						

3.1	Tran, B. N., Tanase, M. A., Bennett, L. T., & Aponte, C.	2020	Are high severity fires increasing in southern Australia?	IGARSS 2020 - 2020 IEEE International Geoscience and Remote Sensing Symposium, Waikoloa, HI, USA, pp. 4630-4633.			
3.2	Tran, B. N., Tanase, M. A., Bennett, L. T., & Aponte, C.	2019	Fire-severity classification across temperate Australian forests: random forests versus spectral index thresholding.	Proceedings of the International Society for Optics and Photonics (SPIE) Remote Sensing 11149, Remote Sensing for Agriculture, Ecosystems, and Hydrology XXI (111490U).			
3.3	Tran, B. N., Tanase, M. A., Bennett, L. T., & Aponte, C.	2019	Fire severity classification and pattern changes across temperate Australian forests.	Session 3: Carbon and Water, Showcase: Integrating science as evidence held by the Integrated Forest Ecosystem Research (IFER), Department of Environment, Land, Water and Planning (DELWP), the State of Victoria and The University of Melbourne, Creswick, 31st July 2019.			
3.4	Tran, B. N., Tanase, M. A., Bennett, L. T., & Aponte, C.	2018	Evaluation of spectral indices for assessing fire severity in Victorian temperate forests, Australia.	Proceedings of the Information Systems for Crisis Response and Management - ISCRAM Asia Pacific 2018. Wellington, New Zealand.			
3.5	Ngo The An and Tran Nguyen Bang	2014	Climate change adaptation in agricultural systems of Giao Thuy district: An analysis from GIS-based modelling and participatory approach	The 8th Asian Crop Science Association Conference: "Sustainable Crop Production in response to Global Climate Change and Food Security".			
3.6	Vo Huu Cong and Tran Nguyen Bang	2007	An investigation of agricultural land change over time in Bao Thang commune, Ky Son district, Nghe An province, Vietnam	Proceeding of Regional Conference on Environmental Planning and Management Issues in Southeast Asian Countries, Hanoi -Vietnam			
3.7	Puree, Tran Nguyen Bang,	2005	The Thachin River Report". A case study	Proceeding of Regional workshop on "Introduction to Environmental			

	Som, Mie and Basia		in Ban Don Wai region, Thailand.	Management and Regulation in Thailand: Cleaner Production or End – of – Pipe Solutions?" - Mahidol University, Bangkok, Thailand			
3.8	Tran Nguyen Bang , Vo Huu Cong, Nong Huu Duong, Nguyen Quang Ha, Tran Trung Kien, and Nguyen Thi Minh Nguyet	2005	The land cover changes overtime and natural resource management issues in Mau Duc Commune, Con Cuong District, Nghe An Province	Second regional USEPAM Workshop proceeding.			
3.9	Tran Nguyen Bang , Nguyen Quang Ha, Nguyen Thi Minh Nguyet, Vo Huu Cong, Nong Huu Duong, and Stephen J. Leisz	2005	A look at land uses map and statistic in the upper Ca River Basin: Using Multi - Year Landsat Data to better analysed land use.	Second regional USEPAM Workshop proceeding.			
4	Article(s) in national scientific journal						
4.1	Tran, B. N. and Ngo T. A.	2015	Characterizing agro-forestry systems in Diem hamlet, Chau Khe commune, Con Cuong district, Nghe An province.	Journal of Science & Development, Vietnam National University of Agriculture. 13(4), 586-597.			
4.2	Ngo The An and Tran Nguyen Bang .	2014	Climate change adaptation in agricultural systems of Giao Thuy district: An analysis from GIS-based modelling and participatory approach.	Science and Technology Journal of Agricultural and Rural Development. Ministry of Agriculture and Rural Development, Vietnam.			
4.3	Tran Duc Vien, Nguyen Thi Lan, Pham Tien Dung, Pham Thi Mai Huong, Nguyen Thi Minh Nguyet and Tran Nguyen Bang .	2005	Comparing Production Efficiency of three groups of Ethnic Minority Households in DakLak Province, the	Magazine of Science and Technology of Hanoi Agricultural University.			

5	Text book, lecture notes (published)					
5.1	Ngô Thế Ân, Trần Nguyên Bằng	2012	Environmental Modelling for Management	Viet Nam Education Publishing House		
5.2	Stephen J.Leisz, Nguyen Thi Thu Ha, Vo Huu Cong, Tran Nguyen Bang and Nong Huu Duong		Does composite swiddening cause deforestation? Evidence from analysis of land cover change in Tat hamlet from 1952 to 2003. Part IV, Section 16, Farming with Fire and Water, The Human Ecology of a Composite Swiddening Community in Vietnam's Northern Mountains	Kyoto University Press		
5.3	Nguyen Thi Thu Ha, Stephen J. Leisz, Vo Huu Cong, Tran Nguyen Bang , and Nong Huu Duong	2008	Does composite swiddening cause deforestation? Evidence from analysis of land cover change in Tat hamlet from 1952 to 2003". Chapter 19, Composite "Swidden Cultivation: An Overview" (in Vietnamese)	Agricultural Publishing House, Hanoi		
6	Others (Monographs, patents, scientific awards...)					
6.1		2019	Yvonne Aitken Bursary travel award	The University of Melbourne, Australia		
6.2		2019	R. S. Fox Forestry Bursary - 2019 travel award	The University of Melbourne, Australia		
6.3		2019	Faculty of Science Travelling Scholarship award	The University of Melbourne, Australia		
6.4		2018	S. F. Pond Scholarship - 2018 travel award	The University of Melbourne, Australia		
6.5		2016	Melbourne Research Scholarship (\$92,000) and Melbourne	The University of Melbourne, Australia		

			International Fee Remission Scholarship (\$ 110,000) awarded by the University of Melbourne.				
6.6		2008	Australian Development Scholarship for my master's degree study at The University of Melbourne 2009-2010 (\$126,000).	Australian Government			
6.7		2003	Outstanding student award – HASEBE Japanese award for Vietnam National University of Agriculture (former named Hanoi University of Agriculture no 1)	HASEBE Japanese award			
6.8		1999-2003	Outstanding Student award for the Year 2002-2003; 2001-2002; 2000-2001; and 1999-2000. Vietnam National University of Agriculture (former named Hanoi University of Agriculture no 1)	Hanoi University of Agriculture no 1			

Vietnam National University of Agriculture

Hanoi, 26th June 2021
(Full name and signature)



Trần Nguyên Bằng