

## Abridged CV – Elias NYANDWI (Ph.D.)

### 1. Personal Details

- Names: Elias Nyandwi
- Position: Researcher & Coordinator of Post-Graduate Study, Centre for Geographic Information Systems and Remote Sensing (CGIS) & University of Rwanda
- Office Location: University of Rwanda, Nyarugenge Campus, KN 73 St, P.O. Box 3900, Kigali, Rwanda
- Telephone (mobile): +250 7 88 65 38 25
- Email: [nyandwi@ur.ac.rw](mailto:nyandwi@ur.ac.rw) & [nyasept@gmail.com](mailto:nyasept@gmail.com)

### 2. Education

- *October 2017*: PhD in Geo-Information for Environment and spatial planning, University of Twente, The Netherlands
- *March 2008*: Msc in Geo-Information and Earth Observation for Natural Resource Management, ITC, The Netherlands
- *June 2003*: BSc. in Physical and Human Geography, former National University of Rwanda

### 3. Publications

#### 3.1. Peer-reviewed Paper

1. Ngwijabagabo, H., **Nyandwi, E.** and Barifashe, T. (2020). Integrating Local Community Perception and Experts's Knowledge in Spatial Multi-Criteria Evaluation (SMCE) for Landfill Siting in Musanze Secondary City. Rwanda Journal of Engineering, Science, Technology and Environment, 3(1)
2. Ndoricyimpaye, E.L., Tuyishimire, J., Vanwambeke, S., Mutesa, L., **Nyandwi, E.**, Rujeni, N. and Coutelier J.P. (2020) L'épidémie de SARS-CoV-2 en Afrique Sub-Saharienne, questions, craintes et espoir. Louvain Médical-Revue 2020, 139 (05-06) 330-336
3. Bernhard, K., Sabuhoro, E., **Nyandwi, E.**, Munanura, I. and Smith, T.E.L (2019) Effects of integrated conservation-development projects on unauthorized resource use in Rwanda's volcanoes national park: a mixed-methods spatiotemporal approach. Oryx. ISSN 0030-6053 (In Press)
4. Rujeni N, Mazimpaka A, Tumusiime M, **Nyandwi E**, Rutayisire G, Kayiranga P, Umulisa I and Ruberanziza E. Pre-school aged children are exposed to Schistosoma through Lake Kivu in Rwanda, AAS Open Research 2019,2 (7). (<https://doi.org/10.12688/aasopenres.12930.1>)
5. **Nyandwi, E.**, Veldkamp, A., Amer, S., Karema, C., & Umulisa, I. (2017). Schistosomiasis mansoni incidence data in Rwanda can improve prevalence assessments, by providing high-resolution hotspot and risk factors identification. BMC Public Health, 17(1), 845. doi:10.1186/s12889-017-4816-4

6. **Nyandwi, E.**, Veldkamp, A., Osei, F. B., & Amer, S. (2017). Spatio-temporal dynamics of schistosomiasis in Rwanda between 2001 and 2012: impact of the national Neglected Tropical Disease control programme. *Geospatial health: health applications in geospatial science: open access*, 12(1), 11 p
7. **Nyandwi, E.**, Veldkamp, T., & Amer, S. (2016). Regional climate sensitivity of wetland environments in Rwanda: the need for a location-specific approach. *Regional Environmental Change*, 16(6), 1635-1647. doi:10.1007/s10113-015-0905-z
8. **Nyandwi E.**, GIS, and RS for Modelling Landform Controls on the Distribution of Forest Canopy Vascular Epiphyte, 2009, *International Journal of Ecology & Development*, Volume 16, Issue# S10, 2010.

### ***3.2. Selected scientific and Professional Publications***

9. Nduwamungu J., **Nyandwi, E.**, Mazimpaka J.D, Mugiraneza T., Mukashema A., Uwayezu E., Rwanyiziri G. and Nzabanita V. (2012) Rwanda Forest Cover Mapping using high-resolution aerial photographs, GSDI Newsletter.
10. **Nyandwi, E** and MUKASHEMA A. (2011) Excessive Deforestation of Gishwati Mountainous Forest and Biodiversity changes, e-bulletin of Enda Lead Africa ict4d Research Program in March 2011.
11. **Nyandwi E.**, Veldkamp T. and Amer S. (2015), Delineating Rwandan Wetland using topographic and Climatic parameters, GeoTech Rwanda 2015 – Kigali, 18-20 November 2015
12. Callixte Gatali, Dr. Léonidas Mbanzamihiho, Valentine Uwamariya et **Elias Nyandwi**, Perspectives d'utilisation des différentes sources Naturelles de minéraux en alimentation animal: cas de la source saline de Kunyu et la roche de Uwinka » Paper published and presented for first time at National Conference on Agricultural Research Outputs, Kigali January 29th – 1st February 2007.
13. SHILLING, M., Lasry, F., **Nyandwi, E.**, Kayijamahe, E., Rulinda, C. and Bizimana, J.P. Connecting Rwanda through Space - Geoinformation and Web-Based Decision Support Systems for Poverty Reduction and Sustainable Development, Paper presented at AfricaGIS Conference at Pretoria /South Africa October 31st to November 4th, 2005.

### ***3.3. Unpublished Report***

1. **Nyandwi, E.**, Landscape and spatial analysis to Support the Preparation of the Full Project Document for a GEF-7 Project 'Ecosystems/Landscape Approach to Climate Proof the Rural Settlement Program of Rwanda', UNDP-RWANDA & REMA, Kigali, April 2020.
2. Rwanyiziri G., **Nyandwi E.**, Tuyishimire J., Mugabowindekwe M., Kagoyire C. & Mulinga N. (2019a). Review of Policies and Strategies related to Ecosystem Management and Climate Resilient Agricultural System towards Environmental Sustainability

Requirements in Rwanda. Kigali: Wildlife Conservation Society – Rwanda Country Program.

3. Rwanyiziri G., **Nyandwi E.**, Tuyishimire J., Mugabowindekwe M., Kagoyire C. & Mulinga N. (2019b). Vital Signs Data Analysis for Ecosystem Management and Climate Resilient Agricultural System towards Environmental Sustainability Requirements in Rwanda. Kigali: Wildlife Conservation Society – Rwanda Country Program.
4. Rwanyiziri G., **Nyandwi E.**, Mugabowindekwe M., Tuyishimire J. & Kagoyire C. (2019c). Rwanda Atlas. Environment, Agriculture & Livelihood Options. Kigali: Wildlife Conservation Society – Rwanda Country Program.
5. Maccioni, L., Gian, M.A, **Nyandwi, E.**, Naramambuye, XF., Plançon. C., (2019). Technical Assistance to Enhance the Government of Rwanda’s Capacities in the Agriculture Sector for the Sustainable Use of Land and Water Resources, Value Creation and Nutrition Security. Guideline for Rwanda Agriculture Spatial Planning., Technical Report MINAGRI –TECAN-EU. Kigali.
6. **Nyandwi, E.**, Mukashema, A., Nduwamungu, J., Kayijamahe, E., Kagoyire, C., Nahimana, Y et Ford, R. Le rôle des SIG –P dans l’élaboration de modèles communautaires de gestion de Ressources forestières au Rwanda. Cas de la Province de l’Ouest ; Research project proposed and accepted by Enda Lead Africa to IDRC Canada: Participatory Geographic Information Systems (PGIS) for a sustainable management of natural resources and food security Case studies: Benin, Kenya, Malawi, Rwanda, Senegal, Tunisia, April 2010- 2012.
7. **Nyandwi, E.**, Mukashema, A., Gakwavu R.J. and SANO. J., Strategic Environmental Assessment for an Integrated Project of Development of Grouped Settlement in Rural Area of Rwanda “Imidugudu Project” for MINALOC/Settlement task force. EIA Concept, 2010.
8. **Nyandwi, E.**, Akagera Basin-Transboundary Agro-ecosystem Management Methodology definition for Baseline data collection for FAO/MINAGRI, 2005  
[ftp://ftp.fao.org/agl/agll/kageradocs/04milestones\\_events/participants\\_development\\_assessment\\_methods.doc](ftp://ftp.fao.org/agl/agll/kageradocs/04milestones_events/participants_development_assessment_methods.doc)