

# NURU BURKINA FASO

## 2023 IMPACT REPORT



May 2024



# NURU BURKINA FASO

## 2023 IMPACT REPORT

**May 2024**

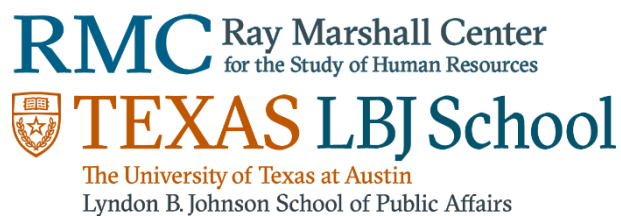
Heath Prince and Thomas Boswell (Ray Marshall Center)

Souleymane Ouedraogo (Nuru Burkina Faso)

Matt Lineal, Casey Harrison, Ian Schwenke, Bethany Ibrahim (Nuru)

Cover Page: Nuru Burkina Faso

This report is commissioned by Nuru



2300 Red River Street, Stop R1300  
Sid Richardson Hall Unit 3  
Austin, TX 78712-1536  
[www.raymarshallcenter.org](http://www.raymarshallcenter.org)

## TABLE OF CONTENTS

<b>Executive Summary</b>	<b>5</b>
Methods	7
<b>Farmer Organizations</b>	<b>8</b>
Introduction	8
Demonstration Plots	9
<b>Rural Livelihoods</b>	<b>10</b>
Introduction	10
Soybeans and Groundnuts	10
Good Agricultural Practice Adoption	12
Best Practice Adoption Leading to Increased Yields	14
Agricultural Income	15
<b>Gender and Social Inclusion</b>	<b>16</b>
Introduction	16
Methods	16
Observations	18
A-WEAI Index Calculation	20
<b>Conclusions</b>	<b>21</b>

## LIST OF TABLES

Table 1. Participant count by commune.....	11
Table 2. Best practice to yield correlation - expressed as additional kg/ha produced.....	15
Table 3. Gender Empowerment Index Score .....	22

## LIST OF FIGURES

Figure 1. Potential to fill yield gap; Average yields, kilogram per hectare .....	12
Figure 2. Practice adoption rate by practice and crop .....	14
Figure 3. Agricultural income, net profit per hectare .....	16
Figure 4. Household decision maker regarding income generating activities by respondent gender .....	19
Figure 5. Extent of participation in income decisions by respondent gender .....	21

## EXECUTIVE SUMMARY

Nuru Burkina Faso (NBF) is a locally-led and locally-registered NGO in Burkina Faso. NBF's mission is to build resilience corridors by eradicating poverty and unlocking economic potential within fragile communities in Burkina Faso to stop the spread of violent extremism by 2030. NBF was founded in 2022, and at the time of this report is in its second year of operation. Since its inception, NBF has created a capable and professional local organization that is engaged across several interventions. Currently, NBF is working with USAID to implement the Tiligre Initiative for Farmer Resilience (TIFR) in the Centre Sud and Plateau-Central regions of Burkina Faso, just outside of the capital Ouagadougou, and receives further support from additional donors to provide support in terms of crop input packages to farmers.<sup>1</sup> Furthermore, NBF has partnered with ignitia to provide two consecutive years of weather forecasting services to nearly 2,000 Nuru-registered farmers.<sup>2</sup>

In 2023, NBF conducted its first input-distribution activity, allowing farmers who are members of the cooperatives that NBF supports to receive crop input packages, consisting of various inputs aimed to improve the yields of soy and groundnut production for individual farmers. Crop loan repayments are made to the cooperative, which becomes a revolving fund at each cooperative. This report examines the results of this 2023 agricultural season, including the yield potential between farmers and demonstration plots. This report also explores baseline gender evaluations aimed at uncovering gender dynamics at the household level. The following results serve as a baseline against which NBF will compare future programmatic results and successes, highlighting the potential to fill the existing yield gap using improved inputs, best practice adoption, and gender mainstreaming approaches.

### Key Results

- NBF conducted a successful first year of program implementation, establishing memorandums of understanding with 10 farmers cooperatives, and supporting 1,912 farmers through agricultural extension, input provision, weather forecasting, and financial literacy training.
- Baseline results indicate an initial production value of 109 kg/ha for soybeans and 468 kg/ha for groundnuts. Demonstration plots identify a large yield gap, showing production potential at 627 kg/ha for soybeans and 854 kg/ha for groundnuts.

---

<sup>1</sup> Nuru. 2023. "Nuru Burkina Faso Secures USAID Award". ([Link](#)).

<sup>2</sup> Nuru. 2022. "Farmer Climate Adaptation Through Better Weather Information". ([Link](#)).

- The NBF combined income model shows a baseline cost-inclusive net income of \$131 per NBF-supported farmer.
- 378 registered farmers were surveyed to uncover gender dynamics at the household level. Abbreviated Women's Economic Empowerment in Agriculture Index (A-WEAI) scores indicate a similar baseline empowerment between men and women.

## METHODS

This report is broken into four sections, exploring first the farmer organizations (FOs) that NBF supports, and results from the demonstration plots located at each FO. Secondly, this report examines the results from the first year of the NBF rural livelihood activities. Eligible farmers received input packages on loan, to be repaid to the cooperative upon selling their harvest. These repayments contribute to the cooperative's revolving fund furthering its sustainability and supporting cooperative development. This section additionally explores good agricultural practice (GAP) adoption by farmers, as well as the agricultural income and return on investment from using these input packages NBF provided. Lastly, the report explores results from the baseline survey conducted by NBF on household gender dynamics.

The survey referenced throughout this report was conducted in November 2023, with 306 individuals surveyed for agricultural production and practice adoption, and 378 individuals surveyed using the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) gender tool. This two-part survey examines the results of the 2023 agricultural season and is published after the date of crop commercialization to generate accurate yield and income results following the sale of crops through the farmers cooperatives.



*Farmer checking for soybean plant pests at one of the NBF demonstration plots.<sup>3</sup>*

---

<sup>3</sup> Image Source: Nuru Burkina Faso

## FARMER ORGANIZATIONS

### INTRODUCTION

Nuru Burkina Faso (NBF) focuses on cooperative agribusinesses as the critical keystone of the Nuru model of intervention. Through cooperative agribusinesses, NBF can engage smallholder rural farmers in multiple interventions targeted at improving their livelihoods, financial inclusion, agency of decision-making, healthcare, and other aspects of their daily lives. More professional cooperative agribusinesses are able to deliver better support to the member farmers, and therefore NBF develops curriculum targeted at improving cooperative policy, practice, and outcomes.

In 2023, NBF focused support on 10 farmer cooperatives located in the Plateau-Central and Centre Sud regions of Burkina Faso. To evaluate the level of professionalization of these cooperatives, NBF will use a combination of tools in the coming years, including the Organizational Capacity Assessment Tool (OCAT) developed by USAID<sup>4</sup>, as well as the SCOPEinsight cooperative assessment tool used across the Nuru Collective to assess farmer cooperatives over 8 domains of professionalization. In next year's report, results from the first round of OCAT assessments will be presented.



*NBF working in the Plateau-Central and Centre Sud regions of Burkina Faso<sup>5</sup>.*

<sup>4</sup> USAID. 2016. "Organizational Capacity Assessment". ([Link](#)).

<sup>5</sup> Image Source: <https://www.worldatlas.com/maps/burkina-faso>



## DEMONSTRATION PLOTS

NBF operates in three communes surrounding Ouagadougou, with several cooperatives operating in each commune. In order to demonstrate the Good Agronomic Practices (GAP), and best possible application of the provided inputs to farmers, NBF operates several demonstration plots. Farmers are encouraged to visit demonstration plots to learn about the practices they can use on their own crops. There are a total of 10 demonstration plots currently in operation. Each demonstration plot is centrally located to the majority farmer population, close to the cooperative, and often used as a training site for farmers. Each of these demonstration plots, roughly 0.1 hectare (0.25 acres), contains several crops of interest for farmers, including the soybeans and groundnuts that NBF encouraged farmers to produce this past year.

The average production of soybeans at a demonstration plot was 628 kg/ha. This far exceeds the actual production value experienced by the average farmer registered with Nuru Burkina Faso. Despite the inputs being the same, farmers on their individual plots have less management and oversight of their crops, often experience intermittent or unpredictable rainfall, and sometimes do not apply all of the necessary practices needed to ensure high levels of production. With continued training and close monitoring in the coming years, it is possible that farmers will produce closer to the demonstration plot average, at nearly 6x the current production of the average farmer.

The average production of groundnuts at the demonstration plot can be seen with both “local seeds” and “improved seeds”. Farmers were shown both the pre-existing local seed variety as a comparison and were provided with the improved seed as an alternative, being more drought-resistant and pest-resistant compared to the existing seed variety. The average local seed production for groundnuts was 615 kg/ha, and the average improved seed production was 854 kg/ha, almost twice the value of production that farmers experienced on their own plots of land. The highest-performing demonstration plot saw over 1,100 kg/ha production using improved seed varieties.

The yield gap is great for farmers in all communes, especially as demonstration plots indicate that higher production is indeed possible with the application of improved inputs and practices. NBF aims to assist farmers in filling the yield gap, to reach the yield potential as demonstrated in the demonstration plots. A list of practices used by the NBF team to fill this gap can be found below in the “Good Agronomic Practice Adoption” section. However, much also depends on climate conditions, as more frequent droughts, lack of consistent rainfall, and pests are leading farmers to encounter many more shocks than before. Nuru is providing farmers with weather forecasting via the ignitia weather platform, however awareness of

rainfall can only go so far in the event of a significant drought period.<sup>6</sup> Rural farmers with a lack of high-quality inputs that are drought-resistant are much more likely to lose significant portions of their crops due to these external shocks. 2023 happened to be a particularly turbulent year in terms of rainfall patterns, as farmers saw periods of drought and insufficient rain, which can lead to crop loss.<sup>7</sup>

## RURAL LIVELIHOODS

### INTRODUCTION

The Nuru Burkina Faso program aims to improve the livelihoods of smallholder farmers through diversifying and improving their livelihoods. Prior to intervention, many farmers who are now supported by NBF were living at or near subsistence levels, producing often just enough to feed their own family, without making a significant profit or return on their investment. By providing improved inputs on loan through the cooperative structure, and training on practices aimed to improve not only the productivity of their crops but also their resistance to climate change, farmers have the ability to produce more and sell at better prices.

### SOYBEANS AND GROUNDNUTS

Farmers registered with NBF in 2023 had the option to receive inputs for either groundnuts or soybeans. The majority of farmers took inputs for a half-hectare plot, or roughly 1.25 acres of land per farmer. The NBF Monitoring, Evaluation, and Learning (MEL) team therefore conducted a survey after the first season of production in order to understand the baseline production of each crop. Although prior estimates on production had been taken, many of the farmers surveyed during this assessment had not previously used these inputs provided, and therefore no direct comparison of production is available to indicate an increase or decrease in production value.

In November 2023, the MEL team conducted a sample survey of the total 1,912 farmers registered with NBF to assess the average production of those producing soybean and groundnuts using the improved input packages. A total of 338 individuals were surveyed. 306 of these individuals produced greater than 1 kg of the respective crop, and were used for all calculations. A total of 261 groundnut and 45 soybean

---

<sup>6</sup> Nuru. 2023. "Farmer Climate Adaptation Through Better Weather Information." ([Link](#)).

<sup>7</sup> FEWS NET. 2023. "West Africa Seasonal Monitor October 26, 2023: Severe rainfall deficits and/or long dry spells across wide areas of northern Sahel in September, 2023." ([Link](#)).

farmers were included in the following calculations and figures. About twice this number of farmers chose to take the inputs during the 2023 agricultural season, representing a nearly 50% sample.

**Table 1. Participant count by commune**

Commune	Count (n)
Plateau-Central	265
Centre Sud	127

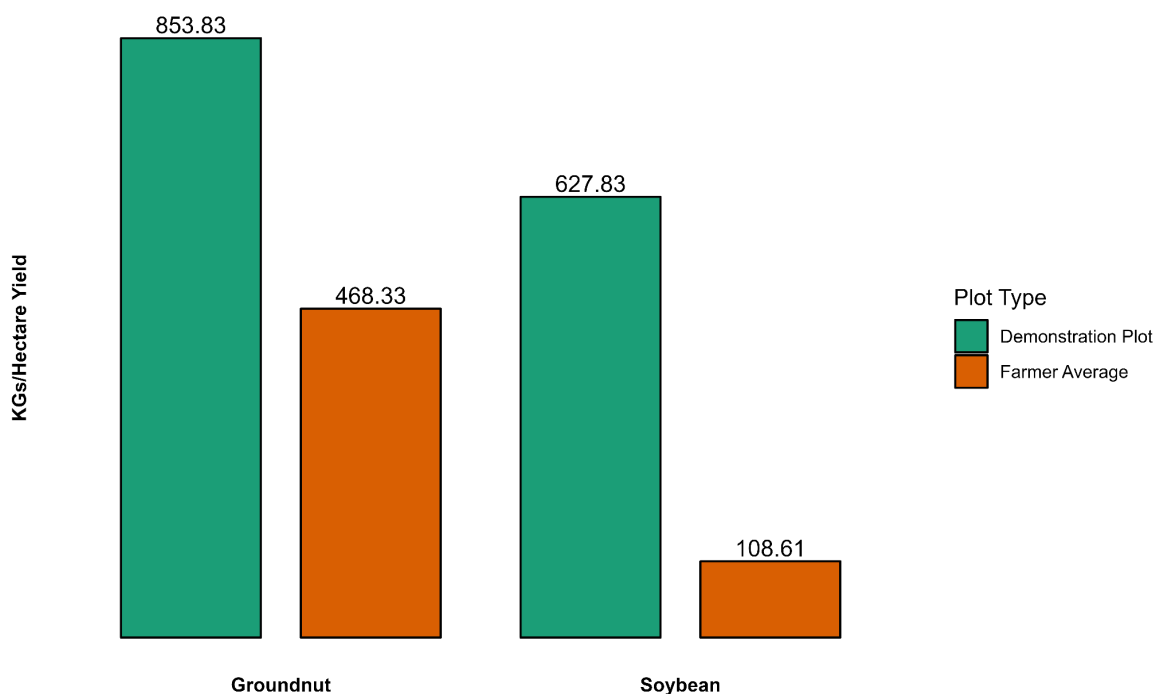
From this sample, the average production of soybeans was 109 kg/ha. The average production for groundnuts was 468 kg/ha. These values were lower than expected due to a myriad of climate shocks during the 2023 agricultural season, in particular for soybeans. Central Burkina Faso experienced severe rainfall deficits in July and September.<sup>8</sup> September is a vital time of the reproductive and maturation period in crop development which leaves soybean crops especially vulnerable to water stress. Significant yield reductions resulted due to these prolonged dry spells in the Sahelian zone.

The production of both of these crops has a much greater potential than was seen, as can be reflected by the demonstration plot yields. Ideally, Nuru farmers have the opportunity to visit demonstration plots to observe the best-possible application of selected inputs and good agricultural practices. The difference between the demonstration plot yield and the average farmer yield can be seen as the potential for improvement for farmers supported by NBF.

---

<sup>8</sup> FEWS NET. 2023. "West Africa Seasonal Monitor October 26, 2023: Severe rainfall deficits and/or long dry spells across wide areas of northern Sahel in September, 2023." ([Link](#)).

Figure 1. Potential to fill yield gap; Average yields, kilogram per hectare



## GOOD AGRICULTURAL PRACTICE ADOPTION

In 2023, NBF trained farmers on a number of Good Agricultural Practices (GAPs). Although many GAPs could be applicable for the average farmer, NBF focused on the tracking and usage of five GAPs in particular over time to gauge adoption. Although it is possible to track every single GAP for farmers, some GAPs are not promoted by NBF directly, and others are only used by a very small portion of the farmers. Therefore, it is more important and useful to the NBF team to track the practices believed to be the most impactful, and practiced by a larger proportion of the farmers overall. The five GAPs chosen include the use of organic compost, improved seeds, crop rotation, usage of the ignitia weather forecasting, and the use of PICS storage bags to avoid crop spoilage.<sup>9</sup>

Often, farmers save seeds from their previous harvest and trade with other farmers, and community members through rural markets. In Burkina Faso, 85% of smallholder farmers rely on this informal seed sector for most crops.<sup>10</sup> Saved seeds exhibit variability in their purity, quality, and physical attributes that

<sup>9</sup> PICS. 2024. "PICS Program Overview." ([Link](#)).

<sup>10</sup> Mabaya, E., et al. 2021. "Burkina Faso 2020 Country Study - The African Seed Access Index."

can diminish the seeds' ability to perform optimally and produce consistent yields. The use of improved seeds can boost farmers' yields by providing resistance to drought and pests, both of which are significant challenges for farmers in Burkina Faso.

Furthermore, smallholder farmers rely heavily on rainfed agriculture. This reliance is increasingly being challenged by the growing inconsistency caused by climate change. Climate information services empower smallholder farmers to strengthen their resilience and readiness in response to climate variability.<sup>11</sup> The Ignitia weather forecasting app increases farmers' access to local weather information based on the precise GPS coordinates of their farms. This technology gives farmers more accurate weather forecasting data sent as a text message to their mobile phones to make informed decisions on the timing of planting depending on expected rainfall to support the optimal conditions for their crops' growth.

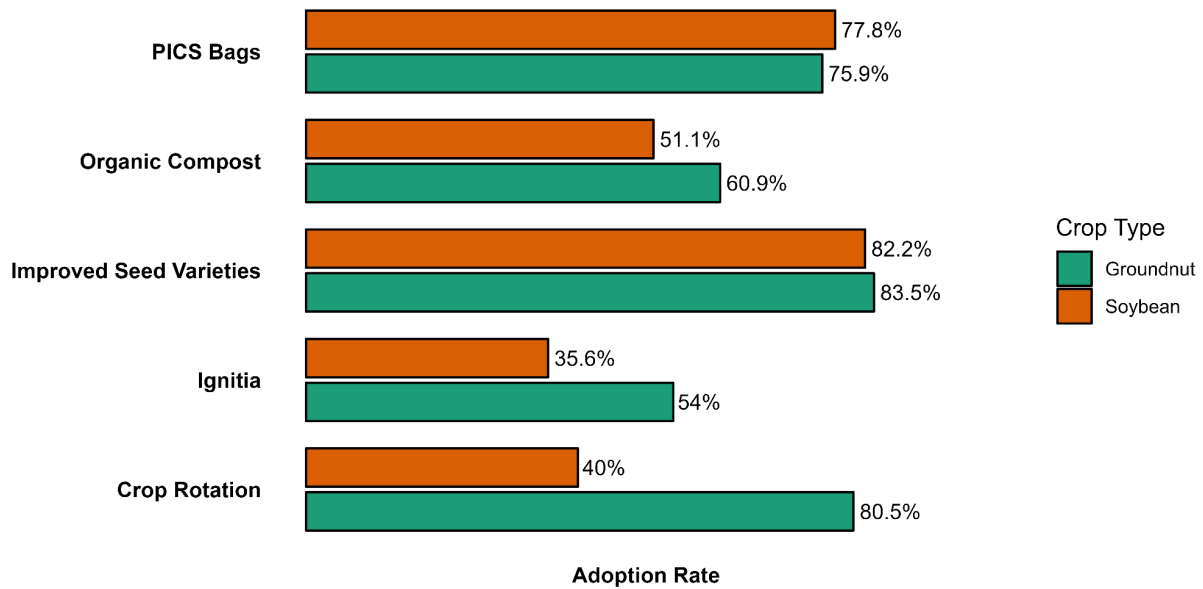
Of the 261 farmers who grew groundnuts, 218 (84%) used improved seeds, 210 (80%) practiced crop rotation, 198 (76%) used PICS improved storage bags, 159 (61%) used organic compost, and 141 (54%) received Ignitia weather forecast messaging. 198/261 (76%) farmers practiced the majority of practices (at least three out of five), and 250/261 (96%) practiced at least 1 of the above practices.

For soybeans, although there was a smaller sample size at only 45 farmers, we can still see that 37 (82%) used improved seed varieties, 35 (78%) used PICS storage bags, 23 (51%) used organic compost, 18 (40%) practiced crop rotation, and 16 (36%) benefitted from Ignitia weather-forecasting. 22/45 (49%) farmers practiced the majority of practices (at least three out of five), and 45/45 (100%) of the soy farmers practiced at least 1 of the practices.

---

<sup>11</sup> Nyoni, Rejoice S., et al. 2024. "Targeting smallholder farmers for climate information services adoption in Africa: A systematic literature review." ([Link](#)).

Figure 2. Practice adoption rate by practice and crop



### BEST PRACTICE ADOPTION LEADING TO INCREASED YIELDS

The table below indicates the results of three linear models that examine the correlation between the crop yield and GAPs promoted by Nuru Burkina Faso over the course of the agricultural season. In the model 1 and model 2, total crop yield is the dependent variable and the number of practices adopted by a given farmer is the independent variable of interest. Model 1 controlled for crop type (Groundnut and Soybean) and found no significant correlation between sum of best practices and yield. However, Model 2 includes additional controls for geographic location (commune) and land size. After including these controls, **the model indicates that for every unit increase in the number of adopted agronomic practices, there was a statistically significant associated increase of 26.7 kilograms harvested.**

Model 3 removes the number of best practices employed by farmers from the regression and includes Individual practice-level variables for compost, PICS bags, crop rotation, and ignitia weather forecasting. This shows how individual practices correlate to increased yield. While continuing to control for crop-type, land size, and commune, 3 of 4 practices correlated significantly to increased yields. For example, we interpret that farmers who adopt organic compost into their agronomic practices are associated with an average 66.5-kilogram higher yield than farmers not using organic compost. While the correlation between PICS bags and crop yield was technically negative, it was neither statistically significant, nor generally attributable to increased yields as a post-production practice.

**Table 2. Best practice to yield correlation - expressed as additional kg/ha produced**

Variable	Model 1 (No Controls)	Model 2 (w/Controls)	Model 3 (w/Controls)
Sum of Best Practices	2.9	26.7***	
Organic Compost	-	-	66.5***
PICS Bags	-	-	-18.5
Crop Rotation	-	-	37.9***
ignitia	-	-	48.6***

Using these results, NBF can be sure that certain practices are associated with increased farmer yields. NBF expects the long-term program goal to promote and increase GAP adoption to result in substantial yield improvements for farmers.

## AGRICULTURAL INCOME

In 2023, NBF-supported farmers produced both soybeans and groundnuts. Nuru uses an income model to estimate the total income earned, and the return on investment generated from the production of these crops. This year, as farmers were new to soybeans and simultaneously experienced significant external environmental shocks, soybeans produced a net negative of \$35.49 USD per farmer. Groundnuts on the other hand, yielded a net positive of \$217.03 USD per farmer. As there is an uneven distribution of soybean and groundnut farmers, Nuru uses a “combined income” model that weights total production by value chain to understand the net average any Nuru-supported farmer might produce. **In 2023, the net average income from production of either soybeans or groundnuts was \$131.37 USD.** The net income value is inclusive of the total revenue (\$257.91 USD) minus the total costs of production (\$126.55 USD). All values are standardized and weighted to the production of 1 hectare of either crop.

Figure 3. Agricultural income, net profit per hectare





## GENDER AND SOCIAL INCLUSION

### INTRODUCTION

Nuru Burkina Faso integrates a women-first approach and gender mainstreaming techniques into programs as an entry point into communities. By focusing on women-first, gender equality and women's agency are considered from the conception of programs. Overcoming barriers to women's participation in certain value chains, and in cooperative activities, is paramount to the durable success of programs and continued increases in yields and incomes. Nuru attempts to place women in positions of leadership within cooperatives where applicable and safe, and encourages women's voices to be heard and present during training with groups of farmers and cooperatives. When women have increased agency of decision-making, are better informed, and hold positions of leadership, the entire community benefits. Nuru hopes that over the years, increasing women involvement in programs, in leadership positions, and general decision making involving their production will lead to positive trends in the results presented by this index survey.

### METHODS

As Nuru adheres to the gender minimum standards across the Nuru Collective, Nuru made the conscious decision to begin evaluation for gender parities in programming beginning in 2022 using the WEAI suite of tools, co-developed by IFPRI and USAID. Out of this suite of tools, NBF piloted the A-WEAI tool in November 2023 alongside the crop yield survey. This tool assesses the level of "empowerment" across 5 domains, including production, resources, income, leadership, and time.<sup>12</sup> The primary outcome of the tool is the observed difference in decision-making agency between both men and women surveyed. The survey itself has been in use since 2012 when it was initially developed, and has been used across the world as a standardized index measurement of women's economic empowerment in the agriculture sector, although recently adopted formally under the Feed the Future USAID infrastructure in 2023.<sup>13</sup>

The survey conducted in November 2024 included 284 women and 94 men. These individuals were distributed evenly across the 3 communes of intervention, and randomly selected from the cooperatives present in each. Results were collected by enumerators in the field using strict guidelines provided by

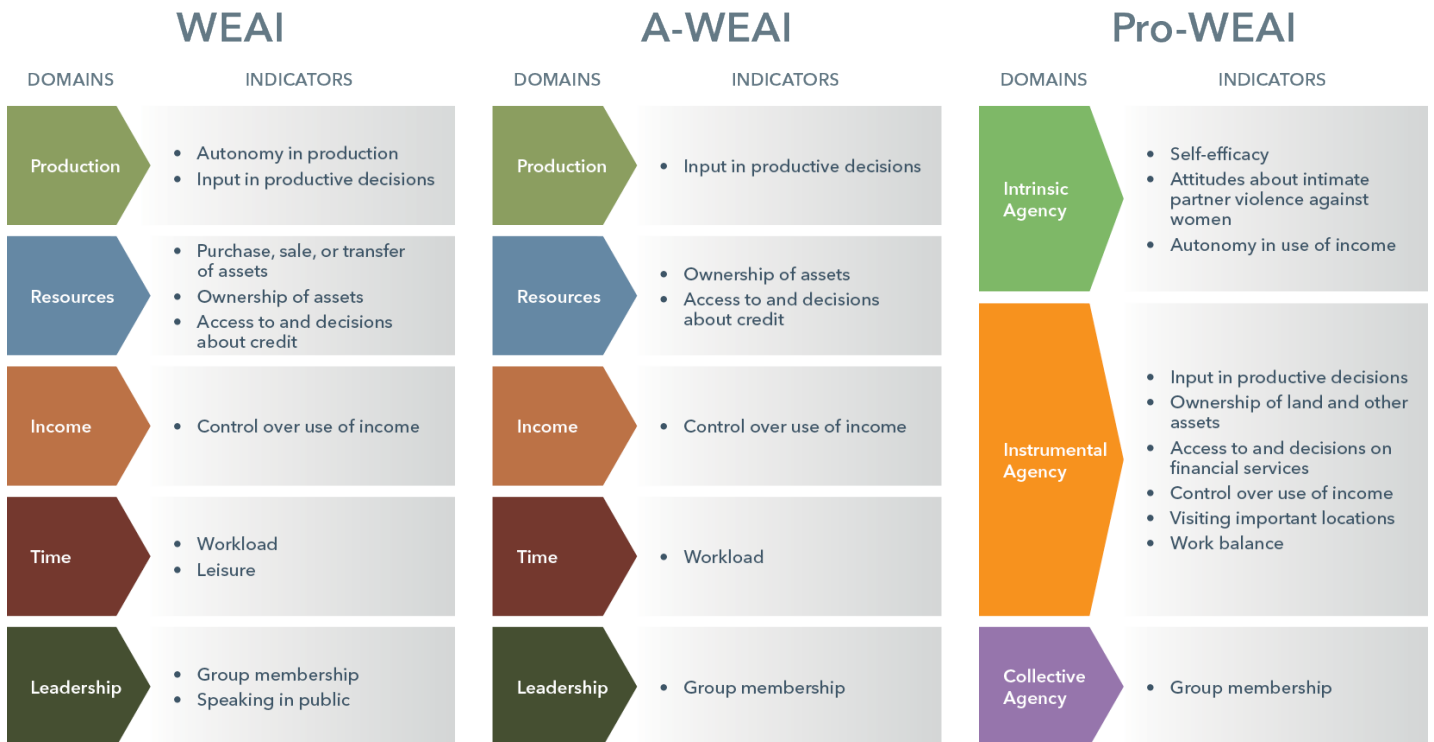
---

<sup>12</sup> Malapit, H. 2020. "Instructional Guide on the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI)". IFPRI. ([Link](#)).

<sup>13</sup> Moore, L. et al . 2023. "Uncovering more than a decade of WEAI use in USAID projects". Feed the Future. ([Link](#)).

IFPRI in the A-WEAI guidebook, data was collected by the NBF MEL manager, and then passed to Nuru and RMC for further analysis.

The outcomes of this tool are twofold. First and foremost, quantitative and qualitative observations can be viewed from the individual questions in the survey, as observed below. These results can shed light on decisions over individual aspects of agency, such as who is in charge of choosing which crop the household grows, who decides whether or not to take a loan, or who owns various assets within the household. Being an index tool, these results can be compared to some extent against other organizations, both within the Nuru Collective and externally, who use and report this tool.<sup>14</sup> The second outcome, and directly comparable, is the index calculation of the tool itself. Available online via a WEAI dashboard, Nuru can be compared against other programs around the world to gain a clearer image of how gender parities differ between the Nuru Burkina Faso program and external programs both in Burkina Faso and elsewhere.



Graphic depicting the various versions of the WEAI survey tool. NBF uses the “Abbreviated” (A-WEAI) version due to its increased accessibility and ease of use.<sup>15</sup>

<sup>14</sup> DevelopMetrics and IFPRI. 2023. “USAID WEAI Dashboard: A Multi-Country Summary of Use-Cases”.

<sup>15</sup> IFPRI. 2023. “Comparison of WEAI, A-WEAI and pro-WEAI”. ([Link](#)).

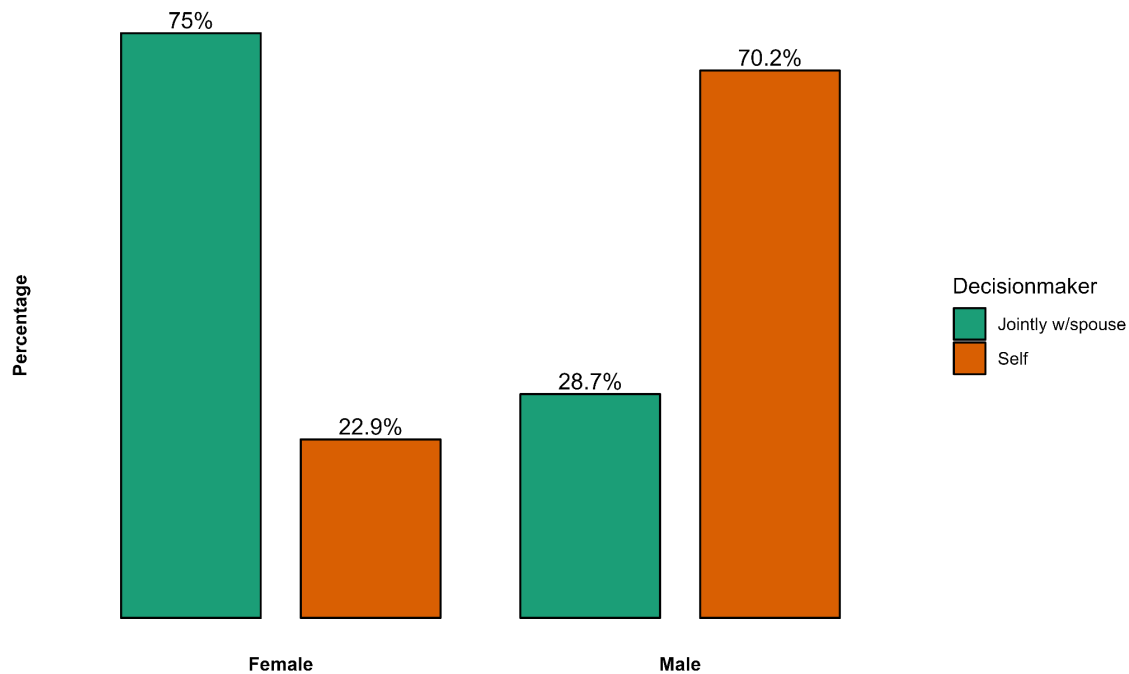
## OBSERVATIONS

As there are 5 different “domains of empowerment” present in the survey, some key observations were drawn from each section in terms of the household gender dynamics for Nuru-supported farmers in Burkina Faso. Results can be disaggregated as follows by domain.

### Production

Farmers were asked to what extent they make choices over production at the household level. This involves selecting which crop to produce, which eventually will lead to the primary income generation of most households. As only 4% of the households surveyed had any sort of business activity aside from farming, we can assume that the large majority of household income for these individuals is derived directly from crop sales. Participants, when asked the question “who makes the decisions regarding income generating activities” had the option of responding “self”, “jointly” (with spouse or other household members), or “other household members”. 70% of men responded “self”, whereas only 23% of women did the same. 75% of women responded with “jointly”, whereas only 29% of men did the same.

Figure 4. Household decision maker regarding income generating activities by respondent gender



A further question revealed that 60% of female respondents reported having “little to no say” over income-generating activities. As an organization promoting agricultural production to farmers, it is important therefore to consider who at the household eventually will make the decision for production.

## **Resources**

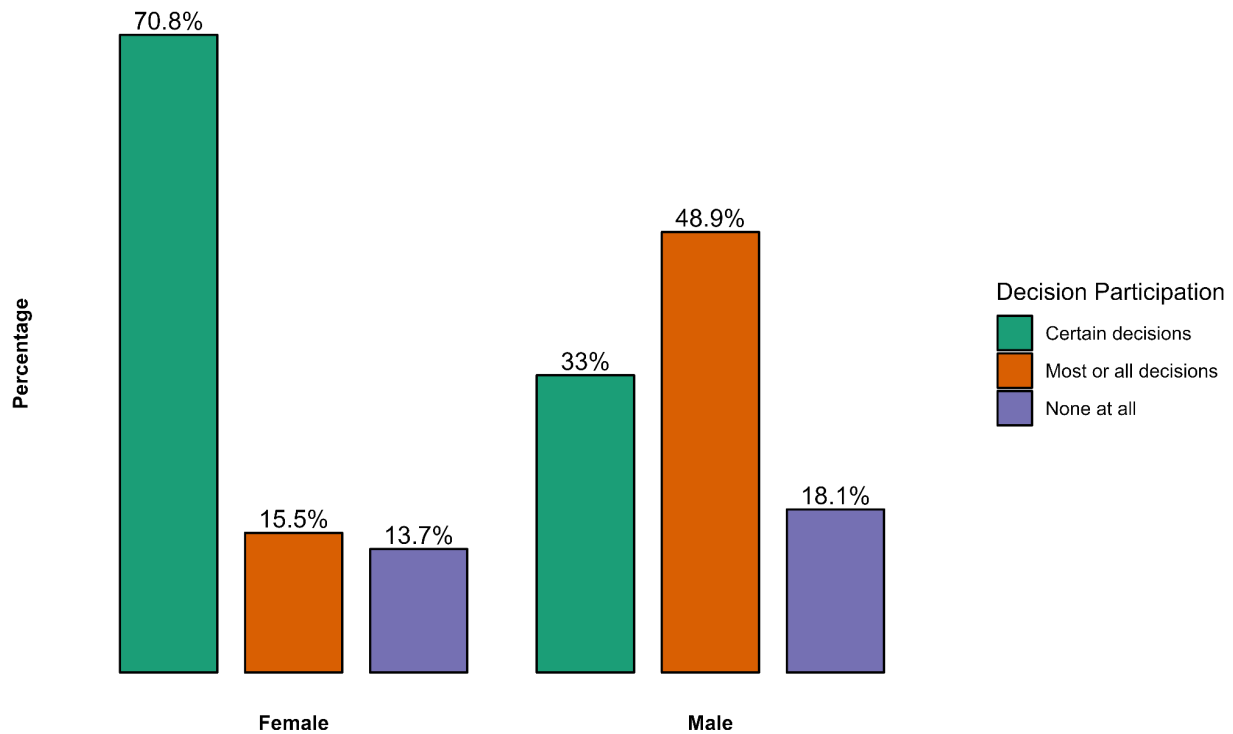
The resources section identifies the extent of ownership over various resources at the household level. This includes all items generally identified during a household survey, including various large and small household items, transportation means, land, livestock, and more. Respondents were asked “to what extent do you own the items you listed”. Notably, ownership is vastly male-dominated in these communities. 100% of men reported at least joint ownership of every household item listed. Women were more likely to say items were owned “jointly” with their spouse, or other household members, at 71% of total female responses. Ownership for Nuru is important to consider, as items provided to the household are more likely to be “owned” by the male members of the household.

## **Income**

The income domain asked to what extent individuals have the potential to make decisions regarding the income generated from the activities they previously identified. Additionally, this section asks about the ability to take loans and credit. When asked “To what extent do you make decisions in regards to your income”, individuals had the option of responding “all/most decisions”, “certain/some decisions”, or “none”. Men were most likely to report they were involved in “all/most decisions” at 49% of male responses. Women were most likely to respond with “certain/some decisions” at 71% of female responses.

Of those respondents who took loans, 73% of men reported making the decision themselves, whereas only 23% of women reported doing so. These results are important for Nuru as more often than not, men will have the final say in decisions over how to use income generated at the household level, and further, when to take loans. Nuru’s model is predicated on the ability of individuals to take crop loans to bolster production and income at the household level.

Figure 5. Extent of participation in income decisions by respondent gender



### Leadership

The leadership section asked individuals if they were part of any “group” at the village level. Groups could be religious groups, women’s groups, savings and loans groups, or other. Of those that reported being a member of a group, 86% were women. This could indicate that women are more comfortable, or have some additional incentive for group membership within the community. As Nuru organizes farmers into cooperatives, understanding that there is a pre-existing custom of female membership in groups is important to community entry and establishing inclusive agribusinesses.

### Time

The time domain asks respondents to break down their daily activities in terms of hours spent doing each activity. These activities are broken into categories such as “agriculture”, “cooking”, religious activities”, “sleep”, “domestic work”, and others. Largely, men and women reported similar daily time usage. Some significant differences include men spending more time on the farm engaged in agricultural production activities, and women spending more time engaged with cooking and domestic work. Many activities such as family care, social time, and religious activities were largely similar between sexes.

## A-WEAI INDEX CALCULATION

The Ray Marshall Center was able to use the data collected from the A-WEAI survey in order to construct the 5 Domains of Empowerment Index (5DE). This approach uses quantitative instruments provided by IFPRI to create an externally comparable index to gauge the level of empowerment of men and women within a given community<sup>16</sup>. Index comparison values from other programs can be found via the online WEAI dashboard<sup>17</sup>. As a reference point, the WEAI guidance documents indicate WEAI pilot post-intervention index values of 0.83 for women in Bangladesh, and a similar 0.83 in Uganda, of a maximum score of one (1.00). There is a similar comparative value for men. These values represent a weighted index of the 5 domains of empowerment surveyed. In this example, the remaining 0.17 (1.00-0.83) is the level of “disempowerment” present for the survey group.

Another element of this calculation is the “gender parity index”, or the difference between male and female levels of empowerment within the community. Due to certain survey limitations, this was not taken into account for this survey. However, 5DE results indicate similar levels of empowerment between sexes, and the 5DE index carries greater weight in the overall index (at 90% of the overall weight).

In Burkina Faso, initial results for this sample indicate an index value of 0.74 for women, and 0.73 for men. These results seem to indicate a similar level of empowerment for men and women within the community, although results are likely to be influenced by certain factors such as disproportionately high levels of “group membership” for women in these communities.

**Table 3. Gender Empowerment Index Score**

Indicator	Women (n = 285)	Men (n = 94)
5DE Score	0.74	0.73
Disempowerment (1-5DE)	0.26	0.27

As a single time period, these index values have no substantial internal comparison for the Nuru Burkina Faso team. Rather, as an external comparison point, one might conclude that this pre-intervention value of 0.74 is logically lower than a post-intervention score of 0.83 from the examples in Bangladesh or

<sup>16</sup> IFPRI. 2024. “Guides and Instruments”. [\(Link\)](#).

<sup>17</sup> IFPRI. 2024. “USAID WEAI Dashboard”. [\(Link\)](#).

Uganda. Over time, Nuru will evaluate this score both in Burkina Faso, as well as across Nuru partner organizations, in order to understand the differing levels of empowerment both over time, and between programs.

## CONCLUSIONS

Despite a season of climate shocks beyond the norm, Nuru Burkina Faso was able to carry out a successful distribution of inputs to farmers in the Centre Sud and Plateau-Central regions of Burkina Faso. This distribution eventually led to sales that turned into tangible income for supported farmers. At baseline, results indicated strong yields for groundnuts, but sub-par soybean yields due to these stressors. However, using the combined income model, NBF observed a net positive income of \$131 per individual.

Demonstration plots show a great potential for improvement, as application of the correct inputs and practices has been shown to have a significantly higher yield than the average farmer has experienced during the 2023 season. Individual practices that NBF tracks, such as compost application, ignitia program participation, and improved seeds are directly correlated with positive increases. As NBF continues to support, train, and monitor farmers over the coming growing seasons, further gains in yields and incomes are expected.

Furthermore, NBF was able to establish a baseline level of empowerment between participant male and female farmers to which future surveys can establish to what extent programs might improve these outcomes at an individual household level.

Despite an increasingly turbulent political environment in Burkina Faso, the NBF team is continuously able to drive impact for supported farmers. Through agricultural livelihoods programs, farmers were able to begin to see the effects of Nuru programming:

- NBF supports 1,912 registered farmers through the first agricultural season, establishing strong ties with 10 farmers' cooperatives.
- Baseline yield results indicate 109 kg/ha for soybeans and 468 kg/ha for groundnuts for those that received input packages. Demonstration plots show high potential for improvement for those that adhere to best practice utilization.
- The combined income model shows an average net income of \$131 per Nuru-supported farmer.
- 378 individuals are surveyed using the A-WEAI tool, co-developed by USAID and IFPRI, in order to establish a baseline level of empowerment index score.