Project partners:

NUTRiGREEN

Promoting green nutrition in the Sahel region

Biannual information sheet on project activities

April 2023 No.3

Welcome to the NUTRiGREEN project

Welcome to the third NUTRiGREEN Newsletter and the first of this year! In fact, we publish twice a year in French and in English for our partners. A lot has happened since last year. Stay up to date with the latest developments in our project and get to know more of the great young scientists in our team. Happy reading!

Agro-meteorological learning

One important focus of the NUTRiGREEN project is Agrometeorological learning. It aims to enhance traditional farmers' knowledge by bringing agrometeorological thinking and empirical learning. This is done by learning about meteorology through direct observation and experience: After training on using the devices thermometer and rain gauge, farmers in Burkina Faso and Senegal continue to carry out their own measurements of rainfall and temperatures in their farms. By jointly looking closer into this data, the farmers are encouraged and guided to understand the variability of weather and connect it to what is happening in their fields (yield, production quality, etc).

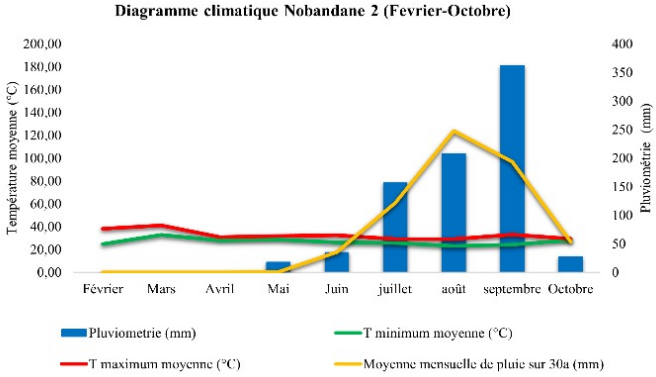
The data collection continues to be coordinated by Olivier Sawadogo in Burkina Faso and by Maty Ndour in Senegal.

Simultaneously the data analysis and modelling are performed by Islem Heraghi, as well as a summarizing report with examples of results interpretation.

Joint Discussion of the results

© Judith Henze

Lately, the main challenges are communication and missing data. Based on a data monitoring overview, we identified where and when was data missing. In Dioffior, one of the 4 sites in Senegal, this was due to a thermometer malfunction since June 2022. Therefore, a new device has been provided during the visit of Judith Henze in March. In Burkina Faso, most of the unavailable new data is due to confusion about food aid as a payoff for farmers for harvesting data. Clear communication with the farmers is crucial in order to address this issue. Therefore, a meeting is planned to remind of the goals of the NUTRiGREEN project and the principles of agrometeorological learning, including a 'no payment for data'-policy. It will be led by on-site manager Eric Kabre and data collection coordinator Olivier Sawadogo.



Example of ombrothermal diagram for Nobandane Senegal

© Islam Heraghi

Climate Field Schools

Hibiscus (*H. sabdariffa*) is important for food and income in the Sahel, but its production is difficult due to poor soils and lack of water. Producers use excessive chemical fertilizers, which harm the environment and soil fertility. Rehema Saidchanfi, featured in our 2. Newsletter, conducted a study to promote the use of organic residues to restore soil fertility and improve purslane growth. The results show that horse manure improves purslane growth and production, regardless of the dose used. Although the maximum dose of 100% of manure shows an improvement in growth compared to doses of 50%, this difference remains not significant.

Project partners:

NUTRiGREEN

Promoting green nutrition in the Sahel region

Biannual information sheet on project activities

March 2023 No.3

Climate Field Schools

The second study conducted in Senegal by Awa Toure, featured in our 2. Newsletter, focuses on the impact of different doses of organic horse manure on the growth of okra () in terms of its agro-morphological parameters: height, collar diameter, and the number of leaves. The results showed that adding organic matter had no significant effect on height and collar diameter. Still, the 100% dose improved the number of leaves compared to the lower doses and the control. The study was carried out in an open field with a completely randomized block experimental design with three repetitions and three different treatments.

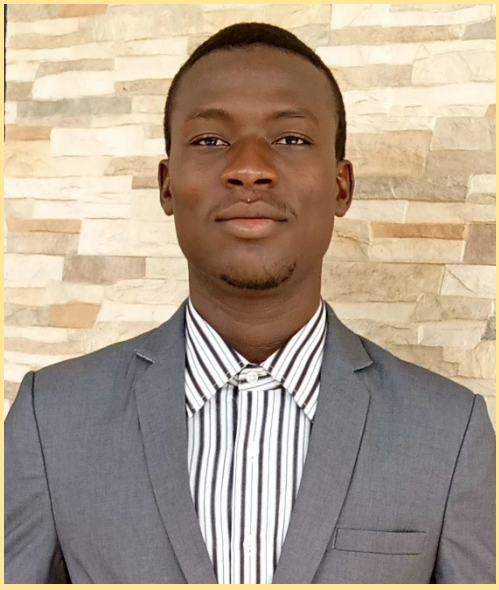
Get to know our students in the team

© Dia Abdourahim

Dia Abdourahim

Dia ABDOURAHIM is a Senegalese PhD student who obtained a Master's degree in Economics with a specialization in International Trade Policies and Negotiations at UCAD. As part of the NUTRiGREEN project, Dia traveled to Sweden to finalize the writing of his thesis proposal, which consists of three articles: an analysis of the value chain of traditional plants, determinants of the demand for traditional plants among households, and the impact of the use of traditional plants on food security.

The proposal was submitted for evaluation to his two research supervisors, Professor Malick Sané from UCAD and Professor Konstantinos Karantininis from the Swedish University of Agricultural Sciences (SLU). Dia also created a questionnaire to collect the necessary data for his field study.



© Magloire Thiombiano

Magloire Thiombiano

Magloire THIOMBIANO is an economist who specializes in agricultural and environmental issues. He is currently enrolled in a thesis at Thomas SANKARA University (UTS) in Ouagadougou and is participating in the NUTRiGREEN project. Together with Professors Youmanli OUOBA and Konstantinos KARANTININIS, he is responsible for identifying obstacles linked to the production of traditional plants and for connecting these producers to the market. To achieve this, he will first contribute to the analysis of the value chain of these plants, secondly to the analysis of the consumer basket, and thirdly to the analysis of the effects of these plants on household food security.

Project partners:

NUTRiGREEN
Promoting green nutrition in the Sahel region

Biannual information sheet on project activities

March 2023 No.3

Get to know our students in the team

© Islem Heraghi

Islem Heraghi

Islem HERAGHI is an engineering student, who is currently pursuing her Master's at the Technical University of Berlin. After obtaining an interdisciplinary Bachelor's degree in Industrial Engineering and Management at Karlsruhe Institute of Technology, Islem is now specializing in energy technologies and resources management. Her work for the past few years within SLE aligns with her interest in interculturality and sustainable development.
As part of the NUTRiGREEN team since last October, she is responsible for the agrometeorological data analysis and the mediation in the collaboration with our partners in Agrometeorological Learning in Burkina Faso and Senegal.

Bright Little-Tetteh

Bright LITTLE-TETTEH is an international Masters student from L'Institut Agro Rennes-Angers in Rennes, France. He studies Transitions in Environment and Agrifood system Management. His research topic is centered on climate change adaptation through agrometeorological learning in climate field schools. He has been involved in the NUTRIGREEN project in Senegal and Burkina Faso since February 2023. He also supports the preparation of teaching materials used in SLE's post graduate study course for implementing the Joint International Research Projects (JIRPs) on methods of qualitative research. The experiences gained through the training course will facilitate the data collection in his fieldwork in Senegal. The results from his Masters' thesis will be incorporated into NUTRIGREEN's project.

© Bright Little-Tetteh

Project partners:

NUTRiGREEN

Promoting green nutrition in the Sahel region

Biannual information sheet on project activities

March 2023 No.3

Dr. Judith Henze visit to Burkina Faso & Senegal

From the 28. February until the 5th of March 2023 Mrs Henze visited Ouagadougou and Zinare. During a meeting with Dr Alphonsine Ramde at the IRSS offices she discussing the ASA project, the school garden project in Tankounga, a second Climate Field School, and how to apply for funds for the bio-chemical analysis at the IRSS.

She also met with the journalist Abel Yerbanga, introducing the ASA Global Project.

Dr Henze attended the discussion round with the agrometeorological data collectors. After handing out the preprepared data charts for the different regions the farmers discussed the preprepared questions. The exchange was guided by Olivier Sawadogo.

Together with the Koassanga Association Dr Henze planned and discussed a small trial in Razoutenga, Andem, Dayagretenga, Lelexe. As well as cowpea trial with the women's group in Boala.

In Senegal, she met with the project partner from UCAD namely Prof Aliou Guisse, Dr Oumar Sarr, Dr Moustapha Sagna to discuss the status quo of the project. The students - Saîd Chanfi Rehema, Awa Touré , Eric Sylvain Badji & Dr Ndiabou Faye - that are supporting the NUTRiGREEN project (see 2. Newsletter for their profiles) gave a detailed presentation of their work and key findings.

Meeting with Olivier Sawadogo in Zinare

© Judith Henze

A meeting with Prof Aliou Guisse, Dr Oumar Sarr, Dr Moustapha Sagna, & Boubarcar Diop from ASW was conducted to discuss the students trial, the conducted trainings and the collaboration with APAF, as well as the content and funds for the remaining trainings. Also examined was the situation in Diorfor, where the well that was drilled is not proving enough water to support an extensive vegetable and tree garden.
Moreover, the group also discussed the situation in Nobandane, where a stolen PVC panel made the water pump unusable. A ZOOM meeting was conducted on the 21. March 2023 with Fatimata Diop from APAF, discussing all open issues.

Urban garden in Ougadougou

© Judith Henze

Coordination and project management

The NUTRiGREEN coordination team, consisting of Dr Alphonsine Ramde-Tiendrebeogo, Prof. Karantininis, Dr Silke Stöber and Dr Judith Henze, met once in 22. September 2022. Prof. Guisse could not attend.
A meeting is planed for June 2023

-

Editors of this fact sheet: Dr Judith Henze, Dr Silke Stöber & Islem Heraghi