Curriculum vitae

1. Name: CAO TRUONG SON 2. Sex (male or female): Male

3. Date of Birth: 30/04/1986

4. Address: Bach Sam Area, My Hao district, Hung Yen Province

5. Office: Faculty of Environment, Vietnam National University of Agriculture

6. Office address: Trauquy, Gialam, Hanoi, Vietnam

7. Email: caotruongson.hua@gmail.com

8: Employment: Department of Environmental Management

9. Position: Lecturer

10. Major: Environmental science.

11. Academic background: Environmental science

Degree	Institutions	Major	Year of graduation
PhD	University of Sciences – Viet Nam Nation University	Environmental science	2019
M.Sc	University of Sciences – Viet Nam Nation University	Environmental science	2012
B.A	Hanoi University of Agriculture, Vietnam	Environment	2008

12. Employment record:

Period	Position	Institution	Address
From 2009-at the present	Lecturer	Department of Environmental Management, Faculty of Environment, Vietnam National University of Agriculture	Trau Quy – Gia Lam – Ha noi

13. Direction of research in last 5 years:

- Rural environment Problems
- Breeding wastes management
- Biodiversity management
- Environmental Audit
- Payment for Environmental Services (PES)



14. Publishers

14.1. Paper:

- 1. T. L. T. Ho, **T. S. Cao**, T. L. Tran (**2008**), *Influence of pig breeding in household to surface water*, Journal of Agriculture and Rural Development, No 10/2008, pp 55 60.
- 2. **T. S. Cao**, D. A. Luong, K. D. Hoang, T. L. T. Ho (**2010**), *Assessment of surface water quality in Laivu Commune, Kimthanh district, Haiduong province*, Journal of Science and Deverlopment, Hanoi University of Agricuture, Vietnam, Vol 8 No 2 2010, pp 296 303.http://www.vnua.edu.vn:85/tc_khktnn/Upload%5C1352010-Bai%2015%20sua%20_296%20-%20303%20%20ban%20in_.pdf
- 3. Thi Lam Tra Ho, **Truong Son Cao**, Thi Loan Tran, Kiyoshi Kurosawa, Kazuhiko Egashira (2010), Assessment of Surface and Groundwater Quality in Pig-raising Villages of Haiduong Province in Vietnam, Journal of the Faculty of Agriculture, Kyushu University, Japan, 55 (1), 123-130. http://catalog.lib.kyushu-u.ac.jp/handle/2324/17813/55_1_p123.pdf
- 4. **T. S. Cao,** D. A. Luong, D. T. Vu, T. L. T. Ho (**2011**), *Study on Levels of Surface Water Pollution in Difference Pig-farm systems in Hungyen Province*, Journal of Science and Deverlopment, Hanoi University of Agricuture, Vietnam, Vol 9 No 3-2011, pp 393 401.

 http://www.vnua.edu.vn:85/tc_khktnn/Upload%5C3082011-Bai%207-HIK/20%28393%20-%20401%20%20ban%20in%29.pdf
- 5. **T. S. Cao**, X. H. Nguyen, L. H. Tran, T. L. T. Ho (**2011**), Accumulation of heavy metal in the agricultural soils which are affected by metal recycling handicraft village at Chaukhe, Tuson district, Bacninh province, Journal of soil Science in Vietnam, No 37 2011, pp 76 79.
- 6. Thi Lam Tra HO, **Truong Son CAO**, Duc Anh LUONG, Dinh Ton VU, Kiyoshi KUROSAWA and Kazuhiko EGASHIRA (**2013**), *Evaluation of Water Pollution Caused by different Pig-Farming Systems in Hungyen Province of Vietnam*, *Journal of the Faculty of Agriculture*, Kyushu University, Japan, 58 (1), 159-165. http://catalog.lib.kyushu-u.ac.jp/handle/2324/26176/p159.pdf
- **7. T. S. Cao,** T. H. G. Nguyen, T. L. T. Ho (**2014**), Waste treatment status assessment in pig-farming system in Vangiang district, Hungyen province, Journal of soil Science in Vietnam, No 43 2014, pp 58 64.
- **8. T. S. Cao,** P. K. H. Bui, T. L. T. Ho (**2014**), *Some nitrogen states in water environment on some pig-farms in Hano city*, Journal of Safety, Health and Labour Environment, No 1,2&3-2014, pp 40 46.
- 9. T. L. Nguyen, **T. S. Cao**, T. H. G. Nguyen (**2014**), *Biodiversity in Hai Dwong province: Current status and challeges*. Journal of Science and Deverlopment, Hanoi University of Agricuture, Vietnam. Vol 12 No 4/2014 paper 574-585. http://www.vnua.edu.vn:85/tc_khktnn/Upload%5C882014-114-125.pdf

- 10. T. N. A. Nguyen, **T. S. Cao (2014),** Supported mechanism for small and medium enterprises to implement environment audit of some nations on the world and learning lessons for Vietnam, Environmental Journal, No 11/2014, pp 55 56, 60. http://tapchimoitruong.vn/T%E1%BA%A1pch%C3%ADOnline/tabid/434/ctl/viewdetails/mid/1695/fields/11-2014.pdf/Default.aspx
- 11. Ho Thi Lam Tra, Đong Thi Thuy Dung, **Cao Truong Son (2014).** *Studying on Application Posibility of Cleaner Production Solutions in Thanhhoa Beer Company*, Journal of Safety, Health and Labour Environment, No 4,5&6-2014, pp 16 26.
- 12. T. T. D Nguyen, T. L. Nguyen, T. D. Pham, **T. S. Cao (2015)**, Environmental Protection Solutions for Pig production Process in Pig-Farming in Gia Lam District, Hanoi, Journal of Science and Deverlopment, Hanoi University of Agricuture, Vietnam, No3/2015, pp 427-436.

 http://www.vnua.edu.vn:85/tc_khktnn/Upload%5C1062015-TC%20so%203.2015%20ban%20in1_02tnmt.pdf
- **13. T. S. Cao (2015),** Payment for Environmental Services (PES) A new tool in natural resource and environmental management, Journal of Natural resource and Environment, No 21 (227) November/2015, pp 24-26.
- 14. P. T. Trieu, **T. S. Cao,** T. L. T. Ho (**2015**), Evaluation on surface-water quality trend of Ca river basin in Nghean province from 2012 to 2014, Journal of Agriculture and Rural Development, No 20/2015, pp.
- 15. T. L. T. Ho, **T. S. Cao**, H. N. Nguyen, P. K. H. Bui (**2016**), *Comparison of two pig-farming systems in impact on the quality of surface and groundwater in Hanoi, Vietnam*, Intenational Journal of Agricultural Inovations and Research (IJAIR), Volume 5, Issue 1, pp 11-19. http://www.ijair.org/index.php/issues
- 16. T. L. T. Ho, **T. S. Cao**, V. H. Le (**2016**), *Building database for managing agricultural land quality in Lap Thach district of Vinh Phuc province*, Journal of Agriculture and Rural Development in Vietnam, No 15/2016, pp 11-18.
- 17. **T. S. Cao,** T. L. Nguyen, T. T. D. Nguyen, T. H. G. Nguyen (**2016**), *Analyzing vuluntarry of payment for forest environmental service in Ba Be, Bac Kan*, Journal of Agriculture and Rural Development in Vietnam, No 17/2016, pp 110-117.
- 18. **T. S. Cao,** T. N. A. Nguyen (**2016**), Effect of cleaner production solutions applying in some cassava starch production factories in Nghe An province, Journal of Environment in Vietnam, No 10/2016, pp 24-25.
- 19. **T. S. Cao,** T. L. Nguyen, V. D. Tran (**2016**), *An overview theory about payments for environmental services*, Journal of Agriculture and Rural Development in Vietnam, Special subject: Environmental protection in Agriculture and Rural Development. October 2016, pp 36-44.

- 20. **T. S. Cao,** T. L. Nguyen, V. D. Tran (**2016**), Assessment of biodiversity potential and forest environmental services for environmental services payment in Babe district, Backan province, Vietnam Journal of Agriculture science, No 12/2016, pp 1945-1955.
- 21. T. H. G. Nguyen, **T. S. Cao** (2017), *Analysing factors affecting food waste at household level: A case study in Trau Quy town, Gia Lam district, Ha Noi*, Journal of Agriculture and Rural Development in Vietnam, No 3 + 4/2017, pp 30-39.
- 22. H.T.L. Tra, **C. T. Son,** N. T. Hai, N. K. Tan (**2017**). *Heavy metal accumulation in the agriculture soil around iron-recycling Chau Khe village in Tu Son town, Bac Ninh province, Vietnam.* International Journal of Agriculture and Environmental Research (IJAER). Volume 3, Issue 2, March April/2017, pp 2698 2711. http://www.ijaer.in/more2.php?id=194
- 23. T. L. Nguyen, **T. S. Cao** (2017), Assessment of environmental services of different agroforestry systems of northern provinces, Vietnam, Journal of Agriculture and Rural Development in Vietnam, No 12 (6/2107), pp 87 – 95.
- **24. T. S. Cao,** T. L. Nguyen (**2017**), Experience in evaluating the payment for environmental services in the world Lessons learned for Vietnam, Journal of Natural resource and Environment in Vietnam, No 13 (7/2017), pp 11 13.
- **25. T. S. Cao,** A. P. Hoang (**2017**), Studying on the relationship between forest management decentralization and payments for forest environmental services in Ba Be district of Bac Kan province, Journal of Soil science, No 51/2017, pp 126 132.
- **26. T. S. Cao,** T. T. D Nguyen, T. L. Nguyen, V. D. Tran (**2017**), Impact assessment of Direct Payment for forest environmental services in Ba Be district, Bac Kan province on forest protection activities and local people's attitude, Vietnam Journal of Agricultural Science, No 7/2017, pp 1033 **1041**.
- 27. H. N. Nguyen, Q. C. Nguyen, Q. G. Do, T. L. Nguyen, **T. S. Cao**, Philippe Lebailly, Martin Reinhardt Nielsen (**2018**), *Livelihood capital and poverty status of forest dependent households in upland area: a casestudy in BacKan province, Vietnam*, Vietnam Journal of Agricultural Science (VJAS), No 1/2018, pp 85 96.
- 28. H. C. Vo, T. L. Nguyen, T. H. V. Dinh, **T. S. Cao,** T. H. G. Nguyen, T. B. H Nguyen (**2018**), *Environmental pollution and potential waste management in livestock production*, Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 22 31.
- 29. T. H. G. Nguyen, **T. S. Cao**, T. B. T. Nguyen, D. A. Luong (**2018**). *Conservation agricultural approaches for sustainable agricuture and vegertable growers perception in Gia Lam, Ha Noi.* Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 158 168.

- 30. T. H. V. Dinh, **T.S. Cao** (2018), Assessment of nitrogen flow on pig-farming system in Gialam, *Hanoi*, Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 15-21.
- 31. H. N. Nguyen, Q. C. Nguyen, Q. G. Do, T. L. Nguyen, **T. S. Cao** (2018), *Livelihood activities development of forest-deprndent people in upland areas of Backan province, Vietnam*, Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 148 157.
- 32. **T. S. Cao,** T. L. Nguyen, H. N. Nguyen, T. H. G. Nguyen, D. V. Tran (**2018**), *Local people's assessment of equity and transparency in payment for frost environmentat services (PFES) programs in Ba Be district, Bac Kan province*, Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 138 147.
- **33. T. S. Cao,** T. M. Nguyen, T D. Pham, T. H. V. Dinh, V. T. Nguyen, T. L. Nguyen (**2018**), *Waste audit application for beef cattle production at household level in Lechi commune, Gialam district, Hanoi*, Journal of Agriculture and Rural Development in Vietnam, No 12/2018, pp 5 14.
- **34. T. S. Cao,** T. B. Nguyen, T. K. A. Tong, V. D. Nguyen, T. D Pham (**2019**), *Water quality assessment of Cam Son lake in Lucngan district of Bacgiang province*, Journal of Agriculture and Rural Development in Vietnam, No 7/2019, pp 22-27.
- **35. T. S. Cao,** T. Đ. Pham, M. A. Nguyen, A. H. Nguyen, Q. T. Dam (**2019**), *Water quality assessment of some rivers in Gia Lam district by water quality index (WQI)*, Journal of TNU of Science and Technology, No 7/2019, pp 133 140.
- 36. T. B. Nguyen, T. H. G. Nguyen, C. T. Le, T.S. **Cao** (2019), *Soil and water quality in fruit cultivation area of Bacgiang province*, Journal of Agriculture and Rural Development in Vietnam, No 13/2019, pp 136 144.
- 37. T. B. Nguyen, **T.S. Cao**, T. T. Dinh, T. M. Nguyen (**2019**), *Effects on the activities of Khe Giang dometic solid waste treatment factory on environmental quality*, Journal of Agriculture and Rural Development in Vietnam, No 17/2019, pp 109 117.
- **38. Cao Truong Son,** Nguyen Thi Huong Giang (**2019**), *General Overview about environmental audit: Theory and Fractice*, Journal of TNU of Science and Technology, No 209 (16), pp 157 164.
- 39. Le Thi Thu Huong, Yoshifumi Takahashi, Hisako Nomura, **Truong Son Cao**, Takeru Kusudo, Mitsuyasu Yabe (**2020**), *Manure management and pollution levels of contract and non-contract livestock farming in Vietnam*. Journal: Science of the Total Environment, Volume 710 (2020), 25/3/2020, 136 200.
- 40. **Cao Truong Son,** Nguyen Thi Huong Giang, Trieu Phuong Thao, Nguyen Hai Nui, Nguyen Thanh Lam, Vo Huu Cong (**2020**), *Assessment of Cau river water quality assessment using a combination of water quality and pollution indices*. Journal of Water quality Supply: Research and Technology Aqua, January 20th 2020.

- 41. Nguyen The Binh, **Cao Truong Son**, Nguyen Van Dung, Nguyen Minh Anh (**2020**). Assessment of the situation of dometic waste management in Bac Giang province. Journal of Agriculture and Rural Development in Vietnam, No 6/2020, pp 128 136.
- 42. **Cao Truong Son,** Nguyen The Binh, Nguyen Thi Minh Thanh, Luong Đuc Anh, Nguyen Thanh Lam (**2020**). *Environmental impact auditing for Khe Giang solid waste treatment factory in Uong Bi city, Quang Ninh province*, Journal of TNU of Science and Technology, No xxx, pp xxx.
- 43. Le Thi Thu Huong, Yoshifumi Takahashi, Hisako Nomura, Le Van Duy, **Cao Truong Son,** Takeru Kusudo, Mitsuyasu Yabe (2020). *Water-use Efficiency of Alternative Pig Farming Systems in Vietnam*. Journal of Resources, Conservation & Recycling or its open access mirror....

14.2. Proceeding in workshop and seminar

- 1. Yuki Mori, Ho Thi Lam Tra, **Cao Truong Son**, Trieu Phuong Thao (**2008**). Seasonal change of soil nitrogen components in paddy fields, Vietnam. Proceedings of the JSPS International Seminar 2008 "Hybrid Rice and Agro Ecosystem", 245-250. http://www.agr.kyushu-u.ac.jp/pastproject/Asia-Africa/images/JSPSInternationalSeminar2008_HybridRice.pdf
- 2. Yuki Mori, Ho Thi Lam Tra, **Cao Truong Son**, Trieu Phuong Thao, Do Thi Thu Hien, Shinji Fukuda, Trinh Quang Huy, Yohei Shimasaki, Pham Van Cuong, Takuya Araki, Do Nguyen Hai, Ha Viet Cuong, Masaru Matsumoto (**2009**). "Effects of urea concentration and application method on urea hydrolysis and nitrification in flooded soil", Proceeding of workshop on "Land, water and Nutrient in Agricultural System of Viet Nam", pp 37 38.
- 3. **Cao Truong Son**, Ho Thi Lam Tra (**2012**), *An Overview of Viet Nam Breeding Environment*. Proceedings of the "New Rural Building Theory and Reality Problems". Hanoi 03/2012, pp 230 238. (In Vietnamese).
- 4. Ho Thi Lam Tra, Cao Truong Son, Nguyen Thi Hong Hanh (2014). Environmental Status of Van Lam District, Hung Yen province, Afectted By Change of Land-use Structure. Proceeding of workshop on "Effective land, water use in agriculture and protection of rural environment in Vietnam and Japan". September, 19/2014, pp 271-282. Agricultural University Press.
- 5. Nguyen Thanh Lam, **Cao Truong Son,** Nguyen Thi Huong Giang (**2014**). *Biodiversity Status in Chi Linh Town, Hai Duong Province*. Proceeding of workshop on "*Effective land, water use in agriculture and protection of rural environment in Vietnam and Japan*". September, 19/2014, pp 185 197. Agricultural University Press.
- 6. Nguyen Thi Huong Giang, Pham Trung Duc, **Cao Truong Son** (2014). "Assessing Social Exposure of Coastal Community to Weather Extreme and Climate Events: A Case Study in Giao Lac Commune, Giao Thuy District, Nam Dinh Province". Proceeding of workshop on "Effective land, water use in agriculture and protection of rural environment in Vietnam and Japan". September, 19/2014, pp 233 242. Agricultural University Press.

- 7. Nui Nguyen Hai, Martin Reinhardt Nielsen, Ida Theilade, Lam Nguyen Thanh, **Son Cao Truong** (2015). Alternative Livelihood Strategies of Forest Dependent Ethnic Minorities within a REDD+ Implementation Area in Bac Kan Province, Vietnam. Proceeding of Tropentag 2015 workshop on "Conference on International Research on Food Security, Natural Resource Management and Rural Development". Berlin, Gemeny, September 16-18, 2015. http://www.tropentag.de/2015/abstracts/full/896.pdf
- 8. Cao Truong Son, Bui Phung Khanh Hoa, Nguyen Thi Thuy Dung, Nguyen Thi Quynh Anh, Ho Thi Lam Tra (2015). Water Environmental State in Some Pig Farming Systems in Ha Noi: a Case Study in Ung Hoa District and Son Tay Town. Proceeding of workshop on "Suitable Livestock Development". Hanoi, December 18-19, 2015, pp 142-152. Agricultural University Press.
- 9. D.T.H. Van, **C.T. Son,** N.T.Lam, P.N. Bao, T. Kuyama, V.H.Cong (**2016**). "Current situation of pig manure and effluent management in Vietnam". Proceeding of The 12th International Symposium on Southeast Asian Water Environment (SEAWE2016) Hanoi, Vietnam, November 28-30, 2016, pp 343-348.
- **10. Cao Truong Son,** Nguyen Thanh Lam, Tran Đuc Vien (**2017**). Roles of Payment for Forest Environmental Services in community based on natural resources management: A case study in Ban Duong, Hoang Tri commune, Ba Be district, Bac Kan province. Poceeding of Vietnam national workshop about "Human ecology and sustainable development" Hanoi January 13, 2017.

14.3. Textbooks and and monograph books

- 1. Ho Thi Lam Tra, Luong Đuc Anh, **Cao Truong Son (2012).** Textbook: *Environmental Management*. Hanoi University of Agricultural Publishing House. (In Vietnamese).
- 2. Nguyen Thanh Lam, Jan Japenga, **Cao Truong Son**, Nguyen Thi Hong Ngoc, Nguyen Thi Bich Ha and Nguyen Thi Huong Giang (**2012**). *Renewable energy in Vietnam. Chapter 2 of Biofuel sector rewier: the case of Vietnam*, Hanoi Agricultural Publishing House.
- 3. Nguyen Thanh Lam, **Cao Truong Son**, Nguyen Thi Bich Ha, Nguyen Thi Huong Giang, Ly Thi Thu Ha, Nguyen Thi Hong Ngoc (2014). *Doccument for knowledge generalizing and skills training about Natural disaster management*. Vietnam Ministry of Education and Training (In Vietnamese).
- 4. T.D.Vien, **C.T.Son,** N.T.T.Dung, N.T.Lam (2016). Redefining diversity and dynamics of natural resource management in Asian Chapter 5: "A voluntary model of payments environmetal services: Lessons from Ba Be district, Bac Kan province of Vietnam". Volumm 2, **Elsevier Publishing** ISBN 9780128054536. <u>Redefining Diversity and Dynamics of Natural Resources Management in Asia, Volume 2.</u>
- 5. Cao Truong Son, Dinh Thi Hai Van (2020), Manual: practice of Environmental Management, Vietnam National University of Agricultural Publishing House.
- 6. Cao Truong Son, Ho Thi Lam Tra (2020), Textbook: *Environmental Audit*, Vietnam National University of Agricultural Publishing House.

15. Research Project Coordinator:

- 1. Project: "Study on inorganic nitrogen in sur-face and groundwater around Ha Noi, Viet Nam". Cooperating between Vietnam and Japan. Period 2008 2010 (Staff)
- 2. Project: "Influences of pig-breeding in household on sur-face groundwater quality in Laivu commune, Kimthanh district, Haiduong province" Period 2008 2009 (Staff).
- 3. Reseach: "Surveying on waterwaste sources and characteristics of sullage pit system in Hanoi University of Agriculture to base for choosing treatment solutions". Period 2010, project at basic level (Staff).
- 4. Research: "Evaluating pollution levels of surface and groundwater in different pig-farming systems in Hungyen province, Vietnam". Cooperating between Vietnam Becjum. Period from 2009 to 2011 (Secretary)
- 5. Minision: "Study on compile environmental modelling textbook". Period from 2012 to 2013. Project of ministry level (Staff).
- 6. Project: "Surveying on biodiversity state and building an action plan for biodiversity of Haiduong province in period from 2011 to 2015, orienting over to 2020", Project in Hai Duong province of Vietnam, Period 2012 2013 (Staff).
- 7. Project "Protecting Environment for "Đảo Cò" in Chi Lang Nam area, Thanh Mien district of Haiduong province". Period from 2013 to 2014. Project of province level (Director)
- 8. Project: "Study on giving some cleaner production solutions for pig-farming: A case study in Gialam district of Hanoi city". Period from 2013 2014. Project of basic level (Director).
- 9. Project: "Compiling guider doccument for generalizing knowledge and educating skills to natural disater risks". Period from 2013 to 2014. Project of ministry level (Secretary).
- 10. Research: "Surveying and building mechanism to support small and medium enterprises to implement environmental audit and ecological management for controlling environmental risks, saving natural resources and reducing production costs". Period from 2014-2015. Project of ministry level (Staff).
- 12. Research: "REDD+: The forest grab of all times". Period from 2014 to 2017, Cooperating between Vietnam and Demark (PhD Student).
- 13. Project: "North mountain urban area Program Yen Bai City". Period 2014 2015 (Environmentlist).
- 14. Research: "Assessment of impacts of payment of forest environmental services on environmental protection awareness and livelihood of people living on forest". Study of Vietnam National University of Agriculture in 2016 (Director).
- 15. Mission: "Developing a project to protect the environment in Cam Son lake in Bac Giang province", project in Bac Giang province of Vietnam in 2018 (Director).
- 16. Project: "Evaluating the environmental impact of solid waste incineration of Khe Giang solid waste treatment plant, Thuong Yen Cong commune on agricultural production of surrounding households", Project in Uong Bi city, Quang Ninh province of Vietnam in 2018 (Director).

- 17. Project: "Investigation, evalution of the current status of environmental pollution by using fertilizers, plant protection drugs in planting fruit plant in three districts of Luc Ngan, Luc Nam and Yen The in Bac Giang province", Project in Bac Giang province of Vietnam in 2018 (Director).
- 18. Research: "Apply waste audit techniques and propose solutions to reduce pig waste", Mission of Vietnam Ministry of Agriculture and Rural Development, Period from 2019 2020 (Director).
- 19. Research: "Building a model of solid waste collection and treatment in rural areas in Ha Nam province". Research in Ha Nam province of Vietnam, Period 2019 2020 (Secretary).
- 20. Mission: "Investigating and evaluating domestic waste collection, transportation and treatment activities and proposing solutions to improve the efficiency in the management of Bac Giang province". Project in Bac Giang province of Vietnam in 2019 (Director).
- 21. Mission: "Prepare a report on environmental protection in 2019 of Bac Giang province", Minison of Bac Giang province of Vietnam in 2019 (Director).
- 22. Project: Investigate the current situation of waste generation at health facilities and propose management solutions in Bac Ninh province, Project in Bac Ninh province of Vietnam in 2020 (Director).

Hanoi, January 1, 2020

Cao Truong Son