# **CURRICULUM VITAE**

## PERSONAL INFORMATION



LAST NAME : ADIFON

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## AREA OF EXPERTISE

- General Agronomy and Crop Production;
- ➤ Rotation system (crop rotation, fallow land, shifting cultivation);
- ➤ Sustainable Land Management and Agro-Ecological Transition;
- ➤ Integrated Cropping Systems Management and Integrated Soil Fertility Management;
- Agroforestry (integration of Gliricidia in sustainable root and tuber crop production);
- Integrated pest and disease management (including organic farming);
- ➤ Climate Change and Adaptation and Mitigation Strategies;
- Farming Council;
- ➤ Gender and Integrated Water Resources Management;
- Social and Environmental Sciences;
- Development Research;
- Project Writing.

## EDUCATION, TRAINING AND DIPLOMAS OBTAINED

- ➤ April 2021: PhD in Agroenvironment, Specialty Soil Management and Agro-Ecological Transition of the Multidisciplinary Doctoral School "Spaces, Cultures and Development" (EDP-ECD) of the University of Abomey-Calavi/Benin.
- May 2013. Master's degree in Environmental Sciences and Sustainable Development from the Interfacultary Center for Environmental Training and Research for Sustainable Development (CIFRED) at the University of Abomey-Calavi.

➤ May 2010. Bachelor's degree in Agricultural Sciences and Techniques, Extension-Agricultural Council option of the Faculty of Agricultural Sciences of the University of Abomey-Calavi.

## PROFESSIONAL EXPERIENCE

**Since November 2021**: Senior trainer in Sustainable Land Management (SLM) and Adaptation to Climate Change (ACC) and in charge of resource mobilization and project writing to the SolCA (Sol Consult Africa) engineering firm. SolCA is indeed the leader in Benin in the design of training modules, training facilitation, advisory support and monitoring and evaluation in SLM and CCA measures, Land Degradation Neutrality with a team of confirmed experts.

My role in SolCA office was to contribute to:

- development of various training scenarios and a training guide for farmers on SLM/ACC measures and AE practices adapted to the main agricultural value chains, agroforestry and fodder production;
- preparing and leading waves of training courses for farmers, technicians from NGOs/OPAs and partners (DDAEP, ATDA, etc.); developing data collection tools, evaluating and providing follow-up support and advice to teams of trained technicians and producers;
- research and identification of potential opportunities and partners and their financing or support mechanisms for actions to protect land, forests, biodiversity, community resilience to climate change and improve agricultural yields with production systems designed to be economically viable, socially acceptable and technically feasible.

To my duties with the SolCA engineering firm, I am also an independent consultant. To this end:

From July 05 to 08, 2023: I took part in an international seminar on advocacy and lobbying strategies entitled: Engaging higher education institutions, NGOs and not-governmental organizations in climate finance at the Hôtel Merveille in Kpalime, Togo,

**February to June 2023**: personally drafted and submitted for funding to the German Federal Ministry for Economic Cooperation and Development (BMZ) through the German Academic Exchange Service (DAAD), a project for a regional training workshop on environmental and social assessment and safeguarding in development projects and programs. After analysis and study, the project was approved and financed by the DAAD (**DAAD/Small Alumni Event/Project-ID: 310413**). The event took place from 07 to June 2023 at the Hôtel Jeanne in Cotonou. The event was an interesting and fruitful workshop from all points of view.

From October 28 to November 11, 2022: Consultant to the GIZ-Benin project "Protection et Réhabilitation des Sols pour améliorer la sécurité alimentaire" (ProSOL) for the execution of a contract relating to the taking into account of observations and comments to perfect a manual on agro-ecological production practices for root and tuber crops, sustainable land management and adaptation of these crops to climate change in the different agro-ecological zones of Benin or Agricultural Development Poles to which I contributed to elaborate.

September to October 2022: Consultant for the elaboration of a technical manual on sustainable and ecological yam production for ProSOL. ProSOL is part of the special initiative "ONE WORLD without Hunger" (SEWoH) of the German Federal Ministry for Economic Cooperation and Development (BMZ). The GIZ project, which is being implemented in six (06) countries including Benin, aims to disseminate sustainable, high-impact approaches to promoting soil protection and rehabilitating degraded soils. My mission for this contract consisted in: i)- contribute to improving the technical-economic content and coherence of the draft manual; ii)- make a scientific and empirical contribution to the missing information (cropping calendars for traditional crop production and for SLM and AE measures, average yield (ha), illustrative photos for different regions of Benin) and other relevant information; iii)- develop a crop operating account; iv)- ensure that SLM/CCA measures are taken into account and that pests are recognized and phytosanitary treatments are environmentally friendly.

Evidence: Contract NoC01-011/2022/GIZ/ProSOL/AS/HP



June to August 2022: Associate Research Assistant for the Faculty of Agronomic Sciences of the University of Abomey-Calavi, in the diagnostic study for the identification of constraints and research opportunities for the valorization of cashew nut industry value chains for the benefit of the Cashew Nut Industry and Agricultural Entrepreneurship Development Support Project (PADEFA-ENA) initiated by the Government of Benin and financed by the African Development Bank (ADB) Group. To this end, on behalf of the above-mentioned diagnostic study, I took part in the preparatory phase and in the field mission with cashew nut industry stakeholders in the Communes of Tchaourou, Parakou and N'Dali in northeastern Benin.

**08-11 December 2021**: Initiator and organizer in collaboration with the Soil Protection and Rehabilitation for Improved Food Security Project (ProSOL/GIZ) thanks to the financial support of the German Academic Exchange Service (**Programme: Small DAAD Alumni Event ; Project-ID : 308694**), a Regional Training Workshop on Sustainable Land Management (SLM) and Climate Change Adaptation (CCA) Measures in Tropical Environments at the Hôtel Jeanne d'Arc in Cotonou, with participants from Ghana, Togo, Nigeria and Benin. The aim of this workshop was to enlighten young people from Benin and the sub-region on the issues of land degradation, vulnerability and the impact of climate change on the agricultural sector in tropical Africa. It also aimed to: (i) build participants' capacities with regard to the WOCAT (World Overview of Conservation Approaches and Technologies) and FAO categories of SLM/CCA measures and their principles; (ii) share with participants the achievements and lessons learned by GIZ's ProSOL in Benin; and (iii)

strengthen participants' knowledge and capacities with regard to adaptation and resilience strategies and agriculture to climate change in Africa and Benin.



July 2021-February 2022: consultant associated with the study on "the range of solutions available for adaptation and mitigation to climate change for the cashew and pineapple sectors in Benin" financed by the World Bank (Credit: IDA No 6663- BJ/ Ref SIGMAP: PI\_APIEX\_770198) and carried out by Dr. EHINNOU Romaric for the Projet d'Appui à la Compétitivité des Filières Agricoles et à la Diversification des Exploitations (PACOFIDE). The aim of this consultancy was to produce a directory of proven technologies for production, conservation, processing and other practices integrated into climate-smart agriculture for the development of the cashew and pineapple sectors in Benin.



From 2017 to 2021: Research assistant and PhD student at the "Unité de Recherche sur la Gestion Intégrée des Sols et des Cultures (UR/GISC)" of the "Laboratoire des Sciences du Sol", Faculty of Agronomic Sciences, University of Abomey-Calavi.

As part of my PhD thesis at UR/GISC, I studied the edaphic, climatic and agronomic factors influencing the productivity of root and tuber crops, in particular yams. In tropical zones, vams (Dioscorea ssp.) are an essential source of food and income for populations. In Benin, yam is one of the essential components of agriculture. It is the second most important food crop after manioc, and is grown on an average of 08% to 10% of sown farmland. In Benin, yam is also a strategic food crop for food security, in that it represents an important source of carbohydrates in the population's diet, and a staple food (270 kg/hbt/year) that can be consumed two or three times a day in various forms between August and December. Yam production is also highly profitable, with gross margins of 300,000 to 500,000 FCFA per ha for certain high value-added cultivars, not to mention its various value chains, including the processing of tubers into flour, which in recent years has been exported to the United States and the European Union. However, despite its importance and the emergence of certain value chains, yam production in Benin is hampered by a number of constraints. These include 1)the saturation of space in certain regions and the transformation of forest areas, leading to a drastic reduction in long-term fallows and forest clearings favored in the extensive yamgrowing system; 2)- disruption of soil biodiversity and land degradation due to extensive slash-and-burn yam production; 3)- stagnation and low current yields (7-12 t/ha) compared with potential yields of 20-40 t/ha; seed insecurity and unavailability of seed supply markets. 4)-Climate change is a source of concern and a threat to agricultural and yam production.

Faced with these constraints, it was urgent to develop alternative sustainable production techniques. In the course of my doctoral thesis, we had the opportunity to select, in order of priority and importance, the parameters to be researched in order to improve the physical, chemical and biological conditions likely to increase yam production under sedentary cultivation. Subsequently, yield optimization systems for non-shifting cultivation were defined using the Box-Behnken Desing (BBD) design, combining four (04) factors and generating 29 treatments. Next, a performance evaluation of the effects of interactions between the various combined factors (treatments) on the yield of the Laboko yam variety of Dioscorea rotundata and the validation of the cropping systems constituted were carried out in a farming environment in the central zone of Benin. We also proposed agroforestry practices for sustainable yam production, with the integration of legumes or grasses into the yam production system, and various soil fertility management practices for sedentary and sustainable yam production.





Laboko yam tubers harvested for various treatments during our PhD thesis research.

I was also involved in the *Projet de Mise en Place et de Gestion des Expérimentations Paysannes de Recommandations de Fertilisation pour la production de maïs du Programme d'Approche Commune du Marché Agricole au Bénin (ACMA2)* funded by IFDC-Benin and implemented in 14 communes of Benin by the Unité de Recherche sur la Gestion Intégrée des Sols et des Cultures (UR/GISC). My mission was to supervise project activities in the field, notably in the communes of Zogbodomey, Djidja, Za-Kpota, Zangnanado, Ouinhi, Kétou, Pobè and Ifangni in southern and central Benin, to collect data from technicians and produce monthly activity reports, as well as the monthly activity sheet submitted to IFDC after amendment and approval by my Director, the Head of the Research Unit, Prof. Dr Ir. Aliou SAIDOU.

**2013 to 2017**: Research assistant at the "Laboratoire des Sciences du Sol, de l'Eau et de l'Environnement (LSSEE)" of the Institut National des Recherches Agricoles du Bénin (INRAB). In this capacity, I actively participated

- ✓ in the drafting and validation of the research protocol and in the execution of the first phase of the project to update cropping calendars adapted to climate change and variability in Benin;
- ✓ drafting of the projects "Participatory soil fertility diagnosis on PAPAPE sites for the formulation of fertilizer recommendations for rice, soybean, groundnut and cowpea crops" and "Validation of fertilizer formulas for maize and cassava production on leached tropical ferruginous soils in Benin" financed by the Programme

- d'Amélioration de Productivité Agricole des Petits Exploitants (PAPAPE/SAPEP/BENIN);
- ✓ Active participation on behalf of the Projet de Productivité Agricole en Afrique de l'Ouest (PPAAO), in the study on "the formulation of economically profitable fertilizer doses, the improvement of cropping systems and the pineapple production environment in South Benin"
- ✓ I also took part in the study on "Evaluation of cotonculture-based cropping systems and environmental impacts in Benin". This was a consultancy carried out by LSSEE on behalf of the Projet Multinational d'Appui à la Filière Coton-Textile (PAFICOT) Benin in 2014.

## PARTICIPATION IN SCIENTIFIC MEETINGS

**November 28 to December 02, 2022:** Participation in a capacity-building seminar on project writing and management organized as part of RUFORUM 2021 activities and led by expert consultant Gérard DEN OUDEN.

**Proof**: Certificate of participation

**December 17- 19, 2021:** Participation in the International Conference on Land Governance for Young People in Africa (CIGOFA). The conference was an opportunity to exchange and share experiences on the challenges and opportunities of land governance for African youth at the Hotel Noah Garden in Cotonou.

**Proof**: Invitation letter

December 08-16, 2020: Member of the organizing committee for the curricula review and validation workshop for the establishment of a Regional Master's Degree in Land Governance and Community Resilience in Africa. This workshop follows the development of the Training Project: Land Governance and Community Resilience in Africa (GFRA) and the preparation of the APPLICATION FORM for the Financial Support Program for the Development of Regional Training Offers on Land Governance in Africa. More than an imperative, good land governance is nowadays a prerequisite for the survival of African communities. Both the African Union Agenda and the Sustainable Development Goals prescribe formal guidelines for responsible land governance, to be observed by regional and national institutions and African states. However, implementation of these guidelines is hampered by the lack of qualified human resources capable of effectively addressing land management through a holistic, inclusive, participatory and gender-sensitive approach. It is against this backdrop that the Beninese Network of Excellence in Land Governance (RéBELGA) has set itself the urgent priority of developing training courses offering degrees (Master's and Doctorate levels), qualifications (capacity-building for players) and modular courses (short duration) to make available the skilled human resources required, both nationally and regionally. The present project is part of this dynamic and aims to mobilize financial resources, in order to elaborate and validate the envisaged training offers, in strict compliance with the rules of approach and quality assurance in force in higher education in the RESAO space and in consultation with actors from the professional world.

**Proof**: Letter of thanks from the Rector of the University of Abomey-Calavi

**September 16-20, 2020:** Participation at the AGLA Hotel in Lomé (Togo) in the regional seminar on post-harvest technologies for the reduction of losses during the storage of agricultural products.

**October 16-19, 2019:** Participation in Koforidua, Ghana in the workshop on 'Training on ecological modelling for agricultural pest and disease assessment and data analysis with R statistical software' held at the CANADIAN DREAMS HOTEL of Koforidua.

Proof: Certificate of attendance

**September 16 to 20, 2019:** Participation and presentation of paper at the VIIth Colloquium of Sciences, Cultures and Technology of the University of Abomey-Calavi on the theme "the valorization of research results and technological innovation, a factor in the development of nations".

Proof: Certificate of participation

**December 05-07,** 2018: Participation in the 1st Scientific Workshop of World Soil Day 2018 (ASJMS 2018) held at the Master Zone of the Faculty of Agronomic Sciences (FSA) of the University of Abomey-Calavi la FSA/UAC.

**Proof:** Certificate of participation

**June 04 to 08<sup>th</sup>, 2018:** Participation in the joint doctorate held on the campus of Abomey-Calavi whose general theme is "Formation Scientifiques au Services du Développement Durable") held at the University of Abomey-Calavi

**Proof**: Attestation of participation

**November 06-25, 2017:** Participation in Benin in the FSC Summer School whose theme is entitled: "Food and Nutrition Security for the next 25 -50 years" and organized by the University of Abomey-Calavi (Republic of Benin), the Center for Food Security at the University of Hohenheim (Germany), EXCEED ("Higher Education Excellence in Development Cooperation) and financed by the DAAD with funds from the Federal Ministry for Economic Cooperation and Development (BMZ). This international symposium brought together participants from Africa, Europe, Asia, North and Latin **America.** 

**Proof: Attendance certificate** 

#### COMPUTER KNOWLEDGE AND SOFTWARE MASTERED

Good knowledge of Microsoft Word, Excel and Powerpoint; search engines; data analysis software: Statistical Analysis System (SAS version 9.2), SPSS (Statistical Package for the Social Sciences), MINITAB and models and designs of experiments for optimization especially the Box-Behnken design of experiments. Good knowledge of Arc View GIS software for map production and Geographic Information Systems (GIS) and of the land use dynamics simulation model CLUES.

## LINGUSTIC ABILITY

- ✓ Foreign: French (excellent, spoken and written); English (Good, spoken and written)
- ✓ National: Fon, Mahi, Idasha, Shabé, Nago, Bariba

- Mr. AMADJI Firmin: Director of Sol Consult Africa (SolCA); Tel (+229) 64 30 41 80; Email: f amadji@yahoo.fr/ amadjifirmin@gmail.com
- Pr. Dr. Ibouraïma YABI, Full Professor in physical geography (climatology and environmental impact study), Teacher-Researcher and Director of the Interfaculty Center of Training and Research in Environment for Sustainable Development (CIFRED) of the University of Abomey (UAC). Co-Director of my PhD thesis. Tel: (+229) 97 47 68 28; E-mail: yafid2@yahoo.fr
- Pr. Dr Ir. Aliou SAIDOU, Full Professor in Soil Science at the Faculty of Agronomic Sciences (FSA), current Vice-Rector in charge of Research and Permanent Secretary of the Scientific Council of UAC. Director of my doctoral thesis. Tel: (+229) 97 49 44 80; E-mail: saidoualiou64@gmail.com
- Pr. Dr Ir. Joseph DOSSOU, Full Professor at the Faculty of Agronomic Sciences of the University of Abomey-Calavi, Focal Point of the Network of Excellence on Land Governance in Africa (NELGA), Francophone West Africa section in Benin. Tel: (+229) 97 08 62 66; E-mail: jokdossou@yahoo.fr
- Dr. Ir. OUIKOUN Gaston, Researcher and Head of the fruit crop program at the Institut National des Recherches Agricoles du Bénin; Tel (+229) 97 48 98 02; Email: ouikoungaston@yahoo.fr

## **PUBLICATIONS & OTHER RELEVANT REFERENCES**

- **Adifon F. H.** 2022. Report of the training workshop on sustainable land management (SLM) and climate change adaptation (CCA) measures in the tropics. 35p. document final soumis à la GIZ/ProSOL-Benin et à DAAD à Born en Allemagne.
- Saidou A., Dagbenonbakin G., **Adifon F. H.**, Chabi Faki. 2021. Mise en place et gestion des essais de validation des recommandations d'engrais. Rapport final (version provisoire). Approche Communale pour le Marché Agricole-Phase 2. IFDC-Bénin. 45p.
- Ouikoun C.G., Bouka E.C., Lawson Evi P., Bello O.D., **Adifon H.F.**, Amouzouvi L.H., Dossou J., Eklu-Gadegbeku K. 2021. : Assessment of the contamination of vegetable crop by polycyclic aromatic hydrocarbons (PAHS) on gardening sites in south Benin. : International Journal of Science Academic Research. 02 (28):3076-3080. Available online at http://www.scienceijsar.com
- **Adifon F. H.**, 2021. Facteurs édaphiques et climatiques pour l'amélioration de la productivité de l'igname au Bénin. Thèse de Doctorat unique en Géographie et Gestion de l'Environnement, Ecole Doctorale Pluridisciplinaire, Université d'Abomey-Calavi, 229p
- **Adifon F.H.**, Yabi I., Vissoh P., Balogoun I., Dossou J., Saïdou A. 2019. Écologie, systèmes de culture et utilisations alimentaires des ignames en Afrique tropicale : synthèse bibliographique. Cah. Agric. 28: 22. <a href="https://doi.org/10.1051/cagri/2019022">https://doi.org/10.1051/cagri/2019022</a>)

- **Adifon F.H.,** Yabi I., Balogoun I., Dossou J., Saïdou A. 2019. Caractérisation socioéconomique des systèmes de culture à base d'igname dans trois zones agro écologiques pour une gestion durable des terres au Bénin. European Scientific Journal. 15 (12): 211-232 <a href="https://DOI:10.1944/esj.2019.v15n12p211">https://DOI:10.1944/esj.2019.v15n12p211</a>
- Adifon F.H., Atindogbé G., Bello D.O., Balogoun I., Yabi I., Dossou J., Ahoton L., Saïdou A. 2020. Effect of Climate Variability on Yams (Dioscorea spp.) Production in Central and Northern Benin.American Journal of Climate Change. 9(4): 423-440 <a href="https://doi.org/10.4236/ajcc.2020.94027">https://doi.org/10.4236/ajcc.2020.94027</a>
- **Adifon F.H.**, Azontondé A.H., Houndantode J., Amadji G.L., Boko M., 2015. Evaluation des caractéristiques chimiques des sols sableux du littoral sous-système maraîcher au Sud-Bénin. Annales des sciences agronomiques 19(2) volume spécial : 53-68

I certify that all the above information is true and accurate

## LINK OF MY PROFESSIONAL SOCIAL MEDIA PAGE.

https://www.linkedin.com/in/sèdégnon-fiacre-hermann-adifon-13b17445

Done in Abomey Calavi on 16/02/2024

Dr. Msc. Fiacre S. H. ADIFON