



## **ATSAF - CGIAR++ Junior Scientists Program Final Report**

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**International Agricultural Research Center: International Food Policy Research Institute (IFPRI)**

**Country: USA, Uganda**

**Supervisor at IARC: Dr. Claudia Ringler**

**Start and end date of stay at IARC: 20 Nov 2021 - 18 Dec 2021**

**Start and end date of remotely supervised project: 10 May 2021 - 31 Dec 2021**

**Title:**

**Project: Reaching Smallholder Women with Information Services and Resilience Strategies to Respond to Climate Change**

**Subproject: The gendered yield gap and women empowerment: Evidence from smallholder farmers in Uganda's central region**

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### **Working with IFPRI**

After almost eight months at IFPRI, I am really glad that I had the chance to work with them and learn with and from them. From the beginning, I was included in the bi-weekly project meeting and met weekly with other researchers on the project. The purpose of the meetings was to discuss progress, methods and framework development. Although the meetings were remote, it was great to have consultation and exchange with my colleagues every week. IFPRI also offered a wide range of almost daily presentations or online events on their research. The staff meetings and the weekly coffee meetings were a great opportunity to get to know other interns and researchers. One fact I really appreciated is that even though I was only an intern, I was treated with the utmost respect and felt that I was perceived in the same way as the other researchers. This put me in a position to contribute and not just be a passive observer, and also helped me to identify knowledge and skill gaps that I want to work on to improve my scientific work. The travel to Uganda was a great experience as well and I received excellent support from the IFPRI administration in Washington D.C. and Kampala. Moreover, the whole staff in the IFPRI office in Uganda was accomodating and helpful.

### **Methods and skills learned**

The work with IFPRI gave me a steep learning curve regarding scientific methods. Since I worked with both, quantitative and qualitative methods, my knowledge and skills improved even more then I expected. As the field research was postponed over and over, working on quantitative data from the baseline survey was a good opportunity for me to learn how to work with STATA. Besides the Women empowerment in agriculture index (WEIA) I learned about the Oaxca-Blinder-Kitagawa decomposition. It is a method used to disaggregate statistical differences between groups and the relationship of endowments to this differences. However, after I discovered data ambiguities which did not allow to continue working with this method, I spend weeks on variable testing and developing new approaches of yield measurement. Hereafter, I developed several regression models using



ordinary least square regression, robust regression models and bootstrap regression models which gave my econometric skills a big boost.

The field study gave me an insight into the upstream administrative work necessary to conduct a CGIAR project study in collaboration with various stakeholders. In addition, I completed the mandatory training on research ethics. I also developed a study protocol for the focus group discussions (FGD) that I later conducted in the field. Additionally, I conducted expert interviews and developed an interview protocol to validate the data we obtained from the FGDs. The whole trip, but also the collaboration with different stakeholders are valuable experiences for my intercultural working skills. Furthermore, the whole field study has significantly improved my project management skills.

### **Field research in Uganda**

The highlight of the internship was certainly the stay in Uganda for field research. Originally, the field stay was planned for July, but was postponed several times due to Covid. Finally, I managed to travel to Uganda in November 2021. I was warmly welcomed by our partners in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and a researcher from IFPRI with whom I worked on my project. After recruiting the team, a driver and a coordinator to help us organise our focus groups in collaboration with the local extension officers in each district, a facilitator who also translated, took notes and transcribed, as well as a colleague from IFPRI. After conducting the pretest (see Figure 1) and revising the study protocol, we conducted the focus group discussions (see Figure 2). In the last district, I got malaria, which is probably inevitable when working in tropical or subtropical Africa. As I recovered without any further complications, I see this as an experience for future 'tropical fitness'.



Figure 1: Discussion about the FGD protocol before the pretest in Mpigi district



Figure 2: FGD with women farmers in Kiboga District



## **Output**

The internship has produced some results that will be completed in the next few months:

- One qualitative paper for a conference and perhaps for a publication
- One quantitative paper as working paper, discussion paper or publication with IFPRI
- One brown bag presentation of the results at IFPRI
- One master thesis including the methods used in the papers

## **Summary**

Participating in the Junior Scientist Program+ and working with a CGIAR institute was a great opportunity for me, which helped me to significantly improve my scientific working skills and analytical thinking. In addition, my skills in applied econometrics, project management and intercultural collaboration were substantially improved. By working with mixed methods on the same research objectives, I learned the advantages and disadvantages of each method and improved my interdisciplinary thinking and approach to future research questions and problems.

## **Next steps**

As the whole experience has strengthened my interest in international agricultural research, I am thinking of doing a PhD in collaboration with IFPRI/CGIAR to become a scientist.