

Curriculum Vitae of Associate Professor Twaha Ai Basamba Ateenyi

CONTACT INFORMATION

Twaha Ai Basamba, Associate Professor,
Makerere University,
College of Agricultural and Environmental Sciences,
School of Agricultural Sciences,
Department of Agricultural Production,
P. O Box 7062, Kampala, Uganda.
E-mail: twahaateenyi@gmail.com twaha@aes.mak.ac.ug
Phone: +256 782 475422

SKILLS

- Can competently use a computer, including GIS applications (ILWIS, ARCGIS, ARCM/INFO, QGIS, R, IDRIS and GRASS) and statistical analyses using SAS, MSTAT, GENSTAT, MINITAB, SPSS, PADI GRAPH and STATA
- Can independently design and conduct field experiments and research;
- Ability to work in a team with people from diverse cultural, socio and economic backgrounds
- Strong analytical thinking skills and a learning attitude;
- Excellent written and oral communication skills, general writing skills including report writing and office communications
- Excellent interpersonal skills
- Excellent organisational skills
- Problem solving skills
- Team work and team building skills
- Honesty and Integrity
- Financial management skills
- Leadership skills
- Reading and comprehensive skills
- Basic arithmetic skills
- Decision making skills
- Communication skills
- Listening and internalizing
- Oratory skills
- Conflict resolution skills
- Time management skills
- Consultation skills
- Multi-tasking skills

EDUCATI ONAL BACKGROUND/ ACADE MI C QUALI FI CATI ON S

YEAR	INSTI TUTI ON	A WARD
2000- 2005	Agric ultural Uni versity of Nor way, NLH (RENAME D The Nor wegian Uni versity of Life Sciences, UMB)	Doct or of Philosophy (Ph. D) degree in Environ mental Sci ences with a bias to Soil and Wa ter sci ences
2001 - 2002	CI AT, COLOMBI A	Certificate in Tropical Soil Phosphorous Transfor ma tion and Or ga nic Mat ter Dyna mics Research
1996- 1998	Agric ultural Uni versity of Nor way, NLH (Re na med The Nor wegian Uni versity of Life Sciences, UMB)	Master of Science (MSc.) Degree in Ma na ge ment of Nat u ral Re sources and Sus tai na ble Ag ri cul ture
1994- 1995	Inter na ti onal In sti tu te for Aer o space Sur ve y and Earth Sci ences (Re na med Inter na ti onal In sti tu te for Geo- In for ma ti on Sci ence and Earth Ob ser va ti on) (ITC), Enschede, The Net her lands	Post Gra du ate Di pl o ma in Soil Sur ve y and Ap pli ca ti ons of Soil In for ma ti on, with a bias to the use of Re mo te Sen si ng and GI S tech ni ques
1988- 1991	Ma ke re re Uni ver si ty, Ugan da	Bach e lor of Sci ence (B Sc.) degree in Forestry, Upper Se cond Class hon ors
1985- 1987	St. Leo's Col lege, Kyegobe, Fort Portal Gty, Ugan da	U A C E (Ugan da Ad vanced Cer ti fi ca te of Edu ca ti on)
1981- 1984	St. Leo's Col lege, Kyegobe, Fort Portal Gty, Ugan da	U C E (Ugan da Cer ti fi ca te of Edu ca ti on)
1974 – 1980	Ka men go Pri ma ry School, Fort Portal Gty, Ugan da	Pri ma ry Leav ing Cer ti fi ca te, passed in grade one (1 st grade)

ADVANCED TRAINING/PROFESSIONAL DEVELOPMENT

2019 (June – July)	National Farmers' Leadership Training Institute, Kampiringisa, Uganda	Certificate of Attendance in Farmer Fields Schools Training of Facilitators
2018 (March)	Makerere University	Certificate of Attendance in Advanced Geo-Spatial Analytics for Resource Assessment and Resilience
2017 (July)	Makerere University	Post Graduate Supervision
2016 (November-December)	World Agro-forestry Centre (ICRAF), Nairobi, Kenya	Certificate in Meta-Analysis
2016 (June)	Makerere University	Certificate in Climate Change and Sustainable Development
2015 (June)	Makerere University	Certificate in Research Management
2014 (December)	Makerere University	Certificate in University Teaching (Pedagogy)
2014 (November)	Makerere University	Certificate in Learner Centered Pedagogy and Student Assessment
2010 (June)	Makerere University	Certificate in Ph. D Supervision and Mentorship
2009 (January)	Uganda National Council for Science and Technology, Kampala	Certificate in Competitive Grants Proposal Writing
2008 (November)	Makerere University	Certificate in End User Training Programme in ICT Skills
2007 (July)	Makerere University	Certificate in Research Management
2007 (January)	Makerere University	Certificate in Scholarly and Communication Skills
2006 (November)	Uganda Martyrs University and Mbarara University of Science and Technology	Certificate in Curriculum Development
2005 (May-July)	Makerere University	Certificate in Information Technology (End User Training Program)
2003 (July)	Makerere University	Certificate in Advanced Gender Research Methodology
2000 (February - March)	Makerere University	Certificate in Gender, Agricultural Research and Development

1999 (October)	Department of Resource Surveys and Remote Sensing Nairobi, Kenya	Certificate in Data Analysis for Natural Resource Management in the tropics
1999 (April)	Makerere University	Certificate in Computer Skills
1999 (March)	Makerere University	Certificate in University Teaching (Pedagogy)
1993 (February)	Makerere University	Certificate in Soil and Plant Analysis

EMPLOYMENT HISTORY

May 2014 – July 2016: Acting Director, Makerere University Fort Portal Campus

Duties and Responsibilities

- ❖ Organise and develop the campus with particular emphasis on the coordination and management of academic programmes, students' affairs and research
- ❖ Provide academic leadership and guidance to staff and students
- ❖ Responsible for the general conduct of examinations at the Campus
- ❖ Coordinate and manage the process of planning and evolution of annual estimates for the Campus, including planning for intake figures and establishments for the various programmes at the Campus
- ❖ Solicit for funds for research and general development of the Campus
- ❖ Chair Campus Appointments and Promotions Advisory Committees
- ❖ Maintain and be accountable for an up-to-date inventory of all Campus equipment and assets, both movable and immovable
- ❖ Prepare the Campus Annual Leave Roster for staff
- ❖ Submit annual Appraisal Reports on members of staff of the Campus
- ❖ Oversee the organization and maintenance of records of past and present students and staff of the campus
- ❖ Participate in the recruitment, selection, promotion and disciplining of Campus staff in accordance with the established procedures of the University
- ❖ Assist in the operations of the Campus and the University by serving on Committees and perform such other duties as may be assigned by the Deputy Vice Chancellors for Academic Affairs and Finance and Administration

Achievements

- ❖ Acquired new text books for the Campus library (over 400 titles)
- ❖ Acquired new computers for the Campus

- ❖ Convened three workshops; the first one on training needs assessment for the campus, the second one on pedagogical skills training and the third one on research management for academic staff at the campus
- ❖ Initiated processes for launching more academic programmes at the Campus
- ❖ Memoranda of Understanding (MOUs) with various institutions in the Rwenzori Region were initiated
- ❖ Recruited more staff at the Campus to boost service delivery through human resource capacity building

September 2011 – April 2014: Coordinator, Makerere University Fort Portal Campus

Duties and Responsibilities

- ❖ Reinforce Makerere University partnership with other local, regional and international institutions in terms of academic and research service delivery
- ❖ Coordinate and facilitate the exchange of experience and skills between the Makerere University Fort Portal branch and the main branch
- ❖ Coordinate and monitor the implementation of all institutional business plans and capacity building activities including organising workshops for both staff and students, internship placement of students etc
- ❖ Preparing annual reports for the branch at the end of each academic year
- ❖ Participate in the recruitment of new staff.
- ❖ Effectively manage and coordinate the implementation of strategic plans on behalf of Makerere university
- ❖ Mentoring and training of academic staff
- ❖ Publicity of the campus and image building
- ❖ Play an effective role in resource mobilization to generate sufficient funds to support the implementation of research and capacity development activities of the campus
- ❖ Institutional financial budgeting
- ❖ Managing institutional funds from government
- ❖ Resolving conflicts among staff to create a peaceful working environment
- ❖ Managing institutional infrastructure
- ❖ Writing fundable research and community development projects
- ❖ Managing research funds
- ❖ Representing Fort Portal branch at workshops, conferences and academic seminars

Achievements

- ❖ Carried out several mentorship and capacity building workshops for staff and as a result, there is better performance of students

- ❖ Well managed institutional funds leading to some improvement in infrastructure for the University branch campus, for example the campus acquired 20 new computers that were installed at a small computer laboratory at the campus
- ❖ Created a peaceful and friendly relationship among staff and between the staff and students
- ❖ Convened a workshop on dissemination of the findings of a study on training needs assessment for Makerere University Fort Portal campus held in January 2012 in Fort Portal town, Uganda

August 2012 – to date: Associate Professor, College of Agricultural and Environmental Sciences, Makerere University

Responsibilities

- ❖ Generate research funding and attract post-graduate students (Masters and Ph. D levels)
- ❖ Managing Research funds
- ❖ Designing and conducting field experiments
- ❖ Capture, collate and synthesize complex data sets
- ❖ Data management
- ❖ Statistical analysis of data resulting from field-based trials
- ❖ Supervision and mentoring of both undergraduate and post graduate students as well as junior teaching and technical staff
- ❖ Peer-reviewing of manuscripts for international journals
- ❖ Maintaining a good publication output
- ❖ Teaching both undergraduate and post graduate students of Integrated watershed management, Soil Science, Land use and Management, Forestry, Agriculture, Environmental science, Agricultural and Rural Innovations, Agricultural Engineering Horticulture and Agricultural Extension Education
- ❖ Research
- ❖ Making regular contributions to scientific meetings

Achievements

- ❖ Continued to supervise and mentor postgraduate students (have so far trained more than 40 M Sc. students and more than 10 Ph. D students)
- ❖ Participated in a number of committee meetings at Makerere University and workshops giving significant contribution
- ❖ Published many papers in international journals of high impact factor
- ❖ Attended a number of workshops and conferences locally (in Uganda) and abroad

2008- July 2012: Senior Lecturer, College of Agricultural and Environmental Sciences, Makerere University

Responsibilities

- ❖ Generating research funding and attracting post-graduate students (Masters and Ph. D levels)
- ❖ Managing Research funds
- ❖ Designing and conducting field experiments
- ❖ Capture, collate and synthesize complex datasets
- ❖ Data management
- ❖ Statistical analysis of data resulting from field-based trials
- ❖ Supervision and mentoring of both undergraduate and postgraduate students as well as junior teaching staff
- ❖ Maintaining a good publication output
- ❖ Teaching both undergraduate and postgraduate students of Integrated watershed management, Land use and management, Forestry, Agriculture, Environmental science, Agricultural and Rural Innovations, Agricultural Engineering Horticulture and Agricultural Extension Education. Taught the following courses:
 - Wetland ecology
 - Irrigation technology
 - Integrated Watershed management
 - Water resources management
 - Water harvesting technologies
 - Water quality assessment
 - Water and society
 - Water pollution
 - Research Methods and Scientific Writing
 - Introductory Soil Science

- Geology and Geomorphology
- Soil Fertility
- Soil Science for Agricultural Engineers
- Soil and Environment Protection
- Pedology
- Ecology
- Tropical Production systems
- Land Use planning
- Land Use Impact Assessment
- Tropical Soils and their Management
- Soil Biology
- Soil Survey and Land Evaluation
- Soil Morphology and Classification
- Soil Ecology
- Soil physics
- Soil chemistry
- Urban Environmental Management and Sustainability
- Introduction to soil surveying and mapping
- Soil Organic Matter
- Agroforestry
- Environmental policy and law
- Environmental health
- Population and development
- Energy conservation and climate change
- Advanced statistics
- Agronomy and ecology
- Soil conservation and management
- Environmental Education and Communication
- Forest soils
- Fertilizer Technology
- Soil and Plant analysis
- Plant nutrition
- Natural Resource management
- Environmental Protection
- Environmental Management
- Environmental Science

- Sustainable Land Management
 - Farming Systems
 - Sustainable Agriculture
 - Environmental Education
 - Land Administration
 - Common Property Management
 - Remote sensing and GIS
 - Plant physiology
 - Plant Science
 - Climate change
 - Climatology
 - Agronomy
 - Soil tillage
 - Environmental microbiology
 - Soil microbiology
 - Land development
 - Irrigation technology
 - Modelling environmental phenomena
 - Forestry economics
 - Forest management
- ❖ Conducting and demonstrating both field and laboratory experiments related to Soil and water science and Agricultural Production
 - ❖ Supervision and mentoring of both graduate and post graduate students as well as junior teaching staff
 - ❖ Make regular contributions to scientific meetings
 - ❖ Curriculum Development for both undergraduate and post graduate programmes

Achievements

- ❖ Promoted to the academic rank of Associate Professor
- ❖ Have won three competitive research grants
- ❖ Supervised M Sc. and Ph. D candidates
- ❖ Published many research articles in international peer-reviewed journals
- ❖ Successfully implemented all my projects to completion
- ❖ Spear-headed and significantly contributed to the development of new academic programs for the Department and the College. For example, my contribution to curriculum development led to the birth of the B.Sc. course in Agricultural Land Use and Management

(B.Sc. LUM) and the M. Sc. in Integrated Watershed management hosted by the Department of Agricultural Production. All these programmes have attracted students and funding to the department and the entire Makerere University at large. They have also attracted staff, thereby providing employment in this country. Many of our graduates from these programmes have had an opportunity to go for further studies in overseas and local universities and have excelled; many have proceeded for M.Sc. and Ph.D. More to that, many of our graduates from B.Sc. LUM have successfully got access to gainful employment in Centenary and other banks as Agricultural loans officers and many are employed in Local Governments, the Uganda Peoples' Defense Forces and Police in Uganda as well as in Local and International NGOs. This demonstrates my significant contribution to human resource development in Africa.

- ❖ Participated in the former Faculty of Agriculture Curriculum Development Process that was concluded with updating of the then Faculty handbook.
- ❖ Was hired as a consultant to write the curriculum for Master of Science in Environmental Science and Management for Ugandan universities by the National Council of Higher Education of Uganda.

2007-2010: Acting Head (Chair), Department of Soil Science, Faculty of Agriculture, Makerere University

Responsibilities

- ❖ Chairing departmental meetings
- ❖ Overseeing research projects
- ❖ Providing strategic direction of the department
- ❖ Day to day management of the department
- ❖ Representing the department at various national and international fora
- ❖ Ensuring teaching, learning and community service are done in line with university policy
- ❖ Ensuring security of departmental equipment and chemicals for teaching and research
- ❖ Managing finances of the department
- ❖ Managing academic undergraduate and postgraduate programmes
- ❖ Curriculum development
- ❖ Acting as chief examiner of the department

Achievements

- ❖ The department contributed significantly to human resource development for the country
- ❖ The visibility of the department nationally and internationally improved
- ❖ Student enrolment improved
- ❖ Research outputs increased in form of publications in international peer-reviewed journals
- ❖ Many staff enrolled for M. Sc. and Ph.D. programs at Makerere University and abroad

2005-2010: Coordinator of the Bachelor of Science Degree Programme in Agricultural Land Use and Management (B.Sc. LUM) of the Department of Soil Science of Makerere University

Responsibilities

- ❖ Ensuring that the program is widely advertised nationally and internationally
- ❖ Making sure that students are taught effectively throughout the semester
- ❖ Maintaining an up to date data base of students
- ❖ Supervision of internships and research projects for the undergraduate students
- ❖ Preparing time tables for lectures per semester
- ❖ Guiding and counseling students

Achievements

- ❖ Many students joined the Ugandan work force in the field of land use and management
- ❖ Some students' research reports were published as papers in conference proceedings
- ❖ Many of the students enrolled for M.Sc. And Ph.D degrees after this B.Sc.
- ❖ The program became popular, especially for Ugandan students

2005: Coordinator of the Practical Skills Training Recess Term Faculty of Agriculture, Makerere University

Responsibilities

- ❖ Ensuring that a time table is drawn for the recess term
- ❖ Managing examinations and other forms of assessments during and after the recess term
- ❖ Ensuring that lecturers carry out the training as planned on the time tables
- ❖ Arranging for transport of staff and students during the recess term

Achievements

- ❖ Students acquired practical skills in the field of agriculture and environmental management
- ❖ Government appreciated the importance of the exercise and committed more funds
- ❖ Local farmers participated in teaching the students based on their practical experience
- ❖ Students appreciated most of the theory subjects taught previously

1992-2004: Assistant Lecturer- Lecturer, Department of Soil Science, Makerere University

Responsibilities

- ❖ Teaching undergraduate students
- ❖ Conducting and demonstrating both field and laboratory experiments related to Soil and water Science and Agricultural Production
- ❖ Research

- ❖ Examining students
- ❖ Lobbying for research funds

PROFESSIONAL AFFILIATIONS (MEMBERSHIP TO PROFESSIONAL BODIES)

- ❖ Member, Makerere University Academic Staff Association (MUASA)
- ❖ Member, Uganda Forestry Association (UFA)
- ❖ Member, Soil Science Society of East Africa (SSSEA)
- ❖ Member, Soil and Water Conservation Society of Uganda (SWCSU)
- ❖ Member, Association of Uganda Professional Agriculturalists (ASUPA)
- ❖ Member, Makerere University Convocation (MUC)
- ❖ Fellow Uganda National Academy of Sciences
- ❖ Reviewer on several international journals

SERVICE TO THE UNIVERSITY AND THE COMMUNITY

- ❖ Advisor, Makerere University Land Managers Association (MULMA)
- ❖ Advisor, St. Leo's College, Kyegobe Old Boys Association
- ❖ Member/ Advisor, Kitumba Muslim Community, Fort-Portal, Kabarole District
- ❖ Advisor, Kamengo Primary School Management Committee, Fort Portal, Kabarole District
- ❖ Member, St. Leo's College, Kyegobe Board of Governors (2010-2016)
- ❖ Chairperson, Academic Committee, St. Leo's College, Kyegobe Board of Governors (2010-2016)
- ❖ Vice-President, St. Leo's College, Kyegobe Old Boys Association (2010-2016)
- ❖ Patron, AGRIFORVET (Agriculture, Forestry and Veterinary Sciences) Muslim brotherhood, Makerere University
- ❖ Co-opted advisor, Kabarole Farmers' Association
- ❖ Served and still serving as External Examiner for Mountains of the Moon University School of Applied Sciences and Technology (2013-2014 Academic Year and 2015/2016 – 2018/2019 Academic Years).
- ❖ I have acted as internal examiner for many postgraduate candidates both at Makerere, Mountains of the Moon and Kampala International universities for many years.
- ❖ I have acted as external examiner for many MSc. and Ph.D candidates from other Universities
- ❖ I have vetted applications for many colleagues for academic promotions both at Makerere and other Universities since 2012
- ❖ I served as Vice-Secretary for Makerere University Academic Staff Association (MUASA) for the period 2009-2011.
- ❖ Minister of Education, Tororo Kingdom (2013-2015)

- ❖ Member, appointments and promotions committee of the Department of Agricultural Production, Makerere University
- ❖ Member, College of agricultural and Environmental science examiners' board
- ❖ Member, Finance committee, Department of Agricultural Production, Makerere University
- ❖ Member, higher degrees and research committee, Department of Agricultural Production, Makerere University
- ❖ Member, undergraduate programmes committee, Department of Agricultural Production, Makerere University
- ❖ Member, curriculum review committee, Department of Agricultural production, Makerere University
- ❖ Member, disciplinary committee, Department of Agricultural Production, Makerere University
- ❖ Member, Makerere University Muslim Academic staff association
- ❖ Member, Akiriga community self-help committee, Kampala
- ❖ Member, rotary club, Fort Portal city

RESEARCH GRANTS AND PROJECTS

- 2007 - 2014: Enhancing community initiatives in managing urban land use, environment and employment creation in the Lake Victoria Basin: The case of Mwanza, Kisumu and Jinja. Sponsored by Vic Res/ Sida (\$150,000).
- 2007 – 2009: The impact of an Environmental Disamenity on the Value of Land in Central Uganda. Sponsored by CEEPA, Centre for Environmental Economics Policy for Africa, University of Pretoria, South Africa (\$10,000).
- 2007 -2012: Enhancing adoption of Agroforestry technologies in Eastern Uganda. Supported by NARO- Uganda (\$100,000).
- 2009-2014: Building capacity for soil health research and development in Uganda: A training grant to Makerere University. Sponsored by AGRA (\$507,00) (Co-researcher on project).
- 2016 – 2019: **PEER Cycle 5 Grant (Approved early September 2016):** Delivering crop yield nowcasts and forecasts by integrating satellite data and crop modeling in Sub-Saharan Africa. Supported by PEER/ USAID (\$300,000).

- 2019-2020: Developing Bio-fertilizer formulations to unlock crop productivity for improved food security and household livelihoods in Uganda. Supported by Government of Uganda (\$50,000).
- 2019-2022: Securing Water Supplies – Participatory Groundwater Monitoring and Management in Botswana and Uganda. Sponsored by Australia Africa Universities Network (AAUN) (\$10,000)
- 2020-2021: Development of a problem-centered teaching and learning approach using the Teach-Think-Pair-Share model for increased skilling of Agricultural students in Uganda. Sponsored by USAID (\$20,000).
- 2021-2023: Building Soil Loss Tolerance Thresholds To Reduce Degradation and Enhance Agricultural Productivity in Marginal Highland Landscapes of Uganda (RF3). Sponsored by the Government of Uganda (\$50,000)
- 2021-2026: Climate Smart Agriculture in Sub-Saharan Africa. Sponsored by NORAD (USD 2,000,000).. Multi-institutional Project with Makerere University and other African Universities/ Norwegian University of Life Science (Co-PI)
- 2023-2027: Nature-based Solutions for Climate-Resilient Tea Production in Uganda (NbS4Tea). Sponsored by the DANIDA.... A multi Institutional Project of Arhaas University, Makerere University and NARO (\$1,500,000) (Co-PI)

ALL THESE GRANTS INCLUDE A COMPONENT OF GRADUATE TRAINING AND MENTORING

WORKS HOPS AND CONFERENCES ATTENDED

2nd - 13th February, 1993: Participated in the Kawanda Agricultural Research Station/ Kenya Agricultural Research Institute/ Makerere University/ Tropical Soil Biology and Fertility Programme/ Manpower for Agricultural Development/ International Institute of tropical Agriculture collaborative workshop on Soil and Plant Analysis at Kawanda Agricultural Research Station, Uganda.

24th - 27th May, 1993: Participated in the 6th Regional IBSRAM Seminar on Management of Acid Soils and Land Development for Sustainable Agriculture at the Kampala International Conference Centre (Presently Serena Hotel) - Uganda.

5^h - 6^h May, 1999: Participated in the Soil Fertility Management Workshop at Cardinal Nsubuga Leadership Training Centre, Nambya - Kampala, Uganda.

12^h – 14^h January, 2009: Attended a Uganda National Council of Science and Technology-sponsored workshop on Grants Proposal development and Competitive grants Proposal Writing at Colline Hotel, Mukono, Uganda.

14^h – 15^h September, 2009: Attended a workshop on Ph. D rules and regulations and student tracking system at the Faculty of Forestry Conference Hall, Makerere University, Kampala, Uganda.

9^h- 13^h October, 2011: Attended a Lake Victoria (VcRes)-sponsored Biennial Forum at Commonwealth Speke Resort, Mityonyo in Uganda.

30^h October - 2nd November, 2011: Attended a Lake Victoria (VcRes)-sponsored Land Use Options and Natural Resource management Clusters' workshop held at Methodist Guest House in Nairobi, Kenya, at which a Scientific paper was presented.

20^h – 21st April, 2015: Attended the Makerere University International Research and Innovations Dissemination Conference at Hotel Africana, Kampala, Uganda.

23rd July 2015: Attended a one day workshop/retreat for Makerere University Management, Principals, Deputy Principals, Deans and Directors of academic units at the School of Public Health, College of Health Sciences, Upper Kololo Terrace, Plot 30, Kampala, Uganda.

2nd May 2016: Attended a Workshop of the DELP project (Distance Education Leapfrogging Project) and Chaired a Session at Makerere University Food Science and Technology whose theme was 'Utilizing Emerging Educational Technologies to Leapfrog Distance Learning', sponsored by NORAD/ University of Agder, Norway.

24^h – 29^h April, 2017: Attended the Pwani University/International Institute for Rural Reconstruction/ UN-FAO Farmer Field Schools curriculum development workshop at Watamu, Turtle Hotel, Kilifi County, Kenya.

19^h-24^h November 2017: Attended an International Conference on Ecosystem Resilience and Agricultural Productivity: Livelihood Pathways under variable and changing climate in Sub-

Saharan Africa where I presented a paper and chaired two break-away sessions at Speke Resort Hotel, Minyonyo in Kampala, Uganda.

15^h -25^h April, 2018: Attended a workshop on Institutionalization of farmer Field Schools in Agricultural Extension delivery systems and higher institutions of learning in Eastern Africa at Colline Hotel, Mukono, Uganda.

5^h – 7^h June, 2019: Attend and presented a paper on research and writing skills at the First great lakes and Catchment Management Conference (1st GLACAM) International Conference whose theme was ‘*Protecting water and land resources in Africa for climate change adaptation and improved livelihoods*’ at The Water Resources Institute, Entebbe, Uganda.

28^h October – 1st November, 2019: Attended the Agricultural Climate Resilience Enhancement Initiative (ACREI) writeshop at Ngong Hills Hotel in Nairobi where a Climate Change Adaptation training Manual was produced (now online).

19^h – 21st November, 2019: Attended a UN-FAO Sub-regional Office for Eastern Africa Farmer Field Schools Monitoring, Evaluation and Learning Framework Workshop in Addis Ababa, Getfam Hotel, Ethiopia.

PUBLICATIONS

REFEREED JOURNALS

1. **Basamba, T A,** Barrios, E, Anézquita, E, Rao, I. M and Singh, B R **2006.** Tillage Effects on Maize Yield in a Colombian Savanna Oxisol: Soil Organic Matter and P Fractions. *Soil and Tillage Research* 91(1/2), 131-142.
2. **Basamba, T A,** Barrios, E, Singh B R and Rao, I. M **2007.** Impact of Hanted Fallows and a Crop Rotation on Nitrogen Mineralization and Phosphorus and Organic Matter Fractions on a Colombian Volcanic-ash Soil. *Nutrient Cycling in Agro-ecosystems* 77 (2), 127-141.

3. **Basa nba, T A**, Anézquita, E, Singh, B R and Rao, I. M **2006**. Effects of Tillage Systems on Soil Physical Properties, Root Distribution and Maize Yield on a Colombian acid-savanna Oxisol. *Acta Agriculturae Scandinavica, Section B- Soil and Plant Science* 56 (4), 255-262.
4. **Basa nba, T A**, Barrios, E, Singh, B R and Rao, I. M **2008**. Influence of Planted Fallows and Manure Application on Soil Quality and Maize Yields on a Colombian Volcanic-Ash Soil. *Journal of Sustainable Agriculture* 32 (1), 1-35.
5. **Basa nba, T A**, Kiza, B, Myanja, C, Nakileza, B, Mtsiko, F, Nyende, P. and Kukunda, E B **2012**. Linking Markets to Smallholder Agroforestry Farmers as a Strategy for Poverty Alleviation in the Tropics. *Journal of Agricultural Science and Technology B* 2 (3), 329-338.
6. **Basa nba, T A**, Sekabira, K, Kayombo, C M and Ssegawa, P. **2013**. Application of Factor and Cluster Analyses in the Assessment of Sources of Contaminants in Borehole Water in Tanzania. *Polish Journal of Environmental Studies* 22 (2), 337-346.
7. Sekabira, K, Gyem-Origa, H, **Basa nba, T A**, Mitumba, G and Kakudidi, E **2011**. Application of Algae in Biomonitoring and Phyto-extraction of Heavy Metals Contamination in Urban Stream Water. *International Journal of Environmental Science and Technology* 8 (1), 115-128.
8. Sekabira, K, Gyem-Origa, H, **Basa nba, T A**, Mitumba, G and Kakudidi, E **2010**. Heavy Metal Assessment and Water Quality Values in Urban Stream and Rain Water. *International Journal of Environmental Science and Technology* 7 (4), 759-770.
9. Sekabira, K, Gyem-Origa, H, **Basa nba, T A**, Mitumba, G and Kakudidi, E **2010**. Assessment of Heavy Metal Pollution in the Urban Stream Sediments and Its Tributaries. *International Journal of Environmental Science and Technology* 7 (3), 435-446.
10. Sekabira, K, Gyem-Origa, H, Mitumba, G, Kakudidi, E and **Basa nba, T A** **2011**. Heavy Metal Phyto-remediation by *Commelina benghalensis* (L) and *Cynodon doctylon* (L) Growing in Urban Stream Sediments. *International Journal of Plant Physiology and Biochemistry* 3 (8), 133-142.

11. Isotq, R E, Bashaasha, B, **Basamba, T A** and Mburu, J. **2011**. The Impact of an Environmental Disaster on Land Values: Case of Kitezi Landfill in Uganda. *International Journal of Environmental Engineering* 3 (3/4), 371-387.
12. Musinguzi, P, Ebanyat, P., Tenywa, J. S., **Basamba, T A**, Tenywa, M M and Mibiru, D N **2016**. Critical Soil Organic Carbon Range for Optimal Crop Response to Mineral Fertilizer Nitrogen on a Ferralsol. *Experimental Agriculture* (online) doi: 10.1017/S0014479715000307, Cambridge University Press, 19p.
13. Musinguzi, P, Ebanyat, P., Tenywa, J. S., Mwanjalolo, M, **Basamba, T A**, Tenywa, M M and Porter, C **2014**. Using DSSAT-CENTURY Model to Simulate Soil Organic Carbon Dynamics Under a Low-Input Maize Cropping System *Journal of Agricultural Science* 6 (5), 120-131.
14. Musinguzi, P, Tenywa, J. S., Ebanyat, P., **Basamba, T A**, Tenywa, MM, Mibiru, D N and Zim, Y **2015**. Soil Organic Fractions in Cultivated and Uncultivated Ferralsols in Uganda. *Geoderma Regional* 4, 108-113.
15. Musinguzi, P., Tenywa, J. S., Ebanyat, P., Tenywa, MM, Mibiru, D N, **Basamba, T A** and Leip, A **2013**. Soil Organic Carbon Thresholds and Nitrogen Management in Tropical Agro-ecosystems: Concepts and Prospects. *Journal of Sustainable Development* 6 (12), 31-43.
16. **Basamba, T A**, Tukezibwa, D, Tumushabe, A and Ssekabira, K **2016**. Impacts of Pastoral Activities on Nature Conservation in Western Uganda. *International Journal of Ecological Science and Environmental Engineering* 3 (2), 42-51.
17. **Basamba, T A**, Okurut, S. P., Wasige, J., Tumushabe, A and Ssekabira, K **2016**. Carbon Sequestration for Enhanced Soil Quality in the Lake Victoria Crescent of East Africa. *International Journal of Ecological Science and Environmental Engineering* 3 (1), 32-36.
18. **Basamba, T A**, Myanja, C, Kiza, B, Nakileza, B, Mtsiko, F, Nyende, P., Kukunda, E B, Tumushabe, A and Ssekabira, K **2016**. Enhancing Adoption of Agroforestry in the Eastern Agro-Ecological Zone of Uganda. *International Journal of Ecological Science and Environmental Engineering* 3 (1), 20-31.

19. Ahumuza, B, **Basamba, T A**, Van Asten, P. and Tusheemereirwe, W K **2015**. Physiological Nutrient Use Efficiency of Banana Hybrids Across Agro-Ecological Regions in Uganda. *African Journal of Plant Science* 9 (2), 97-105.
20. Musinguzi, P, Ebanyat, P., Tenywa, J. S, **Basamba, T A**, Tenywa, M M and Mibiru, D **2015**. Precision of Farmer- Based Fertility Ratings and Soil Organic Carbon for Crop Production on a Ferralsol. *Soil Earth* 6 (3), 1063-1073.
21. Namugwanya, M, Tenywa, J.S, Oabbong, E, Mibiru, D N and **Basamba, T A** **2014**. Development of Common Bean (*Phaseolus vulgaris* L.) Production Under Low Soil Phosphorus and Drought in Sub-Saharan Africa: A Review *Journal of Sustainable Development* 7 (5), 128-139.
22. Namugwanya, M, Tenywa, J.S, Oabbong, E and **Basamba, T A** **2016**. Root Architectural Development and Yield Sensitivity of Phosphorus Tolerant Common Bean Under Low Soil Phosphorus and Drought. *International Journal of Plant and Soil Science* 9 (3), 1-10.
23. Nansamba, A, Kaizzi, C K, **Basamba, T A**, Ebanyat, P. and Wortmann, C S **2016**. Grain Sorghum Response to Reduced Tillage, Rotation and Soil Fertility Management in Uganda. *Agronomy Journal* 108 (5), 1-10.
24. Musinguzi, D, Tumushabe, A, Sekabira, K, **Basamba, T A** and Byarugaba, D **2017**. Medicinal plants in and around Kalinzu Central Forest Reserve, Western Uganda. *Journal of Medicinal Plants Studies* 5 (6), 44-49.
25. Muzira, R, **Basamba, T** and Tenywa, J. S **2018**. Assessment of Soil Nutrients Limiting Sustainable Potato Production in the Highlands of South-Western Uganda. *Open Access Library Journal*, 5: e4440. <https://doi.org/10.4236/oalib.1104440>.
26. Riley, J. A, Amoding, A, Tumuhairwe, J. B, **Basamba, T A** and Gyem-Origa, H **2017**. Hydrocarbons in crude oil production sites of the Sudd region, South Sudan: Implication on soil fertility and plant species risk. *International Journal of Current Research* 9(12), 63070-63075.

27. Nyamaizi, S, Oupot, G, Tumuhe, C L, **Basamba, T A** and Misinguzi, J. **2018**. Impact of Toposequence and Type of Cropping System on Soil Properties in Mid-Western Uganda. *International Journal of Advanced Technology and Innovation Research* 10 (7), 808-815.
28. Muzira, R, Tenywa, J. S and **Basamba, T** **2018**. Linking Soil Conservation in Potato Production Systems in the Highlands of South Western Uganda to Gender and Farmer Markets. *Open Access Library Journal*, 5: e4422 [https://doi: 10.4236/oalib.1104422](https://doi.org/10.4236/oalib.1104422)
29. Kyakuwairu, M, Oupot, G, Amoding, A, Nkedi-Kizza, P. and **Basamba, T A** **2019**. How safe is chicken litter for land application as an organic fertilizer?: A review *International Journal of Environmental Research and Public Health* (Basel, Switzerland) 16, 3521-3544; doi: 10.3390/ijerph16193521; www.mdpi.com/journal/ijerph
30. Oupot, G, **Basamba, T A**, Ebanyat, P., Misinguzi, P., Opolot, E, Katusabe, A A, Bekunda, M A and Singh, B R **2020**. Making sense out of soil nutrient mining and depletion in sub-Saharan Africa. In Lal, R and Stewart, B A (Eds.), *Advances in soil science*, CRC press, Boca Raton, Chapter 3, pp 39-57.

BOOKS/ BOOK CHAPTERS

1. Sekabira, K, Gyem-Origa, H, **Basamba, T A**, Mitumba, G and Kakudidi, E **2012**. Grain Size and Source Apportionment of Heavy Metals in Urban Stream Sediments, Chapter 4, pp 69-88. In Balkis, N (Ed). *Water Pollution In Tech*, 202p. ISBN 978-953-307-962-2, www.intechopen.com
2. Muzira, R, Vanlauwe, B, **Basamba, T A**, Rwakai-kara, S M and Wanjiku, C **2014**. Assessing the Influence of Farmers' Field Schools and Market Links on Investments in Soil Fertility Management Under Potato Production in Uganda. Book Chapter 22 (pp 281-294). In Vanlauwe, B, Het Van Asten and Homme, C (eds.). *Challenges and Opportunities for Agricultural Intensification of the Humid Highland Systems of Sub-*

3. Muzira, R, Vanlauwe, B, Rwakai kara, S M, **Basanba, T A**, Chianu, J. and Farrow A **2011**. Variation in Socio-Economic Characteristics and Natural Resource Management in Communities with Different Potato Market Linkages in the Highlands of South Western Uganda. In Batrono et al. (eds), Innovations as Key to the Green Revolution in Africa. DOI: 10.1007/978 – 90 – 481 – 2543-2_101, © Springer Science + Business Media B V. 2011 (pp 999-1008).
4. Muzira, R, Rwakai kara, S. M, **Basanba, T A**, Vanlauwe, B, Tittonell, P. and Sanginga, P. C **2007**. Socio-Economic Characterization of Communities with Different Potato Market Linkages in the Highlands of South Western Uganda. In Bationo, A, Okeyo, J. M, Waswa, B S, Mupfumo, P., Mina, F, Kihara, J. (eds.). Innovations as Key to the Green Revolution in Africa: Exploring the Scientific Facts, 161p.
5. Muzira, R, Rwakai kara, S. M, **Basanba, T A**, Vanlauwe, B, Tittonell, P. and Sanginga, P. C **2007**. Impact of Different Market Types on Investment in Soil Management Technologies. In Bationo, A, Okeyo, J. M, Waswa, B S, Mupfumo, P., Mina, F, Kihara, J. (eds.). Innovations as Key to the Green Revolution in Africa: Exploring the Scientific Facts, 164p.
6. Basanba et al. 2019. Introduction to far mer field schools: a reader for Instructors of higher learning; User for instructors and Students. Available on <https://www.fao.org/ISBN/978-92-5-131318> (FAO).

Ph. D SUPERVISIONS

1. **Kassim Ssekahira (Registration Number 2006/HD13/4747U)**. Heavy metal pollution in Urban drainage systems and wetlands of Nakiuboko ecosystems in Kampala, Uganda (Graduated in 2012) (Makerere University).
2. **Patrick Misinguzi (Registration Number 2008/ HD02/4938U)**. Critical soil organic carbon for optimal crop response to Nitrogen in a Ferralsol (Graduated in 2018) (Makerere University).

3. **Ssenku Edrisa Jamilu (Registration Number 28/04/2012).** Phyto-remediation of acid mine waste polluted and degraded habitats in Kasese District by selected tree species (graduated in 2016) (Makerere University).
4. **Robert Muzira (Registration Number 2006/ HD13/4747U).** Market linkage enhancement for increased adoption of soil fertility management in potato production systems in south-western Uganda (Thesis is already officially cleared and submitted for examination as of July 2020) (Makerere University).
5. **Alexander Noah Riley (Registration Number 2014/ HD02/18653X).** Bio-remediation of petroleum contaminated soil using native plants and their rhizobacteria in the Sudd region of South Sudan (Thesis submitted for examination, 2020) (Makerere University).
6. **Margaret Namugwanya (Registration Number 2010/ HD02/18244U).** Agronomic performance and adaptive mechanisms to drought for low phosphorus tolerant common beans (Thesis submitted for examination, 2020) (Makerere University).
7. **Nabyonga Lydia (Registration Number 2017/ HD13/19289U).** Unlocking the potential of *Azolla* for improving nutrient use efficiency and food productivity through nanotechnology approaches in Uganda (Student collecting thesis field data, 2020) (Makerere University).
8. **Mukengere Bagula Espoir (Registration Number 2015/ HD13/4747U).** Enhancing water use efficiency under selected soil and water conservation practices and impact assessment of climate change in Ruzizi catchment, eastern Democratic Republic of Congo (Student currently collecting thesis data in the field, 2020) (Makerere University).
9. **Ekwangu Joseph (Registration Number 2018- PH41-1005).** Agro-ecological enhancement of soil carbon sequestration for improved finger millet (*Eleusine coracana* L. Gaertn) productivity in the Teso farming system Eastern Uganda (Student collecting thesis field data, 2020) (Uganda Martyrs University, Nkozi).

THESES AND PRESENTATIONS

1: THESES

Basa nba, T A 2004. Effects of Planted Fallows and Tillage Practices on Organic Matter Fractions, Nutrient Availability and Maize Yield in Colombian Soils (A Ph. D Dissertation, Norwegian University of Life Sciences, UMB, Department of Plant and Environmental Sciences; ISBN 82 - 575 - 0634 - 6, ISSN 0802 - 3220).

Basa nba, T A 1998. Changes in Soil Quality Under Different Land Uses of Formerly Natural Forest Soils: A case study of Mbirra Forest Reserve, Mukono District, Uganda. (An MSc. Dissertation, Norwegian University of Life Sciences, UMB).

Basa nba, T A 1995. A Semi-Detailed Soil Survey of the Mae Tae area, Chiang Mai Province, Thailand (A Special Report for award of ITC Post graduate Diploma, The Netherlands)

Basa nba, T A 1991. The effect of *Sesbania sesban* and *Leucaena leucocephala* on Soil Properties at Kyebogo District Farm Institute, Kabarole District (A BSc. Special Project Dissertation, Makerere University)

Basa nba, T A 1991. A revised work plan for Nyabyeya Forest Reserve for the period 1991-2000, Masindi District, Western Uganda (A Case Study Report, Makerere University).

PRESENTATIONS

Basa nba, T A 2005. Rhizosphere Effects on Phosphorus and Potassium Uptake by Plants. Trial Lecture Delivered During Defence of the Ph. D Environmental Science of the Norwegian University of Life Sciences, UMB (25th February, 2005).

Basa nba, T A 2003. The Role of Arbuscular Mycorrhizal Fungi in the Phosphate Uptake of Plants (A Paper Presented in Partial Fulfillment of the Requirements for Award of a Doctor of Philosophy Degree in Environmental Science at the Department of Plant and Environmental Sciences of the Norwegian University of Life Sciences, UMB).

Basa nba, T A 2001. Genesis, Characteristics, Management and Use of Highly Weathered Variable Charge Tropical Soils: The Case of Oxisols (A Paper Presented in Partial Fulfillment of the Requirements for Award of a Doctor of Philosophy Degree in Environmental Science at the Department of Plant and Environmental Sciences of the Norwegian University of Life sciences, UMB).

Basamba, T A 1996. Uganda Environment: Wetland Conservation (A Paper Presented in partial fulfillment of the Requirements for award of a Master of Science degree in Management of Natural Resources and Sustainable Agriculture of the Norwegian University of Life Sciences, UMB)

Basamba, T A 1996. Agroforestry for Effective Environment Conservation, Development and Sustainable Agriculture in Uganda (A Paper Presented in Partial Fulfillment of the Requirements for Award of a Master of Science Degree in Management of Natural Resources and Sustainable Agriculture of the Norwegian University of Life Sciences, UMB)

Basamba, T A, Serugga, D, Agaya, B and Burra, M 2011. Community Initiatives in Improving the Environment of Urban Informal Settlements in Jinja Municipality in Uganda; A Paper Presented at the Lake Victoria (VicRes)-sponsored Land Use Options and Natural Resource Management Clusters' workshop held at Methodist Guest House in Nairobi, Kenya, 30th October - 2nd November, 2011.

JOURNAL ARTICLES IN PRESS (CURRENTLY 10 IN PRESS)

POST GRADUATE COURSES TAUGHT (2005 TO DATE)

1. SOS 7103 Soil Organic Matter (M Sc. Course)
2. SOS 7204 Land Degradation and Conservation (M Sc. Course)
3. SOS 7205 Soil Survey and Land Evaluation (M Sc. Course)
4. IWM7214 Policy, Laws and Institutions for Watershed Management (M Sc. Course)
5. FBM7102 Advanced Forest Soils (M Sc. Course)
6. SOS 7106 Pedology and Geomorphology (M Sc. Course)
7. IWM7216 Watershed Evaluation Project (M Sc. Course)

COUNTRIES VISITED ON OFFICIAL MISSIONS

Africa

Kenya, Rwanda, Tanzania, Burundi, Democratic Republic of Congo, Ethiopia, Niger, Nigeria

Europe

Norway, The Netherlands, Denmark, The United Kingdom, Luxembourg, Belgium, Germany

South America

Colombia, Venezuela, Brazil, Ecuador, Argentina

Asia

Thailand, India, Malaysia

LANGUAGE SKILLS

English	H uent
Swahili	H uent
French	Mēdi um
Spanish	Mēdi um
Arabic	Mēdi um
Runyakitara	H uent
Luganda	H uent

ACADEMIC AND PROFESSIONAL REFEREES

- ❖ Professor Bernard Bashaasha, Former Principal, College of Agricultural and Environmental Sciences, Makerere University, P. O. Box 7062, Kampala, Uganda. Tel +256 77 262 72 49.

- ❖ Professor Frank Mtsiko, College of Agricultural and Environmental Sciences, Makerere University, P. O. Box 7062, Kampala, Uganda. Tel +256 772 96 01 91. E-mail: fbmtsiako@aes.mak.ac.ug ; fbmtsiako@gmail.com

- ❖ Professor Peter Baguma, College of Humanities and Social Sciences, Makerere University, P. O. Box 7062, Kampala, Uganda. Tel. +256 772 55 18 04. E-mail: ni nterhotep@gmail.com

- ❖ Dr. John James Okiror, College of Agricultural and Environmental Sciences, Makerere University, P. O Box 7062, Kampala, Uganda. Tel +256 772 89 96 44. E-mail: okirorjj@aes.mak.ac.ug.

- ❖ Professor Bal Ram Singh, Department of Plant and Environmental Sciences, Norwegian University of Life Sciences (UMB), P. O Box 5003, N 1432, Aas, Norway. Tel. +4745850778. E-mail: balramsingh@nmbu.no.

- ❖ Dr. Idupulapati Rao, Tropical Soil Biology and Fertility (TSBF) Institute, CIAT, A A 6713, Cali, Colombia, South America. Tel. +13058639126. E-mail: idupulapati.rao@gmail.com