

Nigeria Agriculture Policy Activity

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NAPA Highlight 17

Responding to the Call

My name is Kor Aondona David, a student of Benue Polytechnic in Ugbokolo. I am also the founder of a nonprofit called Bayi Sustainable Development Initiative, in Makurdi, Benue State. I have been a keen follower of the work Dr. Blessing Agada does on soils and climate change. I worked with her on the MasterCard Alluvial Covid-19 Resilience Project in Niger State where I formed clusters of farmers in the rice value chain under the project. When I saw her call, asking me to go with her to Ebonyi State as her student on another team I was super excited.



Networking and fostering relationships with excited team members

The Ebonyi State project led by Dr. Blessing Agada featured 1) Meeting and sensitization of smallholder farmers about the project activity and its importance 2) collection of soil samples from 10 farmer fields across

3 council wards in each of the 13 Local Government Areas (LGA) of the state.

While on the field, we were given in-depth information and knowledge about soils by our lead. The team was divided into two groups to facilitate coverage of the farmer fields in the selected LGAs. Several research reports I had previously read about soils across Nigeria showed that soils in the South were acidic in nature. While on the field however, with the aid of a portable digital soil sensor device used to read the pH and other soil parameters on the spot, we discovered that in some of the sampled LGAs, the soils were not acidic. The pH values were as high as 8.39 at the surface in Ithor council ward, Ezza South in one of the LGAs sampled. Dr. Agada explained that the agro-climatic zone within Ebonyi State was transient and also that the observed granite quarries may impact on the soils since the constituents of granite are alkaline (alkali feldspar) in nature. Thus, from the parent rocks the soils formed from weathering would take characteristics tending towards alkalinity. With this kind of finding, she emphasized the need to manage soils' physical, chemical and biological properties, with respect to their variations by geographical locations advocating for site specific soil management.

We also discovered that most rice farmers in Ebonyi State do not practice bunding their farms, which often led to fertilizers washing-off from fields into water bodies and other farms given the high intensity and amount of rainfall. She laid a lot of emphasis on the need for farmers to bund their rice farms in order to retain nutrients on their fields for crop growth. Bunding helps to channel excess water out of the field

and can stimulate increased yield for a food secure future.



Taking soil samples at lower depths. Digging through hardpans

I must confess that the Ebonyi State project was an amazing experience, I came to understand the dire need for smallholder farmers to bund their farms, test, analyze and manage soils distinctively; that the best solution for Farmer A with deep soils may not be effective for Farmer B with shallow soils.

I also had the opportunity to network and establish relationships with students and faculty from other institutions. This experience has been so rewarding and I will not take the opportunity to participate in it for granted. I have been impacted to give back and I will.

My special thanks to God for his grace and mercies for guiding us as a team, as we travelled to Ebonyi State and across its Local Government Areas while collecting soil samples.

I want to say a big thank you to Dr. Agada for finding me worthy to be in her team. My appreciation goes to USAID Nigerian Agricultural Policy Activity (NAPA) and Michigan State University USA, for impacting me (students), ADPs, farmers and even our environment through funding and other support for this project. I can further relate my experience on the field as to why farmers do not get the desired yield of crops from their farms even when apparently adequate amounts of fertilizers are added to their soils. I can also now be a catalyst for change to farmers and communities.



Dr. Blessing Agada teaching smallholder farmers, ADPS and students how to bund their farm fields

Lastly, I will ask that, aside from these trainings and testing of soils in fields, inputs including fertilizers and quality seeds should be made available to farmers to enhance crop productivity to fight hunger and extreme poverty as we strive to achieve the United Nations Sustainable Development Goals 1, 2, 11 and 15. This was the plea from the farmers' lips.

Kor Aondona David

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