The impacts of the Lisungi Project on refugees and host populations in Likouala, Republic of Congo

Midline Analysis Report

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ACRONYMS

ATT	Average Treatment Effect of the Treated
CAR	Central African Republic
CT	Cash Transfers
CCT	Conditional Cash Transfers
DID	Difference-in-differences
DRC	Democratic Republic of Congo
FCFA	Franc de la Communauté Financière Africaine (Central African Franc)
HH	Household
HDI	Human Development Index
IDA	International Development Association
IGA	Income Generating Activities
INS	Institut Nationale de la Statistique (National Institute of Statistics)
IP	Indigenous Population
IPV	Intimate Partner Violence
IPW	Inverse Probability Weighting
LSNSP	Lisungi Safety Nets System Project
MDE	Minimal Detectable Effect
PIU	Project Implementation Unit
PSM	Propensity Score Matching
RCT	Randomized Controlled Trial
SD	Standard Deviation
SSR	Single Social Register
SSN	Social Safety Nets
USR	Unique Social Registry

EXECUTIVE SUMMARY

Context

Forced displacement presents major challenges in the Likouala department in the northern Republic of Congo, intensifying existing fragility and vulnerability. Refugees constitute 60% of the population in Likouala (UNHCR, 2022), placing additional strain on already scarce local resources and underscoring the urgent need for effective support and interventions. Host communities, Indigenous people, and refugees experience significant unmet needs in nutrition and access to essential services such as healthcare, education, water, and sanitation, caused by a challenging setting characterized by a severe lack of infrastructure, widespread poverty, and limited state capacity.

There is little evidence for how best to provide support in such a context, due to a lack of rigorous evidence from program impact evaluations in the region and in similarly challenging settings. This study, in contrast, provides rigorous, large-n statistical evidence for the project 'Social Safety Nets (SSN) in the Republic of Congo' in Northern Congo, also commonly known as the Lisungi project (Lisungi meaning 'relief and assistance' in the Lingala language).

Intervention

The Lisungi project was launched in 2014 with financing from the World Bank (WB) as a safety net program and a pilot cash transfer program to improve access to health and education services for the poorest households in participating areas. In 2019, the program was expanded to include income-generating activities, broadening its scope beyond direct cash assistance. In 2020, additional funding from the WB Refugee and Host Populations financing window further enabled the expansion of the project to include, for the first time, activities in the Likouala department and to extend benefits to refugees as well.

The Lisungi project in the Likouala department was originally designed to provide 4,000 vulnerable households from three different groups (Bantu, Indigenous people, and refugees) with regular conditional cash transfers (CCTs) and another 8,000 households from these groups with monetary support for income-generating activities (IGA) to generate stable household revenues. In addition to these financial supports, the project implemented a comprehensive "cash plus" approach that included accompanying measures focusing on nutrition, hygiene, intra-household decision-making, human capital development, and money management. These complementary interventions were designed to enhance productive inclusion and build resilience among beneficiary households.

The CCTs were designed to be disbursed quarterly, with amounts ranging from FCFA 10,000 to 135,000 depending on household characteristics. Importantly, these transfers were conditional upon beneficiaries meeting specific requirements, including ensuring at least 80% school attendance for children and participating in regular health check-ups. This conditionality was a deliberate strategy to not only provide immediate financial relief but also to encourage behaviors that can break intergenerational cycles of poverty.

After an initial envelope of USD 17 million, the project received two additional financings, resulting in a final total budget of USD 34 million. By providing both CCTs and IGAs, the project sought to increase household resilience, mitigate poverty, and enable families to invest in their children's human capital, aiming to reduce the intergenerational transmission of poverty. The project began rolling out in the Likouala department in September 2021, with the final transfers taking place in mid-2023.

Key Findings on Impacts

The findings of this report are based on analyses of baseline data collected between June and August 2021 and midline data collected between January and April 2023, to capture the medium-term outcomes and impacts of the project.

Guided by the project's theory of change, we found significant impacts showing how poor households (both hosts and refugees) use and invest cash transfers productively:

Poor Households Use Cash Transfers to Meet Basic Needs

- Beneficiary households had higher consumption of, on average, FCFA 157 per day (around USD 0.25), representing 25% of daily consumption for one adult in a beneficiary household.
- The transfers of the Lisungi project represented 76% of the total support received by beneficiary households, with the remaining 24% coming from other sources such as government programs, humanitarian aid, and family assistance. These Lisungi transfers covered 65% of the annual household consumption of beneficiary households.
- While Lisungi transfers covered only 20% of annual consumption for less-poor households in the top quintile of beneficiaries, they covered up to 200% of annual consumption for the poorest households in the bottom quintile, demonstrating the program's effectiveness as a targeted assistance tool for the most vulnerable populations.
- The equal distribution across all population groups indicates the project's non-discriminatory implementation.

Poor Households Invest in Asset Building

- Beneficiary households held around FCFA 6,234 (around UDS 11) more assets than non-beneficiary households.
- Poor and very poor beneficiary households primarily accumulated assets with the support received.

Poor Households Increase Labor Market Participation

- Conditional cash transfers had a strong causal impact on labor intensity, significantly increasing the number of hours worked by both household heads and their spouses.
- Beneficiaries of income-generating activities did not show significant changes in their employment outcomes, likely because they were already engaged in economic activities with relatively high baseline levels of employment.

Poor Households Invest in Human Capital

- Beneficiary households causally increased investments in health and education, with adult beneficiaries reporting a 5 percentage point reduction in adverse health conditions.
- The Lisungi project also boosted educational engagement, particularly among children, who were 6 percent more likely to attend school.

Program Effects Vary by Household Characteristics

- Female-headed households show particularly strong treatment effects compared to male-headed households, with the largest impacts observed among female-headed Bantu and refugee households.
- The gender differential in program effectiveness suggests that cash transfers may be especially beneficial for households facing greater structural constraints in accessing economic opportunities.

In addition, there are positive causal impacts of the Lisungi project on gender equality and social cohesion beyond the project's theory of change:

Gender Equality

- The project reduced intimate partner violence among spouses, with a particularly strong impact among beneficiary Bantu and Indigenous households receiving conditional cash transfers, which decreased intimate partner violence by approximately 10 percentage points.
- IGA support also changes intra-household decision-making, empowering spouses.

Social Cohesion

- Through its integrated "cash plus" approach combining transfers with nutrition, hygiene, and money management interventions, beneficiaries increased their participation in social organizations (such as involvement in cooperatives and security groups), with a rise of 0.15 standard deviations in social participation indicators for beneficiaries compared to non-beneficiaries.
- The project also improved individual perceptions of community relations: Among the Bantu population, the intervention enhanced trust in formal institutions and reduced perceived community tensions by approximately 5 percentage points. This improvement reflects the combined impact of financial support and complementary interventions focused on productive inclusion and resilience building.

Cash Transfers versus Income-Generating Activities

Overall, the two intervention modalities (conditional cash transfers and income-generating activities) had different impacts by the time of the midline.

We found that **conditional cash transfers, despite providing additional income, increased working hours among beneficiaries**. This result can be explained by the fact that regular, predictable cash transfers may have enabled households to overcome initial barriers to work participation, such as transportation costs, childcare expenses, or the ability to purchase supplies needed for work.

The reliability of these transfers appears to have created a foundation of financial security that encouraged, rather than discouraged, labor market participation. With this increased labor participation, beneficiaries increased their revenue and consumption, thereby strengthening household resilience and economic activity, whilst also reducing the risks of intimate partner violence. Meanwhile, income-generating activities fostered community engagement by increasing social participation and contributed to a greater spousal say in household decision-making.

We also found that IGA support had distinct impacts compared to conditional cash transfers. While IGA beneficiaries did not show significant changes in employment outcomes at midline, likely because they were already engaged in economic activities with relatively high baseline employment levels, the IGA modality was particularly effective at fostering social cohesion and community engagement. Unlike conditional cash transfers, which primarily boosted immediate consumption and labor intensity, IGAs showed stronger effects on human capital outcomes, which suggests that the collaborative nature of family enterprises and the sustainable income streams from IGAs enable longer-term investments in education and health, operating through different pathways than direct cash support.

Together, these modalities address two important aspects: while conditional cash transfers are more effective in alleviating pressing economic needs, IGAs have an important role in improving social interactions and cohesion as well as human capital indicators, particularly through school attendance. The impact of IGAs likely operates through the collaborative nature of family enterprises, which encourages joint spousal decision-making, and through the sustainable income streams that enable longer-term investments in children’s education.

Impacts across Groups

The Lisungi project's impacts vary significantly across population groups. We observed stronger positive effects for host communities (Bantu and Indigenous people) compared to refugees. This disparity suggests that refugees face distinct, group-specific constraints – such as legal restrictions, limited access to services, and social exclusion – that hinder their ability to fully benefit from the project's interventions.

Despite these barriers, refugees show notable progress in employment outcomes, which might be explained by the regular cash transfers providing refugees with the minimum resources needed to overcome initial barriers to work, which are particularly challenging for this population to access through other means.

Recognizing and addressing these group-specific needs will be essential for achieving equitable outcomes across all beneficiary groups in the future implementation of the Lisungi project.

More generally, the findings provide important lessons for future social protection programming in remote low-income settings, highlighting the need to recognize and address modality-specific benefits and group-specific constraints to achieve equitable outcomes across all beneficiary populations.

INTRODUCTION

This report examines the medium-term outcomes of the Lisungi project in the department of Likouala, Republic of Congo, focusing on its 2022 implementation. The Likouala department is one of the major refugee-host regions of the country, where refugees represent around 60% of the department's population (UNHCR, 2022). This unique demographic composition creates both challenges and opportunities for social protection programming.

The evaluation of the project's impact assesses six key dimensions: **household consumption, asset accumulation, labor market impacts, health, education, gender equality, and social cohesion outcomes.** The evaluation draws on midline survey data collected in the first quarter of 2023, from January to April, capturing both immediate program effects and emerging trends in household adaptation.

The Lisungi government project, co-funded by the World Bank's IDA, initially aimed to support 4,000 vulnerable households in Likouala through quarterly conditional cash transfers (CCTs) and help an additional 8,000 households develop income-generating activities (IGAs) for stable income. This dual approach targets three distinct population groups: Bantu, Indigenous peoples (IP), and refugees.

Guided by the theory of change (ToC) first introduced during the project's design phase and detailed in Appendix I, which maps pathways from program activities to immediate and long-term outcomes regarding improvement in economic conditions and livelihoods, this midline impact evaluation of the Lisungi project addresses the following questions using survey data:

1. To what extent are the project's beneficiaries (Bantu, IP, and refugees) economically more resilient / less vulnerable due to the intervention?
2. To what extent did the intervention increase assets and spending on essential goods?
3. To what extent did the intervention improve human capital for poor households, specifically regarding health and education?
4. To what extent did the intervention improve social cohesion and gender equality among beneficiary households?

The evaluation builds on a robust baseline dataset from 67,835 individuals across 18,805 households, collected between June and August 2021 as part of the Unique Social Registry (USR) survey. The USR survey provides a detailed assessment of household poverty and vulnerability in Likouala, classifying households by vulnerability level and guiding their inclusion in the USR for eligibility in the Lisungi project. The survey covers household demographics, health, children's education, employment, asset ownership, and housing characteristics, among other variables. For the impact evaluation, a study sample of 3,200 households was selected from the full dataset. During the midline survey, 2,871 households were successfully re-interviewed, and baseline data were matched for 2,811 households. Consequently, the sample for the impact evaluation comprises 1,759 treated households and 1,052 control households.

The study design distributes the sample across eight groups: 1) IP CCT treatment, 2) IP control, 3) Bantu CCT treatment, 4) Bantu IGA treatment, 5) Bantu control, 6) Refugees CCT treatment, 7) Refugees IGA treatment, and 8) Refugees control.[1] This design allows for a robust comparison both within and across population groups. All designated beneficiary households were classified as very vulnerable according to baseline data.

This report is structured as follows: Section 2 provides background information on the study context, the Lisungi project, and the intervention rationale. Section 3 develops the theoretical framework of the project, grounded in the ToC. Section 4 describes the methodology for the midline impact evaluation of the Lisungi project. Section 5 presents and discusses the empirical results of midline impact evaluation, with a focus on consumption, assets, labor market, education, health, gender equality, and social cohesion. Section 6 concludes and discusses the policy implications of the results.

[1] There were very few IP households eligible for IGA support, which is why there is not an IP IGA treatment group.

CONTEXT

2.1 Study Area

The Republic of the Congo (hereinafter Congo) presents a complex development landscape. With a population of 6.1 million, including approximately 61,800 refugees,[2] the country faces multiple challenges. The economy's vulnerability to external shocks became evident during the COVID-19 pandemic when real GDP contracted by 6.8% in 2020 (AfDB, 2022). Despite deriving more than 50% of its GDP from the petroleum sector and almost 80% of exports from hydrocarbons (World Bank, 2021a), the country struggles with widespread poverty and unemployment. The economic structure reveals a stark disconnect between resource wealth and social outcomes: almost half the population lives below the poverty line, while unemployment exceeds 21% (IMF, 2023). The country's demographic profile compounds these challenges. With 47% of its inhabitants under the age of 18,[3] unemployment is particularly concerning: individuals aged 15-24 face an unemployment rate of 47.7%.[4]

In Congo, economic growth has not translated effectively into poverty reduction. Data from the 2011 Household Consumption Survey (Enquete Consommation Menage, ECOM) revealed that food poverty affects one-quarter of the Congolese population. The situation has significantly deteriorated over time: from an international poverty rate of 39.6% in 2011, projections indicate an increase to 53.2% by 2023. Nearly one in two Congolese live on less than USD 2.15 per day (World Bank, 2024b), while food insecurity affects 59% of the population. This persistent poverty reflects structural challenges in the country's development model, stemming from multiple factors, including income inequality, limited access to basic services, and economic growth concentrated in sectors that do not generate broad-based employment opportunities (AfDB, 2022).

In terms of human development, the country's Human Development Index (HDI) stands at 0.574, ranking it 149th out of 191 countries (UNDP, 2021). Congo continues to confront significant challenges and barriers to development, including the need for infrastructure development and economic diversification to reduce its heavy reliance on oil production and natural gas. Furthermore, inadequate healthcare and education systems, coupled with periodic social tensions and economic vulnerabilities, hinder the country's progress toward sustainable development. Addressing these issues is crucial for fostering long-term growth and improving the population's overall well-being.

Despite these adversities, the country remains an important destination for refugees. According to UNHCR, an estimated 60,000 refugees and asylum seekers, primarily originating from the Central African Republic (CAR), the Democratic Republic of the Congo (DRC), and Rwanda, reside in the country. Refugees are concentrated in the Likouala department, representing 60% of the department's population (UNHCR, 2022). Both refugees and host communities face substantial unmet needs regarding nutrition and access to vital services such as healthcare, education, water, and sanitation (Global Compact on Refugees, 2022).

[2] According to UNHCR Refugee Data Finder https://reporting.unhcr.org/operational/operations/republic-congo?year=2024. Accessed: December 2024.
[3] According to the Fifth General Population and Housing Census carried out in 2023. For more information, visit: https://ins-congo.cg/rapport-preliminaire/
[4] According to statistics produced by the International Labor Organization https://donnees.banquemondiale.org/indicateur/SL.UEM.1524.ZS?locations=CG. Accessed: December 2024.

While the legal framework through the 2021 Asylum Law provides refugees with rights to freedom of movement, education, health services, and employment, the implementation faces significant challenges. In practice, refugees encounter difficulties accessing services due to limited infrastructure and resources, particularly in rural areas where most refugees reside.

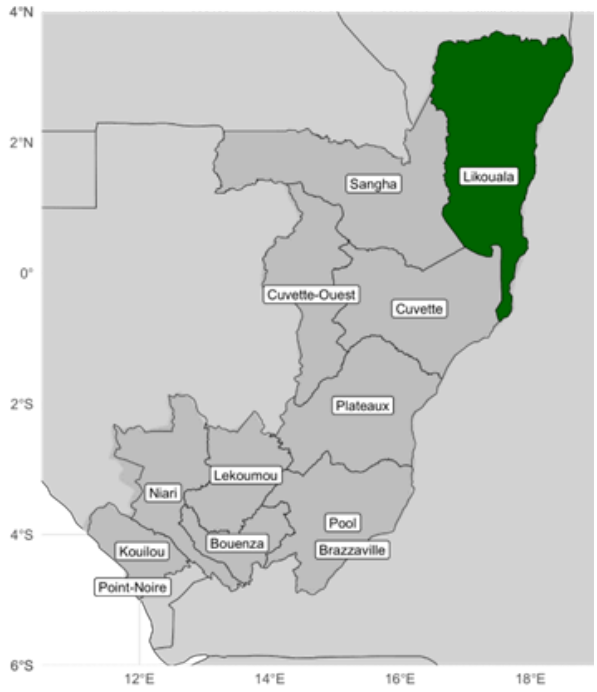
Additionally, refugees report challenges such as payment of undue fees while traveling and limited recognition of their identity documents by some authorities (UNHCR, 2023b). Similar to host community members, refugees encounter difficulties accessing services and limited economic opportunities, which have been further exacerbated by the COVID-19 pandemic and an enduring economic crisis (UNHCR, 2022). Gender inequalities further compound these challenges, with women and girls in both refugee and host communities facing additional barriers to accessing services, economic opportunities, and decision-making power (Holloway et al., 2019). Traditional gender norms limit women's mobility and financial independence (Wouterse, 2019), while gender-based violence remains a significant concern, particularly in displacement contexts (Wirtz et al., 2018). Addressing these gender disparities is essential for building household resilience and improving overall development outcomes in the region (Duflo, 2012).

Our study focuses on the Likouala department (Figure 1). The region has historically experienced elevated levels of poverty and vulnerability. Human development indicators are distressingly low, poverty rates are high, and access to basic services is severely restricted (WFP, 2011). Additionally, Likouala is characterized by its remote and isolated nature, primarily relying on waterways for transportation. These geographic characteristics further compound its socioeconomic challenges. Given Likouala's location —sharing borders with the DRC and the CAR, and being close to Cameroon—it has become an important host region for refugees. Along with Plateaux, these two departments host about 60% of the country's refugees as of 2023 (UNHCR, 2024). It is no surprise that Congo, and Likouala in particular, have experienced an increase in the influx of refugees, particularly after insurgents tried to disrupt the elections in the CAR in December 2020, and ongoing unrest in DRC that started to escalate after 2021.[5] This influx of refugees has strained the already limited resources of the region, intensifying the struggle for access to essential services. At present, employment opportunities are scarce and largely limited to subsistence agriculture.

However, the national challenges previously mentioned also affect population groups distinctly. IPs confront significant barriers in land access and face restricted availability of essential services such as education and health care. The Bantu communities, while constituting the majority of the population, also experience poor living conditions and inadequate access to basic services. A particularly pressing concern across all groups is the high number of children without birth certificates, coupled with parents' inability to pay school fees, which perpetuates educational disparities, hindering social and economic development across the region (UNHCR, 2023a).

[5] According to UNHCR data, the number of refugees in the Republic of Congo under UNHCR's mandate went from 27,097 in 2020, to 40,765 in 2021, reaching 60,637 in 2023. Reference: https://www.unhcr.org/refugee-statistics/download/?url=ES2t4 i

Figure 1: Departments of the Republic of Congo



In Brazzaville and Pointe Noire, refugees face challenging conditions, living in some of the poorest neighborhoods and experiencing strained relationships with host communities. These tensions in urban areas stem from economic contraction, limited job prospects, and a lack of alternative livelihood options such as subsistence agriculture, informal sector employment, and microenterprise opportunities (World Bank, 2019). In contrast, Likouala presents a more stable dynamic between refugees and the Congolese population, despite competing over resources and services. This relative stability can be attributed to the rural setting's greater availability of land for agriculture, established trade networks along waterways, and longstanding patterns of cross-border movement and exchange between communities, among other things.

The host community comprises two distinct groups: the Bantu and the Indigenous population. The Bantu are the largest ethnic group in Congo, making up around 50% of the population. They are divided into several sub-groups, including the Kongo, Teke, Mbochi, Kouyou, Sanga, and Bembe (Crevels & Muysken, 2020). In central Congo (encompassing both the DRC and the Republic of Congo), the most prominent Bantu groups are Lingala, Mongo, Ekonda, and Ewondo. More recently, the Bantu have been referred to as a linguistic population rather than an ethnic group, as there has been documentation of their expansion through the Congo rainforest to eastern and southern Africa (Fortes-Lima et al., 2024). This shift in perspective emphasizes the cultural and linguistic diversity within Bantu-speaking communities, which include a wide range of distinct ethnic groups unified by shared language features rather than a single cultural or ancestral identity. Today, approximately 350 million people belong to the Bantu linguistic group, speaking over 500 different languages, spread across almost the entire southern projection of the African continent (Fortes-Lima et al., 2024).

On the other hand, the Indigenous population (IP), who traditionally engaged in nomadic or semi-nomadic hunting and gathering, has seen some members settle permanently, taking up roles in agriculture, livestock farming, commercial hunting, tracking, and employment with logging companies. However, the transition to these more sedentary lifestyles has been gradual and often influenced by external pressures, including economic necessity and environmental changes. The exact number of IP in Congo remains uncertain (IWGIA, 2020). These communities are identified by various names depending on the department where they reside, such as Bakola, Tswa or Batwa, Babongo, Baaka, Mbendjele, Mikaya, Bagombe, Babis, and others. Although the indigenous population is distributed throughout the Congolese territory, their concentration is notably higher in the departments of Lékoumou, Likouala, Niari, Sangha, and Plateaux (Population Data, 2019). This distribution pattern reflects the historical and cultural ties of these communities to specific regions, as well as their adaptation to diverse ecological zones. Their presence in these areas also highlights the need for targeted policies that acknowledge their traditional lifestyles while addressing modern challenges such as access to education, healthcare, and economic opportunities.

2.2 The Lisungi Project

In 2014, the Government of Congo initiated the Lisungi Safety Nets System Project (LSNSP). Since then, the Lisungi project has been working towards enhancing the Social Safety Nets (SSN) systems and building resilience among impoverished and vulnerable households. The project's primary objective has been to lay the groundwork for a comprehensive national SSN program while simultaneously piloting a social transfer initiative. The program was designed to target and support the most economically disadvantaged households and vulnerable households, specifically those whose adult equivalent household consumption falls below the food poverty line.

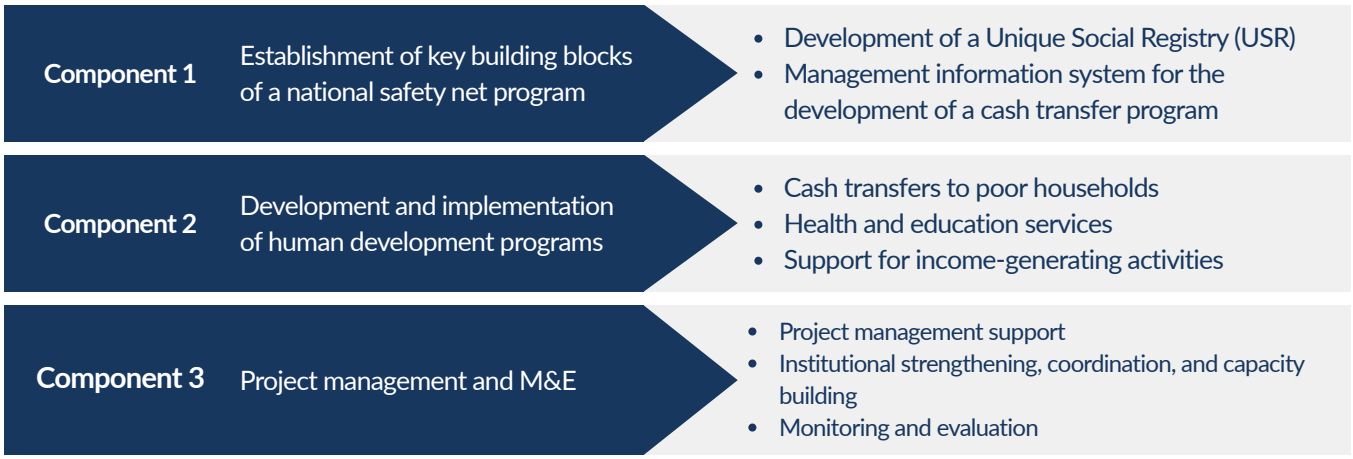
The project has two program modalities (detailed in Section 2.2.1 below): it offers either cash transfers contingent on fulfilling certain conditions (CCTs), or three installments of cash transfers coupled with mentoring and training to develop income-generating activities (IGAs). These modalities aim to offer a better social protection system not only through income support but also through the promotion of basic services – mainly education and health – and the enfranchisement of poor and vulnerable populations to the civil registry.[6]

The coverage of the Lisungi project was expanded to 8 million euros in 2016 and 10 million USD in 2018. In January 2019, the LSNSP secured an additional 22 million USD from the refugee sub-window of the World Bank's IDA18. These funds facilitated the project's expansion to encompass both refugees and their host communities, following the Government's commitment to inclusion and support for host communities, as outlined in its 2017 Letter of Development Policy (UNHCR, 2023a). By splitting the total number of beneficiaries equally across the refugee and host populations, the project's extension enabled its implementation in the Likouala department for the first time (the focus area of this study), while also expanding its coverage in Brazzaville and Pointe-Noire. This strategic decision to balance support between refugees and host communities reflects an understanding of the mutually dependent relationship between these groups, which is crucial for fostering social cohesion.

[6] Information obtained from Report No: PAD2764 elaborated by the World Bank (January, 2019).

In April 2021, the Minister of Humanitarian Affairs and Social Actions and the Representative of UNHCR in Congo signed a technical assistance agreement to roll out the Lisungi project in the Likouala, where UNHCR has long been active. The main goal was to support the Congolese Government in the inclusion of refugees and host populations in the activities of the Lisungi project, thereby improving equitable access to health and education services in the refugee-hosting area. As a result, an additional 4,000 households received CCTs, while another 8,000 households benefited from IGA support. Additional support was also allocated to the health and education sectors to further enhance service delivery in the participating areas. The increased investment in these sectors aimed not only to improve immediate access to essential services but also to build the long-term capacity of local systems, ensuring that both refugees and host communities can thrive in a more equitable environment. Figure 2 shows the specific components of the Lisungi project, highlighting the role of UNHCR in this collaboration.

Figure 2: Components of the NSNSP



Note: Based on World Bank (2019)

2.2.1 Intervention Modalities

The disbursement of CCTs, which was designed to occur every three months and would involve an amount ranging from FCFA 10,000 to 135,000[7] depending on household characteristics (see Figure 3), would be contingent upon meeting certain conditions, including regular school attendance for children (a minimum of 80% attendance per child per month) and undergoing regular health check-ups.[8] By incorporating these conditions, the project aims to promote long-term investment in the welfare and prospects of individuals. This approach not only provides immediate financial relief but also encourages behaviors that can break the cycle of poverty over time, thereby contributing to sustainable development.

[7] From USD 20 to USD 270, considering the exchange rate from 2013-2014, which was when the project was designed (1 USD = ~ FCFA 500). Considering that the lower middle income class poverty line in 2011 was set at FCFA 1,004.5 (USD 3.20 PPP) per day per capita (World Bank, 2021b), the CCT amounts (FCFA 10,000 to 135,000) represent between 10 days to approximately 4.5 months of consumption at the poverty line level for one person. For context, at the upper middle income poverty line of FCFA 1,726.6 (USD 5.50 PPP) per day per capita, these transfers would cover between 6 days to 2.6 months of consumption for one person.

[8] Families could also use the CTs to pay for tuition, buy uniforms and school supplies for children, and pay for medicines and supplies. In addition, through CTs, it was expected that families would start investing in productive activities to become more autonomous.

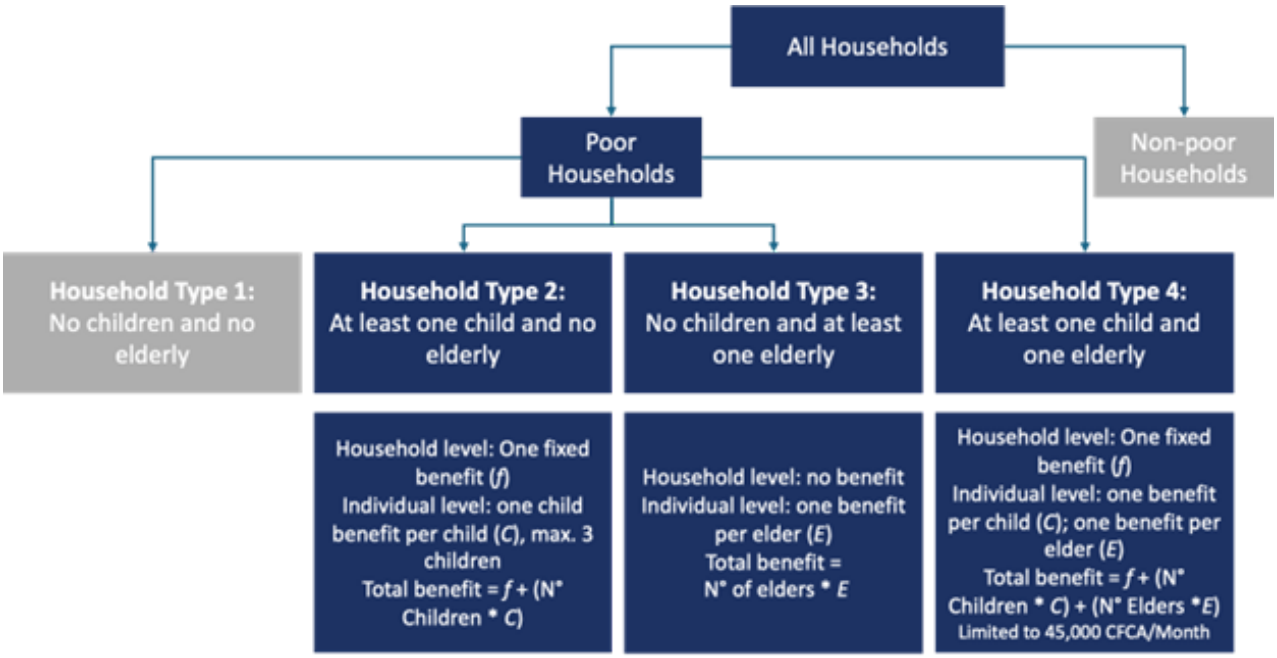
On the other hand, IGAs were planned to be delivered under the same approach as CCTs. Selected beneficiaries would receive a transfer of FCFA 200,000 (around USD 345 equivalent)[9] in three installments of 50%, 25%, and 25%. The first transfer of 50% would be provided upon receipt of a validated business plan to allow for up-front investments, whereas the second and third installments would be provided midway through the implementation, and six to nine months from the first payment, respectively. In addition to the cash transfer, beneficiaries would receive training on preparing an action plan and other technical skills, communication, and monitoring to support implementation and boost their self-confidence and social capital, and financial literacy training to improve their income management and encourage saving in case of shocks.

Furthermore, the project adopted a "cash plus" approach by implementing accompanying measures alongside these transfers. These measures focused on enhancing nutrition and hygiene practices, intra-household decision-making, human capital development, and money management.

2.2.2 Beneficiaries and Selection Rationale

The targeting of the Lisungi project in the Likouala department has several components and stages. Figure 3 summarizes the eligibility and the allocation of benefits per household type.

Figure 3. CT Eligibility and Benefit Allocation per Household Type



Note: Based on the World Bank Project Appraisal Document of Lisungi Safety Nets Project, Dec. 2013.

[9] Based on exchange rates presented in Report No: PAD2764 elaborated by the World Bank (January, 2019), which established USD 1 = FCFA 579.49.

Overall, households eligible for the Lisungi CT project should have at least either one pregnant woman, one child aged 0-14 years, or one elderly person of 60 years or older, and could be either of (1) Congolese nationality living in extreme poverty, (2) refugee household recognized by UNHCR as living in extreme poverty, or (3) households of foreign nationality in a regular situation and living in extreme poverty.

Based on this eligibility, the next step focuses on targeting and selecting beneficiary households. First, USR registration and obtaining a social identification number are required, followed by the household's request to join the Lisungi project. After that, a list of all potential beneficiary households is compiled and validated by the village or neighborhood chief and the local community. Using baseline information obtained from the Enquête Sociodémographique, vulnerable households are identified, and a second validation by the local community is conducted. The last step is registration as a beneficiary of Lisungi, but if the number of households exceeds the quota, a lottery determines which households become actual beneficiaries.

For IGAs, the eligibility and targeting are slightly different. Households should be either current beneficiaries of CCTs, which are favored, or other poor or very poor households enrolled in the USR. Households that are also receiving CCTs are required to contribute at least 10% of the budget of their IGA. Eligible activities require a non-complex, low-carbon technology, such as agriculture, livestock, artisanal fishing, handicrafts, services, or small businesses. Viable micro-projects within these sectors are selected based on personal motivation and competencies, project relevance, and must have an appropriate management and implementation timeline while staying within a set budget of FCFA 200,000.

THEORETICAL FRAMEWORK

3.1 Theory of Change of the Lisungi Project

The Lisungi project's theory of change (ToC) is designed to address the contextual challenges outlined in Section 2 through two complementary intervention pathways centered on monetary transfers. These transfers are expected to help households better allocate their financial resources and make meaningful investments in their livelihoods. By ensuring timeliness and reliability, the transfers aim to support households in planning for the future, particularly by facilitating investments in their children's human capital. Developed during the project's design phase, the ToC envisions that the economic resilience and well-being of vulnerable households – including refugees, IPs, and host communities – can be strengthened through CCTs and support for IGAs. This framework suggests that by meeting immediate financial needs and enabling long-term investments in human capital and livelihoods, the project will contribute to sustainable poverty reduction and improved social cohesion.

Table 1: Summary of Lisungi Project Theory of Change

Components	Key Activities	Main Outcomes
Cash Transfers	• Setting up trimester cash transfers for poor households (4,000 total) • Providing accompanying measures on early childhood development, financial literacy, and other services • Conditional transfers based on school attendance and health visits	• Increased income and assets • Improved human capital (health, education)
Income-Generating Activities (IGA)	• Supporting poor households in developing IGAs (4,000 refugees, 4,000 host) • Providing three installments of IGA transfers with training and mentorship	• Increased income from IGA • Consumption smoothing through diversified income sources

Note: Full table available in Appendix I, Table A1.

The CCT component is designed to provide regular cash transfers to approximately 2,000 refugee households and 2,000 host community households. The program aims to smooth consumption, protect household assets, and enable families to plan and invest in income-generating activities and human capital development. This approach is expected to lead to increased incomes and assets for poor households, allowing them to plan for the future and take on more risks. Additionally, the cash transfers are conditional upon children's school attendance and health visits. The specific conditions include regular school attendance records for school-aged children and attendance at scheduled health check-ups for younger children. By tying transfers to these conditions, the project seeks to improve early childhood development and financial literacy awareness, encouraging beneficiaries to utilize educational and health services. Overall, the CCTs are targeted to increase assets and income while enhancing the human capital of poor households.

The second intervention arm, support for IGAs, is designed to assist 4,000 refugee households and 4,000 host households in developing income-generating activities. By providing financial transfers, training, and mentorship, the program enables households to start new ventures or expand existing ones. The training includes business management skills, technical skills relevant to specific trades, and financial literacy workshops. Mentorship is provided by experienced local entrepreneurs and program facilitators. Diversifying income sources is expected to help households smooth consumption and increase incomes derived from IGAs. These interventions aim to build a foundation for sustainable income among vulnerable households.

The strategies employed by the Lisungi project align with evidence from development literature. Studies have demonstrated that cash transfer programs, particularly those that are predictable and conditional, can effectively reduce poverty, increase consumption, and improve human capital outcomes (Fiszbein & Schady, 2009). By providing households with regular financial support tied to specific conditions like school attendance and health check-ups, such programs encourage investments in education and health, leading to long-term benefits. Similarly, support for income-generating activities has been found to enhance income diversification and economic resilience among poor households, enabling them to better withstand economic shocks and improve their living standards (Banerjee et al., 2015). Recent studies in African contexts have also highlighted the effectiveness of combining cash transfers with livelihood support to achieve sustained poverty reduction (Bastagli et al., 2016; Coudouel et al., 2018). The Lisungi project's dual focus on CCTs and IGAs thus reflects evidence-based strategies for poverty reduction and human capital development.

3.2 Additional Gender and Social Impacts

In addition to the benefits specified in the ToC, we posit that the positive changes induced by the project may also benefit gender equality and social cohesion. We motivate these potential positive externalities below.

3.2.1 Gender Equality

In addition to its economic objectives, the Lisungi project is expected to influence intra-household dynamics, particularly concerning gender equality. Improvements in household resilience and financial stability may lead to changes in decision-making processes and reduce intra-household conflict. Specifically, we anticipate that the project will contribute to more equitable relationships by increasing women's say in household matters while reducing instances of spousal violence.

Several factors may contribute to changes in spousal conflict within the context of social protection programs. First, a dominant explanation in the economics literature for intimate partner violence (IPV) is based on intra-household bargaining models between two rational partners. These models suggest that a woman may tolerate violence from her partner in exchange for material compensation or due to economic dependence (Farmer & Tiefenthaler, 1996, 1997; Anderberg et al., 2016). A key prediction from these models is that when a man's relative bargaining power decreases, due to the woman gaining financial resources or autonomy, he is less likely to commit violence against her (Aizer, 2010). This aligns with criminological theories of "female exposure reduction," which argue that increased employment or economic opportunities for women are associated with reduced abuse by male partners (Dugan et al., 1999). Therefore, if the Lisungi project enhances women's economic standing and bargaining power, it could help reduce spousal conflict and IPV.

Second, economic stress at the household level is known to exacerbate tensions and can lead to increased violence within families (Lucero, Lim, & Santiago, 2016). By providing financial stability through cash transfers and support for income-generating activities, the project may alleviate economic pressures, thereby reducing stress-induced conflicts between partners.

Third, intra-household conflict is also influenced by inter-household interactions and community engagement. Men's participation in social events can sometimes increase the risk of spousal violence due to factors such as prevailing social norms, learned behaviors (Bandura, 2007), alcohol consumption (Rees & Schnepel, 2009), or heightened emotional states (Card & Dahl, 2011). However, increased community participation may also have protective effects. Higher levels of social cohesion at the community level have been associated with lower rates of intimate partner violence (Dugan et al., 1999). When potential perpetrators spend more time engaged in community activities and less time at home, the opportunities for conflict may decrease, reducing the risk of violence.

Changes in the frequency of spousal debates must be interpreted carefully alongside instances of spousal violence. While a reduction in spousal debates can be associated with less violence, a relationship documented in prior research, including in fragile settings (Stojetz & Brück, 2023), an increase in debates is not necessarily negative. An increase may signal a heightened sense of female empowerment and more open dialogue within households, provided it is not accompanied by violence. This can reflect healthier communication dynamics where both partners feel empowered to express their opinions. Therefore, we consider an increase in spousal debates as a potential positive indicator of advancing gender equity, as long as it occurs without an increase in spousal violence.

Given these considerations, our evaluation of the Lisungi project's impact will focus not only on aggregate outcomes but also on heterogeneous effects across different groups, including gender, age, and marital status. Understanding how various segments of the population experience the intervention will provide critical insights into the integration of refugees, Indigenous Peoples, and host communities into national social service systems. This nuanced approach aims to offer lessons that can inform future interventions, ensuring that social protection systems promote gender equality and social cohesion without inadvertently increasing divisions or conflicts within communities.

3.2.2 Social Cohesion

Recent research has highlighted the potential role of social protection in fostering social cohesion, particularly in contexts involving refugee and host communities (Valli, Peterman, & Hidrobo, 2019). This relationship has gained particular significance as communities worldwide face compound challenges of displacement, natural disasters, and public health crises. Existing research (Burchi et al., 2022) has demonstrated that cohesive societies not only show greater resilience in crisis situations but also prove more capable of designing and implementing effective social protection systems.

The Lisungi project's approach to social cohesion operates along two critical dimensions identified by Leininger et al. (2021): horizontal and vertical cohesion. Horizontal cohesion addresses relationships among individuals and groups within societies – in this case, the interactions between refugees, IPs, and host communities. Vertical cohesion focuses on the relationship between these groups and state institutions, which can be strengthened through the project's institutional requirements, such as engagement with health services for children's checkups, or the enfranchisement in the USR. These institutional touchpoints are particularly significant in a context where many families have limited engagement with formal state services.

The importance of social cohesion extends beyond immediate community relationships. Research indicates that cohesive societies demonstrate an enhanced capacity for conflict prevention and tension management (Valli, Peterman, & Hidrobo, 2019). Individual perceptions of inclusion and fairness, particularly regarding access to resources and institutions, significantly influence investment decisions in human and social capital (Oxoby, 2009). The impact evaluation survey measures these dimensions through survey questions that assess institutional trust, perceptions of conflict within communities, and broader indications of social cohesion. These metrics allow for systematic tracking of how program participation might affect beneficiaries' integration into their communities and their trust in institutions.

However, social protection programs can also have unintended consequences for social cohesion. While the primary goal of these programs is positive (i.e., reducing poverty and improving well-being), unintended negative outcomes can arise, especially when targeting and inclusion processes are poorly managed. Despite positive spillover effects, selective inclusion can create social divisions, leading to jealousy or resentment among non-recipients, who may undermine the economic efforts of beneficiaries or feel alienated from community networks (Della Guardia, Lake & Schnitzer, 2022).

For instance, in Indonesia, a poorly implemented unconditional cash transfer program resulted in the inclusion of many better-off households, negatively affecting social capital and community group participation (Cameron & Shah, 2013). Similarly, in Zimbabwe, communities' tensions rose after cash transfer distribution due to dissatisfaction with targeting procedures (Kardan, MacAuslan & Marimo, 2010). These cases underscore the potential risks of social protection programs and the importance of carefully evaluating both their intended and unintended consequences.

The Lisungi project has incorporated specific design elements to address these potential risks through a rigorous, multi-step targeting process. The selection of beneficiaries begins with registration in the USR and proceeds through a series of community-engaged validation steps. Local involvement is embedded throughout the process: village and neighborhood chiefs, along with community members, participate in validating potential beneficiary lists. The process culminates in a general assembly where the final list receives community validation, ensuring transparency and local ownership of selection decisions. When the number of eligible households exceeds program quotas, a lottery system provides an additional layer of fairness in the final selection. This structured approach to targeting, combined with multiple touchpoints for community dialogue and validation, aims to minimize the social tensions that have emerged in other cash transfer programs. The process reflects a careful balance between objective poverty assessments, through tools like the proxy means test, and community-based verification mechanisms that promote program legitimacy and social acceptance.

Understanding the project's impact on social cohesion is particularly relevant given Likouala's unique social composition as a major host department for refugees from the DRC and the CAR. Understanding whether the project has strengthened community ties or inadvertently exacerbated tensions is crucial for informing future policy decisions. By evaluating both positive and negative outcomes, policymakers can refine program design and implementation strategies to maximize benefits while mitigating potential drawbacks.

METHODS

The starting point of this study was the construction of a socioeconomic profile and the collection of baseline data to characterize the host and refugee households in the Likouala department. In June 2021, before the initiation and implementation of project interventions, the INS deployed the collection of data for the Unique Social Registry, an information system managing data and statistics on poor households for use in social protection programs that functions within the Ministry of Social Affairs.[10] Various Social Safety Net programs, including the Lisungi Project, use the USR and its vulnerability score to determine eligibility for the program. The primary aim of this data collection was to gather comprehensive data on various socio-economic dimensions, including household demographics, health, children's education, employment, asset ownership, and housing characteristics.[11]

The database built from this survey contains observations from a total of 12,603 individuals from 2,811 households residing in Likouala, including 900 refugee households. This comprehensive data collection provides a robust foundation for understanding the socio-economic conditions of the population and for effectively implementing the Lisungi project activities. The inclusion of both refugee and host communities' data allows for comparative analysis, which is key for tailoring interventions to the specific needs of each group.

The information collected by the USR was complemented by UNHCR ProGres data and served to design the eligibility criteria and targeting rationale of the Lisungi project (see Appendix II for a detailed description). In summary, the eligibility criteria considered administrative requirements, household vulnerability, and household composition.

4.1 Sample

4.1.1 Sampling Procedure

The sampling procedure to conduct an impact evaluation of the Lisungi project combined the data of households that are effective beneficiaries of CCTs or IGAs.[12] As the allocation of support is not random, but based on multiple factors (as mentioned above, both administrative and based on household characteristics), once the benefit is allocated, we have to decide on a consistent and transparent variable that would allow us to make comparisons between the beneficiaries and nonbeneficiaries.

We leverage the fact that practically all households that received an intervention had a vulnerability score below 13. In contrast, this was not the case for households that did not benefit from an intervention, which were, on average, somewhat richer than the treated groups.

[10] Decree No. 2019-134 of May 31, 2019 establishing the creation, attributions and organization of the single social register. Available in: https://faolex.fao.org/docs/pdf/Con191218.pdf . The USR contains entries of over 18,000 households in the Likouala department. The database includes Bantu, indigenous, and refugee households, and captures demographic, economic and wealth, schooling, and health variables.
[11] Even when the USR is a governmental program that operates nationally, the data collection efforts for Likouala were enhanced thanks to additional World Bank funding to collect more data on poverty indicators and to allow the Lisungi project to conduct a vulnerability analysis (VA) prior to the enrollment of potential beneficiaries.
[12] As shown in Appendix II, the rationale for selecting beneficiaries of CCTs and IGAs is different.

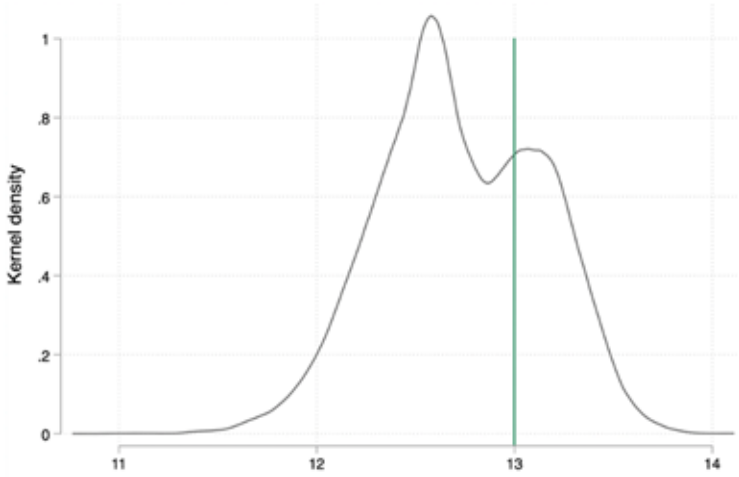
Therefore, to obtain control groups that are as similar as possible to the treatment groups, we sampled our control groups from the list of households in the USR who did not benefit from the intervention but who nevertheless had a vulnerability score below 13.[13] We randomly sampled 400 households from each of these groups.[14] This approach ensures that the control group closely mirrors the socio-economic characteristics of the treatment group, thereby enhancing the validity of the comparison and the overall study. By focusing on households with similar vulnerability scores, we aim to isolate the effect of the intervention more accurately, minimizing the potential influence of external variables.

In case households were not available in the field, were absent, or refused to take the survey, we prepared a reserve list for each of the eight groups, organized by village of residence. We instructed our survey team to select a reserve household from the same sampling group and the same municipality as the original household. This approach ensured consistency in the sample and minimized potential biases that could arise from substituting households across different villages. In our midline data collection, a total of 2,878 households were interviewed. Of these, 2,818 households were matched, including 1,781 treated households and 1,037 households in the control group.

4.1.2 Sampling Frame and Rationale

The study sample for the impact evaluation of the Lisungi project was drawn from 11,484 households where population group data (Bantu, IP, or refugees) were available. The project uses the USR well-being score to determine eligibility, with a score below 13 categorizing households as very vulnerable. While all designated beneficiaries had scores below this threshold, resource constraints meant some eligible households were excluded from the program, as indicated by the green line in Figure 4. To assess the project's impact, a control group of non-beneficiary households with similar well-being scores (below 13) was sampled, ensuring comparability with the treatment group. Program data clearly distinguishes intervention status, allowing for an accurate evaluation of the project's effects on vulnerable populations.

Figure 4: Distribution of Well-Being Score



[13] Due to finite resources, the project cannot provide interventions to all eligible households, resulting in some households meeting the criteria but not receiving the intervention.
[14] The groups are: IP Conditional Cash Transfers (CCTs) treatment; IP control; Bantu CCTs treatment; Bantu IGA treatment; Bantu control; Refugees CCTs treatment; Refugees IGA treatment; & Refugees control. See Section 4.1.3 for details.

For designated beneficiaries, there are three conditions of treatment: cash support, support with income-generating activities (IGA), and no support (control). However, due to the limited number of IP households eligible for IGA support, we excluded this group from the analysis. This exclusion was necessary to maintain the validity of the comparisons across treatment conditions. All designated beneficiary and non-beneficiary households included in the analysis have a well-being score below 13.

4.1.3 Study Sample

The impact evaluation seeks to estimate the effects of the Lisungi project on Bantu, IP, and refugees separately. Therefore, the 11,484 households surveyed by USR were divided into eight groups. The categorization of the eight groups is illustrated in Table 2, along with the distribution of households across treatment and control groups.[15]

A total of 2,871 households were successfully interviewed in the midline survey. Of these, 2,811 households were matched and included in the final analysis, encompassing 1,052 treated households and 1,759 households in the control group. This sub-sample encompasses 1,197 households from the Bantu groups, 647 households from the Indigenous population, and 1,033 refugee households.

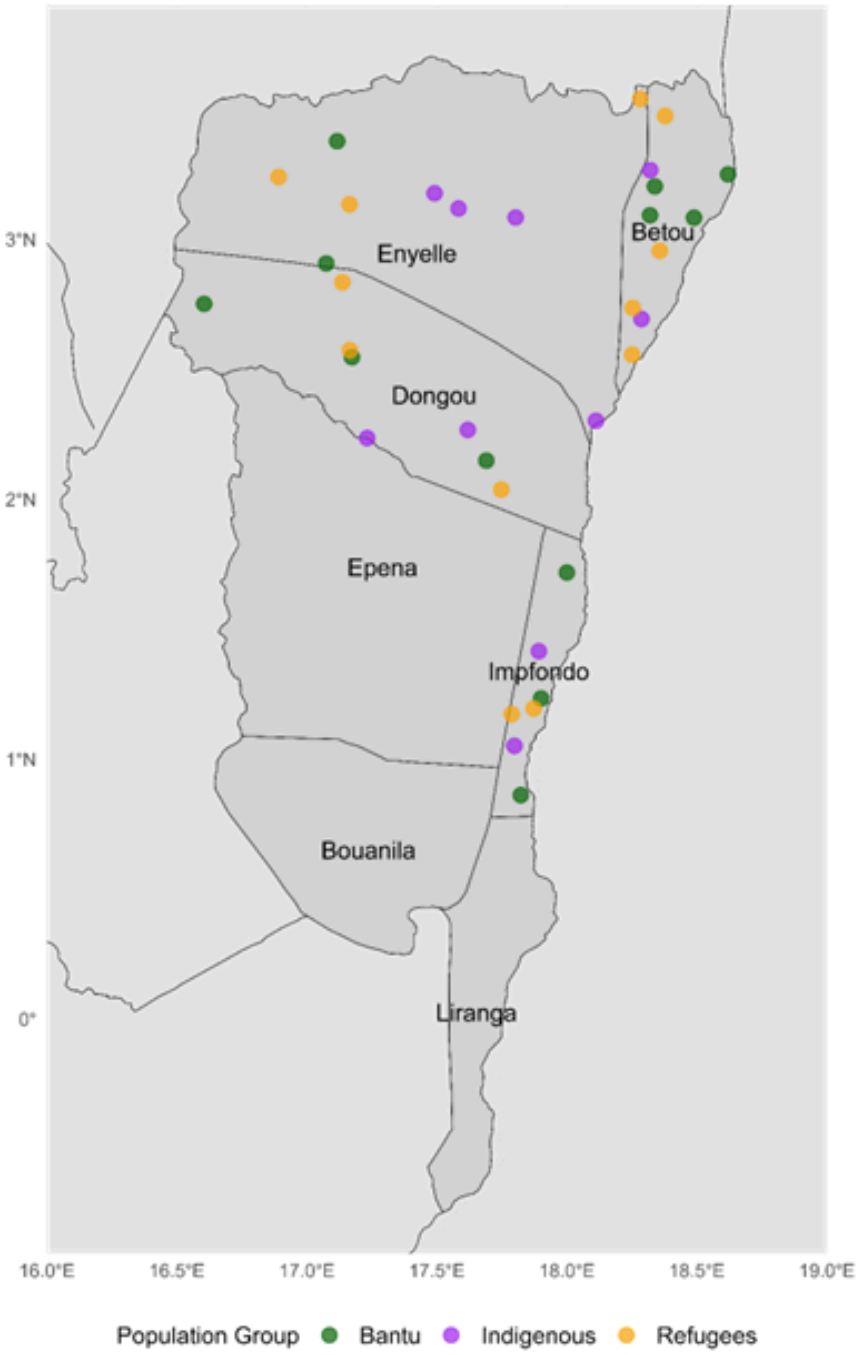
[15] As was previously mentioned, there were very few IP with IGA; therefore, we did not create a category for that group.

Table 2: Distribution of Households across Treatment and Control Groups

Group	Name of the group	Targeted number of HH in baseline	Effectively reached HH	Effectively reached individuals
1	IP treated with CCTs	400	304	1,439
2	IP control	400	350	891
3	Bantu treated with CCTs	400	361	1,976
4	Bantu treated with IGA	400	410	2,374
5	Bantu control	400	360	1,401
6	Refugees treated with CCTs	400	355	1,823
7	Refugees treated with IGA	400	351	2,026
8	Refugees control	400	321	1,452
Total		**3,200**	**2,811**	**13,382**

In addition, as seen in Figure 5, the distribution of households that are part of the sample is homogeneous between population groups. There are no clear clusters that show only one group being targeted in a determined area. As expected, a large number of households reside in Bétou and the regions facing the Ubangi River. In addition, we see that multiple districts within the Likouala department, such as Epena, Bouanilla, and Liranga, are not included in the Lisungi project.

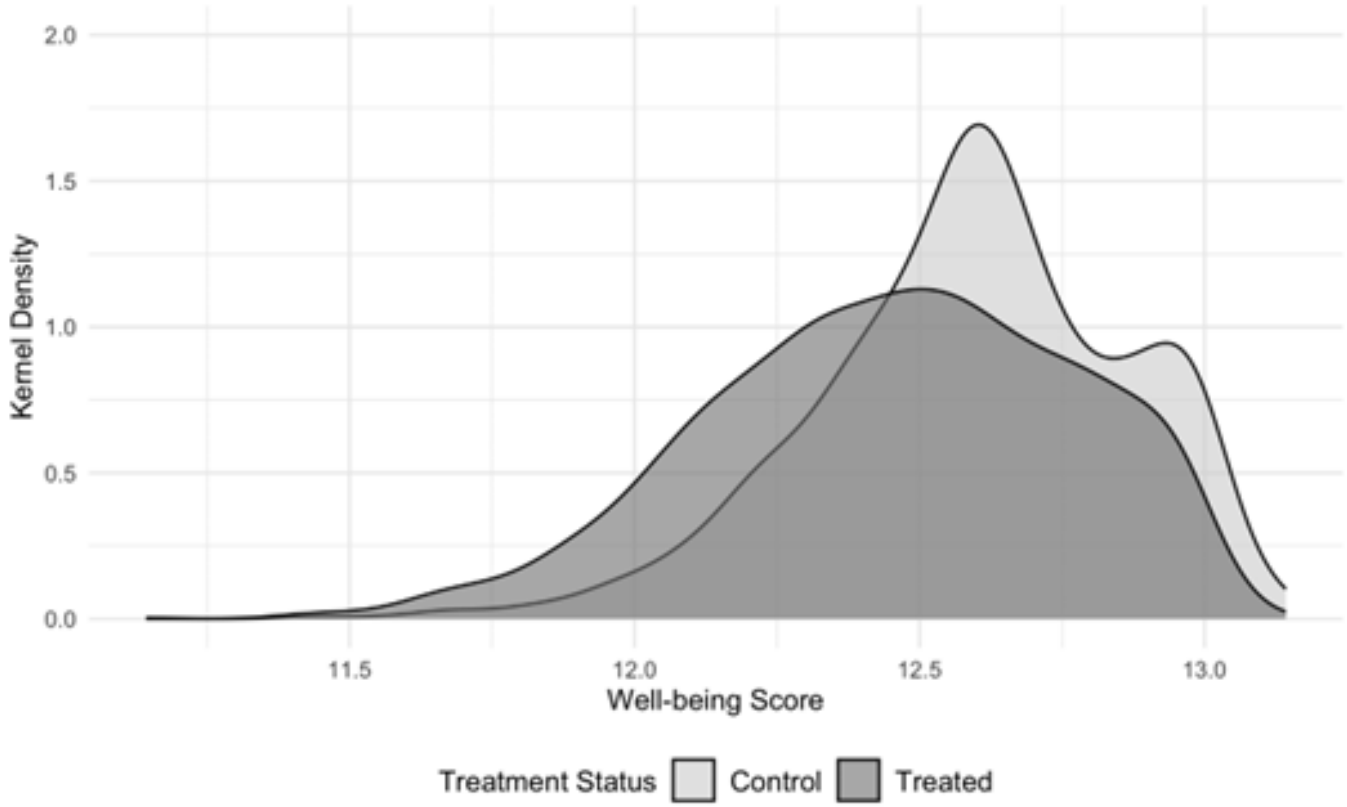
Figure 5: Distribution of Households in the Sample by Population Groups in the Likouala Department



Note: Each colored point represents approximately 100 households of a given population group. Points are randomly distributed within each district to preserve the geographic distribution of population groups while protecting individual household locations. The number of points in each district is proportional to the actual number of surveyed households in that area.

When assessing the distribution of well-being scores within the treatment group, the distribution of designated beneficiaries shows slightly lower scores, indicating higher vulnerability levels than non-beneficiaries (Figure 6).

Figure 6: Baseline Well-being Scores across Treatment and Control Groups



The analysis of well-being scores across different household groups (Bantu, IP, and refugees) and treatment conditions (CCTs, IGAs, and control) reveals interesting patterns in vulnerability levels. Overall, across all groups, households receiving IGA support tend to have slightly lower well-being scores, indicating higher vulnerability compared to those receiving CCTs and control groups. The control groups generally show higher well-being scores, reflecting better conditions compared to the treated groups. This pattern suggests that interventions (CCTs and IGAs) are targeted at more vulnerable populations within each household group. A detailed analysis of the distribution patterns for each population group is presented in Appendix IV, Figure A4.1.

4.2 Estimation

To estimate the impact of the Lisungi project on the outcomes of interest, we employ propensity score matching (PSM) and inverse probability weighting (IPW) methods. Due to limited resources, the program could not offer the intervention to all potentially eligible households identified at baseline. We utilized this constraint to form a control group by randomly selecting from the pool of eligible households that did not receive the intervention. This approach was consistently applied across Bantu, IP, and refugee households, allowing us to assess the program's impact within each group separately.

Using baseline data, we matched treated households with control households based on observable pre-treatment characteristics to create comparable groups. Key variables used for matching included the age and education level of the household head, marital status, and vulnerability score of the household. By matching on these covariates, we aimed to minimize selection bias and ensure that any differences in outcomes between the treated and control groups could be attributed to the Lisungi project rather than underlying differences between the groups.

Our analysis focuses on the Average Treatment Effect on the Treated (ATT), comparing outcomes between beneficiaries and a matched control group of non-beneficiaries. This method allows for a causal interpretation of the results under the assumption that all relevant covariates influencing both the treatment assignment and the outcomes are observed and properly accounted for. For detailed information on the matching procedure, assessments of common support, and checks for covariate balance, see Appendix III.

RESULTS

5.1 Consumption

In this section, we examine the impacts of the Lisungi project on consumption and whether consumption changes depending on the support received by beneficiaries.

5.1.1 Consumption and Support Received by Beneficiary Households

Consumption. Considering both food and non-food expenditures at the household level, the expenditure is, on average, FCFA 1,469 per day (around USD 2.65)[16] for the entire sample, which includes all three groups (Bantu, IP, and refugees), as well as treated and control households. On an annual basis, this translates to FCFA 536,303 (around USD 963) per household. When adjusted for adult equivalents, these amounts become 576 (around USD 1) per day and FCFA 210,237 per year (around USD 377).[17]

Table 3 shows the distribution of these amounts over expenditure quintiles in our sample. As was previously mentioned, poverty in the department of Likouala was estimated at 53%, while the estimate in our sample is higher at 85%. It should be noted that our sample is not a representative, random sample of the Likouala population, but a sample of households that were eligible for the Lisungi project. Hence, we have an overrepresentation of Indigenous and refugee households, which could be the reason behind the high percentage of poverty in our sample.

[16] Exchange rates are based on the last quarter of 2021 to coincide with Lisungi first transfers in the Likouala department, with 1 USD equivalent to approximately FCFA 557. Subsequent calculations are based on this rate.
[17] The benefit level of the Lisungi project was designed to be FCFA 10,000 minimum per month. A variable child benefit is set at FCFA 5,000 per child per month. A variable elderly benefit is set at FCFA 10,000 per elderly per month. The maximum number of variable child benefits is FCFA 15,000, which represents three children. Due to the multigenerational households, the maximum transfer per household is FCFA 45,000 that represents a household with three children and two elders.

Table 3: Distribution of Expenditures

Expenditure Quintile[a]	Average Expenditure per Household			Average Expenditure per Adult eq.		
	FCFA/year	FCFA/day	USD/day[b]	FCFA/year	FCFA/day	USD/day[b]
Poorest 20%	101,842	279	0.43	33,742	92	0.14
Poor 20-40%	233,931	641	0.98	78,761	216	0.33
Middle 40-60%	388,426	1064	1.62	139,453	382	0.58
Rich 60-80%	628,001	1,720	2.63	236,444	648	0.99
Richest 20%	1,329,383	3,642	5.53	561,460	1,538	2.35
Expenditure (mean)	536,303	1,469	2.24	210,237	576	0.88
Expenditure (median)	385,683	1,056	1.61	139,063	381	0.58
% Below Poverty Line[c]				85%		

Figure 7 shows the daily distribution of expenditures within each population subgroup. The IP emerges as the poorest group, followed by refugees and then Bantu. Figure 8 illustrates the expenditures per adult equivalent. The Indigenous group has higher expenditures, likely caused by the smaller household sizes in this group.

Figure 7: Distribution of Household Expenditures per Day (in FCFA)

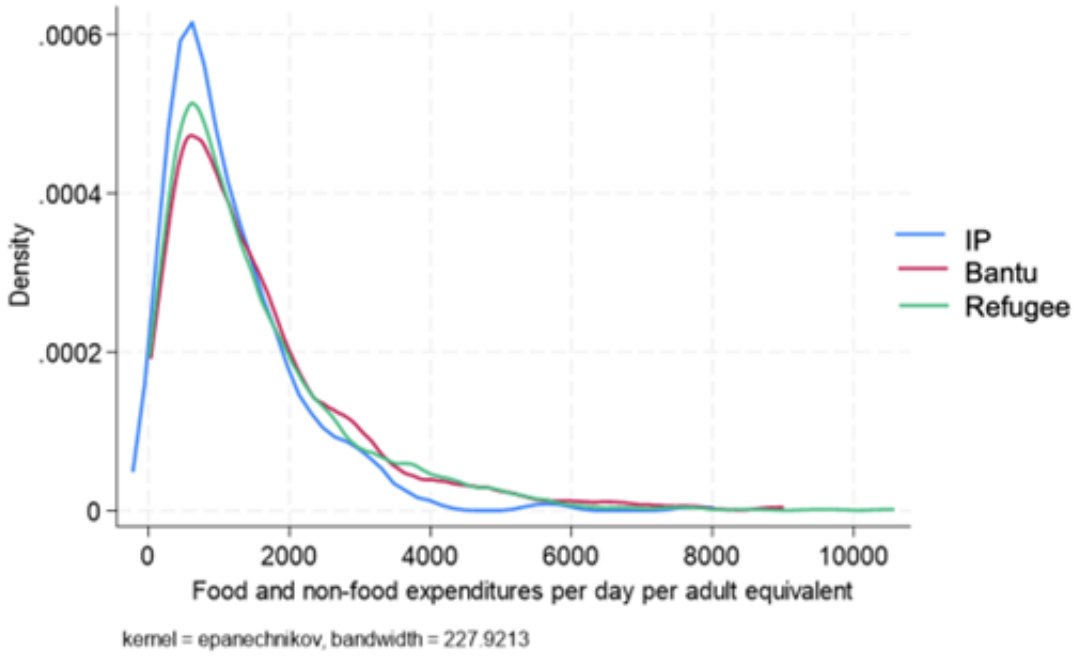
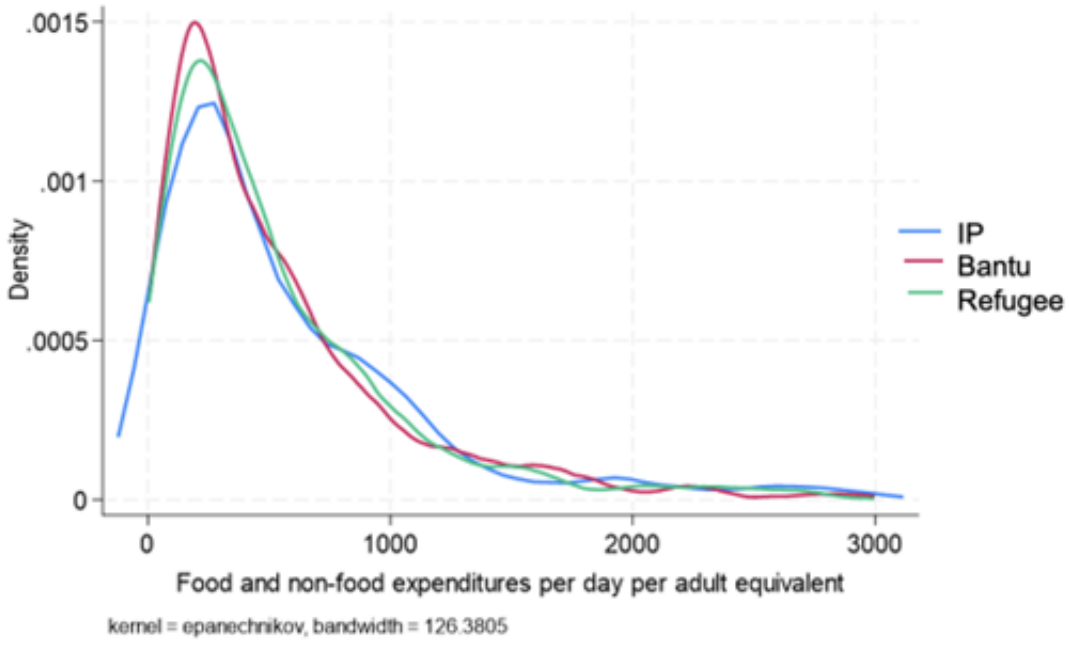


Figure 8: Distribution of Expenditures per Adult Equivalent per Day (in FCFA)



Support. Tracking the support received by households is crucial for understanding both the relative contribution of the Lisungi project compared to other assistance programs and its significance in relation to households' overall economic situation. This dimension helps us assess whether the program is providing meaningful assistance relative to household needs and whether it's effectively reaching its target populations. Table 4 shows that the overall support received by the households who were beneficiaries of the Lisungi project is considerable, totaling on average FCFA 228,453 (around USD 410) annually for the entire sample. Of this amount, 76.4% comes from the Lisungi project, equating to 65% of annual household consumption.

Table 4: Support Received by Beneficiaries of the Lisungi Project

Full Sample	Treatment	Control
Total support per HH received in 1 year (FCFA)	228,453	22,927
Of which support from Lisungi project (%)	76.4	
Total support in % of annual HH consumption	85	11
Lisungi support in % of annual HH consumption	65	
Bantu		
Total support per HH received in 1 year (FCFA)	211,060	7,479
Of which support from Lisungi project (%)	77.5	
Total support in % of annual HH consumption	71.5	4
Lisungi support in % of annual HH consumption	55	
IP		
Total support per HH received in 1 year (FCFA)	205,465	8,550
Of which support from Lisungi project (%)	81.4	
Total support in % of annual HH consumption	99	4
Lisungi support in % of annual HH consumption	86	
Refugees		
Total support per HH received in 1 year (FCFA)	258,637	53,067
Of which support from Lisungi project (%)	72.7	
Total support in % of annual HH consumption	93	24.8
Lisungi support in % of annual HH consumption	64.7	

Note: N = 2,760. 5 households with extreme values (support > 3,000,000) were excluded from the analysis

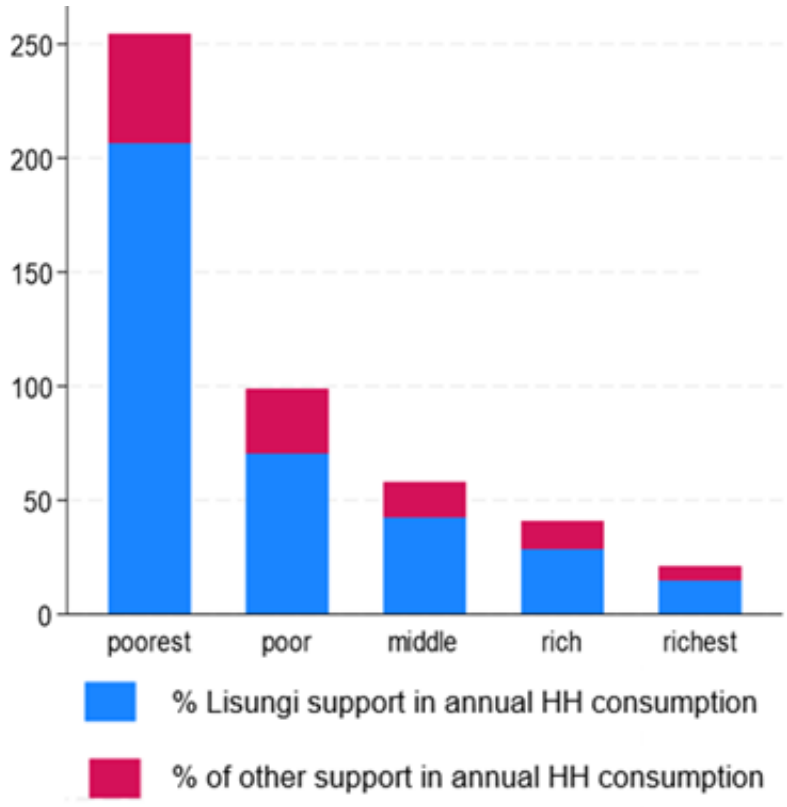
Concerning the different population subgroups separately, we notice that the IP group received somewhat less support (FCFA 205,465, around 369 USD) compared to the other groups. However, this amount covers 99% of the IP group's average annual consumption. This suggests that the support was well-targeted and sufficient to cover the needs of the IP households, which tend to be smaller in size on average compared to the other population groups. The Lisungi project alone is responsible for 86% of this group's household consumption. Considering that the IP group is, on average, poorer than the other two population groups, the overall coverage of consumption needs by the project is significant, despite the lower absolute transfer amount per household.

For the other two groups – the Bantu and refugees – the coverage of the annual household consumption by the Lisungi project is 55% and 64.7%, respectively, even though the consumption of these two groups is, in absolute terms, higher than the IP.

Compared to the control group, the beneficiary group received, on average, 10 times more support. Only the refugee control group received a sizable amount of non-Lisungi support, which amounted to about 20% of the support received by the refugee households who benefited from Lisungi. This is understandable, as refugee populations often benefit from multiple sources of support.

Another way of looking at the data is by consumption quintile, across the entire sample, ranked from the poorest to the richest 20% of households. As we can see from Figure 9, Lisungi covers only 20% of the annual household consumption for the less-poor households, but it covers 200% of the annual consumption for the poorest households.

Figure 9: Percentage of Lisungi and Other Support in Annual Household Consumption



Note: For beneficiaries of the Lisungi project, by consumption quintile

Additionally, we can examine the importance of support relative to household consumption within the three populations in our sample, rather than the entire group of beneficiaries. The three population subgroups follow the same pattern as the entire group of beneficiaries. This indicates that the Lisungi project did not discriminate in favor of one or the other population groups. Within each group, we observe the same pattern across consumption quintiles, which suggests that the support distribution was equitable and consistent across different levels of household consumption, promoting fairness in the project's implementation and ensuring that no subgroup was disproportionately advantaged or disadvantaged.

Given the high support coverage relative to household consumption in the poorest quintile, one may be tempted to believe that these households received more support than the less poor households. However, Table 4 dispels that belief: while the poorest households received a substantial amount, the richest quintile received slightly more support overall. Nonetheless, when we consider support relative to the number of adult equivalents in the household, the distribution appears more balanced. Table 5 reveals a non-monotonic pattern, where the average support received increases up to the 80th percentile before dropping for the richest quintile. This decline may be partially explained by the cap in cash transfers, as indicated in the table, which limits the total benefit per household to a maximum of FCFA 45,000 (around USD 81) per month. Larger households in the richer quintiles may reach this cap more easily, thus limiting the per-adult equivalent support they receive. This suggests that while wealthier households may receive larger nominal transfers, the impact per individual is diminished compared to smaller households in lower consumption quantiles. Table 5 also debunks the misconception that the rich are wealthier due to the support they receive; in terms of support per adult equivalent, they actually received less than other groups, highlighting the equity of the support distribution across different household types.

Table 5: Average Amount of Support Received (Yearly)

Consumption Quintile	Average amount of support received (FCFA)	Average amount of support received per adult equivalent (FCFA)
Poorest 20%	172,984	91,727
Poor 20-40%	225,218	93,791
Middle 40-60%	223,808	99,746
Rich 60-80%	252,687	100,518
Richest 20%	257,717	85,760

5.1.2 Lisungi Impacts on Consumption

In this subsection, we employ econometric techniques to assess the causal impact of the Lisungi project on household consumption. Specifically, we utilize PSM (as outlined in Section 4) and IPW to estimate the ATT. This allows us to compare the consumption levels of beneficiary households with those of a similar control group, accounting for observable characteristics that might influence consumption outside of the treatment status.

Our findings, detailed in Table 6, indicate that the ATT is statistically significant across all subgroups and program modalities. This demonstrates that the Lisungi project's interventions have led to higher consumption among beneficiaries. The application of PSM and IPW strengthens the causal interpretation of these results by mitigating selection bias and ensuring that the differences observed are due to treatment rather than other factors or characteristics.

Table 6: Daily Expenditure per Adult Equivalent by Population Group and Treatment Modality

Group	Treated	Control	Difference	S.E.	T-stat
Bantu					
Cash					
Unmatched	675.5	508.81	166.7	50.97	3.27***
ATT	675.5	481.42	194.08	57.71	3.37***
Income support					
Unmatched	558.43	508.81	49.63	42.97	1.15
ATT	558.43	422.82	135.61	60.44	2.24**
Indigenous					
Cash					
Unmatched	577.33	517.92	59.41	50.05	1.19
ATT	577.33	439.71	137.61	76.23	1.81*
Refugees					
Cash					
Unmatched	709.18	508.61	200.57	54.76	3.66***
ATT	710.32	476.11	234.2	59.42	3.94***
Income support					
Unmatched	542.95	508.61	34.34	46.89	0.73
ATT	542.95	448.21	94.75	53.9	1.76*
All					
Unmatched	611.01	511.59	99.42	25.97	3.83***
ATT	611.01	454.07	156.93	32.07	4.89***

Note: PSM results. Expenditures include food and non-food items.

For the entire sample – across subgroups and program modalities – the increase in daily expenditure per adult equivalent for treated households amounts to FCFA 157 per day (around USD 0.28), representing 25% of daily consumption for one adult in a beneficiary household. For refugee households receiving cash, the additional consumption per adult equivalent is 33% higher compared to the matched control group (FCFA 234, around USD 0.42), while Indigenous households with cash support see an increase of 23.7% (FCFA 137, around USD 0.25), and Bantu households receiving cash report an increase of 28.7% (FCFA 194, around USD 0.35).

In the income support modality, the effects are generally smaller and less consistent across groups. Bantu households receiving income support show an increase in daily expenditure of FCFA 135.61 (around USD 0.24), which, while statistically significant, is lower than the increase observed for the cash treatment. Similarly, refugee households receiving income support see a smaller but still positive increase in daily consumption of FCFA 94.75 (around USD 0.17), though this effect is less statistically significant. For Indigenous households, the impact of income support on daily consumption is positive but marginally significant at the 10% level.

These differences highlight that the cash modality produces a more substantial impact on daily consumption than income support across all groups, suggesting that cash transfers offer more immediate support for daily needs. However, given the substantial amount of support provided, both in absolute terms and relative to household consumption, it raises the question of why the increase in consumption among the treated group is not larger. This observation leads us to the next section, where we explore potential reasons for these limited gains in consumption.

5.1.3 Consumption Patterns by Gender

Table 7 and Figures 10 and 11 reveal important gender-specific effects of the program. When analyzing treatment and control groups separately by household head gender, female-headed households show particularly strong performance at midline. The treatment effect is significantly larger for female-headed households compared to male-headed households, with treated female-headed households substantially outperforming their control counterparts. This gender differential is primarily driven by Bantu and refugee households, while indigenous households show similar treatment effects regardless of household head gender.

Table 7. Consumption per Adult Equivalent, Gender of the Head of the Household, and Treatment Status

Group	Treated	Control	Diff	SE	T-stat
Bantu					
Male	552	486	-66	47	-1.41*
Female	662	497	-165	73	-2.23***
Indigenous					
Male	542	498	-44	60	-0.73
Female	585	526	-59	85	-0.68
Refugees					
Male	534	493	-41	51	-0.8
Female	678	470	-208	78	-2.6***

Figure 10. Consumption per Adult Equivalent per Day (by Gender of the Head of the Household and Treatment Status)

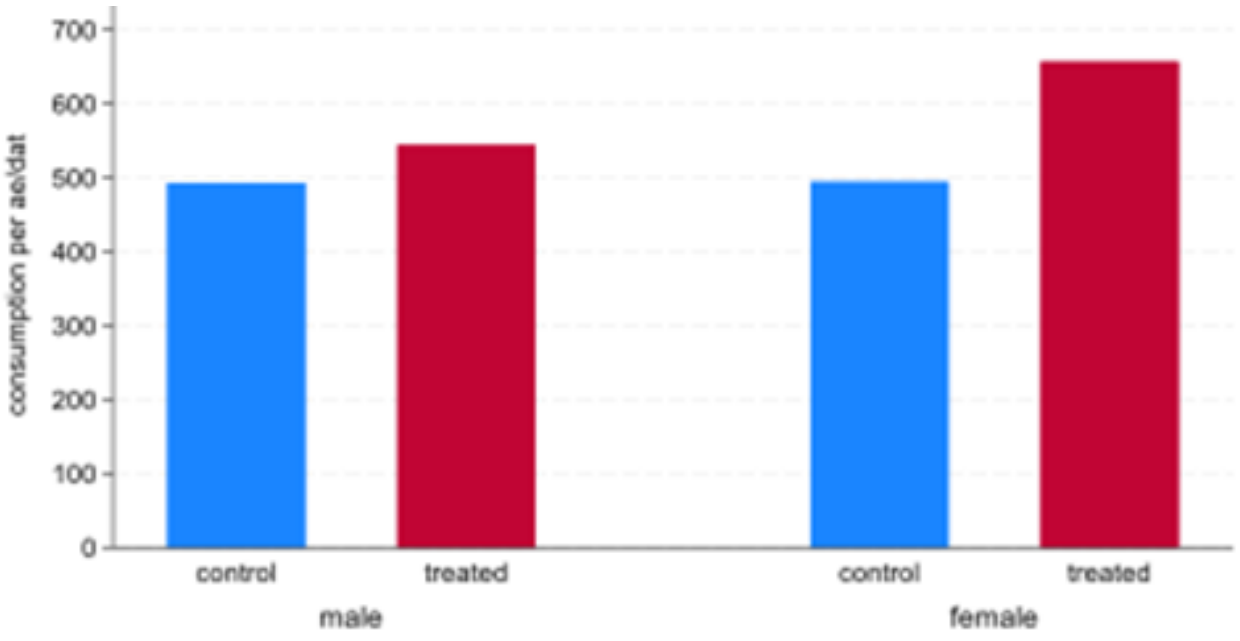
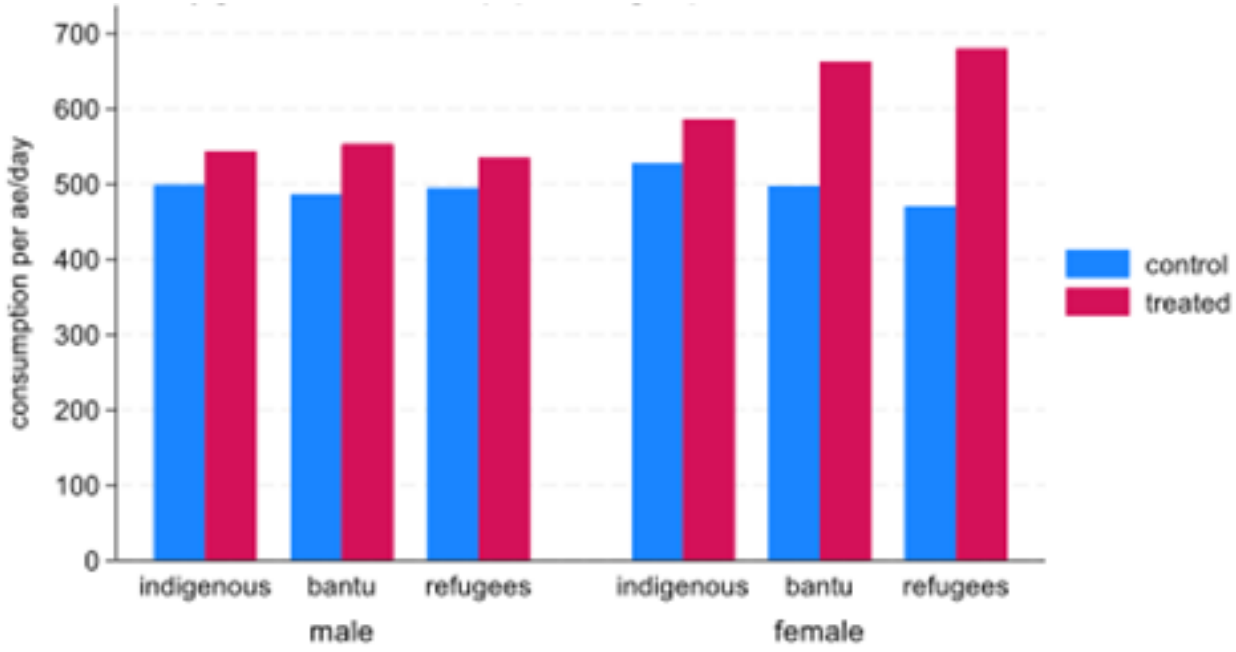


Figure 11. Consumption per Adult Equivalent per Day across Groups (by Gender of the Head of the Household and Treatment Status)



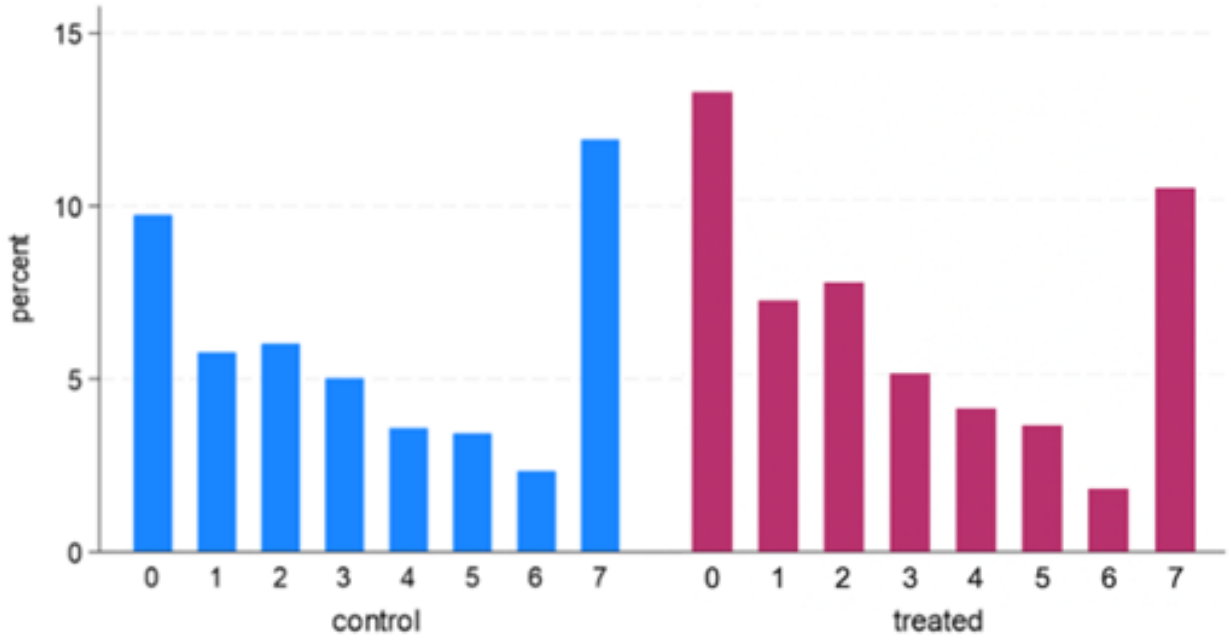
5.2 Food (In)Security

In this subsection, we explore the impact of the Lisungi project on food security.

Many households in fragile settings countries lack regular, predictable access to food and must adjust their consumption through various strategies – or "food coping strategies" – to ensure that all members can eat each day. We find evidence for extensive food coping in our sample. Households were asked how many days in the week prior to the survey they consumed less, cheaper, or less-preferred food than they would with adequate resources. About 88% reported experiencing this on at least one day, and 10% reported it occurring every day of the past week.

Comparing the treatment and control groups, it becomes clear that the treated households have more food security, as more households (in relative terms) stated that they did not use coping strategies in the past week and also less treated households used them every day than in the control group (Figure 12). On average, treated households report having resorted to coping strategies on 3.0 days per week and the control group on 3.4 days per week, a difference that is statistically significant at the 99% level (t-test on the means, t=3.66***). This indicates that treated households are more food secure than control households. Propensity score matching based on the same pre-treatment covariates as used in the consumption analysis suggests that the observed 0.4 difference between the treated and control groups can be attributed to the Lisungi Project. The project increased income for beneficiary households and allowed them to save in the form of assets (see below).

Figure 12. Food Coping Strategies



Note: Number of days using food coping strategies in the last 7 days by treated vs control group (percentage of households).

Table 8 provides a more nuanced view of food (in)security across population groups by treatment arm. For both the Indigenous and Bantu groups, the cash-transfer treatment is associated with higher food security relative to the control group, whereas the income-support treatment shows no such improvement. Among refugees, neither treatment yields a statistically significant difference compared with the control group.

We conclude that food (in)security, whether measured by the number of days households relied on coping strategies or by reported worry about insufficient food, remains a pervasive challenge in Likouala. Across population subgroups and treatment arms, 75–85% of households experience some form of food insecurity. While the Lisungi Project, particularly through its cash-transfer component, has provided some relief, its overall impact appears limited.

Table 8. Food Security by Population Group and Treatment Modality

Group	Are you worried about a lack of food due to insufficient funds ?		
	Yes (%)	No (%)	Chi sq. test
Bantu			
Cash Transfer	75.1	24.9	4.16**
Income support	82.1	17.9	0.05
Control	81.5	18.5	
Indigenous			
Cash Transfer	67.6	32.4	3.55**
Control	74.4	25.6	
Refugees			
Cash Transfer	79.3	20.7	0.66
Income support	82.2	17.8	0.01
Control	81.8	18.2	

5.3 Assets

In the baseline survey, households were asked about 17 valuable items they possessed. In the midline survey, these same households were asked again about these items, as well as about 30 additional items that were not listed in the baseline questionnaire. When we want to compare the change in assets over time between the treated and control groups, we are limited to these 17 items. Table 9 presents a difference-in-differences (DID) analysis of the value (in FCFA) of the assets in the possession of treatment and control households at baseline and midline. While the value of assets at baseline is more or less equal between treated and control households, there is a sizable and statistically significant difference between the two groups at midline, indicating that treated households have managed to increase the value of their assets considerably and control households have not or to a much smaller degree. With one exception: for the income support treatment of the Bantu population group- a group with highest value of assets holdings at baseline - we find an increase at midline, but not statistically different from the control group.

Table 9. Differences in the Value of Possessed Assets between Baseline and Midline(*)

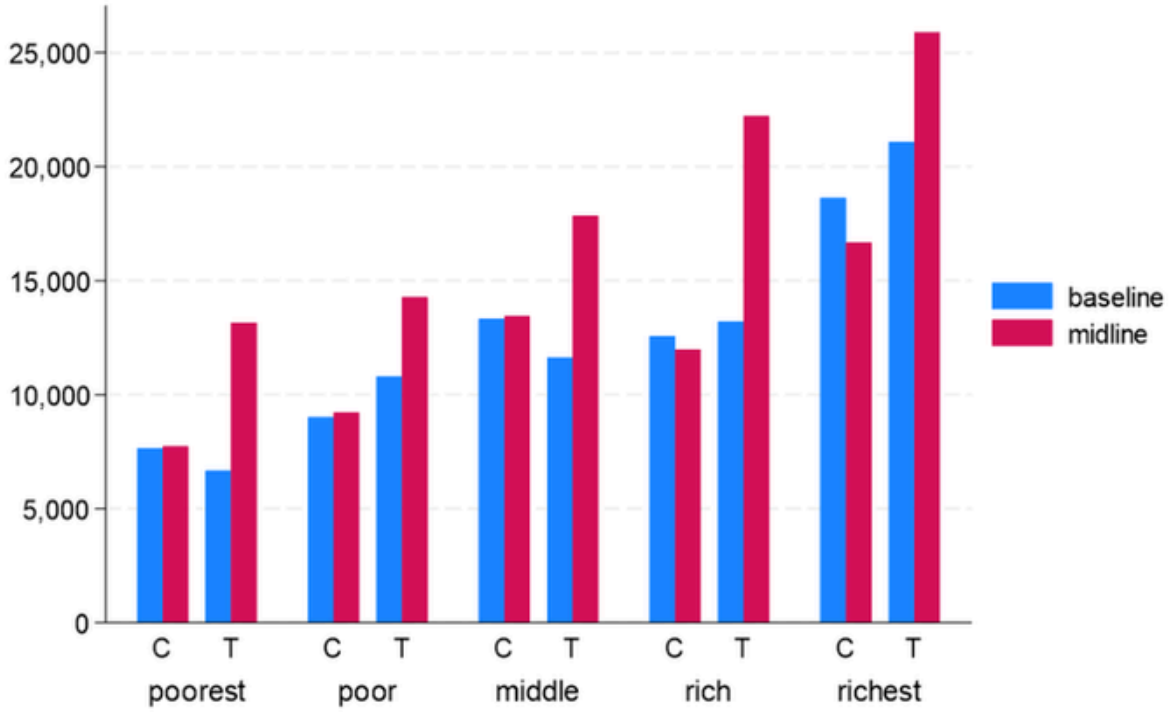
Group	N	Baseline	Midline	Difference
Bantu				
Cash treatment	353	12,895	21,858	
Control	346	13,175	14,588	
Difference		-280	7,270***	7,550***
Income support	402	19,760	23,411	
Control	346	13,175	14,588	
Difference		6,585***	8,823***	2,238
Indigenous				
Cash treatment	346	2,642	6,657	
Control	297	3,477	3,862	
Difference		-835**	2,795***	3,630***
Refugees				
Cash treatment	353	11,023	17,246	
Control	320	17,841	13,020	
Difference		-6,818***	4,226**	11,044***
Income support	348	15,460	19,068	
Control	320	17,841	13,020	
Difference		-2,380	6,048***	8,428***
All				
Treatment	1802	12,586	17,944	
Control	963	11,734	10,759	
Difference		851	7,085***	6,234***

*note: includes only households interviewed in both waves

To address whether the distribution of these new valuable assets is different across consumption quantiles, we can observe the differences depicted in Figure 13. Treated households in all quintiles have managed to increase the value of their assets, while control households have not. This is a clear indication of the impact of the program, because at baseline the value of assets of control and treated households was (almost) the same.

A substantive implication of this is that all treated households, including the poor and poorest used the support received from the Lisungi project to accumulate assets. This conjecture is consistent with prior observations in project monitoring, suggesting that households were saving and investing the CCTs, and prompting the later introduction of IGAs to further support their economic resilience. Poorer households, in particular, relied on this support more than richer households to build a financial cushion, likely anticipating the eventual end of Lisungi support. This strategy of asset accumulation may reflect an effort by poorer households to protect themselves from falling back into poverty once the support ends. This raises a question we intend to explore further with data at the end of the project: if asset[18] accumulation is indeed a common strategy among poorer households, it could explain why not all Lisungi support was consumed immediately.

Figure 13: Value of Assets by Consumption Quintiles between baseline and midline and treatment and control

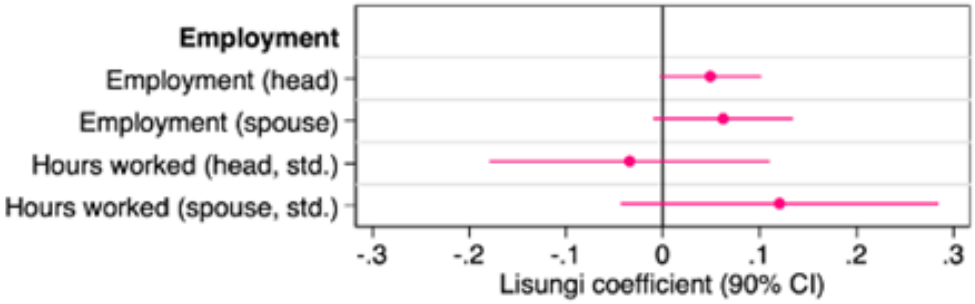


[18] The endline data collection occurred between July and October 2024. A new report focusing on the long-term impacts of the Lisungi project will be produced in the first quarter of 2026.

5.4 Labor Market Outcomes

The Lisungi project's impact on labor market outcomes shows positive but limited effects on employment.[19] In general terms, both heads and spouses work about 30 hours per week in any economic activity (30.8 hours among heads; 28.9 hours among spouses), including those who do not work at all. As shown in Figure 14, the point estimates of the impact of the Lisungi project are positive for having employment for both heads and spouses as well as for the employed spouses' hours of work, but these effects do not attain statistical significance. Additionally, 86% of household members report agriculture as their main activity, with no statistically significant difference between treated and control households. This suggests that, although the program may tend to increase labor market outcomes, its impact on shifting employment patterns remains limited in the short term.

Figure 14: Impact on Employment



Household members in treated households are slightly more active in construction and commercial businesses, although this difference is not statistically significant at conventional thresholds. Treated households, however, worked more hours per day on average (6 hours compared to 5.6 hours for the control group) and earned more money in the last month before the interview (FCFA 23,500 compared to FCFA 17,000 for the control group, around USD 42 and USD 31, respectively). The difference between treatment and control groups in hours worked is primarily observed between Indigenous households (Figure 15). Meanwhile, the difference in last month's earnings is mainly between the treated and the control group of Bantu households (Figure 16).

[19] Employment includes four variables: (1) Employment (head), indicating whether the household head is employed; (2) Employment (spouse), indicating whether the spouse is employed; (3) Hours worked (head), the average weekly hours worked by the household head; and (4) Hours worked (spouse), the average weekly hours worked by the spouse.

Figure 15. Hour Worked per Day by Treatment and Population Group

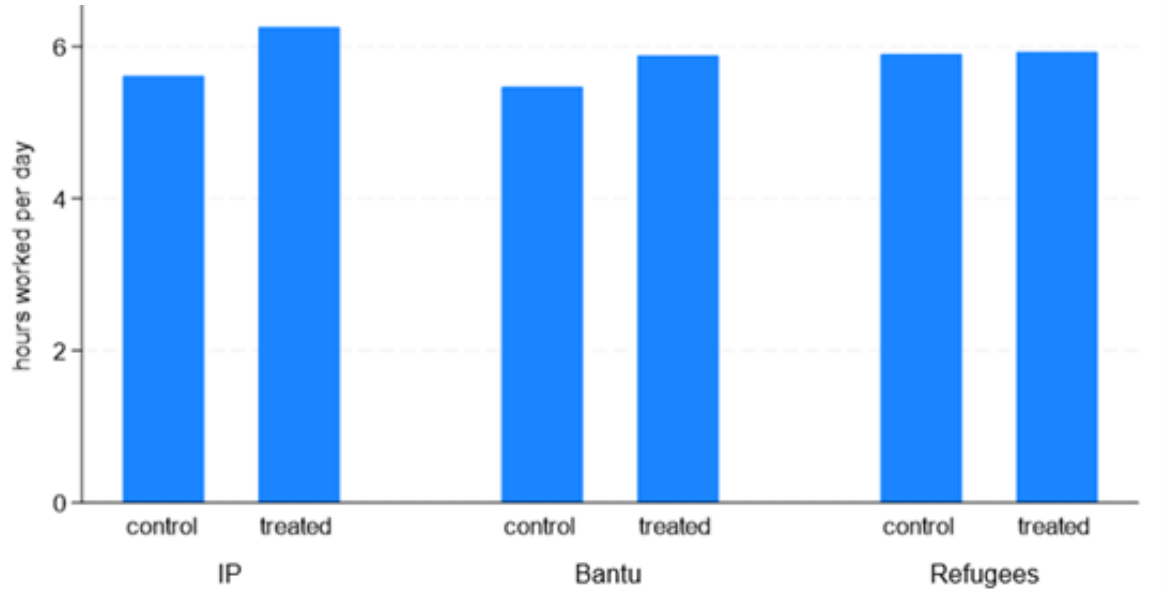


Figure 16. Revenue Earned Last Month with Main Economic Activity by Treatment and Population Group

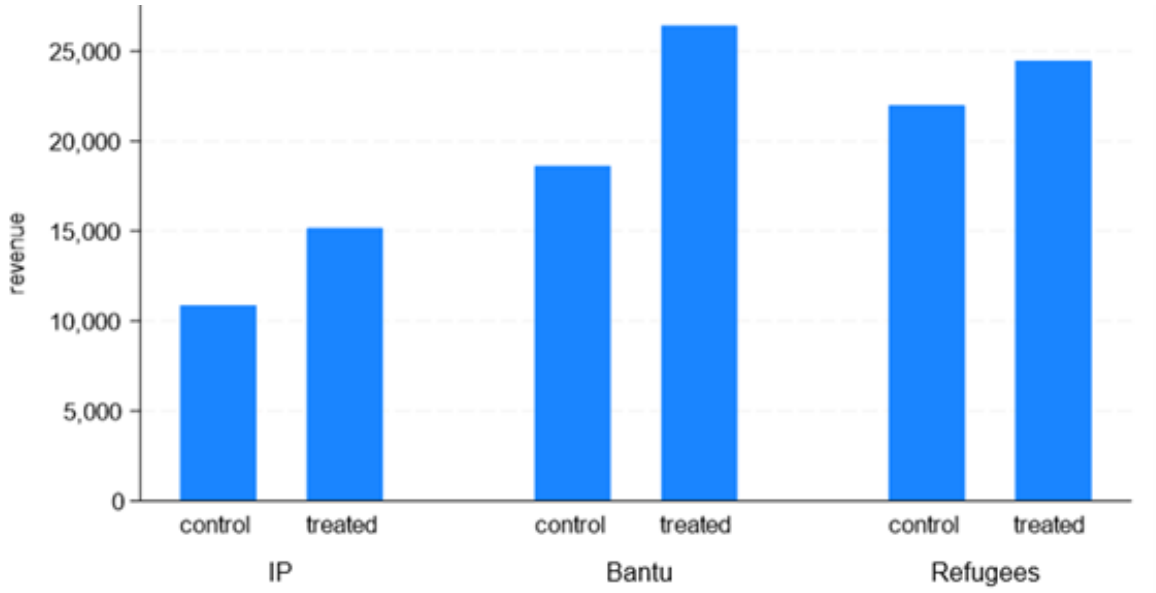
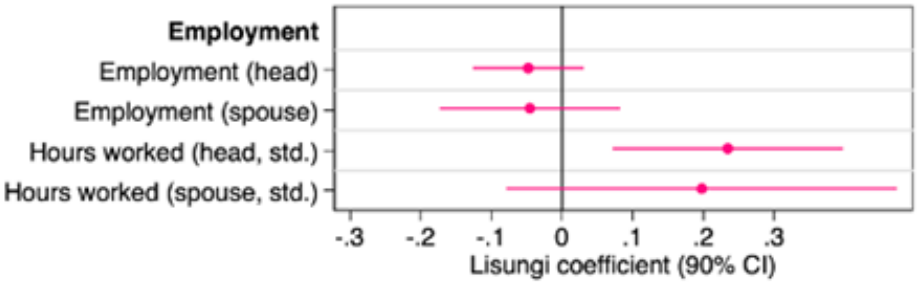


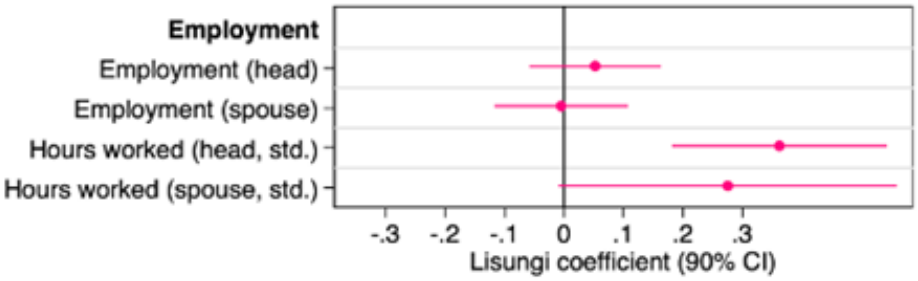
Figure 17 shows the impact of the Lisungi project on employment outcomes across population groups. Among Bantu households, there is a positive effect of the intervention on the hours worked by the household head. For IP households, the effects are similarly positive but vary across metrics, with a slight increase in employment and hours worked, especially for spouses. The increase in hours worked for these two groups could suggest that the financial support provided by the program enables household heads to commit more time to economic activities, potentially leading to improved financial stability for the family. Refugee households show a notable positive impact on employment for both heads and spouses, but no effects on the amount of worked hours.

Figure 17: Impact on Employment by Population Group

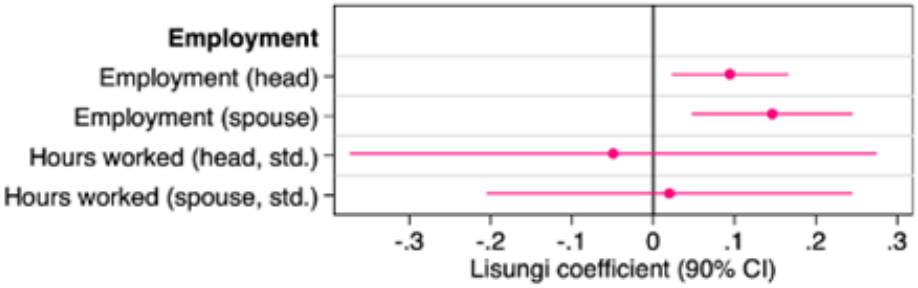
(a) Bantu



(b) IP



(c) Refugees



This suggests that the program may be particularly beneficial in facilitating employment opportunities for refugees, who often face significant barriers to labor market entry. Overall, while the Lisungi project appears to have differential effects by group, it shows the strongest positive impact on employment outcomes for refugees. These positive impacts are vital for refugees, who often face significant barriers to employment due to displacement, lack of local connections, and potential legal restrictions (Demirci & Kirdar, 2023; Ortlieb & Knappert, 2023). By facilitating employment, the Lisungi project thus not only enhances the economic self-sufficiency of refugee households but also supports their integration into the host community.

When we investigate the effect of the Lisungi project on hours worked, quantifying the difference between treated and untreated groups for the full sample and also across populations, we observe that the T-statistics between the treated and control groups decrease after matching treated households to similar control households based on their pre-program background characteristics. This indicates that these background characteristics account for part of the initial difference in hours worked between the two groups. After accounting for these factors, the causal effect of the Lisungi project on hours worked is statistically significant for Indigenous and Bantu heads of households but not for refugee heads of households (as also shown in Figure 17).

Table 10: Hours Worked by Household Heads for Treated versus Control Group

		Treated Group	Control Group	Difference	S.E.	T-stat
Entire sample	Unmatched	6.16	5.67	0.48	0.12	3.88***
	ATT	6.16	5.91	0.28	0.16	1.57
IP	Unmatched	6.48	5.64	0.83	0.19	4.33***
	ATT	6.48	5.78	0.69	0.26	2.62**
Bantu	Unmatched	5.92	5.39	0.53	0.2	2.65**
	ATT	5.92	5.37	0.55	0.25	2.23**
Refugees	Unmatched	6.22	6.04	0.18	0.25	0.74
	ATT	6.22	6.41	-0.19	0.32	-0.59

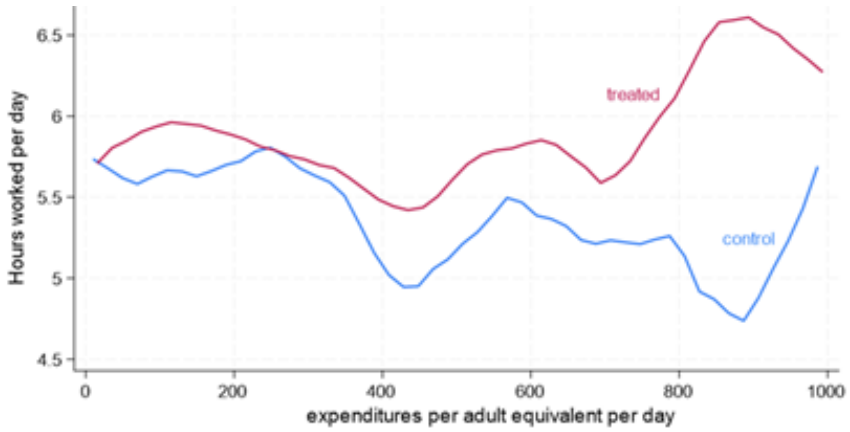
Note: Estimations done using Propensity Score Matching. Significance levels: p < 0.10 (*), p < 0.05 (**), p < 0.001 (***). This analysis is limited to household heads because we lack pre-program individual characteristics for other household members to include in the matching exercise.

From a poverty perspective, and concerning Figure 18, we observe that very poor households tend to work more hours per day than less-poor households, a trend that is particularly pronounced among Indigenous households. That is, treated households work more compared to control households with similar expenditure levels. This difference is not due to household size, although treated households tend to be smaller, which might suggest that heads need to work more, household size is already accounted for in the matching algorithm. Combined with the observations from above that agriculture is still the vastly dominant sector of economic activity and the treatment does not increase participation in construction and commercial businesses (yet) at statistically significant levels, these patterns are very consistent with the notion of the working poor in rural areas.

Moreover, our findings may suggest that treated households may be saving a portion of their earnings, as discussed in Section 5.2. Our expenditure measure does not capture investments in durable assets, and we have already observed that treated households accumulate more assets than control households. Treated households may thus be channeling some of their labor income into savings or asset accumulation.

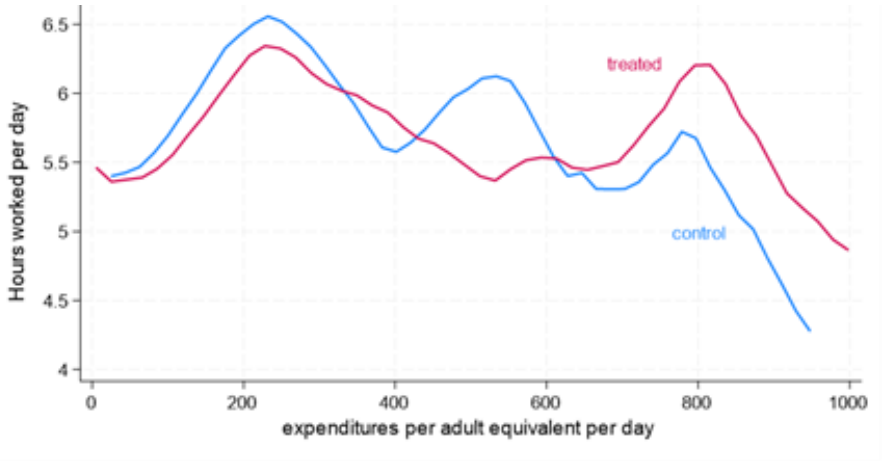
Figure 18: Hours Worked per Day and Daily Expenditures per Adult Equivalent by Treatment and Control Group

(a) Bantu



(b) IP

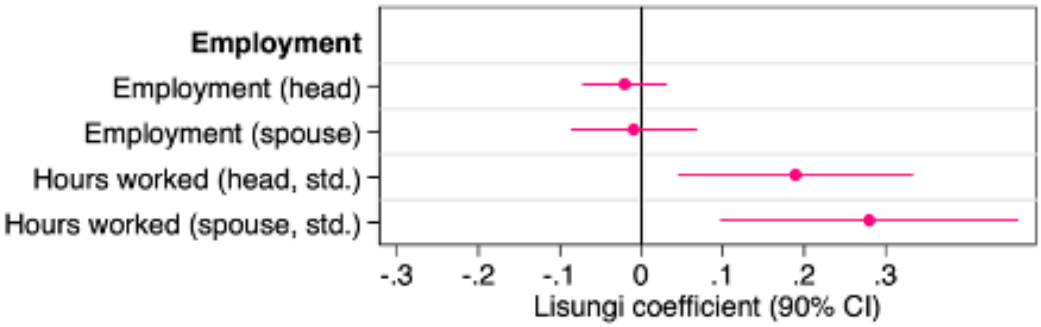
(c) Refugees



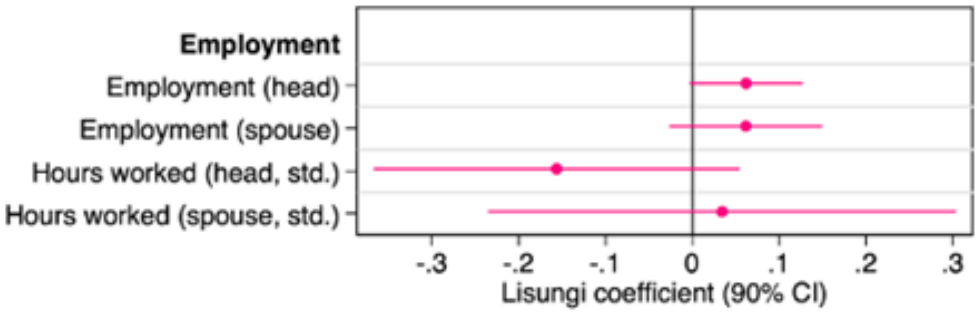
Lastly, Figure 19 shows the impact of the intervention on employment outcomes by program modality. While the point estimates for having any form of employment (versus not) under the CCT modality show slightly negative (though not statistically significant) effects for both household heads and spouses, there are positive effects on hours worked by spouses, with statistically significant increases, suggesting that cash support may encourage greater labor market participation, especially among spouses. In contrast, the IGA modality is more associated with increases in employment, but these estimates are not statistically significant. Given the nature of the IGA support, aiming to foster self-employment and business creation, such improvements are expected but may require a bit more time to be significant in a statistical sense. We conclude that cash transfers immediately increase labor intensity for the IGA support, although it may take a bit longer to produce systematic improvements in labor market outcomes, potentially due to the initial setup and investment required in developing income-generating activities. It will thus be interesting to analyze if these effects become statistically significant in the long term, which are also aligned with the ToC for IGA support, which is theorized to stimulate starting new activities (see Table A1 in Appendix I).

Figure 19: Impact on Employment by Treatment Modality

(a) Cash Transfers



(b) IGA



5.5 Health and Education

Next, we look 'inside the household' and report the impacts of the Lisungi project on individual health and education.

5.5.1 Summary Statistics

We study two sets of indicators: health and education (see Table A5.2 in Appendix V for a summary of the variables of each indicator).[20] To study health, we use information on whether the household reports that an individual has had any health issues in the last 30 days. 74% of adults and 82% of children have not had any recent health issues.

[20] Health includes three variables: (1) *Health investments*, which account for the total cost of medical consultations and medicines over the last two weeks for the household; (2) *Health (adults)*, which measures the absence of reported health issues among adults in the last 30 days (a positive value indicates better health); and (3) *Health (children)*, which measures the absence of reported health issues among children in the last 30 days. Education includes three variables: (1) *Education investments*, which cover household expenditures on school fees and other compulsory education-related expenses in the last 12 months; (2) *School attendance (adults)*, the proportion of adults currently attending school; and (3) *School attendance (children)*, the proportion of children currently attending school.

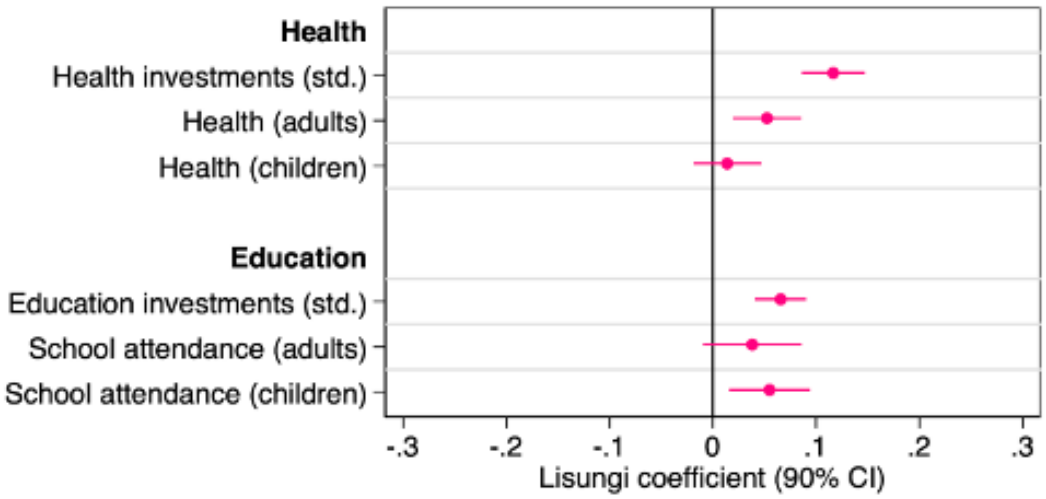
For education, we examine both current attendance and household investments in education, including school fees and other compulsory education-related expenses over the last 12 months. 88% of all children are currently attending school, and 29% of all adults (any formal school or course). 59% of household heads have some form of employment, and 51% of all spouses.

5.5.2 Lisungi Impacts on Health and Education

Overall, the Lisungi project has positive impacts on health and education (Figure 20). First, the program increases health investments by about 0.13 SD, which is associated with improved health outcomes. Through the provision of indigent cards that grant access to free health services in Likouala, adults in the program are more likely to report good health, measured by the absence of reported health issues in the last 30 days, increasing the likelihood of being healthy by 5 percentage points. This positive effect on health highlights the program's role in promoting preventive health behaviors and reducing the incidence of health problems among beneficiaries.

The Lisungi project also shows positive impacts on education, increasing investments by about 0.08 SD. We also observe an associated program impact on increased school attendance among children: children are about 6 percentage points more likely to be attending school due to the program. Thus, the program effectively contributes to improving children's educational engagement, which is crucial for long-term social and economic development.

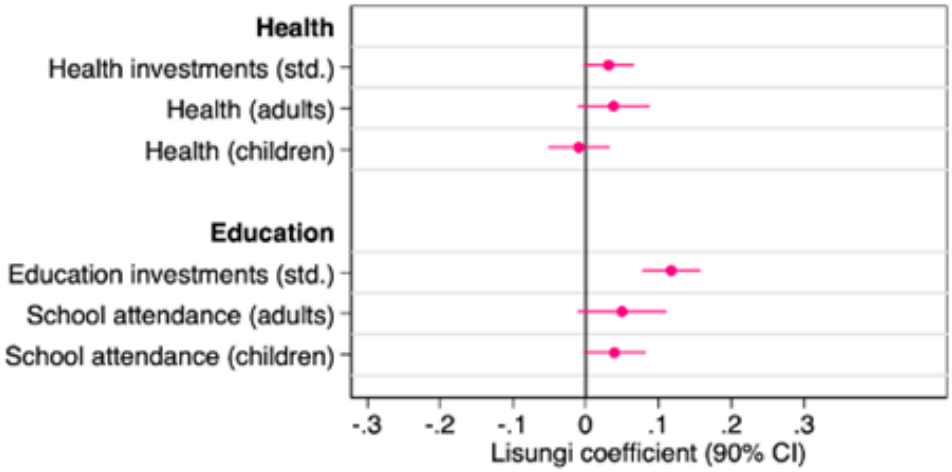
Figure 20: Impacts on Health and Education



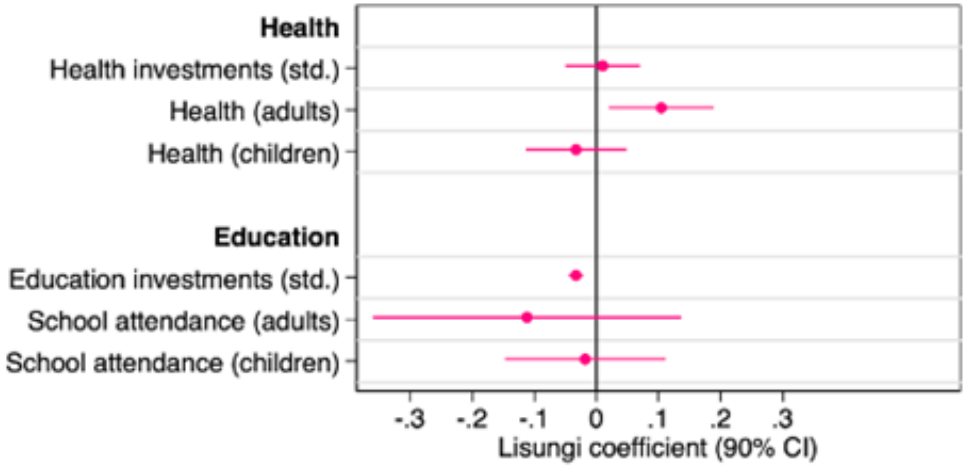
Heterogeneity. There are notable differences in the Lisungi project's effects on health and education across Bantu, IP, and refugee households (Figure 21). Among the Bantu population and refugees, Lisungi appears to increase education investments, whereas for IP, it improves the health of adults. Nevertheless, even if we cannot detect significant gains in terms of school attendance across groups yet, we expect to see those in the long run.

Figure 21: Impacts on Health and Education by Population Group

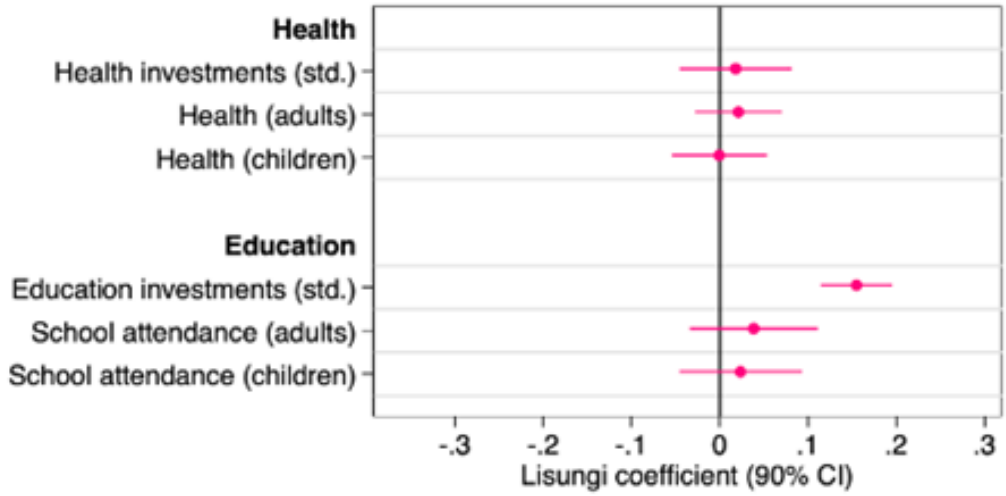
(a) Bantu



(b) IP



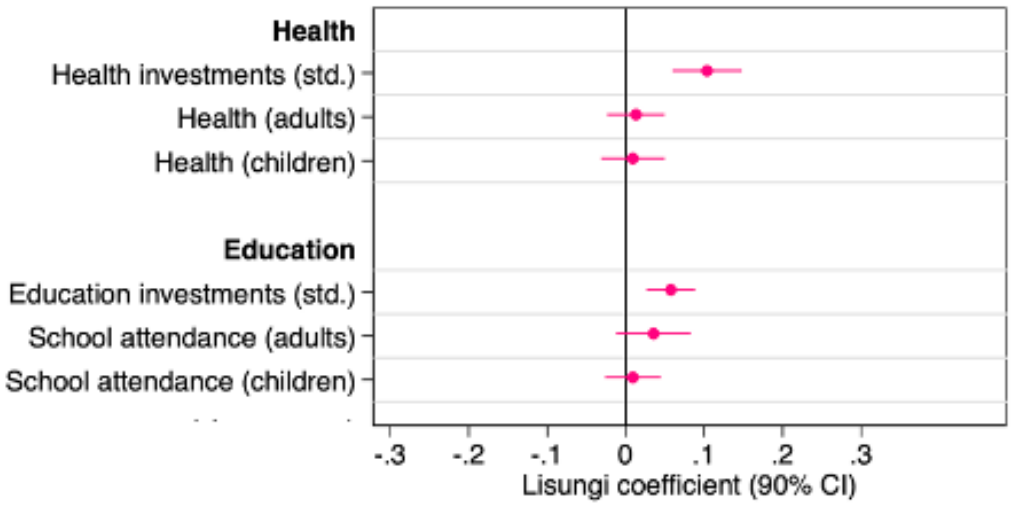
(c) Refugees



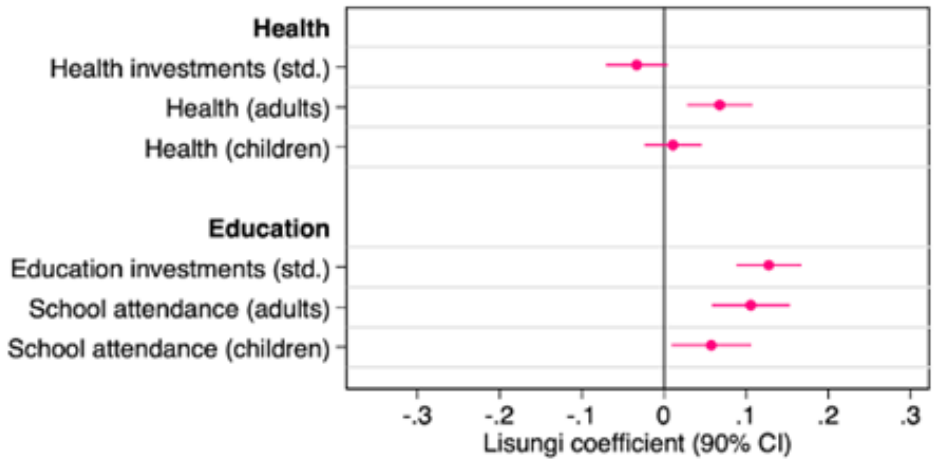
When distinguishing between treatment types, cash transfers have been particularly effective in promoting investments in human capital, increasing health investments by 0.1 standard deviations (SD) and education investments by 0.06 SD (Figure 22a). These investments are expected to lead to measurable improvements in health and education outcomes over the medium term. Additionally, cash transfers have a strong, immediate, and statistically significant impact on labor intensity, increasing weekly hours worked by 0.19 SD for household heads and by 0.28 SD for spouses – both sizable effects.

Figure 22: Impacts on Health and Education by Treatment Modality

(a) Cash Transfers



(b) Income-Generating Activities



In contrast, the short-term health and education benefits are more concentrated in the IGA group. This type of support significantly boosts educational investments and school attendance for both adults and children, while also improving health among adult household members (Figure 22b). Unlike cash transfers, IGAs not only provide financial resources but also lead to immediate improvements in human capital outcomes.

5.6 Gender Equality

To study gender equality, we look even further 'inside the household' and report the impacts on intra-household decision-making and conflict.

5.6.1 Summary Statistics

To gauge decision-making and gender equality, the survey probed 11 important domains of decision-making and asked which household members usually make relevant decisions. 88% of spouses are involved in decision-making in at least one important domain. The average couple had about 10 intense debates over the past year, but the frequency varies considerably across couples (SD = 26). Lastly, 19% of spouses report having experienced spousal violence in the past year. Table A5.2 in Appendix V provides an overview and summary statistics for all variables.[21]

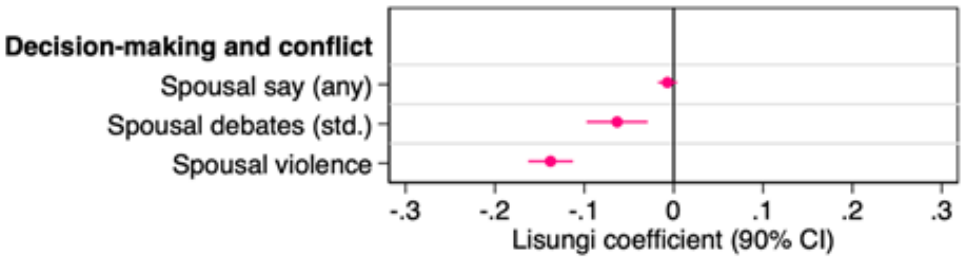
[21] We refer to 'children' as individuals aged 0-14, and to all of age 15 or over as 'adults'.

5.6.2 Lisungi Impacts on Gender Equality

While the program does not significantly change the decision-making process within households, it does reduce spousal conflict. As shown in Figure 23, the program overall reduces both intense spousal debates and spousal violence.

This reduction of conflict is a powerful, positive impact of the Lisungi project as it contributes to safer and more equitable relationships within the household. In particular, by reducing spousal violence, the program effectively supports women's empowerment, creating an environment where women can participate more fully in household and economic decisions. These short-term impacts may also create downstream impacts on decision-making later on: as the program reduces conflict and violence, it can contribute to a more cooperative atmosphere in households, which over time may lead to more equitable decision-making practices in the long term. Thus, decision-making does not change due to the program in the short term, but it might well do so in the long run.

Figure 23: Impacts on Gender Equality



Heterogeneity. There are notable differences in the Lisungi project's effects on household dynamics across Bantu, IP, and refugee households (Figure 24).

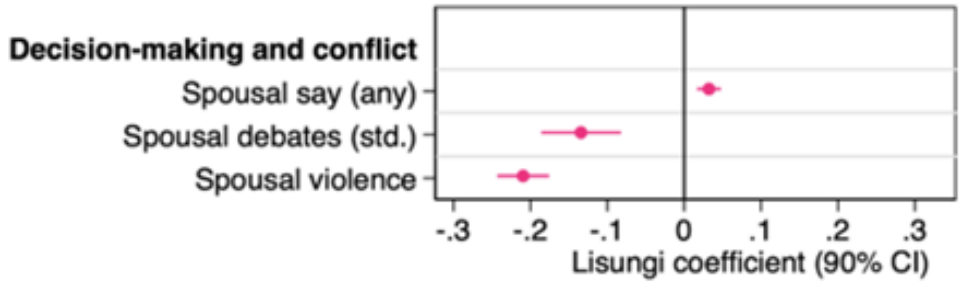
Among the Bantu, there is a particularly strong reduction in spousal debates and spousal violence (Figure 24a). In addition, there is also a modest, statistically significant increase in spousal say due to the project, i.e., whether spouses are actively involved in the decision-making of the household. This increase in spousal say indicates that the project may be gradually shifting household dynamics toward more collective decision-making.

Among IP, the Lisungi project also reduces spousal violence, and an increase in spousal say, mirroring the impact observed in Bantu households (Figure 24b). This indicates that the project's effects on creating safer domestic spaces and more collective decision-making extend beyond a single group or cultural context. At the same time, the intervention appears to increase spousal debates, although this result may not be a point of concern given the simultaneous reduction in spousal violence, as the increase in spousal debates may reflect a more open and engaged dialogue within households, potentially a sign for healthier communication dynamics where both partners feel empowered to express their opinions.

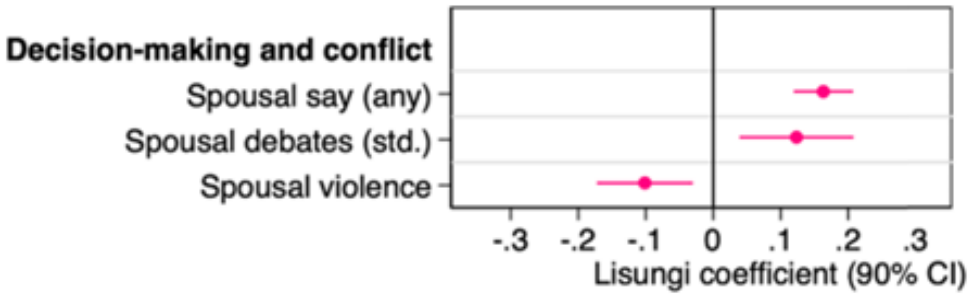
In contrast, for refugee households, the project does not seem to empower women in the short term (Figure 24c). There are no statistically significant impacts on the incidence of spousal debates and violence. Moreover, the project has a small but statistically significant negative impact on spousal say. The absence of positive immediate impacts among refugees suggests that refugees face distinct group-specific constraints and barriers that prevent these positive impacts from materializing for refugee women in the short term.

Figure 24: Impacts on Gender Equality by Population Group

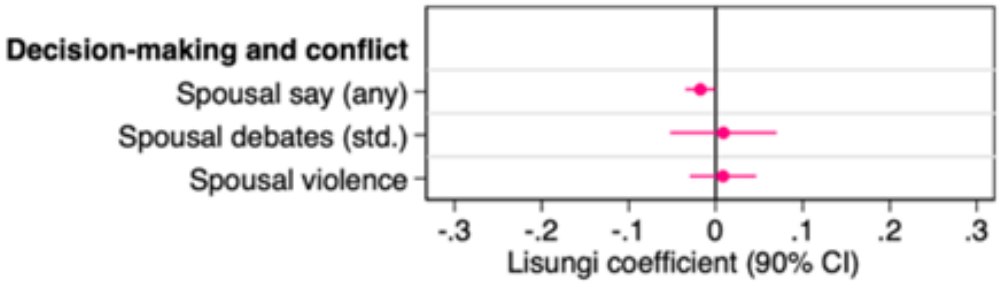
(a) Bantu



(b) IP



(c) Refugees

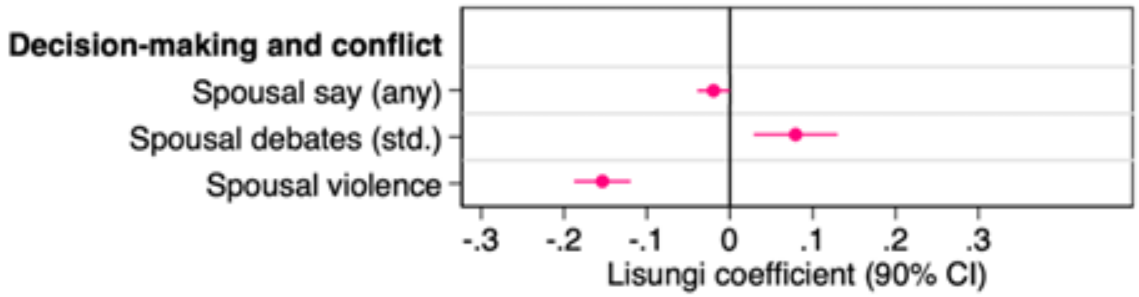


Distinguishing treatment types, there are significant benefits of cash on all study outcomes: (slightly) more collective decision-making, more spousal debates, and less spousal violence (Figure 25a).

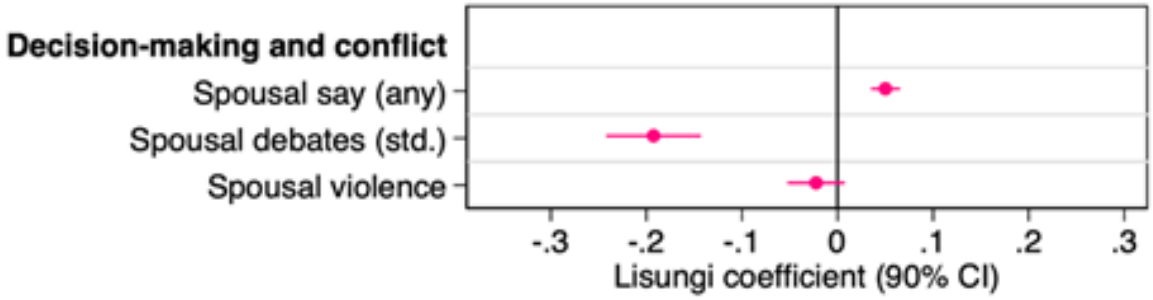
IGA support is less effective at reducing spousal violence than cash transfers (Figure 25b). However, we do observe greater spousal say and fewer spousal debates among IGA recipient households due to the project. Unlike cash transfers, IGAs require active participation and engagement from beneficiaries, which may foster a greater sense of ownership and responsibility within the household. As cash transfers increase spousal debates, given that spouses have to discuss the best way to allocate this extra source of income, IGAs do not increase that burden for households in that regard.

Figure 25: Impacts on Gender Equality by Treatment Modality

(a) Cash Transfers



(b) Income-Generating Activities



5.7 Social Cohesion

5.7.1 Summary Statistics

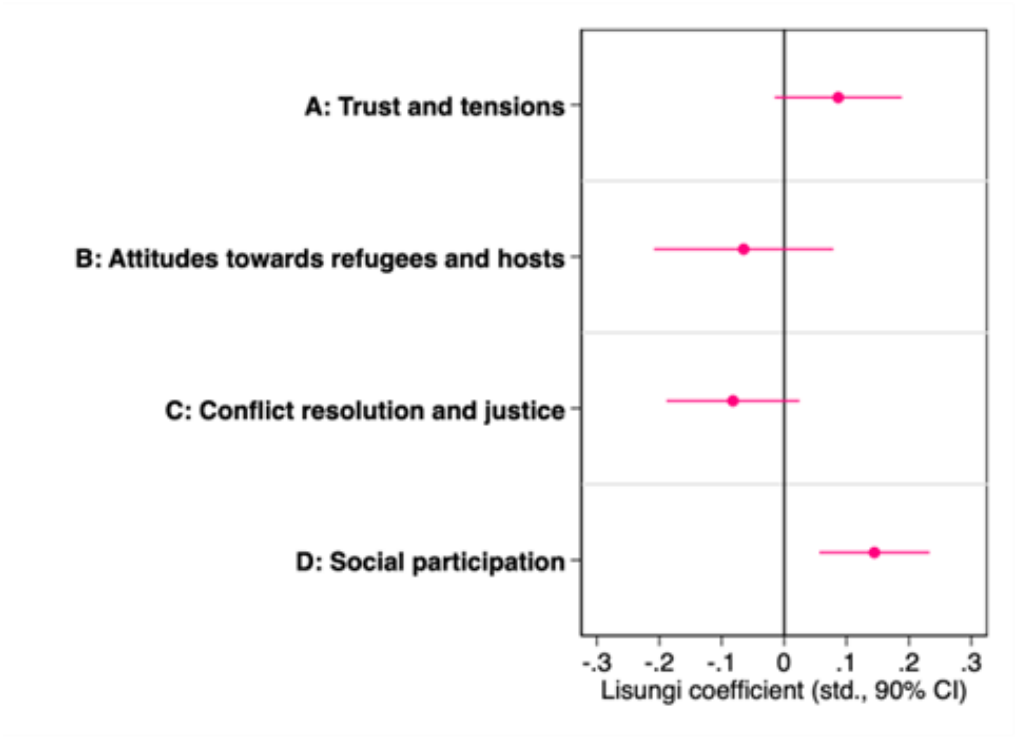
We study an extensive set of variables related to social cohesion, grouped into four dimensions. The first dimension refers to trust and tensions and includes respondents' feelings of acceptance, their interpersonal and institutional trust, and their perceptions of intergroup tensions. The second dimension refers to attitudes toward refugees and hosts and includes six questions ranging from opinions about the impact of refugees on the community and its safety to opinions about the effect of refugees' presence on food prices, and also opinions about the host community. The third dimension, conflict resolution and justice, includes six questions regarding whom respondents go to in case of conflict (e.g., political leaders, village authorities, etc.), and their perceptions of these institutions. Lastly, social participation accounts for the respondent's participation in sixteen different types of organizations, ranging from cultural or sports groups to political meetings. Table A5.3 in Appendix V provides an overview and summary statistics for the whole set of items. For each of the four categories, we calculate an index standardized to zero mean and unit standard deviation, resulting in our four outcome variables.[22]

5.7.2 Lisungi Impacts on Social Cohesion

The Lisungi project improves social cohesion, particularly through its influence on social participation (Figure 26). As described in Section 4.2, our regression analysis using PSM – to ensure that groups being compared are similar in terms of observable characteristics – indicates that the Lisungi project increases social participation by 0.15 SD, a statistically significant effect. We can interpret this result as a causal impact of the Lisungi project, due to our methodological approach comparing beneficiaries with similar non-beneficiaries. This suggests that the program effectively leads beneficiaries to engage more actively in their communities, thereby fostering stronger ties and collective engagement.

[22] The indices are calculated using the z-scores of each item, where each item is first standardized by subtracting the sample mean and dividing by the sample standard deviation. The standardized items are then averaged to create a composite index for each category. This method ensures that each index has a mean of zero and a standard deviation of one, facilitating comparison across different measures.

Figure 26: Impacts on Social Cohesion



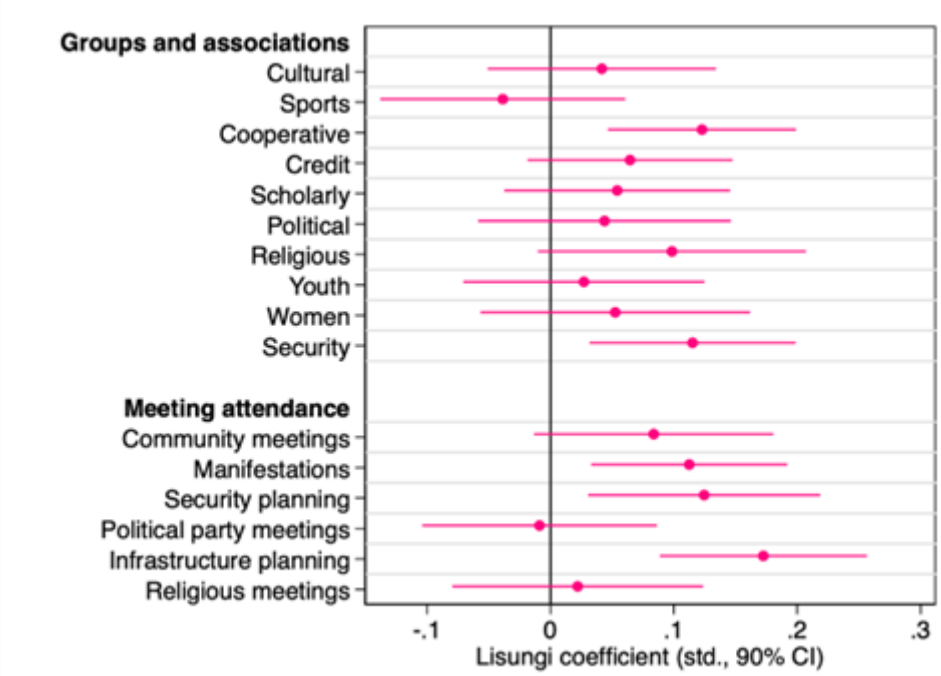
Note: The variables included in each social cohesion item are available in Table A5.3 of Appendix IV.

By contrast, the estimated impacts on the other three dimensions of social cohesion (trust and tensions, attitudes toward refugees and hosts, and conflict resolution and justice) are smaller in magnitude and not statistically significant. Thus, while the program positively influences social participation, it does not meaningfully affect other aspects of social cohesion, such as reducing (perceived) tensions or improving attitudes toward different groups.

These findings suggest that the Lisungi project's design may be more effective in promoting active community involvement rather than directly addressing deeper societal issues like trust and conflict resolution, at least in the short term. The strong effect on social participation underscores the program's potential to build community resilience by encouraging collective action and participation. However, the lack of effect in other areas suggests that additional or complementary interventions may be needed for stronger shifts in trust, intergroup attitudes, and conflict resolution. These interventions may include community dialogue sessions, conflict mediation training, or educational campaigns to reduce prejudice and promote inclusivity.

Looking at different forms of social participation separately (see Table A5.2 for descriptive statistics of the distribution of participation in different organizations), we find that the Lisungi project significantly boosts membership across various groups and associations (Figure 27). The positive impacts on social participation are observed for both female- and male-headed households (Table A5.5). Notably, there are marked increases in participation within cooperatives and security groups, along with active involvement in manifestations and planning related to security and infrastructure. Conversely, we do not observe an effect of the program on participation in cultural, sports, political, or religious groups, nor in their associated meetings. This pattern of impact may reflect the program's targeted approach, focusing primarily on economic empowerment and community safety, areas deemed most critical for immediate improvement in the lives of beneficiaries. The absence of significant effects on cultural and political participation underscores the program's specific alignment with pragmatic and immediate needs rather than a broad spectrum of social activities.

Figure 27: Impacts on Different Forms of Social Participation



As the estimated impact on trust and perceived tensions was not statistically significant but sizable, Figure A5.2 of Appendix V displays the estimated effects of the Lisungi project on the various aspects of trust and intergroup tensions separately. Across all indicators – such as feelings of acceptance, interpersonal trust, institutional trust, and perceptions of (the absence of) intergroup tensions – the coefficients are positive but not statistically significant. It is important to highlight that, in contexts where social safety net programs might provoke resentment and deepen in-group biases, particularly since this program targets both groups, a measurable positive effect on trust and tensions may not be evident. However, the absence of negative impacts on perceptions of intergroup tensions can still be considered a positive outcome.

Given the severe economic constraints faced by these communities, where nearly half of the population lives below the poverty line, it is perhaps not surprising that the program's strongest impacts are concentrated on strengthening economic well-being rather than on socio-political outcomes. The absence of equally strong effects on social and political outcomes likely reflects this appropriate prioritization of basic needs rather than a programmatic shortcoming. While future programs may consider ways to support broader social and cultural engagement, the Lisungi project's focus on fundamental economic and security concerns appears well-aligned with the communities' most urgent priorities.

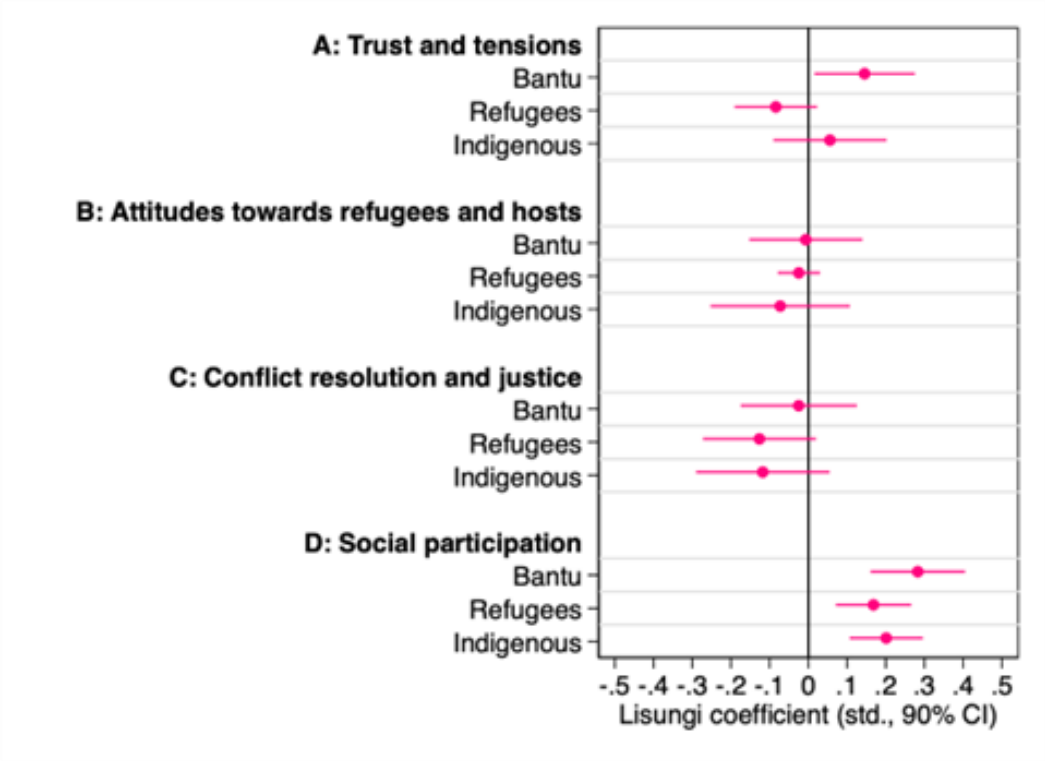
Heterogeneity. As shown in Figure 28, the Lisungi project strengthens social participation across all studied population groups: the Bantu, refugees, and IP. The results indicate that the program successfully promotes community engagement and involvement, regardless of the treated population group.

At the same time, the impacts of other areas, such as (A) trust and tensions, (B) attitudes toward refugees and hosts, and (C) conflict resolution and justice, are not statistically significant across groups, with one exception: among the Bantu population, there is a positive and significant impact on trust and the perceived absence of tensions. This effect is driven by an increase in trust in formal institutions (see Table A5.3 of Appendix V), possibly due to the program's perceived fairness.

For IPs and refugees, the absence of significant impacts on political participation and other aspects of social cohesion may be influenced by social structures and long-standing barriers. In the case of IPs, deeply rooted discrimination and exploitation dynamics continue to limit their access to political spaces, making immediate increases in political engagement highly unlikely despite any political empowerment that the Lisungi project might have brought. On the other side, refugees, due to their legal status, may be unable to participate fully or effectively in political activities beyond community engagement. Therefore, while Lisungi enhances social participation in terms of economic and community activities, it does not yet fully address deeper issues related to political participation, trust, intergroup relations, or conflict resolution among these groups.

The absence of significant impacts in the other domains for refugees and IP suggests that, while the program enhances social participation, it does not yet fully address deeper issues related to trust, intergroup relations, or conflict resolution among these groups.

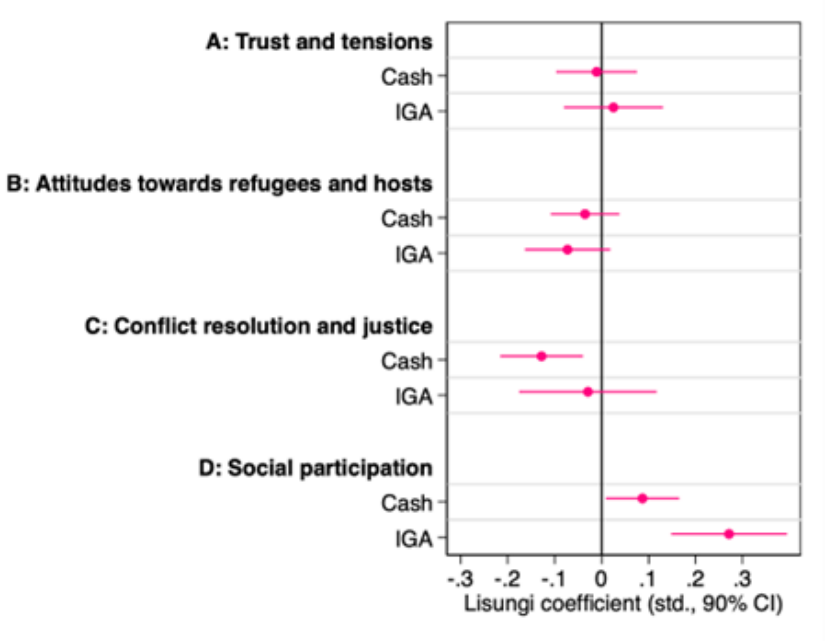
Figure 28: Impacts on Social Cohesion by Population Group



Comparing the Lisungi project's two types of treatment, our estimates show that both cash support and IGA foster social participation (Figure 29). The impact is particularly strong for the IGA treatment, which increases social participation by 0.27 SD, suggesting that beneficiaries who receive assistance aimed at generating income become particularly likely to engage more actively in community activities due to the program. This robust effect highlights the importance of economic empowerment initiatives in fostering community involvement and enhancing social networks.

While the Lisungi project's cash support treatment also improves social participation, it has slightly negative impacts on perceptions of conflict resolution and justice. The negative coefficient in this area suggests that cash support may have unintended consequences, potentially exacerbating tensions or dissatisfaction with the justice system. This could manifest in decreased trust in national or traditional justice systems, local peace committees, or perceptions of their strength and effectiveness, which are the items included in this index. These findings imply that, while financial assistance can help meet immediate needs, it might also disrupt the fragile balance within justice mechanisms, possibly by creating or intensifying power dynamics that undermine fairness and equality.

Figure 29: Impacts on Social Cohesion by Treatment Modality



CONCLUSIONS

The report documents how the Lisungi project had strong social and economic impacts in the short run, improving lives and livelihoods across population groups.

Consumption has improved for all beneficiary households compared to their respective control groups. Specifically, consumption increased between 20% and 30%, depending on the sub-population group. Notably, households did not convert all the support received from Lisungi into consumption, suggesting that they also saved and invested. We see this through a positive lens, as it may indicate that households anticipate the program's termination and, consequently, are trying to invest in and enhance areas that can provide them with long-term benefits, once the program ends.

Many treated households also saw their assets increase, compared to the control group. Poorer households, in particular, relied on this support more than richer households to build a financial cushion, likely anticipating the eventual end of Lisungi support. The end-line analysis will offer the opportunity to assess whether asset accumulation effectively explains why not all Lisungi support was consumed immediately.

Moreover, the Lisungi project fosters social cohesion. Across all three population groups, the program boosts beneficiaries' social participation. Both cash and IGA support are effective in creating these positive social impacts, with particularly strong benefits from IGA support.

The Lisungi project also supports gender equality. While, on average, the program does not change decision-making rules in the household, it reduces spousal debates and violence. This reduction of conflict is a powerful, positive impact of the Lisungi project as it contributes to safer and more equitable relationships within the household, effectively supporting women's empowerment.

To some extent, the Lisungi project also reduces health risks for adults, improves education for children, and improves employment outcomes. Both cash and IGA support foster positive change, with the short-term health and education benefits being concentrated among IGA beneficiaries. Notably, the positive impacts are particularly pronounced among the Bantu and Indigenous but very weak for refugees, which may suggest that refugees face additional constraints and barriers that prevent these positive impacts from materializing in the short term.

In summary, our results suggest that the Lisungi project reduces both economic and social stress among recipient households. Thus, it can effectively help households to break out of the cycle of poverty, making them less vulnerable and more resilient. At the same time, social relationships improve inside and outside the household, and women's lives become safer as spousal conflict decreases due to the program. Thus, the program's approach, combining cash transfers and IGA support, has proven to be a powerful tool in addressing the needs of vulnerable communities in the Republic of Congo. Importantly, while the size of certain impacts varies across population groups, the Lisungi project is effective at improving the lives and livelihoods of all groups.

These short-term impacts are highly encouraging and are expected to become even more pronounced over time. We will be able to test the long-term impacts and contrast them with the short-term impacts based on the endline survey data, which is under collection throughout the last trimester of 2024.

The findings contribute to a better, much-needed understanding of the impacts of social protection programs in fragile contexts and settings of forced displacement. Such rigorous evidence for economic well-being, human capital, livelihoods, women's empowerment, and social cohesion, across treatment modalities and population groups, is vital for better support of some of the most vulnerable populations across the world.

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APPENDICES

Appendix I Theory of Change for the Interventions of the Lisungi Project

Table A1: Theory of Change

Components	Activities	Outputs	Intermediate Outcomes	Outcomes
Cash transfers	• Setting up trimestral cash transfers for poor and very poor households (2,000 refugees, 2,000 host community households)	• Regular cash transfers provided to about 4,000 households	• Consumption smoothing • Protection of household assets • Ability to plan and invest in the future (IGA, human capital) • Ability to take risks	• Increased income of (very) poor households • Increased assets • Improved human capital of poor households (health, education)
	• Provide accompanying measures on early childhood development, financial literacy, and others in areas with weak provision of services. • Make cash transfers conditional on health visits and school attendance	• Sessions on early childhood development, financial literacy, and other topics delivered to beneficiaries in areas with weak provision of services. • Cash transfers paid out to families on the condition that children attend school and attend regular health visits and vaccinations	• Increased awareness of early childhood development and financial literacy among beneficiaries • Increased use of education and health services (paying with transfers)	

Income Generating Activities (IGA)	Support poor households in their development of IGA (4,000 refugees, 4,000 hosts)	Three installments of IGA transfer (total up to FCFA 200,000), training and mentoring provided	Income generating projects implemented by beneficiaries (start of new activities, expansion of existing activities, diversification of activities)	• Increased income of poor households from income-generating activities • Consumption smoothing through diversification of income sources

Appendix II Targeting Rationale of Lisungi Interventions

For conditional cash transfers (CCT), the eligibility of the households was established according to their belonging to at least one of the following groups:

1. Households of Congolese nationality living in extreme poverty, that have at least one pregnant woman, one child aged 0-14 years, or one elderly person (60 years or older).
2. Refugee households living in the Republic of Congo in a regular situation, recognized by UNHCR as living in extreme poverty and who have at least one pregnant woman, one child aged 0-14 years, or one elderly person (60 years or older).
3. Households of foreign nationality living in the Republic of Congo in a regular situation and living in extreme poverty, that have at least one pregnant woman, one child aged 0-14 years, or one elderly person (60 years or older).

The targeting and selection of the beneficiary households is based on the following steps:

- Step 1: Social registry (USR) registration and obtention of a social identification number/code.
- Step 2: Households request to join the Lisungi CT project.
- Step 3: Pre-list of potential beneficiary HHs established and validated by village/neighborhood chief and local community.
- Step 4: Enquete sociodemographique conducted.
- Step 5: Calculation of proxy means test.
- Step 6: Pre-list of beneficiary HHs based on a test.
- Step 7: Validation of the list by the local community (general assembly).
- Step 8: Registration in the Lisungi project.
- Step 9: If the number of households is above quota, a lottery serves to determine participant households.

For income-generating activities (IGA), 200,000 CFAF (approx. 360 USD), beneficiaries are also households of host communities of refugees, following the partition of the population in the Likouala department, which has 66% refugees.

The first transfer of 50% is provided upon receipt of a validated business plan to allow for up-front investments; the second transfer of 25% is provided midway through the implementation of the activities; and the third transfer of 25% is provided six or nine months from the first payment. Households are either current beneficiaries of the conditional cash transfers (CCT), which are favored, or other poor or very poor households enrolled in the social registry.

Households also receiving CCT need to contribute at least 10 percent of the budget of their income-generating activity. Eligible activities require a non-complex low-carbon technology (sectors covered: agriculture, livestock, artisanal fishing, handicrafts, services, and small businesses).

The eligibility varies depending if the household is from the host population or a refugee household. For host populations, households must be registered in the USR, be very poor according to PMT, and be recognized as poor or very poor by the community. For refugee households, they need to have official refugee status and a valid identification number provided by UNHCR, be on the list of households with special needs provided to the Lisungi PIU by UNHCR and have been selected by the Community Targeting Committee of the area of residence. Common eligibility requirements for both host and refugee households are to be capable of carrying out an IGA confirmed by local associations after a home visit, have a viable micro-project, and for households that are already recipients of CCT, provide a collateral of at least 10% of the amount of the IGA.

Appendix III Further Methods

AIII.1 Sample Rationale

The sample size of 400 households was determined through a power analysis performed using Stata. Our goal was to achieve 80% power with a minimal detectable effect (MDE) of 0.3, which would allow us to detect relatively small effects, assuming a standard deviation of 1/5 of the mean. The initial analysis yielded sample sizes for a randomized controlled trial (RCT), indicating that we needed 175 households in each of the eight groups to achieve this power.

However, to account for the complexities of non-random selection and matching, this sample size was increased by a factor that reflects the degree of common support between the control and treatment groups. Assuming that 50% of the households would fall outside of the common support region – a conservative estimate –, we multiplied the initial sample size by 2. This adjustment resulted in 350 households in each group.

Additionally, we considered potential attrition as data collection spans several years. Assuming a 15% attrition rate, and given that the endline data collection is scheduled for the last trimester of 2024 (i.e., more than 1.5 years after the mid-term), we further increased the sample size. By accounting for attrition, we adjusted the sample size to 400 households in each of the eight groups. This approach ensures that the study is adequately powered to detect meaningful effects, even in the face of potential data collection challenges (e.g., attrition).

AIII.2 Matching

As previously mentioned, given that the program has limited resources, it cannot offer the intervention to all potentially eligible households (based on the well-being score at baseline). To address this limitation, we leveraged this shortcoming by selecting potentially eligible households that did not receive the intervention and randomly sampling from this group as our control group. This quasi-experimental design was applied consistently across Bantu, Indigenous, and refugee households, allowing us to assess the program's impact on each of these groups separately.

By matching the control group to the treatment group based on baseline data, we aimed to create comparable groups that would allow for a more rigorous evaluation of the intervention's effectiveness across different population segments. Our estimation strategy involved the use of inverse probability weighting (IPW) using a propensity score, where treated and control households are matched based on pre-treatment observables.

We calculated the propensity to be offered access to the program based on the following pre-treatment variables: the age of the head of the household, the level of education of the head, their marital status, and the global vulnerability score. These variables were selected due to their potential influence on both the likelihood of receiving the treatment and the outcomes of interest. Each household was then weighted with the inverse of its propensity score to balance the distribution of observed covariates between treated and control groups.

To assess the quality of the matching and the overlap between treated and control groups, we examined the common support region and the reduction in standardized biases for covariates. Figure A3.1 illustrates the common support area for propensity score matching between treated and untreated groups. The propensity scores range from 0 to 1, with the treated group (in orange) having higher scores ,primarily concentrated around 0.6 to 0.8, and the untreated group (in green) having scores spread more evenly across the lower range. The overlap between the two groups indicates a common support region, which is essential for making valid comparisons and estimating treatment effects in the matched sample. The presence of a common support region is critical for the validity of the propensity score matching method, as it confirms that there are sufficient similarities between the two groups to make meaningful inferences about the treatment effects.

Figure A3.1: Propensity Score Matching: Common Support

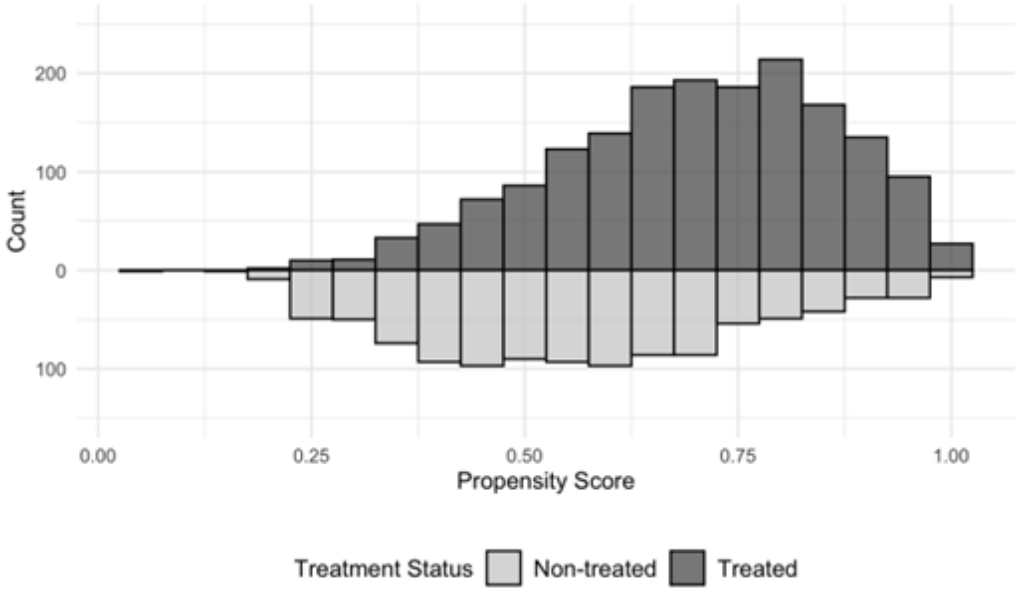
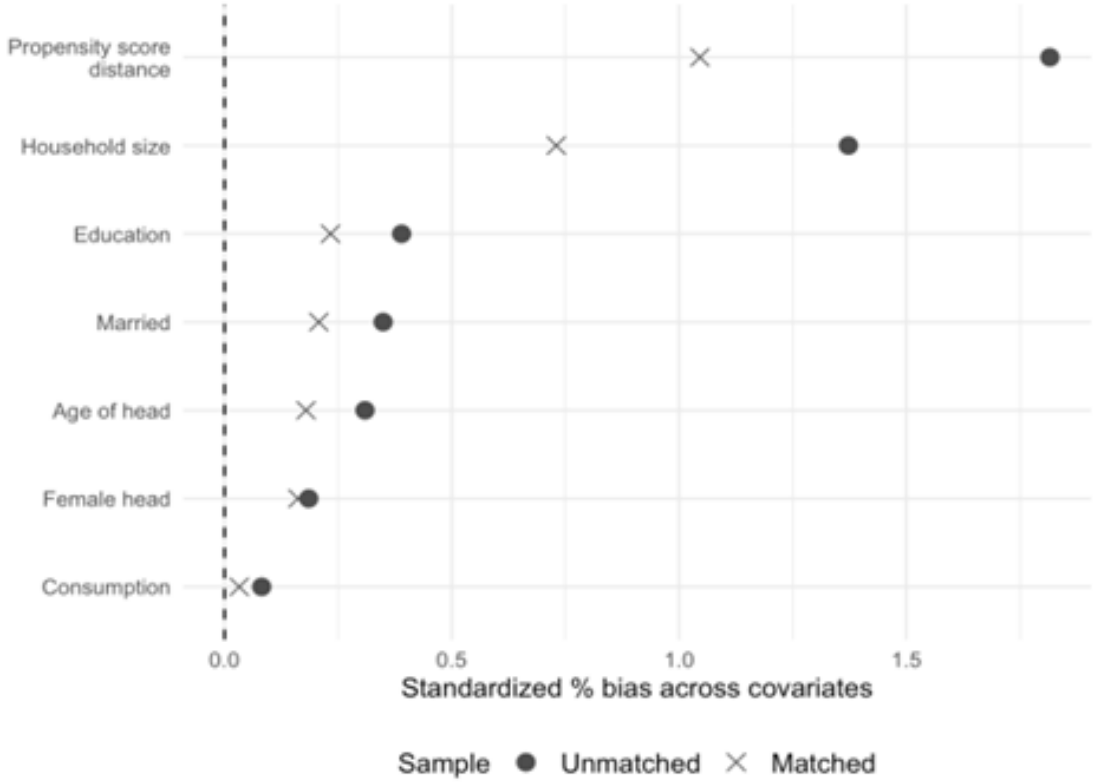


Figure A3.2 illustrates the reduction in standardized bias for several covariates after applying matching. The black dots represent the bias in the unmatched sample, while the crosses indicate the bias in the matched sample. The propensity score distance shows the differences in propensity scores between matched pairs and is not expected to be fully eliminated. While there is clear bias reduction for most covariates, such as education and age of the head, household size still retains some bias. This may be because household size is more variable and harder to predict, or there might be less overlap in its distribution between the treatment and control groups. If treatment assignment was correlated with household size, achieving perfect balance would be challenging without losing many treated or control cases. Overall, the matching procedure significantly enhanced comparability between treated and control groups, though some residual bias remains for specific covariates.

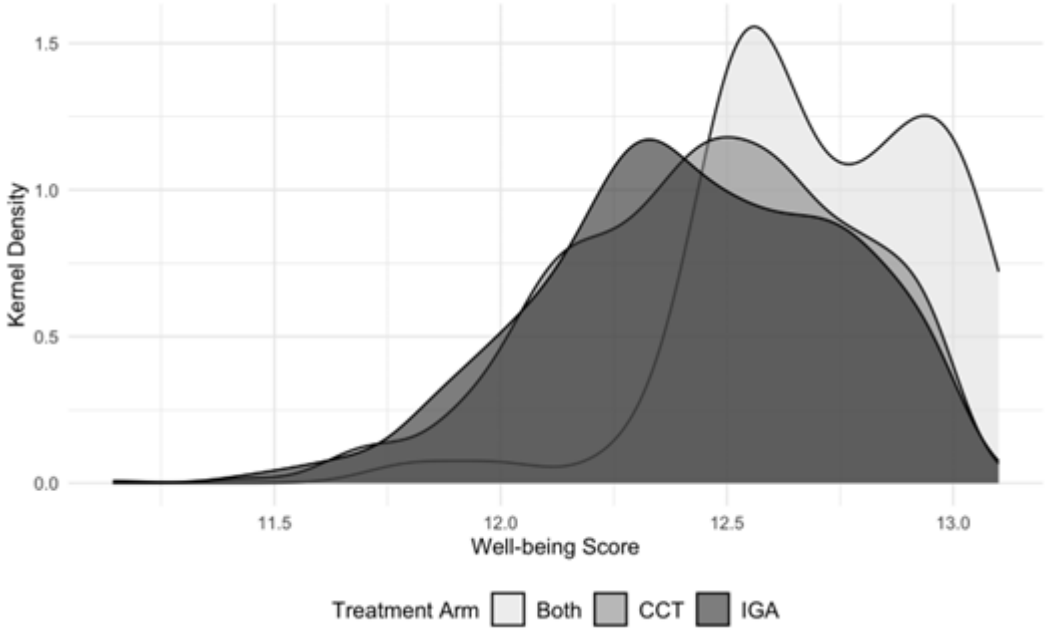
Figure A3.2: Bias Reduction



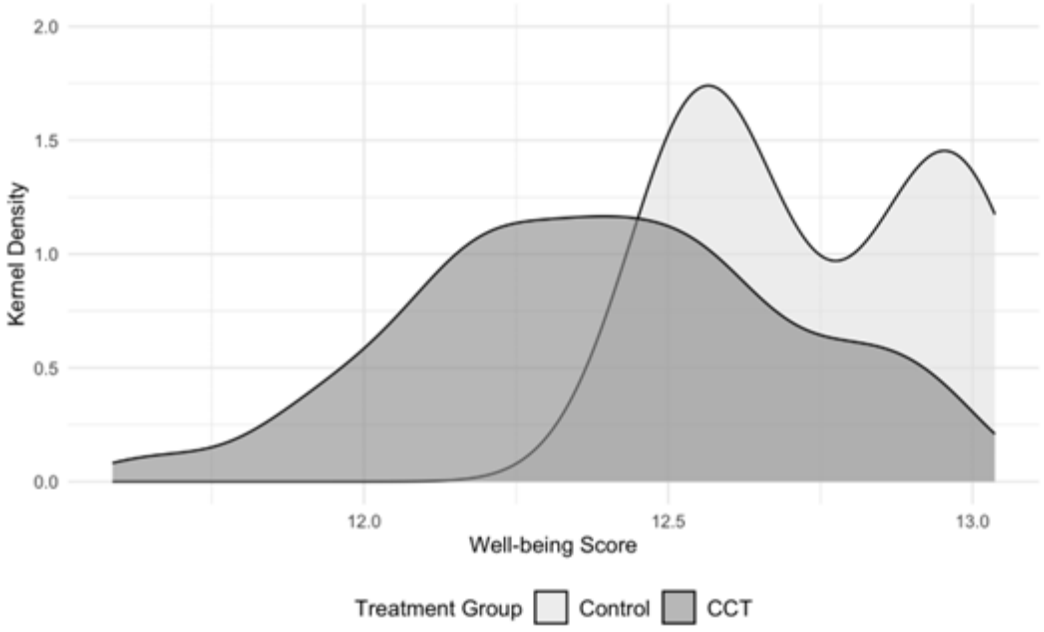
Appendix IV Additional Figures

Figure A4.1: Well-being Scores Across Population Groups

a) Treatment vs Control - Bantu



b) Treatment vs Control - IP



c) Treatment vs Control - Refugees

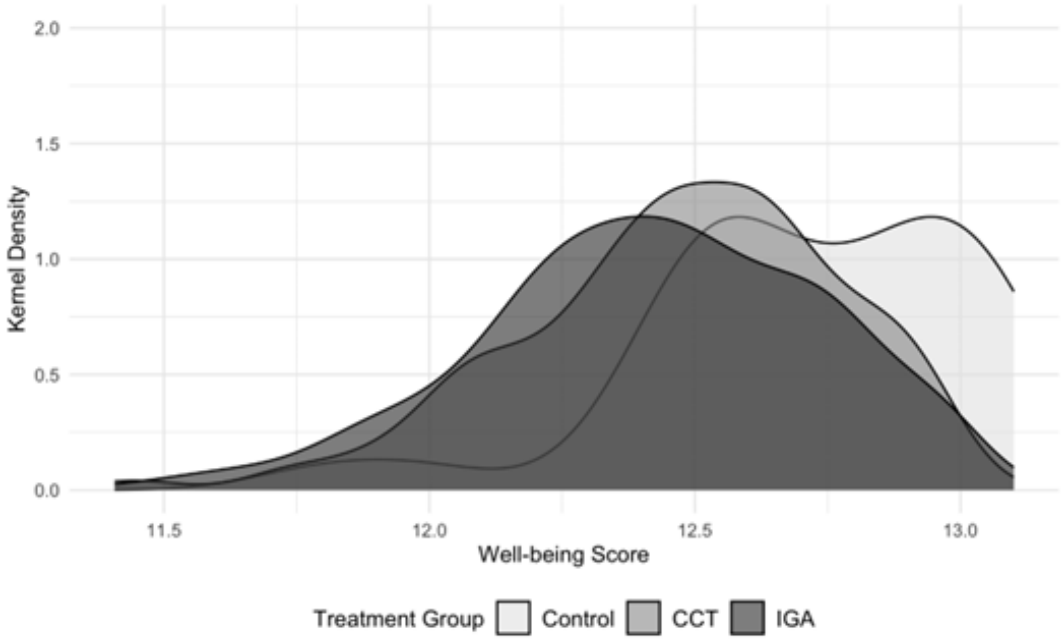


Figure A4.2: Distribution of Spousal Say in Decision-Making

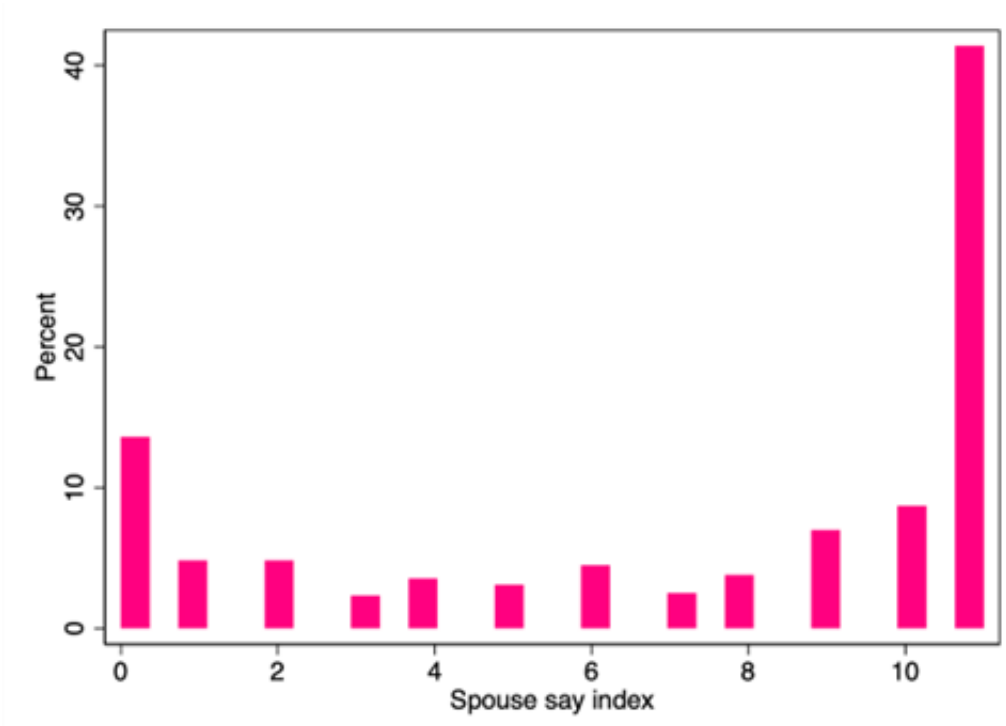
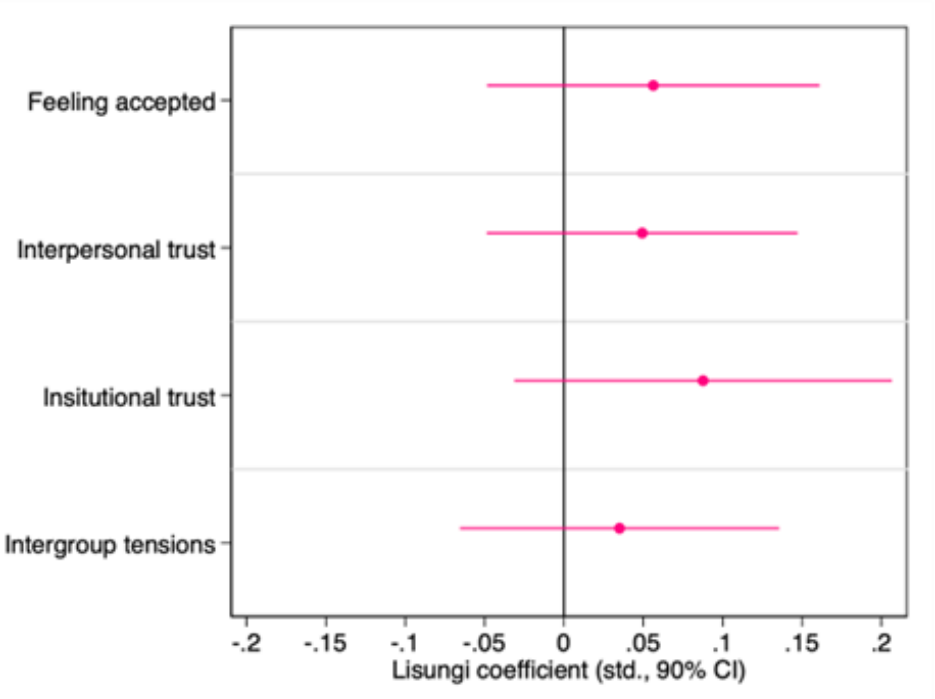


Figure A4.3: Lisungi Impacts on Spousal Say in Decision-Making

Figure A4.4: Impacts on Different Forms of Trust and Perceptions of Tensions



Note: Intergroup tensions refer to the absence of tensions.

Figure A4.5: Impact on Social Cohesion by Sex of Household Head

Appendix V Additional Tables

Table A5.1: Descriptive Sample Characteristics

Variable	N	%	SD	Mean
Lisungi Project Beneficiary	1727	62.55	0.48	-
Female Headed	1230	44.55	0.5	-
Refugee Household	883	31.98	0.47	-
Number of Household Members	-	-	2.18	4.45
Household with members 0-5	1444	52.28	1.29	1.67
Household with members 6-11	1523	55.14	1.6	1.75
Gender (Female)	6586	52.26	-	-
Age	-	-	18.88	21.9

Note: Gender and Age distribution are calculated based on the individual-level database.

Table A5.2: Human Capital, Employment, and Gender Equality Variables

	Mean	S.D.	Min.	Max.
A: Health				
Health (adults)	0.74	0.44	0	1
Health (children)	0.82	0.39	0	1
Health-related expenses (std.)	-0.00	1.00	-0.45	13
B: Education				
School attendance (adults)	0.29	0.45	0	1
School attendance (children)	0.88	0.32	0	1
Education-related expenses (std.)	0.00	1.00	-0.71	14
C: Employment				
Employment (head)	0.59	0.49	0	1
Employment (spouse)	0.51	0.50	0	1
Hours worked (head)	30.77	16.86	0	84
Hours worked (spouse)	28.88	15.14	0	84
D: Gender equality				
Spousal say (any)	0.88	0.33	0	1
Spousal debates	10.19	25.61	0	96
Spousal violence	0.19	0.39	0	1

Table A5.3: Social Cohesion Variables

	Mean	S.D.	Min.	Max.
A: Trust and tensions				
Feeling accepted	2.84	1.24	1	4
Interpersonal trust	2.85	1.09	1	4
Institutional trust	21.34	5.98	7	28
Intergroup tensions	0.81	0.40	0	1
B: Attitudes towards refugees and hosts				
Refugees: community	-0.04	0.98	-2	2
Refugees: security	0.09	0.68	-1	1
Refugees: local food prices	0.06	0.70	-1	1
Hosts: general	-0.00	1.03	-2	2
Hosts: assistance	0.83	1.15	-2	2
Equality of economic opportunities	0.20	0.40	0	1
C: Conflict resolution and justice				
National justice system	0.72	0.95	-2	2
Military tribunals	0.57	0.97	-2	2
Traditional justice	0.66	0.93	-2	2
Local peace committee	0.62	0.94	-2	2
Strength	0.78	0.41	0	1
Effectiveness	0.98	1.24	-2	2
D: Social participation				
Cultural	0.10	0.30	0	1
Sports	0.02	0.14	0	1
Cooperative	0.04	0.20	0	1
Credit	0.01	0.08	0	1
Scholarly	0.01	0.10	0	1
Political	0.02	0.13	0	1
Religious	0.44	0.50	0	1
Youth	0.05	0.23	0	1
Women	0.09	0.29	0	1
Security	0.03	0.16	0	1
Community meetings	0.13	0.33	0	1
Manifestations	0.03	0.16	0	1
Security planning	0.12	0.33	0	1
Political party meetings	0.04	0.19	0	1
Infrastructure planning	0.07	0.26	0	1
Religious meetings	0.36	0.48	0	1

Table A5.4: Descriptive Statistics Participation in Social Organizations

Organization Type	Total Participants	Percent Participation (%)	S.D.
Cultural	1201	9.53	0.29
Sports	293	2.32	0.15
Agricultural/cooperative	594	4.71	0.21
Credit/microcredit	80	0.63	0.08
Educational	181	1.44	0.12
Political	215	1.71	0.13
Religious	5738	45.53	0.50
Youth group	820	6.51	0.25
Women's association	1235	9.80	0.30
Self-defense group	431	3.42	0.18

Note: Calculations made with the individual-level dataset (N = 12,603). Percent participation is calculated based on the full sample, i.e., the percentage of individuals who declare participation in that type of organization.

Table A5.5: Distribution of Participation in Social Organizations between individuals from Female and Male headed Households

Organization Type	Female-Headed (N)	Female-Headed (%)	Male-Headed (N)	Male-Headed (%)	p-value
Cultural	425	8.40	766	10.44	0.00
Sports	36	0.71	252	3.43	0.00
Agricultural/Cooperative	182	3.60	410	5.59	0.00
Credit/Microcredit	29	0.57	51	0.69	0.47
Educational	31	0.61	145	1.98	0.00
Political	44	0.87	171	2.33	0.00
Religious	2380	47.04	3263	44.46	0.00
Youth Group	227	4.49	578	7.88	0.00
Women's Association	656	12.97	561	7.64	0.00
Self-defense Group	107	2.12	324	4.41	0.00

Note: Calculations made with the individual-level dataset (N = 12,603). Percent participation is calculated based on the full sample for the given group, i.e., the percentage of individuals who declare participation in that type of organization and who live either in female- or male-headed households. The p-value column represents the significance of the difference in participation rates between individuals in female-headed and male-headed households, calculated using a two-sample test for proportions.

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