

NURU ETHIOPIA

2022 IMPACT REPORT



JULY 2023

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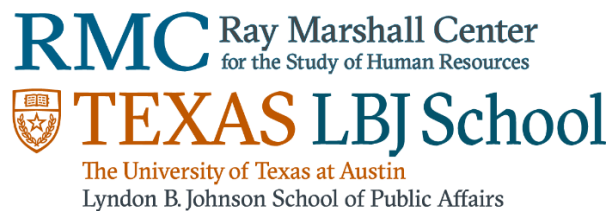
JULY 2023

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EXECUTIVE SUMMARY

In 2022, Nuru Ethiopia (NE) offered interventions in cooperative and rural livelihoods programming with 18,194 participant households in Gamo and Gofa Zones of Southern Nations, Nationalities, and Peoples' Region (SNNPR) of Ethiopia. The intervention activities were punctuated by a shift in approach to supporting larger cooperative unions and cascading services to an increased number of primary cooperatives and farmers. The intervention activities achieved the following outcomes:

Cooperative Impact

- NE-supported farmer organizations achieved an average SCOPEinsight score of 4.4 out of 5, demonstrating competitiveness at national, regional, and global levels for agricultural farmer organization businesses.
- 90% of NE-supported farmer organizations have achieved net profitability from their business operations as of 2022.
- NE-supported Hidota Union Cooperative achieved a 4% net profit margin as of 2022, which expands its ability to invest in member primary cooperatives and farmer livelihoods.

Agricultural Impact

- By participating in the diversified livelihood interventions, Nuru farmers were able to generate \$411 USD of extra income, an increase of 77% compared to their 2020 baseline value of \$233 USD and a continued increase over previous years.

In achieving impactful outcomes for households and cooperatives, NE interventions overcame significant weather shocks related to climate change and historic hyperinflation. All NE operating areas in SNNPR were affected to a different degree by these shocks. Still, NE successfully adapted its intervention activities to a new union approach that relies on digital development strategies and union cooperative staff to achieve impact for primary cooperatives and farmer households. This shift toward lower-cost and higher visibility training and extension services began in 2021 and was mainstreamed in 2022. This multi-year effort explains the significant increase in the number of farmers NE supported from 2021 to 2022. In summary, NE overcame substantial obstacles, maintained impact, and significantly expanded the breadth and depth of its programming in 2022.

FARMER ORGANIZATIONS

INTRODUCTION

Farmer organization businesses are the engine that generates sustainability in the Nuru Model. To successfully exit, replicate, and scale to new communities and zones in Ethiopia, NE must evaluate the capacity of emerging farmer organizations. NE must determine whether the farmer organizations can sustain the meaningful choices delivered to its farmer members. To this end, NE conducts profitability analyses alongside SCOPEinsight assessments for supported farmer organizations in a given year. NE and Nuru International (NI) provide quality assurance of these profitability reports.

In 2022, NE worked with 121 farmer organizations comprising 119 primary cooperatives and two cooperative unions. NE provided capacity development, seed capital, commercialization assistance, and other critical business support services to these farmer organization businesses. NE adopted a union approach in 2022 by formally organizing the primary cooperatives under unions to enhance their collective power. The shift in approach focuses NE's capacity development resources at the union business level, with the union ultimately responsible for cascading knowledge, skill, and behavior change opportunities to their member primary cooperative and farmers. NE provides monitoring and evaluation support in the form of adapted curricula and assessments accredited by the Agribusiness Market Ecosystem Alliance (AMEA).¹

2022 Milestones	Target	Achievement
Total Cooperatives	100	119
SCOPEinsight Average	>= 3.3	4.4
Percent of Profitable Cooperatives	70%	90%

¹ <https://amea-global.com/>

METHODOLOGY

Measurement approach

After several years of providing direct resources and business development support (BDS), NI and NE deployed the SCOPEinsight tool to assess the overall organizational capacity of four primary cooperatives in Zala woreda and one primary cooperative in Boreda woreda that were established in 2019 and 2016, respectively.² SCOPEinsight generates internationally benchmarked assessments that measure the operational and professional efficiency of NE-supported agribusinesses. The SCOPEinsight assessment is linked to a database with over 4,000 comparable farmer organizations operating across 40 countries. The consistency and comparability of SCOPEinsight assessments help to limit bias and allow NE to offer tailored interventions and technical assistance for partner cooperatives based on scores across eight dimensions (Figure 1).

In 2022, NE worked with government auditors to generate comprehensive financial reports based on farmer organization financial records. The process requires government accountants, farmer organization management committees, and NE staff to develop the financial statements (income statement, balance sheet, and cash flow) necessary to generate a snapshot of the business's net profit during a given financial year. Quality assurance of these reports is provided by NE and NI accountants and cooperative business development staff.

Data collection

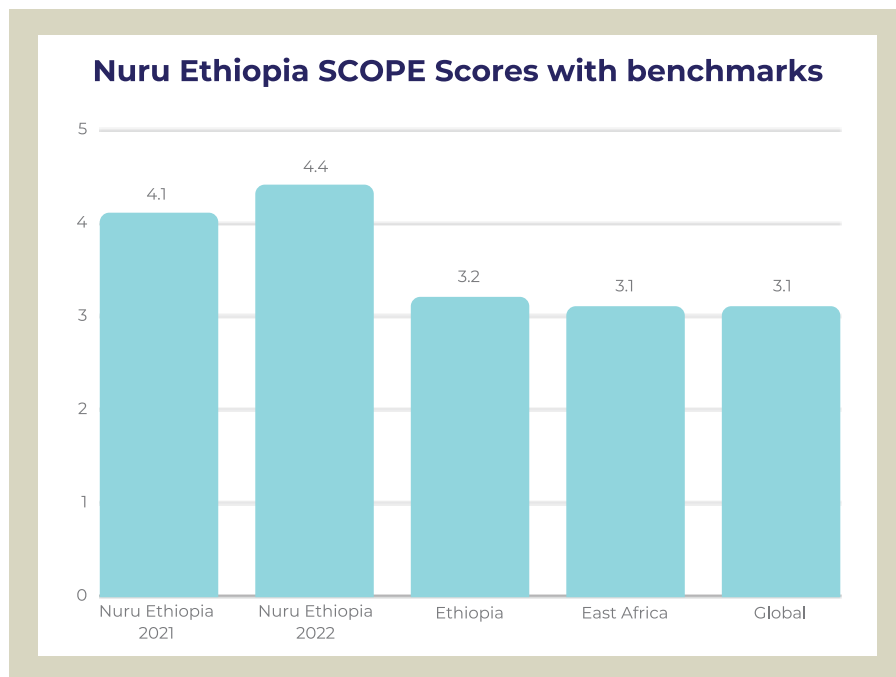
In 2022, NE and NI used internal capacity to conduct five SCOPEinsight basic assessments in July. Accordingly, two NE staff and two external Ethiopian consultants already familiar with the SCOPEinsight assessment and methods received their annual refresher training delivered by SCOPEinsight experts in 2022. After the refresher training, the four certified assessors worked together to conduct the assessments and facilitate the data entry into the SCOPEinsight mobile application and online dashboard.

RESULTS AND DISCUSSION

² <https://scopeinsight.com/>

SCOPEinsight basic assessments measure operational and professional efficiency against eight dimensions (i.e., external risks, production base, market, enabling environment, operations, internal management, financial management, and sustainability) and over 90 indicators. These dimensions and indicators are scored on a scale of 1 to 5 points, with a final aggregate score provided for international benchmarking. The final profitability metric represents the percentage of farmer organizations that achieved net profits during the most recent fiscal year of operation on a July to June calendar. The final reports are distilled into briefs, and translated, that outline recommendations for each cooperative to implement to improve their operations and subsequent SCOPEinsight scores.

Figure 1. SCOPEinsight average scoring matrix in 2022³



NE-supported farmer organizations averaged a SCOPEinsight score of 4.4 out of 5, far exceeding the target agricultural business benchmark of 3.3. The results also demonstrate an increase in business capacity for Nuru-supported farmer organizations when compared to 2021 results (Figure 1). Moreover, as of 2022, 90% of NE-supported farmer organizations have achieved net profitability from their business operations,

³ <https://scopeinsight.com/strengthening-cooperatives-by-working-together/>

which exceeded the target of 70% of businesses profitable in a given year. NE-supported Hidota Union Cooperative achieved a 4% net profit margin as of 2022, which expands its ability to invest in member primary cooperatives and farmer livelihoods. In reflection, Hidota Union scored an impressive 4.4 out of 5.0 on a SCOPEinsight assessment in 2021.⁴

CONCLUSION AND RECOMMENDATIONS

In 2022, NE-supported farmer organizations met and exceeded their benchmark levels of performance for business professionalism and profitability. These impacts indicate a successful transition to a union approach that will continue to transfer key responsibilities to union cooperatives, like Hidota Union, in 2023. By developing strong cooperative unions that are professional and profitable businesses, NE can reach more farmers and primary cooperatives at lower costs that benefit from the knowledge, skill, and meaningful choices necessary to withstand shocks and continue positive impact year on year.

As NE-supported unions become increasingly professional and financially successful, they develop strong working relationships with the government, private sector, and other enabling partners. These relationships generate new opportunities for vocational training, technical support, and financing cascaded to member primary cooperatives and farmer members. As NE refines the union approach in 2023, they are leveraging blended learning techniques that utilize visual learning, e-learning modules, and other media to further extend the reach of their program activities at a lower cost. In 2023, NE is targeting support to three additional unions and their member primary cooperatives as part of a new 3-year intervention in three new zones of SNNPR⁵.

⁴ https://sites.utexas.edu/raymarshallcenter/files/2022/06/NE_2021_Impact_Report_v3.pdf

⁵ At the time of writing this impact report and the period under assessment, the SNNP region still included the Nuru Ethiopia operating areas. However, for future awareness, the referenced woredas in this report will be included in the newly formed Southern Ethiopia Region after members of the Ethiopian House of Federation (HoF) passed a unanimous decision to approve the change in July 2023.

RURAL LIVELIHOODS

INTRODUCTION

The Nuru Ethiopia Rural Livelihoods (RL) program aims to build the capacities, assets, and income of farmer households (farmer organization members) to achieve diversified livelihoods and to cope with shocks. To accomplish this aim, NE supports activities that impact cash crop yield, livestock, food security, and household income. Agricultural extension agents, rural livelihoods field officers, and cooperative field officers provide technical training, extension services, and cooperative support structures through formal partnerships with the Government of Ethiopia's primary cooperative support institutions.

The RL program activities are integrated into the union approach. NE supports establishing agribusiness training and extension departments within supported unions. In addition to BDS, these departments deliver agronomy and animal husbandry technical assistance. NE staff lead these activities in partnership with government extension agents and agribusiness advisors that are permanent union staff. They establish demonstration plots at government-funded farmer training centers to promote agricultural behavior change and technology adoption. In addition, NE leverages digital technology to coordinate activities with supported unions and reduce the cost of extension. For example, in partnership with the Agricultural Transformation Institute (ATI), the union agribusiness advisors disseminate vital agronomic and environmental information to primary cooperatives provided by the 8028 free farmer hotline (Interactive Voice Response) and SMS project under ATI management.⁶

The Nuru Ethiopia Monitoring and Evaluation (M&E) team supports this work by conducting an annual assessment (Table 1) addressing the evaluation question: *What is the impact of the Nuru Ethiopia RL Program?*

⁶ <https://www.ata.gov.et/programs/highlighted-deliverables/8028-farmer-hotline/>

Table 1. Rural Livelihoods survey timeline and sample size

Group	Sample Size	Enumerator count	Survey Dates
Cash Crops	326	10	November 28 th 2022 – January 27 th 2023
Financial Inclusion and Livelihood Diversification	2249	49	April 13 th 2023 – May 6 th 2023

METHODOLOGY

In 2021, NE completed integrating the cash crop program after a successful pilot season in 2019. To inform the small-scale pilot activities in 2019, NE conducted a preliminary baseline evaluation of mung bean and groundnut yields with a very limited sample survey and secondary research. In 2020, the NE M&E team undertook a more comprehensive data collection exercise with a larger sample size of farmers to establish a baseline better aligned to the geographic scale of the cash crop activities. This report uses the 2020 values for all subsequent analyses.

Cash Crops

In partnership with farmer organizations, NE delivers training, extension, and production input sourcing support for producing mung bean and groundnut. The cash crop program has successfully supported farmers within Hidota (Gamo Zone) and Esipe Dicha (Gofa Zone) unions and is presently being scaled to three additional unions. The aim of these activities is to promote the improved production of higher-value and more stable crops rich in micronutrients and protein. In addition, NE promotes good agricultural practices and crops that generate significant real income gains, better household nutrition, and improved soil health.

The performance of the cash crop activity is assessed with an overall combined household income model that accounts for costs of production and estimates revenue from measures of productivity and sales prices for mung bean and groundnut.

Crop Equivalent Yield and Income

For comparability across Nuru farmers and against the baseline, Nuru employs a single composite indicator of crop performance: Crop Equivalent Yield (CEY). The CEY calculation converts the performance

of select crops into one standard average for kilograms per acre. This is done using the farm-gate prices per kilogram of mung bean and groundnut. One way to interpret this calculation is to ask: *If farmers only grew mung bean or groundnut this season, how much of either would they have produced?*

Since crop yield is measured as production amount per land area, measuring the land size is critical to the yield calculation. Survey enumerators pace each farmer's cash crop field perimeter, then calculate the area. The average land size per farmer is calculated using the combined survey data.

For cropping activities, revenue is calculated by multiplying the CEY by the average farm gate price. The costs are calculated using the cost of farm inputs from local suppliers, including improved seeds and biofertilizers optimized for mung bean and groundnut production. The net profit or loss is calculated by subtracting the costs from revenue.

Livelihood Diversification Income

Livelihood diversification programming facilitates training and loans for cultivating fodder and caring for small ruminants (goats or sheep) for sale at local markets as protein-rich mutton or goat meat. This activity intentionally targets women who historically have limited to no control of household income in rural Ethiopia. The impact of livelihood diversification activities is assessed based on income changes over time, which accounts for costs, including the loan for the purchase of two goats or sheep along with other animal care-related expenses (medications and fodder multiplication) and the revenue generated from the sale of the same two small ruminants. These data points calculate the profit or extra household income generated from the program activity.

Combined Household Income

NE programming offers diversified and complementary income-generating activities, including cash crops like mung bean, groundnut, and small ruminant production. To estimate the impact on household income, revenue, costs, and profits are accounted for based on program and market data from Gamo and Gofa Zones of the SNNPR.

MONITORING

In addition to yearly impact evaluations focused on agricultural yield and profits, the NE M&E team collects monitoring data throughout the year. While evaluations focus on a sample of farmers, program teams and partner union cooperatives monitor the entire Nuru farmer population. The monitoring data provides the NE team with quarterly information for real-time data-driven decision-making. In 2022, the

monitoring data show (Table 2) that the NE Rural Livelihoods Program was on target for enrollment in farmers and women household members participating in the livelihood diversification intervention.

Table 2. Rural Livelihoods Program monitoring data

Indicator	Performance	Target	Actual
Number of farmers	<i>On Target</i>	18,000	18,194
Cash Crop Participants	<i>On Target</i>	2,000	1,679
Women sustaining saving behavior and accessing loans for livelihood diversification from cooperative fund	<i>On Target</i>	3,500	4,038

RESULTS AND DISCUSSION

Agricultural Yield

At baseline in 2020, Nuru farmers had an average cash crop CEY of 217 kgs/acre. In 2022, Nuru farmers experienced a 24% increase in their yield with an average cash crop CEY of 270 kgs/acre. As the target yield increase is a sustained 32% increase over baseline, Nuru Ethiopia was slightly below target. The abnormal dryness and drought experienced in Ethiopia in 2022 were concentrated across the southern regions.⁷ The three woredas that NE implemented cash crop activities were Boreda, Kucha, and Zala. While all three woredas experienced abnormal dryness, the Zala Woreda felt the full force of the drought conditions, leaving maize and other cereal crops withered in fields after planting and attempts at replanting. The mung bean and groundnut crops were stressed by these conditions, as evidenced in the yields in Figure 3; however, the technical assistance and information services delivered by NE and the supported unions ensured yields continued to increase over baseline. More importantly, these interventions ensured that households had nutritious protein-rich food at home and helped prevent a categorical famine in Zala Woreda.⁸ These contextual highlights reinforce why NE’s intervention was necessary and profoundly impactful at the household level.

⁷ <https://fews.net/global/global-weather-hazards/december-2022-1>

⁸ <https://fews.net/east-africa/ethiopia>

Figure 2. Trends in yields over time

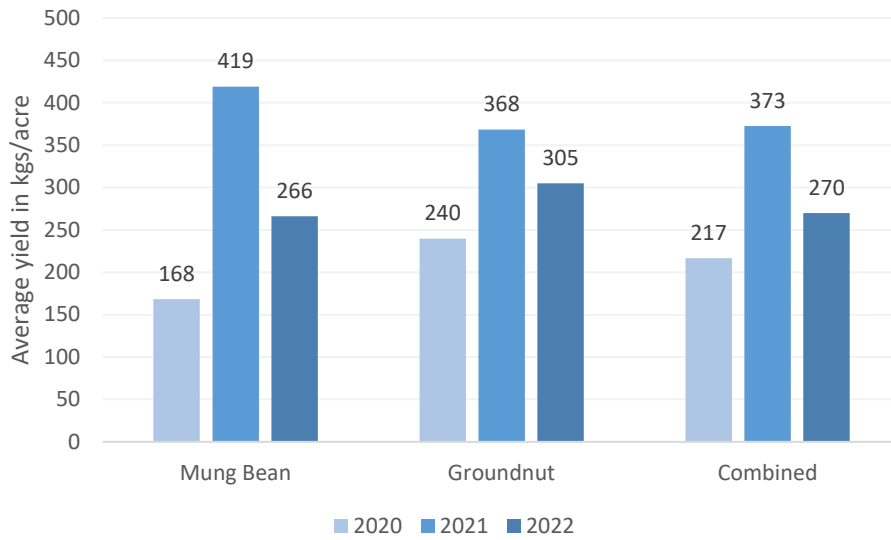
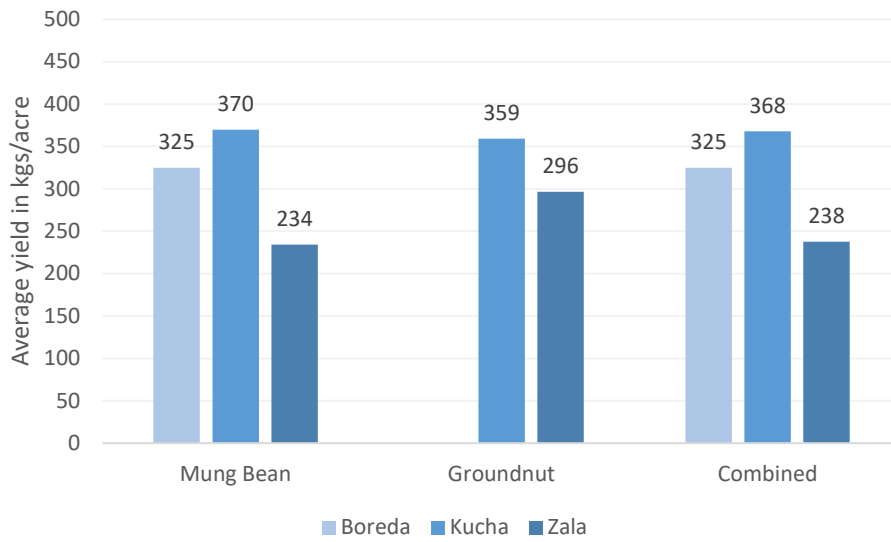


Figure 3. 2023 yields by woreda



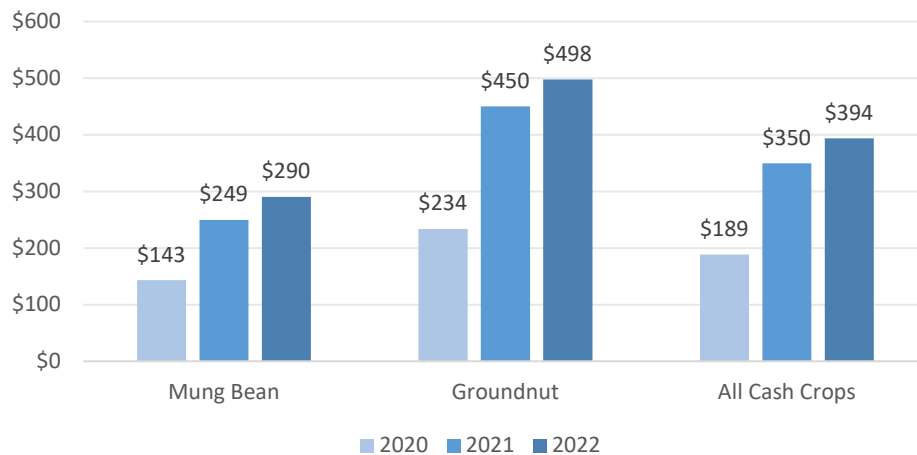
* Boreda did not plant or harvest groundnut in 2023

Agricultural income

In 2022, Nuru households generated an average of \$394 USD of profit from the sale of cash crops. In 2020, Nuru households only generated \$189 USD from the sale of these two cash crops. Thus, Nuru households experienced a 108% increase in income derived from mung bean and groundnut sale from 2020 to 2022. Even though yields in 2022 were less than those experienced on average in 2021, farmer households still increased their incomes from mung bean and groundnut production due to higher sale prices.

The COVID-19 pandemic, abnormal rainfall and drought conditions, the Northern Ethiopia war in Tigray, and the Ukraine crisis coalesced into unprecedented inflation that continues to affect all Ethiopian households. In May 2022, before planting the first mung bean crop, headline inflation stood at 37.2%, and by January 2023, only slightly declined to 33.9%.⁹ The result for NE-support cooperatives and farmers was historically high input costs and the risk that households would not benefit from the high selling prices for mung bean and groundnut. Despite this environment, NE-supported cooperative unions were able to navigate volatile markets and ensure farmers received an even higher sale price for their mung bean and groundnut. These union cooperative-led efforts not only averted income backsliding but they generated the most significant increase in income over baseline in the history of the cash crop activity.

Figure 4. Agricultural income model (USD)



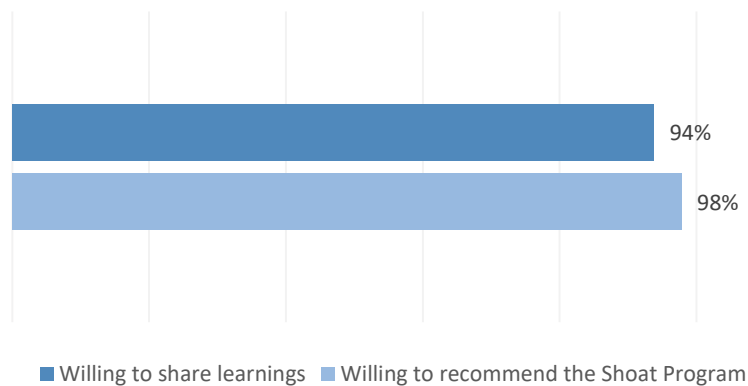
⁹ <https://www.undp.org/sites/g/files/zskgke326/files/2023-03/UNDP%20Quarterly%20Economic%20Profile%20March%202023.pdf>

Livelihood Diversification

The NE Livelihood Diversification (LD) loan product is integrated with improved animal management training and extension for goat and sheep (shoat) fattening and is paired with financial inclusion activities to improve savings adoption amongst women. Nuru women savers qualify for a loan equivalent to two or more goats or sheep, if they repay 100% of their previous loans and meet savings requirements. NE provides working capital for three rounds of loans. The funds are added to the primary cooperative revolving funds to support the activity in the long-term. The goal of these activities is to increase the resilience and economic empowerment of women in Nuru farmer households, increase their access to financial resources, and enhance their leadership positions in cooperative businesses.

In 2022, Nuru collected responses on practices related to Livelihood Diversification programming. A total of 326 responses were collected, with an overwhelming majority expressing satisfaction as summarized in Figure 5.

Figure 5. Customer satisfaction among Nuru farmers

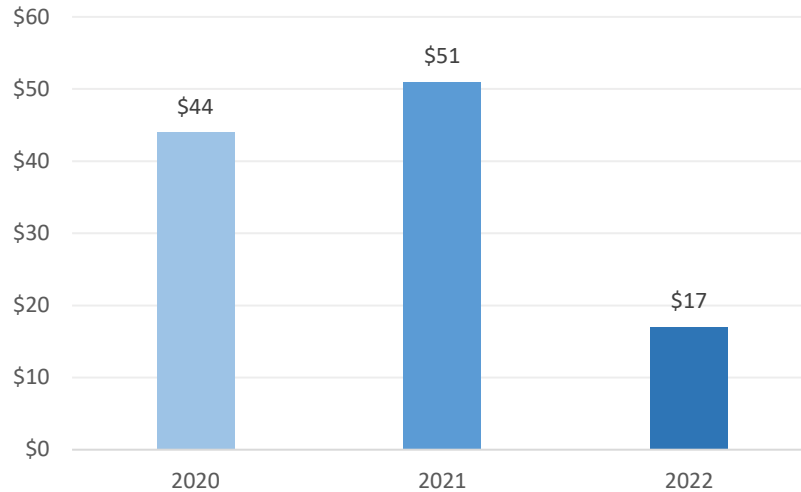


Livelihood Diversification Income

In 2022, women generated an average of \$17 USD of profit from the fattening and sale of two shoats. The costs include the animal's purchase price and average costs for additional medications and feeds. In 2020, participating women generated \$44 USD from the fattening and sale of two shoats. Unlike the cash crop program, participating women sell their shoats individually at local rural markets and not in aggregate through their cooperatives. Therefore, skyrocketing inflation from quarter two to quarter four of the 2022

calendar year substantially affected their return on investment. In the future, NE plans to more holistically evaluate the program by adapting mainstream women's economic empowerment methods to understand better the benefits women derive from participation. There is value in this approach since the program receives high participant satisfaction even when income gains are modest and below historical averages.

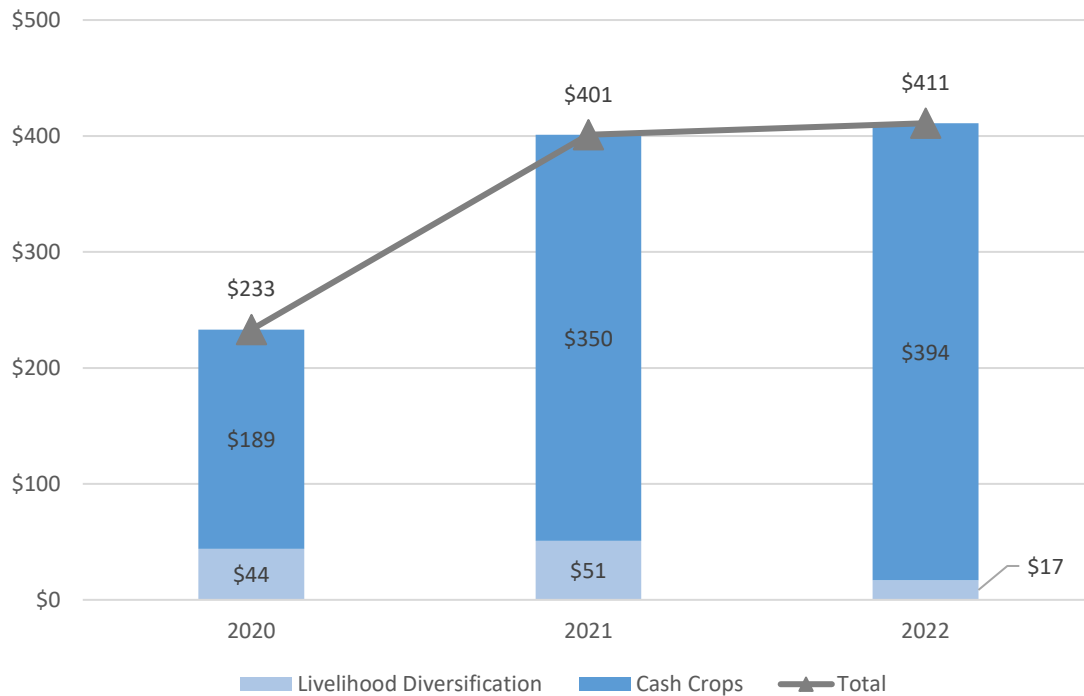
Figure 6. Livelihood diversification income



Combined Income Model

Improving on-farm and household income is a crucial feature of the NE RL Program. Households that participate in cash crop production (i.e., mung bean and groundnut) and shoaat fattening have the opportunity to generate extra income from those activities. Participation in these activities generated an additional \$411 USD per household on average (Figure 9). Importantly, the income generated from the cash crops was a significant driver of extra income due to commercial aggregation provided by cooperatives and higher regional and international market prices for these legume crops. **By participating in livelihood diversification and cash crop programs, Nuru farmer households were able to increase their incomes by 77% over the 2020 baseline.**

Figure 7. Combined livelihood income model



CONCLUSION AND RECOMMENDATIONS

NE was able to offer household members of NE-supported farmer organizations strong support throughout 2022. Nuru farmers were able to realize an increase in agricultural income and greater resilience through diversified livelihoods in the face of significant environmental and socio-economic challenges. The meaningful choices provided by NE resulted in the following outcomes for Nuru farmers:

- By participating in the diversified livelihood interventions, Nuru farmers were able to generate \$411 USD of extra income, an increase of 77% compared to their 2020 baseline.
- Nuru Ethiopia farmers increased crop yields by 24% compared to their 2020 baseline. While not meeting the target of a 32% increase, this yield increase indicates that legume crops act as a strong coping mechanism during extreme weather events in rural communities.
- NE is committed to better understanding the impact of the LD activities on women participants. The income gains from the program have slowed, but participant satisfaction remains high. Moreover, NE will explore opportunities to improve the aggregation and sale of shoats with supported unions.

DISCUSSION & CONCLUSIONS

The 2022 production seasons in Boreda, Kucha, and Zala woredas of the SNNPR were defined by a final year of severe weather resulting from the extended La Niña (2020-22) and hyperinflation.¹⁰¹¹ Although the La Niña weather pattern has subsided, the El Niño Southern Oscillation (ENSO), much like headline inflation in Ethiopia, remains volatile in 2023. The socio-economic fallout from the COVID-19 pandemic, the northern war in Tigray, and the ongoing Ukraine crisis had wide-ranging effects on all Ethiopians in 2022, including those supported by NE activities. Regardless, due to the persistence of NE staff and the lessons learned from the Nuru Collective, NE successfully adapted its interventions to the union approach. The successful shift to the union approach means that more farmers will have the opportunity to benefit from cash crop production, more women will benefit from livelihood diversification, and the socio-economic benefits of cooperatives will reach more remote rural communities in southern Ethiopia.

In 2023, NE continues to scale its programs and targets three additional unions for BDS, rural livelihoods, and healthcare-related activities. NE has a history of implementing healthcare activities that aim to reduce under-five mortality due to healthy behavior adaptation. In 2023, NE is revitalizing this intervention area by combining digital skills training, blended learning approaches, and a partnership with the Health[e] Foundation's Lucy App.¹²¹³ Similarly, NE is mainstreaming blended learning techniques that utilize videos, e-learning modules, SMS messages, and other media to further extend the reach of their farmer organization BDS and RL program activities at a lower cost.

NE has been able to leverage 15 years of Nuru Collective experience to overcome substantial obstacles, maintain impact, and significantly expand the breadth and depth of its impact.

- NE-supported farmer organization businesses achieved an average SCOPEinsight score of 4.4 out of 5, demonstrating competitiveness at national, regional, and global levels for agricultural farmer organization businesses.

¹⁰ <https://nuruinternational.org/blog/nuru-views/effects-of-la-nina-in-east-west-africa/>

¹¹ https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/ifrs/ey-hyperinflationary-economies-updated-oct-2022.pdf?download

¹² <https://sites.utexas.edu/raymarshallcenter/files/2021/06/NE-2020-Impact-Report-Final-4.pdf>

¹³ <https://healthefoundation.eu/>

- 90% of NE-supported farmer organizations have achieved net profitability from their business operations as of 2022.
- NE-supported Hidota Union Cooperative achieved a 4% net profit margin as of 2022, which expands its ability to invest in member primary cooperatives and farmer livelihoods.
- By participating in the diversified livelihood interventions, Nuru farmers were able to generate \$411 USD of extra income, an increase of 77% compared to their 2020 baseline value of \$233 USD.