



ATSAF - CGIAR++ Junior Scientists Program Final Report

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Title: Social and ecological context of a technical innovation: Increasing the profitability and sustainability of local small scale processing of underutilized species in south-western Nigeria

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The overall objective of the thesis is to examine the technical, social, and ecological factors influencing the strategies to increase the sustainability and profitability of processing selected underutilized species (e.g. cocoyam) in Osanetu area of Oyo State, Nigeria.

I. **Experience during visits to CG centre IITA, IBADAN**

The first experience was when I newly arrived the CG centre. The staff responsible for Graduate Student Fellowship Programmes and IITA Capacity Development Office (CDO) diligently supported during the administrative and other protocol procedures at the CG centre. Further registration processes were promptly done with ease. This made me have a good start working and interacting with my supervisor at the CG centre.

Also, working with my supervisor at the CG centre was easy and impactful. Although physical meetings were not regular but update on the process were regularly sent to him via mails, WhatsApp messages etc. for inputs and comments.



Researcher and the supervisor at the CG centre (IITA, Ibadan)

II. Experience during field work at the study area (Osanetu community)

My integration with the women's group members and other actors in the local communities was easy with the help of my field assistant who served as my translator of the local language during group sessions, interviews etc. with the women's group members.

The women's group and the community leaders were always excited to receive us, share their perspective during meetings. This made our visits to the community more regular and easy. The women were ready to learn new skills that will improve the business strategies for their agro-processing business. For example, their production efficiency improve as a group during processing underutilized species such as cocoyams, Okra, etc. because they learned new ways of processing their products with a modular drying machine. Also, the women learnt how to advertised their business by using a Tripod camera to make a short video in their local dialect.



Some of the women's group members processing cocoyams



One of the women using their local dialect to make a short advertisement video for their business.

Business profitability

The women together with the researcher, through various group meetings and discussions, individual interviews and focus group discussions, identified ways they can sustainably manage the business by:

- I. Reducing variable cost across processing stage
- II. Having direct contact with farmers in order to buy their products directly from them
- III. Creating more awareness for their business around the communities
- IV. Accessing higher value markets etc.



Group members using process diagram to Identify areas to reduce variable cost

Adopting new technology

The women, through the new introduced technology for drying, improved the quality of their processed products.



Quality changed of cocoyam amala processed by the women



Package cocoyam amala flour processed by the women for sale.





Conclusion

Rural businesses in this region faces similar challenges such as capital and basic infrastructure such as electricity and as well as lacking the potential to penetrate higher value markets.

Apart from having their personal businesses, for instance processing of palm oil, these rural women in Osanetu community in Oyo state displayed a level of strength and capacity to work as a group in developing a sustainable business plan for the group's processing business. This makes them self-dependence as a major contributor of house hold income and food security.