Selorm Akaba

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RESEARCH

Interests	Agricultural Economics · Sustainable Food Systems · Technology Assessment · Climate Actions
Areas	Plant Science · General Agricultural and Biological Sciences · Soil Science · Food Science · Business and International Management · Economics and Econometrics

RESEARCH SUMMARY

56	1,470	18	25	8.71	44%
Publications	Citations	h-index	i10-index	Field-weighted impact	World top 10%

Counted from the 56 publications listed below, 2012–2026. Field-weighted impact is the mean over the 39 works scored for it; 1.00 is the world average for works of the same field, type and year. 17 of the 39 papers scored for it are among the world's most cited tenth for their field, type and year.

POSITIONS

Lecturer 2004–present
Agricultural Economics and Extension, University of Cape Coast, Cape Coast, Ghana

Adjunct Professor 2010–2012
Graduate and Professional Studies, University of Liberia, Monrovia, Liberia

Associate Professor 2010–2012
Agriculture and Sustainable Development, Cuttington University, Monrovia, Liberia

EDUCATION AND QUALIFICATIONS

PhD Agricultural Econoics 2014–2018
Agricultural Economics and Extension, University of Cape Coast, Cape Coast, Ghana

Certificate in Peace and Development Studies 2012
Peace and Development Studies, Cuttington University, Monrovia, Liberia

Postgraduate Diploma in Project Management 2010
Maastricht School of Management, Maastricht, Netherlands

M.Phil Agricultural Economics 2004–2008
Agricultural Economics and Extension, University of Cape Coast, Cape Coast, Ghana

BSc Agriculture 1998–2002
School of Agriculture, University of Cape Coast, Cape Coast, Ghana

PUBLICATIONS

Journal articles 49

1. Kwame Agyei Frimpong, Ransford Opoku Darko, **Selorm Akaba**, Isaac Boateng, Agnes Naa Abeley Abbey (2026). Assessing the influence of farmers' socio-economic orientation on the adoption of recommended soil fertility management practices. *International Journal of Agricultural Research Innovation and Technology*. https://doi.org/10.3329/ijarit.v15i2.87914
2. Kwame Agyei Frimpong, Ransford Opoku Darko, **Selorm Akaba**, Isaac Boateng, Agnes Naa Abeley Abbey (2026). How Socio-Economic Factors Shape Soil Fertility Management in Ghana's Smallholder Farms. *Growing Africa*. https://doi.org/10.55693/ga51.eyfw6809
3. Bernard Archibald Senyo Agyeman, **Selorm Akaba** (2025). Comparative Assessment of Extension Delivery in the Volta Cocoa Region of Ghana. *International Journal of Agriculture & Environmental Science*. https://doi.org/10.14445/23942568/ijaes-v12i6p103
4. Jacob B. Kolleh, Lateef Olalekan Bello, Aminou Arouna, **Selorm Akaba**, Takeshi Sakurai (2025). Impact of the smart valley project in enhancing rice production and farmer outcomes in Northwestern Sierra Leone. *Journal of Agriculture and Food Research*. https://doi.org/10.1016/j.jafr.2025.102338
5. Ernest Teye, Charles Lloyd Yeboah Amuah, Vida Gyimah Boadu, Kwadwo Anokye Dompreh, Maxwell Darko Asante, Francis Padi Lamptey, Stephen Narh, Daniel Dzorkpe Gamenyah, George Oduro Nkansah, **Selorm Akaba** (2025). Rice seed integrity evaluation: Developing a rapid onsite system to check seed fraud using a portable NIR spectroscopic device coupled with smartphone technology. *Food Physics*. https://doi.org/10.1016/j.foodp.2025.100059
6. Kwaku Boakye, **Selorm Akaba**, Shallan Awuye, Samuel Mensah (2025). Sustainability in Agricultural Value Chains: Evidence from the Pineapple Sector in Ghana. *Research on World Agricultural Economy*. https://doi.org/10.36956/rwae.v6i2.1641
7. Kelvin Dodzi Aloryi, Nnaemeka Emmanuel Okpala, Mawuli Korsi Amenyogbe, Daniel Bimpong, Hong Guo, Semiu Folaniyi Bello, **Selorm Akaba**, Akwasi Yeboah, Abdul Razak Ahmed, Patrick Maada Ngegba, Nabieu Kamara, Juliet Nkiruku Anyanwu, Danielle Ama Essandoh, Xianjin Qiu, Xiaohai Tian, Guoli Wang, Tianyue An (2025). Whole-genome meta-analysis coupled with haplotype analysis reveal new genes and functional haplotypes conferring pre-harvest sprouting in rice. *BMC Plant Biology*. https://doi.org/10.1186/s12870-025-06551-5
8. PA ASARE, MO ADU, **S AKABA** (2024). CARNEIRO, JL dos S. Caracterização morfológica e molecular de germoplasma de. *PROPAGAÇÃO VEGETATIVA E DIVERSIDADE GENÉTICA DE INHAME (Dioscorea sp.)*. https://ri.ufs.br/bitstream/riufs/19514/2/CRISLAINE_ALVES_SANTOS.pdf#page=24
9. Adeyinka S. Adewumi, Idris I. Adejumobi, Vincent A. Opoku, Paul A. Asare, Michael O. Adu, Kingsley J. Taah, Adekemi E. Stanley, Temitope E. Olatunde, Emmanuel Afutu, **Selorm Akaba**, Hapson Mushoriwa, Paterne A. Agre (2024). Exploring quantitative trait nucleotides associated with response to yam mosaic virus severity and tuber yield traits in Dioscorea praehensilis Benth. germplasm via genome-wide association scanning. *Frontiers in Horticulture*. https://doi.org/10.3389/fhort.2024.1459476
10. Adeyinka S. Adewumi, Paul A. Asare, Oluyemi Titilola Akintayo, Idris I. Adejumobi, Michael O. Adu, Kingsley J. Taah, Emmanuel Afutu, Vincent A. Opoku, Adekemi E. Stanley, **Selorm Akaba**, Jean M. Mondo, Hapson Mushoriwa, Paterne A. Agre (2024). Genetic architecture of post-harvest tuber quality traits in bush yam (Dioscorea praehensilis Benth.) germplasm through association mapping. *Frontiers in Horticulture*. https://doi.org/10.3389/fhort.2024.1373327
11. Kelvin Dodzi Aloryi, Nnaemeka Emmanuel Okpala, Hong Guo, Benjamin Karikari, Aduragbemi Amo, Semiu Folaniyi Bello, Dinesh Kumar Saini, **Selorm Akaba**, Xiaohai Tian (2024). Integrated meta-analysis and transcriptomics pinpoint genomic loci and novel candidate genes associated with submergence tolerance in rice. *BMC Genomics*. https://doi.org/10.1186/s12864-024-10219-z
12. **Selorm Akaba**, CA Wongnaa, AA Boakye, B Adjei-Mensah, B Asante, F Idan, C Antwi (2024). Journal of agriculture and food research. *Journal of Agriculture and Food Research*. https://www.researchgate.net/profile/Lukeman-Haruna/publication/380865604_Effect_of_Partial_pulp_removal_and_fermentation_dur

ation_on_drying_behavior_nib_acidification_fermentation_quality_and_flavor_attributes_of_Ghanaian_cocoa_beans/links/66599179bc86444c721f15c7/Effect-of-Partial-pulp-removal-and-fermentation-duration-on-drying-behavior-nib-acidification-fermentation-quality-and-flavor-attributes-of-Ghanaian-cocoa-beans.pdf

13. Matthew Ayamga, Abdelaziz Lawani, **Selorm Akaba**, Arsene Birindwa (2023). Developing Institutions and Inter-Organizational Synergies through Digitalization and Youth Engagement in African Agriculture: The Case of "Africa Goes Digital". *Land*. https://doi.org/10.3390/land12010199
14. Daniel Odoom, Festus Annor-Frempong, **Selorm Akaba**, Albert Obeng Mensah (2023). Factors Affecting Sustainability of Cocoa Life Project Interventions in Ghana: Views of Beneficiaries in Wassa East District. *Ghana Journal of Development Studies*. https://doi.org/10.4314/gjds.v20i1.10
15. ANNOR-FREMPONG FESTUS, EL Okorley, **Selorm Akaba**, A Obeng-Mensah (2023). Maize farmers' preferred option for Fall Armyworm control, and factors influencing their preference: A case of Northern Ghana. *ADRRI Journal of Agriculture and Food Sciences*. https://www.researchgate.net/profile/Isaac-Asante-4/publication/374372413_Maize_farmers'_preferred_option_for_Fall_Armyworm_control_and_factors_influencing_their_preference_A_case_of_Northern_Ghana/links/651a7bca1e2386049def3f6d/Maize-farmers-preferred-option-for-Fall-Armyworm-control-and-factors-influencing-their-preference-A-case-of-Northern-Ghana.pdf
16. Ebenezer Osei Jones, Enoch Kwame Tham-Agyekum, Fred Ankuyi, Daniel Adu Ankrah, **Selorm Akaba**, Adinam Bahahudeen Shafiwu, Forson Nkrumah Richard (2023). Mobile agricultural extension delivery and climate-smart agricultural practices in a time of a pandemic: Evidence from southern Ghana. *Environmental and Sustainability Indicators*. https://doi.org/10.1016/j.indic.2023.100274
17. Kelvin Dodzi Aloryi, Nnaemeka Emmanuel Okpala, Aduragbemi Amo, Semiu Folaniyi Bello, **Selorm Akaba**, Xiaohai Tian (2022). A meta-quantitative trait loci analysis identified consensus genomic regions and candidate genes associated with grain yield in rice. *Frontiers in Plant Science*. https://doi.org/10.3389/fpls.2022.1035851
18. Omega Selorm, **Akaba Selorm**, Ghartey William (2022). Adoption of electronic commerce by agribusiness small medium enterprises in the upper east region of Ghana. *Journal of Development and Agricultural Economics*. https://doi.org/10.5897/jdae2022.1350
19. Christian Adler PHARES, **Selorm AKABA** (2022). Co-application of compost or inorganic NPK fertilizer with biochar influences soil quality, grain yield and net income of rice. *Journal of Integrative Agriculture*. https://doi.org/10.1016/j.jia.2022.07.041
20. Selorm Omega, Esther E. E. Adebote, Peter K. Omega, **Selorm Akaba**, Omitoyin A. Siyanola (2022). Fish Farmers' Willingness to Pay for Improved Information and Communication Technologies During COVID-19: A Case of Ibadan, Nigeria. *Journal of Agricultural Science*. https://doi.org/10.5539/jas.v14n2p113
21. Richard Osae, Maurice Tibiru Apaliya, Raphael N. Alolga, Emmanuel Kwaw, Phyllis Naa Yarley Otu, **Selorm Akaba** (2022). Influence of shea butter, bee wax and cassava starch coatings on enzyme inactivation, antioxidant properties, phenolic compounds and quality retention of tomato (Solanum lycopersicum) fruits. *Applied Food Research*. https://doi.org/10.1016/j.afres.2022.100041
22. Francisca Addae-Frimpomaah, Godwin Amenorpe, Nicholas Ninju Denwar, Samuel Amiteye, Gloria Anyesom Adazebra, Frederick Leo Sossah, **Selorm Akaba**, Abdul Rashid Issah, Harry Mensah Amoatey (2022). Participatory approach of preferred traits, production constraints and mitigation strategies: implications for soybean breeding in Guinea Savannah zone of Ghana. *Heliyon*. https://doi.org/10.1016/j.heliyon.2022.e09497
23. IK Asante, EW Inkoom, **Selorm Akaba** (2022). Sustainability analysis of programme interventions: The case of Root and Tuber Improvement and Marketing Programme in the Central Region of Ghana. *ADRRI JOURNAL OF AGRICULTURE AND FOOD SCIENCES*. https://www.researchgate.net/profile/Isaac-Asante-4/publication/361664640_Sustainability_analysis_of_programme_interventions_The_case_of_Root_and_Tuber_Improvement_and_Marketing_Programme_in_the_Central_Region_of_Ghana/links/62bebee0d53e0b7114c01a9c/Sustainability-analysis-of-programme-interventions-The-case-of-Root-and-Tuber-Improvement-and-Marketing-Programme-in-the-Central-Region-of-Ghana.pdf

24. Martinson Ankrah Twumasi, Yuansheng Jiang, Evans B. Ntiamoah, **Selorm Akaba**, Kwabena N. Darfor, Linda K. Boateng (2021). Access to credit and farmland abandonment nexus: The case of rural Ghana. *Natural Resources Forum*. https://doi.org/10.1111/1477-8947.12233

25. **Selorm Akaba** (2021). Assessment of development intervention sustainability in rural Ghana: The case of Oasis Foundation Child Labor Monitoring Project beneficiaries. *International Journal of Development and Sustainability*. https://www.researchgate.net/profile/Zenas-Afram/publication/360657980_Assessment_of_development_intervention_sustainability_in_rural_Ghana_The_case_of_Oasis_Foundation_Child_Labor_Monitoring_Project_beneficiaries/links/628d35046773462154d50fa4/Assessment-of-development-intervention-sustainability-in-rural-Ghana-The-case-of-Oasis-Foundation-Child-Labor-Monitoring-Project-beneficiaries.pdf

26. Kwabena Nkansah Darfor, Martinson Ankrah Twumasi, **Selorm Akaba**, Michael Kwamega, Gideon Ntim-Amo, Stephen Ansah (2021). Determinants of agriculture credit fungibility among smallholder farmers: The case of rural Ghana. *International Journal of Agriculture and Natural Resources*. https://doi.org/10.7764/ijanr.v48i1.2235

27. **Selorm Akaba** (2021). Digital Library Usage during the Covid-19 Pandemic. *Library Philosophy and Practice*. https://scholarworks.sjsu.edu/libphilprac/5831/

28. Adeyinka S. Adewumi, Paterne A. Agre, Paul A. Asare, Michael O. Adu, Kingsley J. Taah, Jean M. Mondo, **Selorm Akaba** (2021). Exploring the Bush yam (Dioscorea praehensilis Benth) as a Source of Agronomic and Quality Trait Genes in White Guinea yam (Dioscorea rotundata Poir) Breeding. *Agronomy*. https://doi.org/10.3390/agronomy12010055

29. Adeyinka S. Adewumi, Paul A. Asare, Michael O. Adu, Kingsley J. Taah, **Selorm Akaba**, Jean M. Mondo, Paterne A. Agre (2021). Farmers' perceptions on varietal diversity, trait preferences and diversity management of bush yam (Dioscorea praehensilis Benth.) in Ghana. *Scientific African*. https://doi.org/10.1016/j.sciaf.2021.e00808

30. Hanyabui Emmanuel, Obeng Apori Samuel, **Akaba Selorm**, Ssekandi Joseph (2021). Implementation of COVID-19 control measures: Effect on fertilizer supply and soil fertility in Africa. *African Journal of Agricultural Research*. https://doi.org/10.5897/ajar2021.15621

31. Christian Adler Phares, Emmanuel Amoakwah, Andrews Danquah, **Selorm Akaba**, Kwame Agyei Frimpong, Theophilus Abonyi Mensah (2021). Improved soil physicochemical, biological properties and net income following the application of inorganic NPK fertilizer and biochar for maize production. *Acta Ecologica Sinica*. https://doi.org/10.1016/j.chnaes.2021.12.002

32. Matthew Ayamga, **Selorm Akaba**, Albert Apotele Nyaaba (2021). Multifaceted applicability of drones: A review. *Technological Forecasting and Social Change*. https://doi.org/10.1016/j.techfore.2021.120677

33. Samuel Kwesi Ndzebah Dadzie, Emmanuel W. Inkoom, **Selorm Akaba**, Festus Annor-Frempong, James Afful (2021). Sustainability responses to climate-smart adaptation in Africa: implication for food security among farm households in the Central Region of Ghana. *African Journal of Economic and Management Studies*. https://doi.org/10.1108/ajems-04-2019-0155

34. Nancy Innocentia Ebu Enyan, **Selorm Akaba**, Sarah Ama Amoo (2021). Women diagnosed with HIV and unknown HIV status perceived susceptibility to cervical cancer and perceived benefits of cervical cancer screening in Ghana: a cross-sectional study. *BMC Women s Health*. https://doi.org/10.1186/s12905-021-01509-9

35. Richard Osae, Gloria Essilfie, Raphael N Alolga, **Selorm Akaba**, Xiaoqian Song, Patrick Owusu-Ansah, Cunshan Zhou (2020). Application of non-thermal pretreatment techniques on agricultural products prior to drying: a review. *Journal of the Science of Food and Agriculture*. https://doi.org/10.1002/jsfa.10284

36. **Selorm Akaba** (2020). Economic resources utilisation in maize production: Evidence from Central Region, Ghana. *Journal of Development and Agricultural Economics*. https://www.academia.edu/download/93277820/BDF793965550.pdf

37. Terence F McGrath, Maeve Shannon, Olivier P Chevallier, Ratnasekhar Ch, Fei Xu, Fanzhou Kong, Hong Peng, Ernest Teye, **Selorm Akaba**, Di Wu, Libiao Wu, Qiang Cai, Doan Duy Le Nguyen, Van Viet Man Le, Sufyan Pandor, Arun P Kapil, Guangtao Zhang, Mary McBride, Christopher T Elliott (2020). Food Fingerprinting: Using a Two-Tiered approach to Monitor and Mitigate Food Fraud in Rice. *Journal of AOAC*

International. https://doi.org/10.1093/jaoacint/qsaa109

38. Martinson Ankrah Twumasi, Yuansheng Jiang, Xiaoshi Zhou, Bismark Addai, Kwabena Nkansah Darfor, **Selorm Akaba**, Prince Fosu (2020). Increasing Ghanaian fish farms' productivity: Does the use of the internet matter? *Marine Policy*. https://doi.org/10.1016/j.marpol.2020.104385
39. Samuel A. Manu, Samuel Akuamoah-Boateng, **Selorm Akaba** (2020). Predictors of Food Security among Vegetable Farmers in South Ketu and North Ketu, Ghana. *International Journal of Technology and Management Research*. https://doi.org/10.47127/ijtmr.v1i2.19
40. Raphael N. Alolga, Richard Osae, Gloria Essilfie, Firibu Kwasi Saalia, **Selorm Akaba**, Fadzai Chikari (2020). Sonication, osmosonication and vacuum-assisted osmosonication pretreatment of Ghanaian garlic slices: Effect on physicochemical properties and quality characteristics. *Food Chemistry*. https://doi.org/10.1016/j.foodchem.2020.128535
41. Chosniel Elikem Ocloo, Hu Xuhua, **Selorm Akaba**, Junguo Shi, David Kwaku Worwui-Brown (2020). The Determinant Factors of Business to Business (B2B) E-Commerce Adoption in Small- and Medium-Sized Manufacturing Enterprises. *Journal of Global Information Technology Management*. https://doi.org/10.1080/1097198x.2020.1792229
42. Hu Xuhua, Ocloo Chosniel Elikem, **Selorm Akaba** (2019). Effects of business to business e-commerce adoption on competitive advantage of small and medium-sized manufacturing enterprises. *Economics & Sociology*. https://doi.org/10.14254/2071-789x.2019/12-1/4
43. Nancy Innocentia Ebu, Salome Amissah-Essel, Christiana Asiedu, **Selorm Akaba**, Kingsley Asare Pereko (2019). Impact of health education intervention on knowledge and perception of cervical cancer and screening for women in Ghana. *BMC Public Health*. https://doi.org/10.1186/s12889-019-7867-x
44. Elikem Chosniel Ocloo, Hu Xuhua, **Selorm Akaba**, Michael Addai, David Kwaku Worwui-Brown, Adelaide Spio-Kwofie (2018). B2B E-commerce Adoption amongst manufacturing SMEs: An Evidence from Ghana. *Canadian Journal of Applied Science and Technology - Canadian Journal of Applied Science and Technology*.
45. **Selorm Akaba**, Martin Bosompem (2018). Public and Private Extension Services Delivery to Cassava Farmers in Sanniquellie and Saclepea Mahn Districts in Nimba County, Liberia. *Journal of Sustainable Development in Africa*. https://www.jsd-africa.com/Jsda/Vol20No1%20Spring%202018/1-%20Sustainable%20Agriculture/Public%20and%20Private%20Extension%20Services.Mercy%20Lah.pdf
46. MEK Amu, **Selorm Akaba**, R Quarcoo (2014). Contribution of child labor to children's schooling in and around the University of Cape Coast. *Asian Journal of Educational Research*. https://www.academia.edu/download/80311308/CONTRIBUTION-OF-CHILD-LABOUR-TO-CHILDREN_E2_80_99S-SCHOOLING-IN-AND-AROUND-THE-UNIVERSITY-OF-CAPE-COAST.pdf
47. **Selorm Akaba** (2014). Globalization and competitiveness: Challenges of small and medium enterprises (SMEs) in Accra, Ghana. *International journal of business and social science*. https://ir.ucc.edu.gh/server/api/core/bitstreams/33866d74-2ea4-4280-ba91-a06a4b23d5bb/content
48. **S Akaba** (2013). Predictors of Food Security among Vegetable Farmers in South Ketu and North Ketu, Ghana. *International Journal of Technology and Management Research*.
49. **Selorm Akaba** (2012). Journal of Development and Agricultural Economics. *Journal of Development and Agricultural Economics*. https://academicjournals.org/articles/j_articles/JDAE

Book chapters 2

1. Selorm Omega, Henry De-Graft Acquah, **Selorm Akaba** (2025). Soybean Farmers' Ecosystem-Based Approach in Mitigating Climate Change in Savannah Agroecological Zones in Northern Ghana. *Disaster Resilience and Green Growth*. https://doi.org/10.1007/978-981-95-0389-6_14
2. **Selorm Akaba**, Samuel Akuamoah-Boateng (2017). An Evaluation of Climate Change Effects on Fishermen and Adaption Strategies in Central Region, Ghana. *Climate change management*. https://doi.org/10.1007/978-3-319-70703-7_7

Conference papers 1

1. Selorm Omega, **Selorm Akaba** (2021). Socio-Demographic Factors Contributing to Adoption of Ecommerce by Agribusiness SMEs in the Upper East Region of Ghana. *first Africa Precision Agriculture Conference*.

Reports 3

1. **Selorm Akaba** (2020). B2B e-commerce adoption levels; SMEs; TOE framework; partial least squares; Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/items/e9d08c86-4354-4991-98ad-1ea16afd1de7
2. ANNOR-FREMPONG FESTUS, **Selorm Akaba** (2020). How drone technology impacts livelihoods: the case of Nsadwir farming community in Ghana. *http://www.afgoesdigital.com/how-drone-technology-impacts-livelihoods-the-case-of-nsadwir-ghana/*. https://ir.ucc.edu.gh/items/380d8c42-9df8-424e-b04f-160cde6b2769
3. **Selorm Akaba** (2018). Climate change impacts and adaptation strategies for coastal communities. *Springer International Publishing*. https://doi.org/10.1007/978-3-319-70703-7

Theses 1

1. **Selorm Akaba** (2019). Climate Change Responses, Food Security and Production Sustainability of Maize-Farming Households in Volta Region, Ghana. *University of Cape Coast*. https://ir.ucc.edu.gh/items/e4a4ec62-8b42-47e6-ae79-81ef18d6a603