

NUMFOR Solange Ayuni

Tohoku University, Graduate School of Environmental Studies (Graduated: March 25<sup>th</sup>, 2022)

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## **OBJECTIVE**

To secure a responsible career opportunity to fully utilize and expand my skills and knowledge, while contributing significantly to the growth and progress of the organization, where I can grow further as well.

## **My RESEARCH and INTERESTS**

My current research is on the potential for developing countries to recycle end-of-life vehicles and recover energy to meet some of the energy needs in these countries. This is to ensure a sustainable and friendly environment by reducing the pollution from end-of-life vehicle waste. The recycling of end-of-life vehicles is acknowledged as a source of secondary resources for use in industry. Such resources would include metals, energy from non-metallic materials. In addition, it is vital to determine feasible locations for establishing such recycling facilities, which my research also covers.

### **Skills acquired:**

While conducting this research, I have gained technical skills in tools, including Vensim, Stella, ArcGIS Pro. Other toolkits include STATA, R-Commander, LaTeX, Eviews, Google Cloud Services (Forms, Sheets, etc.), and Microsoft Office.

### **I am interested in:**

Renewable Energy, System Dynamics, Environmental and Energy Economics, End-of-Life Vehicle Recycling, Automobile Recycling, Waste/Resource Management, International Economics, International Trade and Trade Policies, Equality, Management, Business Innovation and Entrepreneurship, Human Resource, Economic Growth and Development, E-Commerce.

## **WORK ATTITUDE**

Particularly, I have exhibited capacity to:

- Conduct research, analyze and present relevant data/information
- Lead and work with a team
- Understand and contribute to environmental issues/affairs
- Manage affairs and coordinate activities

## **AWARDS/SCHOLARSHIPS**

- Tomoni Crowdfunding Program, Tohoku University Fund, 2022  
([https://www.kikin.tohoku.ac.jp/project/tomopro/2021/pj\\_003](https://www.kikin.tohoku.ac.jp/project/tomopro/2021/pj_003))
- Interdepartmental Multi-Dimensional Doctoral Program for Materials Science and Engineering

April, 2019 – March 31, 2022

- Best Presentation Certificate Award, Final Master's Defense, Graduate School of Economics and Management, Tohoku University, January 17<sup>th</sup>, 2019.
- African Business Education Initiative Scholarship Award by JICA  
September 6, 2016 – March 30, 2019

## WORK HISTORY

### ■ **Founder and President, The Numfor Solange Foundation (2021~)**

Contributing and gaining practical experience on promoting waste management and recycling in Cameroon through waste recycling projects, webinars on waste issues. I have and I am gaining experience on legal registration issues, leading and working with a team, especially from abroad.

### ■ **Group Leader, English Teaching/Empowerment, ISA, Japan (2019~)**

Teaching/participating in English empowerment programs at junior high and high schools across Japan, and online as well.

### ■ **Marketing Agent at Group Uni Pharma Inter Ltd., Douala-Cameroon (Sept 2015 - July 2016)**

Carried out sales, promotion, and logistics of cosmetic products. Designed and implemented marketing strategies to uplift revenues and increase the customer base.

### ■ **Weight Bridge Operator at Bam International (Project of Quay Wall Construction, Limbe-Cameroon (Feb-Aug 2014).**

Collected and recorded material types and weights of trucks loaded with rocks from the quarry to the seaside (Quay Wall), as well as fuel needed for operations. Ensured appropriate materials were transported, truck drivers' effectiveness and efficiency by monitoring their speed, and punctuality to work.

### ■ **Assistant Quality at Somainto Sarl, Cameroon (Jan-Mar 2013)**

As an assistant quality, I worked in close collaboration with the chief engineer, issued tests to be conducted on welded tanks and ensured welders' effectiveness and efficiency by monitoring their number of defaults on welds and their punctuality to work.

## INTERNSHIP

### ■ **Virtual Internship at EBS Group Co., Ltd (May -July 2021)**

Carried out research on used tire and used vehicle market in Cameroon and other Africa countries. I also learned about the car auction system in Japan, logistics and supply chain of used vehicles and tires.

### ■ **Overseas Research Internship at The University of Queensland, Australia (Nov 2019-Jan 2020)**

Conducted research on end-of-life tire (waste tire) recycling in Australia and developed a manuscript for publication.

### ■ **Internship at Kaiho Industry Co. Ltd, Kanazawa, Japan (Aug 25-Nov 1 2019 and Feb 9-26 2020)**

Designed the company's brochure and conducted research on their potential business extensions. Received Practical training on vehicle dismantling and material sorting. Carrying out continuous research with this company and Meru University in Kenya, on establishing a vehicle recycling facility at Meru University.

### ■ **Summer Internship 2017 at Anchor Network Services (ANS), Japan (Sept 2017).**

Dismantled electronics, sorted and categorized various material types. Proposed some business ideas on the expansion of ANS to Africa with respect to the recycling of used electronics.

■ **Internship at Japan International Cooperation Agency (JICA) Branch Tohoku (Feb 2017)**

Studied and made propositions on how JICA Tohoku could promote local companies and attract more tourists into the region after the 2011 Earthquake and Tsunami. Learned about the operations and functioning of the organization.

■ **Internship at Divisional Tax Center of Limbe, Cameroon (Aug-Sept 2011)**

Conducted tax assessments. Gained knowledge on the tax system of Cameroon as well experience on tax assessments. I also took part in field controls for tax payments.

## EDUCATION

Doctorate Degree	Graduate School of Environmental Studies (Environmental and Energy Economics) Tohoku University, Japan (April 2019 –March 2022) Thesis: « The Potential for End-of-Life Vehicle Recycling in Cameroon »
Certified Design Thinker	The Berkeley Innovation Group, University of Berkeley, USA (Nov-Dec 2020) By successfully completing a six-week design thinking course jointly organized by Berkeley Innovation Group (University of Berkeley) and MD Leading Program (Tohoku University), I achieved the title, Certified Design Thinker.
PhD Diploma	Interdepartmental Multi-Dimensional Program for Material Science and Engineering (2019-04-Present) Multi-Dimensional (MD) Leading Program/scholarship recipient. By the end of my master's degree, I successfully acquired the MD scholarship where I am obtaining credits in the courses offered for a diploma at the end of my PhD, plus the monthly stipends to sustain my doctor's research.
Master's Degree	Graduate School of Economics and Management, Tohoku University, Japan (2017 –2019) Thesis: « Trade and Economic Growth. Evidence from Trade Openness through Regional Integration in Africa »
Online Seminar	Globis University, Japan (2017)
MBA	Preparation in Strategy, Leadership and Cultural behavior
Online in HR	OSHAcademy, US (2014), Professional Training Program for Safety Management at workplace
Bachelor of Science	Faculty of Social and Management Sciences, Department of Economics and Management, University of Buea, Cameroon (2009-2012)

## LANGUAGE CAPABILITY

English (fluent), French (basic), Japanese (basic)

## EXTRA-CURRICULAR ACTIVITIES

### ■ (2020-Present) Music Artist (Gospel Music/Afro Music/R&B, etc)

When it comes to entertainment, I go by the name SOLLY BLISS (artist name). I Have singles released with some videos. I recently released my debut album (Blessed call). My songs are available on all digital stores and social media handles. Solly Bliss is on YouTube, Instagram, Facebook, Twitter, etc.

### ■ (2017-10 - Present) African Association of Miyagi (AFAM), Japan (*Organizing Secretary*)

Plans and organizes activities for the association. Ensures activities are followed/carried out, and other offices are performing their assigned tasks. Presently gaining more experience on human resource management and organizational leadership which is a bridge to my career, as well as the planning of activities and ensuring their successful implementation.

### ■ (2016-8-2019-3) Japan International Cooperation Agency (JICA)

*African Business Education Initiative (ABE) Scholarship Participant.* Successfully gained the JICA/ABE scholarship to Japan under in which I obtained my master's degree in Economics at Tohoku University while networking with Japanese enterprises and linking them to African enterprises for a win-win cooperation.

### ■ (2017-04 – 2019) KUVUKI and Dance Groups, African Association of Miyagi (*A Lead Singer and Dancer*)

Singing and dancing as hobbies and being part of these groups, I have experienced self-development and exposure, especially with several performances and invitations for performances.

### ■ (2017-03 - 2019) KAKEHASHI Africa, Japan (*Finance Officer, Cameroon Chapter*)

Learning more about accountability, research and development in a quest to bridge enterprises especially Japanese and African enterprises, to a win-win cooperation.

### ■ (FLC Sept 16-18 2017) Future Leader Congress

Organized by STUDEC International, supported and held at the UN Conference Center Bangkok- Thailand. Participated in workshops and presentations on issues geared towards achieving the UN SGDs.

## HOBBIES

*Singing, dancing, modelling, watching movies, playing software games, travelling, camping.* Apart from studying, I am engaged in other activities as my hobbies which act as boosts to my social life, interaction and self-relaxation.

## PUBLICATIONS

### Journal Papers

- **Numfor Solange Ayuni, Geoffrey O., Zhengyang Z., Kazuyo M., 2021.** A Review of Challenges and Opportunities for End-of-Life Vehicles Recycling in Developing Countries and Emerging Economies: A SWOT Analysis. *Sustainability*, 13(9), p.4918. (*Published in Sustainability Journal*)

- **Numfor Solange Ayuni**, Yutaka T., Kazuyo M., 2022. Energy Recovery from End-of-Life Vehicle Recycling in Cameroon: A System Dynamics Approach. (*Revised and Resubmitted to the Journal of Cleaner Production*).
- **Numfor Solange Ayuni**, Glen C., Anthony H., Kazuyo M., 2022. A Review of End-of-Life Tire Recycling in Australia, Japan, South Africa and Cameroon: A System Dynamics Approach. (*Submitted as a Letter (short Article) to Academia Journal*).
- **Numfor Solange Ayuni**, Tomoki N., Kazuyo M., 2022. Facility Location for End-of-Life Vehicle Recycling in Cameroon. (*In Preparation for submission to the Journal of Industrial Ecology*).

### Conference Papers

- **Numfor Solange Ayuni**; Kentaro T.; Kazuyo M., “Estimation of End-of-Life Vehicle Quantities in Kenya, Cameroon, Nigeria, South Africa and Morocco Using Population Balance Model”, Conference proceedings of the 15th Meeting of the Institute of Life Cycle Assessment, Japan, page 164-165, March 2020. *Published (Extended Abstract)*
- **Numfor Solange Ayuni**; Zhengyang Zhang; Kazuyo Matsubae, “The Potential for Energy Recovery from End-of-Life Vehicle Recycling in Cameroon. A Systems Dynamics Approach”. The 31st Annual Conference of Japan Society of Material Cycles and Waste Management (JSMCWM), 2020. *Published (Extended Abstract)*
- Tshimula J., Mary M.N., Thierry R.B., Mbuyi M.D., Achraf E., Hugues K., **Numfor Solange Ayuni**, “Sifting for Deeper Insights from Public Opinion: Towards Crowdsourcing and Big Data for Project Improvement”, 2019 IEEE 10th International Conference on Awareness Science and Technology (iCAST), Morioka, Japan, pp. 1-5, October 2019. *Published*
- Tshimula J., Togashi A., **Numfor Solange Ayuni**, “Towards Financial Inclusion-based Monetization Model for Startups Drive”, The 2018 IEEE Transactions on Engineering Management - International Symposium on Innovation and Entrepreneurship (ISIE). *Published*

**Academic Societies:** System Dynamics Society, Japan Society for Material Cycles and Waste Management, International Society for Industrial Ecology.

### REFERENCES

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