Resilience, Vulnerability, and Social Isolation: Barriers to Poverty Reduction in War

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The majority of the world's ultra-poor live in conflict-affected environments. Poverty reduction efforts are increasingly attempting to target the most vulnerable inhabitants of these settings. Few studies have so far examined their impacts. Against the backdrop of one of the largest humanitarian crises in recent years, survey data from the Central African Republic demonstrates that a year after the conclusion of a large social safety net program, the poorest female participants did not benefit proportionately to other women and men. We draw on 257 in-depth qualitative interviews in extremely difficult-to-access conflict-affected sites across the country to explore the puzzle of why the most vulnerable inhabitants of conflict-affected settings may fail to benefit equally from poverty reduction programs. We demonstrate that conditions of social isolation—rather than poverty itself—create two specific barriers to long-term benefits. First, social isolation means that the poorest women recipients lack the social support networks that permit others to respond to conflict-related shocks without draining all their new income on emergency spending. Second, small social networks create a shortage of labor and higher start-up costs for new revenue-generating activities, thereby preventing spending on investment opportunities. These factors highlight the social barriers to poverty reduction, which are often intensified by shocks born from war, that material aid alone fails to redress.

La mayoría de las personas en situación de extrema pobreza en el mundo viven en entornos afectados por conflictos. Los esfuerzos en materia de reducción de la pobreza intentan dirigirse cada vez más a los habitantes más vulnerables dentro de estos entornos. Hasta ahora, han existido pocos estudios que han examinado los impactos de estos esfuerzos. Tomamos los datos procedentes de una encuesta que tuvo lugar en la República Centroafricana, dentro del contexto de una de las mayores crisis humanitarias de los últimos años. Estos datos demuestran que, un año después de la conclusión de un gran programa de redes de seguridad social, las mujeres participantes más pobres no se beneficiaron de este programa de una manera proporcionalmente equivalente a otras mujeres y hombres. Nos basamos en 257 entrevistas cualitativas en profundidad llevadas a cabo en sitios extremadamente difíciles de acceder y que habían sido afectados por conflictos por todo el país con el fin de explorar el misterio de por qué los habitantes más vulnerables de los entornos afectados por conflictos pueden no llegar a beneficiarse por igual de los programas de reducción de la pobreza. Demostramos que las condiciones de aislamiento social, y no tanto la pobreza por sí misma, crean dos barreras específicas para los beneficios a largo plazo. En primer lugar, el aislamiento social significa que las mujeres potencialmente receptoras más pobres carecen de las redes de apoyo social que permiten a otros responder a las crisis relacionadas con los conflictos sin necesidad de agotar todos sus nuevos ingresos en gastos de emergencia. En segundo lugar, las pequeñas redes sociales crean una escasez de mano de obra y unos mayores costes iniciales para la puesta en marcha de nuevas actividades generadoras de ingresos, lo que obstaculiza el gasto en oportunidades de inversión. Estos factores ponen de relieve las barreras sociales que existen para la reducción de la pobreza. Estas barreras se intensifican con frecuencia debido a las conmociones nacidas de la guerra y que la ayuda material por sí sola no logra reparar.

La majorité des ultra-pauvres du monde vivent dans des environnements soumis à un conflit. Les efforts de réduction de la pauvreté essaient de plus en plus de cibler les habitants les plus vulnérables de ces régions. Jusqu'ici, peu d'études se sont intéressées à leurs effets. Sur toile de fond de l'une des plus grandes crises humanitaires de ces dernières années, des données de sondage issues de République centrafricaine démontrent qu'un an après la conclusion d'un grand programme de filet de sécurité social, les participantes les plus pauvres n'en avaient pas bénéficié équitablement par rapport aux autres femmes et hommes. Nous nous fondons sur 257 entretiens approfondis dans des sites soumis au conflit et extrêmement difficiles d'accès du pays pour étudier les raisons compliquées qui expliquent pourquoi les habitants les plus vulnérables de ces régions ne bénéficient pas de manière équitable des programmes de réduction de la pauvreté. Nous démontrons que les conditions d'isolation sociale, plutôt que la pauvreté en elle-même, créent deux barrières spécifiques aux bénéfices sur le long terme. D'abord, à cause de l'isolation sociale, les bénéficiaires féminines les plus pauvres ne jouissent pas du réseau de soutien social qui permet aux autres de faire face aux crises liées au conflit, sans utiliser tous leurs nouveaux revenus dans des dépenses urgentes. Ensuite, les petits réseaux sociaux entraînent une pénurie de main-d'œuvre et des coûts de démarrage plus élevés pour les nouvelles activités génératrices de revenus, et donc limitent les investissements dans des opportunités. Ces facteurs mettent en évidence les barrières sociales auxquelles est confrontée la réduction de la pauvreté. Elles sont d'ailleurs souvent aggravées par les crises issues de la guerre, auxquelles l'aide matérielle, à elle seule, ne peut remédier.

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Introduction

Extreme poverty is increasingly concentrated in fragile and conflict-affected countries (Corral et al. 2020). Poverty reduction programming is challenging to implement in such settings, but global donors have increasingly hailed social protection programs as particularly important for communities affected by outbreaks of violence (Ovadiya et al. 2015; Brück et al. 2019; Bowen et al. 2020). Between 2016 and 2019, the government of the Central African Republic—a country that is among the poorest globally and continues to be affected by a devastating war—implemented a temporary social assistance program offering two months of public employment. The program ("Londō"), which was supported by the World Bank, targeted 35,000 people living in contexts of extreme poverty across the country.¹

Despite its short duration, the results of the program were striking. A 2019 impact evaluation used the random selection of program participants via public lotteries to estimate the effects of participating. The results show that, on average, program participants were significantly materially better off approximately a year after their engagement in the program than their counterparts who were not selected to participate. Moreover, participation improved both protective and productive outcomes (Alik-Lagrange et al. 2020). Participants were able to build stocks of assets and savings (protection against future shocks) and to make productive investments in income-generating activities. This is particularly remarkable given the size and time-limited nature of the material assistance in comparison to other aid and social support programs (Daidone et al. 2019).

Yet, while the majority of participants improved their material well-being a year after the program's conclusion, one group consistently lagged behind. The very poorest women participants remained—on average—as poor a year after the program ended as those in similar economic standing who had never participated.² Despite the fact that the poorest women in our sample more than quadrupled their daily earnings for the duration of the program,³ this positive income shock ultimately made little difference to their economic well-being about a year after the program's conclusion. This sits in stark contrast to the results of other program participants.

The discrepancy between program effects for the poorest women and other program participants presents a compelling puzzle, whose answer sheds light on some of the gendered and socially embedded barriers to poverty reduction in war. We draw on unprecendented access to four conflict-affected regions of the Central African Republic to explore *why* the poorest women, when compared to other program participants, were uniquely unable to convert this

new source of income into enduring improvements in their material well-being.⁴ We combined ethnographic observations of the employment program from the first day of work through payday, with over 250 interviews with participants and team leaders while the program was ongoing and up to a year after it had ended. Due to the immense challenges of conducting research in such settings, there is, to date, a dearth of empirical knowledge on the impacts of social assistance in conflict-affected environments. With this study, we were able to conduct an in-depth examination of the unique challenges presented by poverty reduction efforts amidst conflict, revealing the importance of gendered social dynamics in shaping aid effectiveness.

Specifically, we find that the conditions that prevented the poorest women from benefiting from short-term material assistance stem from their social isolation, which emerged as a deeply gendered phenomenon that was intensified by conflict-related shocks (Jones and Tvedten 2019). We found that extreme poverty hit women differently from men. Whereas men living in conditions of extreme poverty were typically embedded in a family unit, women were often living alone or supporting a small number of dependents. Furthermore, the poorest men tended to be differently socially embedded, having slightly wider support networks than their female counterparts to rely on in case of an emergency. This social isolation had two important consequences for women living in extreme poverty, which limited their capacity to benefit from new income. First, social isolation created labor shortfalls that made poor women uniquely constrained in their ability to invest new income in productive activities. Having no friends and family members able to work with them meant they had no real opportunity to invest new earnings into revenue-generating activities. Second, social isolation meant less access to informal insurance in the face of negative shocks, which had knock-on effects for spending and investment capacity. Unlike program participants with wider social networks, socially isolated women had no one to turn to when hit with an emergency. This disadvantage is especially acute in conflictaffected contexts, which house the majority of the world's ultra-poor; where negative shocks are frequent and ubiquitous; and where the effects of war can be felt differently by women and men. As a result of this lack of social support, socially isolated women ended up spending all of their new income on conflict-related shocks to their livelihood.

Economists and development scholars have long called attention to the gendered barriers to opportunity for the world's poorest women (Duflo 2011; Kabeer 2018). Among other factors, existing research highlights additional care burdens, women's disadvantaged social status, and more limited opportunities for productive investment (Holmes and Jones 2011; Chant 2014; Cookson 2016). Other bodies of work have demonstrated the gendered effects of conflict, wherein women may be left alone to juggle care work with revenue generation when their husbands are killed or otherwise absent due to the conflict (Sjoberg 2011; Berry and Lake 2017). While each of these features of daily life offers compelling explanations for why women struggle to convert new income into productive capacity, in this article, we highlight social isolation as an especially binding constraint and one with deeply gendered causes and consequences for the poorest women. As other work has shown, this is a constraint that is greatly exacerbated in conflict contexts

¹Londō means "stand up" in Sango. The programme deliberately sought to target the country's poorest and most vulnerable inhabitants, purposefully setting a low threshold for the daily wage, in order to deter those with existing incomes from signing up.

²While most women participants in the program were extremely poor, there is nonetheless variation in degrees of extreme poverty. The quantitative study used a wealth index measuring ownership of key household assets as an indicator of poverty level. The analysis presented in Alik-Lagrange et al. 2023 shows the impact of the program by baseline quantile of the asset index and finds that positive impacts for women were concentrated among those in the top half of the baseline wealth distribution.

³Whereas most households living in the bottom 30 percent of the income distribution subsist off approximately 200 CFA per day (the equivalent of around \$0.35 USD), daily wages from the public employment program were set at 1500 CFA (approximately \$2.50 USD). This salary represented a significant income boost, especially for the poorest participants.

⁴See London School of Economics Institutional Review Board approval 000,744, 12th July 2018.

due to the high prevalence of negative shocks. Building on existing work (e.g., McKay 2013: 122), we thus posit that structural poverty for women in war—and an inability for poor women to benefit equally from poverty reduction programs—is sustained by an absence of supportive social relationships and networks rather than from their economic deprivation alone (Kruks-Wisner 2011, 2022). As a result, short-term material assistance will continue to fail to alter the conditions that created the poorest women's poverty in the first place.

These findings have important policy implications for poverty reduction strategies in conflict-affected contexts. While there is a rich literature on aid and social assistance programs, few studies focus on regions heavily affected by war. Indeed, while existing literature highlights the importance of unexpected economic shocks in exacerbating poverty, most empirical studies on social protection are conducted in relatively more stable political environments.⁵ Given that a majority of the world's ultra-poor live in conflict-affected contexts, however, donors need to understand the dynamics particular to these environments (Corrall et al. 2020). Poverty reduction is thought to act as a vehicle for long-term stabilization, easing the vulnerabilities, grievances, and social unrest that stem from economic inequality, aiding populations in withstanding the effects of war, and mitigating the potential for cyclical conflict (Cirillo and Tebaldi 2016). Yet in order to realize these effects, it is necessary to understand the ability of such programs to impact the lives of their most vulnerable targets. Explaining the disparities between the benefits felt by the poorest women and those felt by other poverty affected populations therefore informs poverty reduction strategy elsewhere. Indeed, the Londö program's inability to generate lasting gains for this target population has implications far beyond the Central African Republic. In calling attention to the ways that conflict-related shocks combine with conditions of social isolation to prevent the poorest women from benefiting equally, it is our hope that this research can inform the design of future programs. We do not wish to suggest that short-term income assistance programs are futile; rather, our findings illuminate forms of accompanying assistance that may allow structurally poor women to benefit on a more equal footing.

The remainder of the article is divided into four sections. First, we lay out the literature on social assistance, resilience, and the gendered barriers to poverty reduction in war. We use this body of work to demonstrate that although there has been important and much-needed attention to the structural barriers to poverty reduction, there has been less attention to the ways in which social isolation renders certain populations—especially women affected by conflict particularly vulnerable. We argue that conditions of social isolation are especially detrimental in war-affected environments where economic shocks are ubiquitous. In Part III, we provide background on CAR's public employment program and discuss how we were able to conduct qualitative research in this exceptionally difficult context. In Part IV, we present evidence from four sites across the country, leveraging participant observation and 257 interviews with program participants and team leaders. Part V concludes with some broader implications for social assistance programming.

Vulnerability and Social Isolation: An Examination of the Literature

International NGOs and global donors have long been invested in reducing poverty for the world's most vulnerable inhabitants. Concurrently, researchers interested in aid, economic development, and poverty reduction programming have examined many explanations for the persistence of poverty over time, theorizing who in ultra-poor settings is most vulnerable to persistent poverty and why. Existing research has emphasized (1) initial conditions and (2) structural vulnerabilities as key features of persistent poverty traps, preventing households from improving their material well-being even in the context of positive income shocks such as employment programs or direct cash assistance. We scrutinize how these two features affect women living in extreme poverty and shape their ability to make the most of new income support, as well as their ability to respond to negative shocks. We then discuss the ways in which war and political violence interact with existing explanations to exacerbate these challenges, leading to the discrepancies we observe in CAR's Londö program.

Scholarship on initial conditions has posited that households with the fewest assets face the greatest barriers to future welfare improvements, even in the context of material assistance resulting from aid and poverty reduction programs. Studies that examine poverty traps predominantly focus on the importance of material assets. Carter and Barrett's influential 2006 analysis of poverty traps impeding international poverty reduction programs, for example, shows that the ability to buy and sell in times of need separates poor and food-insecure households who have something to sell from those who have nothing. McKay (2013: 114) builds on Carter and Barrett's insights, explaining why levels of material assets affect people's ability to take advantage of aid provided to them and respond to negative shocks:

having cash savings means that food can be purchased; having land plus sufficient labor enables cultivation; having a strong supporting network or access to government may allow access to goods even without cash. There is a lot of evidence for assets providing a buffer against idiosyncratic and covariate shocks and being an important determinant of social status.

Initial conditions thus matter a great deal, both for opportunities to invest new income and for resilience in the face of frequent negative shocks. The fact that physical assets can be sold off or transferred in exchange for other forms of (normally medical) assistance leads McKay (2013: 122) to an important distinction between the stochastically poor and the structurally poor, wherein the structurally poor are those whose assets are so low that they are unlikely to be able to rise above the poverty line in the future. This is usually because, although groups with and without assets may be observationally equivalent in terms of their day-to-day poverty levels and food security, groups without assets have nothing to sell or invest when faced with a crisis or opportunity.

Scholarship on structural vulnerability builds on these themes, foregrounding the importance of a household's ability to contend with negative shocks as one of the primary factors contributing to keeping people in extreme poverty (e.g., Suryadarma et al. 2009; Barrientos 2013). Barrientos identifies a series of feedback effects wherein choices made in moments of crisis serve to keep people in poverty over the long term. For instance, when faced with a life-threatening illness, an individual might be required to forsake important food and nutrients or sell off assets or livestock to survive to-

 $^{^5{\}rm This}$ is not surprising, since research is unstable political environments can be costly, challenging, and dangerous for researchers and research participants.

day, with detrimental consequences for day-to-day survival tomorrow.

We extend this concept of structural poverty by highlighting how it is inextricably linked to conditions of social isolation, is often *exacerbated* by war, and is often deeply gendered.

Conflict and the Gendered Impacts of War

While there is a rich literature on social assistance programs, few studies focus on regions heavily affected by war. Yet, contexts affected by war and violence are likely to experience higher poverty levels in general; be harder hit by frequent crises; and are more vulnerable to the types of unexpected economic shocks that result from displacement, food insecurity, incidents of violence, and obstructed access to crops, markets, or medical care. Since conflict-affected settings are, by no coincidence, home to the highest proportion of the world's ultra-poor (Corrall et al. 2020) and are therefore prime targets for poverty reduction programming by international NGOs, aid agencies, global donors, and development organizations, a lack of research on poverty reduction in such settings represents a considerable gap in scholarly knowledge. Indeed, by the end of 2020, the number of ultrapoor people living in economies affected by fragility and conflict had overtaken the number of poor people in all other settings combined. Donors have thus focused on such settings as priorities for poverty reduction programming as well as emphasizing the crucial role poverty reduction can play as a vehicle for long-term stabilization. Poverty reduction can ease the vulnerabilities, grievances, and social unrest that stem from economic deprivation, aid populations in withstanding the effects of war, and mitigate the potential for cyclical conflict (Cirillo and Tebaldi 2016).

The conditions of social isolation we discuss are both more common and more consequential in war-affected environments, where negative economic shocks are frequent. It is well acknowledged that war has deeply gendered impacts, frequently leaving women responsible for additional care work on top of new revenue-generating activities when male family members are absent or killed.⁶ Moreover, while vulnerability and social isolation are common experiences for many of the world's ultra-poor, social isolation affects women differently (Kabeer 2018). Gendered norms around care and work combine to keep women in the home and limit their social networks compared to their male counterparts (Chant 2014; Finlay et al. 2018). This may be especially true for the very poorest women, who are less likely to have networks beyond the family derived from education or salaried labor and who are more likely to be left unpart-

As Jackson (1996) observes, the social status of women around the world means that poverty reduction strategies rarely benefit women equally,⁷ and conditions of social isolation are both more likely—and more consequential—for women. Women may leave their own families to join their husband's family when they marry. Such arrangements can ensure that when their husbands die, they are left alone or may be unable to return home. When male family members go missing in war with their deaths left unconfirmed, women often remain isolated from their husband's or family's social networks. And when socially isolated women receive positive income shocks, they face myriad gendered obstacles to ben-

efiting from them. In the following sections, we shed light on how social isolation combines with the persistence of economic shocks born from war (such as illness, widowhood, theft, loss of land, displacement, and death) to make poor women particularly vulnerable to sustained poverty and less able to benefit from assistance, even when participating in programs explicitly intended to aid them.

Social Isolation in Research on Aid and Poverty Reduction

Existing literature on poverty reduction already sheds some light on social dynamics. Sen and Ali (2013) point to the constitutive effects of social exclusion, which they define as "limited physical mobility, remote and ecologically vulnerable geographical location, lack of family social capital, lack of collective action, and political passivity" (Sen and Ali 2013: 185). However, Sen and Ali focus more on political persecution and less on how a lack of community embeddedness or social networks can affect specific households or individuals.⁸ In his work on asset poverty, McKay (2013: 115) calls attention to social in addition to material assets, writing that "social capital is often a key component of a response to a shock through, for example, more community-based activities or increased reliance on social support networks. However, their chronic inability to reciprocate may exclude the poor from such networks (González Lourenço-Lindell 2002; de la Rocha 2006)." However, while these studies mention the importance of social capital, it is often not measured and therefore not given much analytic attention.

Another relevant body of research examines conditions of vulnerability. This literature more squarely centers on the role of social isolation in poverty, although the focus is more on the effects of negative shocks than on the ability of vulnerable households to benefit from social programs and exit poverty. The literature has often defined vulnerability either as "uninsured risk" (Barrientos 2013: 88), which is the absence of formal or informal forms of insurance (friends, neighbors, or others who can contribute and offer support in times of crisis) to help respond to negative economic shocks, or as a "higher incidence of "idiosyncratic risks," such as illness-related shocks" (Sen and Ali 2013: 184). In addition to focusing on material assets such as land, therefore, economists, sociologists, and political scientists have already moved toward highlighting the important role that social capital plays in escaping the trappings of poverty. Whitehead (2006) documents how small household size makes the impact of health shocks in Ghana more severe, identifying a virtuous circle between household labor supply and poverty. Woolcock (2005) similarly calls attention to the importance of friends and relatives in responding to adverse events. Kruks-Wisner (2011) highlights the role that gender, caste, and social connectedness play in accessing the state and social services. Social support networks thus provide an invaluable form of informal social insurance, allowing for additional support in the form of labor, material assistance, or lending in times of crisis. This social support can, in some contexts, compensate for a lack of material assets. Those without social support or a stock of assets, on the other hand, lack resilience in the face of negative shocks. In this study, we build on the literature on initial conditions and structural vulnerability to show how social isolation affects people's ability to benefit from positive shocks, in addition

⁶For an overview of these impacts, see, e.g., Ni Aoláin et al. (2018), Davies and True (2018), and Sjoberg (2013).

⁷See also: de Mel. McKenzie, and Woodruff 2009

⁸Emblematic of their focus on political dynamics, they identify movers out of poverty as "often in areas marked by strong social movements aimed at gaining greater political voice and influence, as happened historically in southern India" (in Sen and Ali 2013: 185).

to how it increases both the likelihood and the severity of negative shocks.

Conditions of social isolation have two important consequences. First, they constrain people's ability to invest new capital into productive activities. Socially isolated women typically have increased care responsibilities and cannot rely on others to assume any burden of care while they engage in revenue-generating activities. Since the socially isolated also have a limited labor supply resulting from smaller families, they have relatively fewer existing productive activities within their households. Therefore, they are unable to invest in a diversity of existing activities and need to start new ones, which incur considerable start-up costs, thereby limiting the number of investment options they can consider.

Second, social isolation means less access to informal insurance and therefore lower resilience in the face of negative shocks. This disadvantage is especially acute in contexts like CAR, where negative shocks are both frequent and ubiquitous because of war and political unrest. In CAR, as is the case in other war-affected environments, almost all program participants faced significant negative shocks. Those who were less socially isolated could turn to neighbors, friends, or relatives for short-term loans or other forms of support. Informal social insurance enabled those with social ties to convert at least some of their program income into assets, remittances, or investments that could help to protect them in the future. Those who were socially isolated, on the other hand, lacked coping strategies. In particular, they were more severely credit constrained and were often compelled to divert whatever material resources they had accrued to respond to shocks, spending the entirety of their newfound earnings quickly after they were received. This dynamic is consistent with a classic poverty trap, where beneficiaries with wealth below a certain threshold are not able to realize the long-term gains of short-term assistance. It is not only an inability to reciprocate, therefore, as McKay (2013: 115) suggests, but a lack of access to such networks in the first place—a common experience for the war-affected widows in our study—that makes responding to unexpected shocks so challenging (Brück and Schindler 2009). It is for this reason we posit that the very factors that likely engendered women's poverty in the first instance remain present both during and after efforts to alleviate it materially. This emerges as a major impediment to any long-term impact from injections of cash or other material assets.

Our research draws upon the team's unparalleled access to four conflict-affected sites in the Central African Republic. The Londö program sought to target the ultra-poor in an extremely volatile political context in which war, violence, and poor infrastructure threaten lives and livelihoods on a daily basis. It is striking, given the short-term nature of the social assistance provided, that many Londö participants did indeed manage to convert their meager earnings into improvements in their income and material well-being a year after the program's conclusion. This is particularly noteworthy since economists and social scientists have often cast doubt on the capacity for short-term programs to result in medium- to long-term material gains. Its inability to benefit one particular target population therefore has implications far beyond the Central African Republic. We thus bring the literature on chronic poverty into conversation with a literature on the persistence and ubiquity of shocks in environments characterized by conflict and political unrest, emphasizing the ever more crucial significance of social assets—alongside their gendered dimensions—in shaping a household's vulnerability in such settings.

It is evident that purely economic interventions that do not consider the social structures that make—and keep—some people poor in the first place will remain limited in their capacity to alleviate or overcome a person's experience of poverty. As we observe in this study, the social dynamics of structural vulnerability in war can result in poverty reduction programs widening the gap between those able to benefit and those who are left behind. In calling attention to the ways in which conflict-related shocks combine with conditions of social isolation to prevent the poorest women from making lasting gains, it is our hope that this article can inform the design of additional support programs in the future.

Project Background and Research Methods

Londö

We draw from an embedded qualitative analysis of Londö, a temporary employment and public works program in the Central African Republic, undertaken between 2018 and 2019. The Londö project, a partnership between the World Bank and the Central African government was intended to be rolled across all CAR's 71 sous-préfectures between 2016 and 2019 (see Figure 1). Overseen by the Agence d'Exécution de Travaux d'Interet Public en Centrafrique (AGETIP-CAF) and housed within the Ministry of the Economy, Planning, and Development Cooperation, Londö worked with local government authorities in each sous-préfecture to rollout the project identically in each site. In each site, the Mayor and relevant public officials oversee the recruitment of 500 individuals in partnership with AGETIP-CAF. These individuals serve as employees of the state for a duration of approximately two months, and their work contributes to a clear and visible public good: clearing and repairing roads to facilitate access to important locations such as markets, schools, airports, or other nearby towns. Worksites were selected by AGETIP-CAF in consultation with the relevant authorities in each sous-préfecture. In general, the program was based in the principal city of the sous-préfecture.

Recruitment to the program occurred through a public lottery, wherein inhabitants of the area were informed of the work opportunity and of the days for registration. In order to ensure full transparency, all registrants were assigned a number on arrival, with a cap of 1,500 permitted to register. Once all participants in the lottery had registered, 250 numbers were pulled at random on each of the two lottery days in front of the audience of applicants. Numbers were read aloud as they were selected. Approximately 34 percent of those selected were women.

The first group began work almost immediately after the lottery and worked the duration of their two-month contracts. Everyone attended an introduction to the program, a day-long training on the Londö Code of Conduct, and the distribution of tools. The government also distributed a bicycle to each recipient to travel to and from the worksite as part of their participation. The bicycle was theirs to keep or sell after the program terminates. On the first day of their contract, beneficiaries were divided at random into ten groups with 25 workers in each. Each group was assigned a team leader recruited from the community and trained in advance of the lottery. The team leader distributed tasks within the team and enforced the Code of Conduct. The second group began work after the first group's contracts had terminated.

 $^{^9\}mathrm{A}$ further 50 numbers were pulled each day for the waiting list.

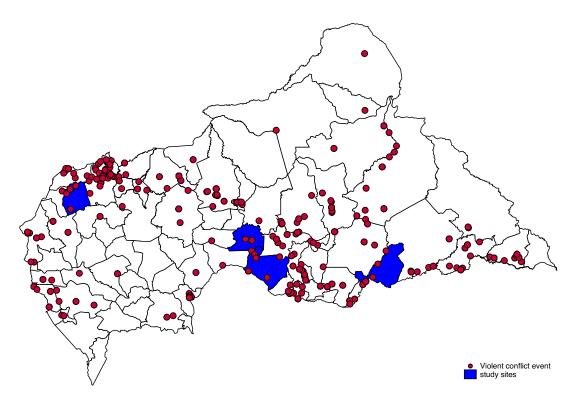


Figure 1. Map of the study sites and outbreaks of violence in 2017 and 2018 Source: IPIS data accessed in May 2019 (https://ipisresearch.be/home/conflict-mapping/).

For many participants, Londö was their first experience of regular salaried labor, wherein each employee signed a contract stipulating the terms of employment, its duration, and specified working hours. The Code of Conduct dictated that they must arrive to the worksite on time with their tools and kit. Late arrivals and absences were penalized through a points system, and more than one absence without sending a replacement to work resulted in dismissal and permanent replacement through the waiting list. Due to the physical demands of the labor program, participants were not permitted to come to work pregnant or breastfeeding, and arriving intoxicated or bearing arms was also prohibited. The Code of Conduct also stipulated that employees commited to treating other members of their work team with respect.

Research Methods

The qualitative arm of the research project involved comparative ethnographic analysis across four sites and 257 interviews. Our research began in 2018 and concluded by the end of 2019. At the time of the research, Londö had reached 54 sous-préfectures. The research team was comprised of three lead researchers, three research assistants from CAR, and three research assistants from [institution name redacted], who were predominantly involved in coding and analysis. For Stage 1 of the qualitative research, the lead researchers selected two sous-préfectures in which the program would be in progress when the team was ready to deploy. These two sites were selected from approximately 23 sous-préfectures out of a total of 54 where lotteries were close to being deployed at the time we were ready to begin our research. It is important to note that the entire country was deeply affected by the war, and the only safe way to travel to most locations was by UN plane. This also posed access restrictions, as permissions, authorizations, and coordination needed to be managed across a number of UN and government agencies.

To maximize some geographical variation, while excluding sites that were inaccessible on account of the security situation, and sites that started the program rollout before we were able to secure relevant permissions, we identified Bangassou, in the South-East, and Bocaranga, in the North-West. For Stage 2 of the research, we selected two souspréfectures out of around eight where the program had ended more than a year prior to commencing the research. These sites were Kouango in the South-Center and Grimari in the Center-West. We excluded the North from our study, predominantly due to the fact that the Central African members of the research team all hailed from Southern Christian backgrounds and would have faced challenges working in the North. We also excluded all sites that the UN classified as "red" zones at the time of the research and were therefore impossible to reach.

This qualitative research was designed to complement a quantitative impact evaluation that estimated the effects of participation in the Londö program on individual wellbeing and earnings (Alik-Lagrange et al. 2023). The impact evaluation took advantage of the random selection of program beneficiaries for the causal identification of program impacts. The research team compiled lists of all individuals who had registered for the lottery. In 12 sous-préfectures, a survey questionnaire was administered to 3,256 people who had been randomly selected by the lottery to participate and 2,854 people who had registered for the lottery and had not been selected. Due to resource and research constraints, both the qualitative and the quantitative research focused on the impacts of the program for individuals and households and did not investigate changes at the

community level, such as possible infrastructure improvements due to the public works activities, or shifts in social or political mobilization.

The qualitative research provided an opportunity to capture and amplify some of the world's poorest people's own subjective assessment of their social and economic standing (Kabeer and Datta 2020). In Stage 1 of the qualitative research, we relied on a combination of observational and interview-based data to understand gendered differences in program impact. We were primarily concerned with understanding the socio-economic context as well as the challenges beneficiaries faced in the course of their daily lives and in the context of the Londö program. In addition to gaining a general sense of the program's implementation, we also sought to understand inter-household differences in spending patterns as well as individual aspirations for how best to make use of Londö earnings.

We began the project in Bocaranga. Following a weeklong training and introduction to the project in Bangui, three members of the research team traveled to Bocaranga just after the Londö lottery. Londö staff introduced the research project to the beneficiaries. The researchers got to know each worksite well and kept daily journals documenting Londö activities and team and site dynamics. They were also present for two pay days. The goal of these observations was to gain insight into how the teams were working together, how team leaders interacted with program beneficiaries, and the particularities of Bocaranga as a site. For instance, because Bocaranga was close to the border with Cameroon, it was home to a considerable volume of trade.

In addition to general field observations, the research team conducted seventy-six in-depth interviews over a period of two months with sixty-three individual respondents. From the end of July until the end of September 2018, the research team carried out one-on-one interviews with each of the ten Bocaranga team leaders (two women and eight men). We also conducted twenty-nine in-depth interviews with twenty-three women beneficiaries. Six of the women were interviewed a second time after they had received their program payments. Additionally, we interviewed thirty-one men beneficiaries and conducted a further six follow-up interviews with men after they had received their payments. The interviews typically lasted between 35 minutes and 1 hour and covered topics ranging from income-generating activities to experiences of conflict to daily expenditures. We selected program participants for interviews by drawing a random sample from the full lists of participants in each site.

The second site in Stage 1 was Bangassou. Here, the research team conducted 121 interviews from the end of September to the end of November, 2018. During this period, the research team conducted fifty-six interviews with women beneficiaries, fifty-two interviews with men beneficiaries, eight interviews with team leaders (2 women and 6 men), and five follow-up interviews with men. These interviews took place at different moments during the work period, split evenly between interviews before and after the first pay day.

In Stage 2, we opted to conduct interviews in two additional sites approximately one year after the program's conclusion. This phase of the research took place in 2019. Drawing on hypotheses generated through observations and interviews in the first stage of the research, the goal of Stage 2 was to understand the unique constraints faced by the poorest women. We did not spend as long in either of the Stage 2 sites. Rather, we conducted targeted interviews with twenty women and twenty men in Kouango and ten women and ten men in Grimari to understand why the poorest women fared

differently. Two-thirds of the participants in Stage 2 were selected at random from lists of program participants in each site, while 33 percent of the interviews deliberately targeted both men and women among the very poorest participants. We identified the poorest participants by asking work site team leaders for introductions to the people they perceived as the poorest in their work group.

Each interview followed a similar format, asking interviewees to describe their current livelihoods and incomegenerating activities, inviting them to describe any changes in these activities over the past three years, and asking them to break down how they spent their Londö earnings. We concluded each interview with an assets index, in which we asked interviewees to list various household items that they owned and the quantity of these items. This exercise, which mirrored the assets index in the quantitative survey, allowed us to identify where participants would have been classified in the wealth distribution of lottery participants measured in Alik-Lagrange et al. (2023). The asset index data confirmed that the participants identified as the poorest program participants by team leaders were those with little material wealth. Each of our poorest households fell in the lowest 20 percent of the distribution.

All 257 interviews were transcribed and translated from Sango into French. Together with three [institution redacted]-based research assistants, we coded all interviews using the qualitative coding software Dedoose. We inductively coded all transcripts from Stage 1 using key themes that emerged from an initial read of the data. Themes were diverse, ranging from spending of Londö earnings to religion, conflict, adverse events, and to Londö code of conduct. Reading excerpted data by theme from all data sources allowed us to identify patterns emerging from the data as well as an understanding of inter-household differences in socio-economic activity.

In Stage 2, our coding was more structured. Among other descriptive codes, we coded the characteristics of the household, income-generating activities, savings, unanticipated expenses, school fees, and salary spending. We also applied a debt code, a code for aspirations that had not yet been achieved, and a code for any advice received with regard to investments or savings. Once again, we examined excerpts by topic to identify themes in the data.

Finally, in addition to coding the data in Stage 2, we created a spreadsheet to map the social support structures of the 60 respondents. For each individual, we summarized their household structure, income-generating activities, sources of support in case of emergency, and how they said that they spent the Londö earnings. This exercise enabled a holistic examination of beneficiaries' circumstances and whether/how they were affected by the Londö income.

Evidence from Four Sites

Employing an innovative qualitative research design, including embedded observational and interview-based research during program implementation and ~12 months after termination, our examination into why the poorest women were unable to convert the positive income shock from Londö into enduring improvements in their standards of living after the program's conclusion sheds crucial light on the social, political, and gendered barriers to poverty reduction in war. The strength of the qualitative data is that we were able to capture how participants made sense of their life circumstances and what spending options they considered.

Table 1. Prevalence of negative shocks

Adverse event	Proportion of households
Conflict, violence, insecurity, and attack of village	55%
by armed group	
Severe illness or accident of HH member following conflict	35%
Theft of high value good because of conflict	45%
Death of HH member because of conflict	35%
Access to market blocked because of conflict	60%

Source: Londö quantitative impact evaluation data, Alik-Lagrange et al (2023).

In the sections that follow, we first describe the frequency with which negative shocks—stemming from the conflict environment—affected women's lives and livelihoods. We then explore the experience of social isolation as it was described to us by our interviewees. Finally, we show how social isolation—as a gendered phenomenon—affected women's abilities to (1) respond to these negative shocks and (2) invest in productive activities, thereby creating enduring barriers to poverty reduction strategy for the most vulnerable inhabitants of war-affected settings.

The Ubiquity of Negative Shocks in War

Regardless of where they fall on the poverty spectrum, almost all program participants experienced adverse shocks born from or exacerbated by the conflict and devoted some proportion of their earnings to responding to these. The most common shocks with major economic consequences were illness or death in the immediate family.

The quantitative data supports this observation. Table 1 indicates the proportion of households in the quantitative sample of program participants that experienced each type of negative shock in the twelve months prior to the lotteries. The ubiquity of these shocks had crucial consequences for social assistance spending.

Out of 60 qualitative interviews conducted in Stage 2 of the research (in Kouango and Grimari after the program's conclusion), only 13 beneficiaries across the wealth distribution said that they did not use at least some of their earnings to cover medical costs or costs associated with the death of a family member. Lydie, in Grimari, spent half of her first payment on her own medical needs, and then the second payment was spent almost entirely on her daughter's medical needs, who spent two weeks in the hospital. 10 Also in Grimari, Odette spent most of the first tranche on funeral needs for her sister and then spent almost all of the second tranche on funeral needs for another sister who passed away shortly afterwards. 11 In a number of these cases, Londo earnings were almost entirely diverted to cope with urgent needs rather than being saved or invested. This caused many of the poorest respondents to comment that they had little memory of the program a year after its conclusion.

Coping with Negative Shocks

Negative health-related shocks were a common feature of daily life across all our research sites and across the poverty distribution. These kinds of shocks are ubiquitous in conflict environments and are often exacerbated by the prevalence of armed groups and a lack of access to basic health-care or social services. Yet the gendered experiences of social isolation meant that the poorest women differed significantly from other participants in their ability to contend with these shocks, with knock-on effects for their social assistance spending. The costs of conflict-related shocks hit the most isolated women the hardest, predominantly because they were unable to reach out to others for assistance when facing an emergency. For shocks that occurred around the time of the program, this caused many women to lament that they had "no memory" of Londö some months later. Amelie recalled:

I have no one. My only younger sister who comes after me, died. Then, in the year 2015, when I had the operation, she told me to stay with her to recover. But a week after I got there, I lost her. Since she was the one giving me help, I was obliged to go home, and now I have no one to help me. After I returned, I encountered the same problems that had required the operation previously, happened to me again. I lost a lot of blood until I had that operation in 2016. I had given birth to a child who was 2 years old, but in 2012 I lost him. Then, in 2013, 3 months after his death, a disease started in my stomach. By the time I gave birth, I had not had a period in 17 months...in 2016 they gave me an operation for appendicitis. The second time was like the first... I was hospitalized in January, and because of this, everything I received from working in Londö is gone.

This story, while extreme, is characteristic of stories told by many program participants. Building on observations from Bangassou and Bocaranga in Stage 1, in the second stage of our research in Kouango and Grimari, we structured our interviews specifically to capture respondents' current household structure, the contributions of all household members to domestic and income-generating work, current sources of income for the household, any changes in income-generating activities in the past three years, the division of responsibilities for paying for common household expenses, and, in particular, the sources of money for medical needs and school-related expenses. We summarized sources of emergency support from each respondent's answer to specific questions about where they had gotten support in the past, as well as hypothetical questions about who they would turn to in the event of a future medical emergency. Among the poorest interview participants, most women said that they could not borrow any money at all. Other respondents said that they could borrow a few thousand CFA from people in the community and then do day labor (earning around 250 CFA/day) to pay off the debt.

"I Have No one": The effects of Social Isolation for the Poorest Women

Whereas the poorest male participants, as well as those women who were better off on the poverty scale, tended to live with other working-age adults (spouse, younger parents, older children, or brothers and sisters), the poorest female participants often lived alone or with only very elderly relatives or young children. Occasionally they were married, but often they were widowed or abandoned by their husbands. This deeply gendered household composition, leaving women as the sole provider in the household and often with caring responsibilities in the form of one or more dependents, compounded conditions of social isolation within

 $^{^{10}\}mathrm{Lydie}.$ Grimari. May 24th, 2019. Phase 2: Interview 22. All names are pseudonyms.

¹¹Odette. Grimari. May 22nd, 2019. Phase 2: Interview 13.

the community while also inhibiting the poorest women's ability to contend with negative shocks or invest in productive activities.

Aimée, for example, lived in Kouango with her elderly mother. After her husband died, her brother supported her, but then he died, as did her son. Aimée had no one left to turn to for support. When asked what she does when someone in her family gets sick, Aimée simply responds that she has no one to help her.¹²

Another woman from Kouango, Grâce, lives with her spouse and her three children from a previous husband. However, the father of her children refuses to provide them with any support. Grâce remarried, but her new husband will not pay any costs toward the children because they are not his. Grâce faced high medical costs associated with her mother, who ended up dying. Her mother was her main supporter, but now she is dead, Grâce informs us she has no one else to turn to. When she is able to find work on other people's land, she earns 250 CFA per day, but this is infrequent, and when she does not work, she cannot eat. Grâce told us:

My mother is sick in bed, we said that we will do the operation, but the operation did not work. We even went to the other side of the river, but it did not work there either. I brought my mother back and she came to die here. The child of my mother's sister is also dead. We brought her to the hospital, but there was no money. Because we had no money, I had to give my money to the hospital for the treatment. Even schooling children, I do not know what to do anymore. I just stay like this. I do not have anyone to help me. I use my money like this until the end. 13

Jeanette, who is 18 years old and also from Kouango, lives with her great grandmother and her two young children, who are one and two years old. She is pregnant, and recently her husband died. Her mother's younger brother helps to care for her great grandmother from time to time and buy clothes for her children. She has no land, but occasionally she is able to find work on others' land, earning 250 CFA per day.¹⁴

Lucy lives in Grimari with her husband and five children, who are between the ages 2 and 11. She helps to support her mother who lives elsewhere. Lucy told us she has no one to help her in times of need. She does not borrow money from her neighbors, because they know she will not be able to repay them. Her brothers all died and she has two other siblings, but they do not help her.¹⁵

These women have the most difficulty meeting basic subsistence needs. Because they typically depend on only one, maybe two, adults generating revenue, it is fairly common for them to miss meals entirely. Most of the women in these circumstances do not have land of their own. If they are fortunate, they may sell firewood or find casual agricultural labor on others' land. This may generate between 200 and 400 CFA per day on a day when work is found. Amelie told us:

If there is coffee, we take it. If not, we extend our hearts. If we find something at lunchtime to eat, then we eat. If not, we extend our hearts. We cannot steal. If we find the cassava leaves, we eat them without the fourou. What can I do? There is nothing to do. 16

In contrast, the poorest male participants were typically situated somewhat differently in their households and communities and were more readily able to turn to others for support when in need. Table 2 documents the sources of emergency support for the ten poorest men and women in our interview sample.

It is evident even from just the ten poorest male and ten poorest female interviewees in our sample that some patterns begin to emerge. With the exception of Joseph, the poorest men each describe other community members they can rely on or turn to when in need. Moreover, almost all live in larger households with either a wife or a number of other working-age adults to support their dependents. While Lucy, Chantale, and Grâce also live with their spouses, they each forcefully emphasize that they have no one in the community they can turn to for help if they need it. Some of the married women also unhappily described a lack of support from their spouse, which generally did not appear in the interviews with men. Many of the poorest women we interviewed, like Aimée and Jeanette, care for their dependents alone. In addition to these evident differences in structures of support, there was a qualitative difference between men's and women's responses to questions about what they do when faced with an emergency. Resulting from their larger social networks within the community, men were more likely than women to describe efforts to approach acquaintances and other contacts to secure needed funds. Responses from the poorest women were more likely to feature descriptions of feelings of despair.

These women, and others in the sample, vividly described the loneliness and emotional toll that social isolation has taken on them. They repeat emphatically: "I have no one" or "I have no one to help me." This self-reflection on participants' own social circumstances is significant. Indeed, in their analysis of qualitative and quantitative studies of poverty, Jones and Tvedten (2019: 158) make the point that when asked to define the nature of their own poverty, many women refer explicitly to their societal positioning. Of their conversations with women, Jones and Tvedten write: "poverty also is perceived to reflect the strength and nature of social relationships. These relations are seen as vital to cope with vulnerability (shocks) and to facilitate social mobility ... being poor is intimately connected to one's perceived "place" in a wider society and one's scope for (upward) movement." We also find that women describe their deprivation by explaining their social isolation.

In contrast, Table 3 includes our summaries from the ten least poor households in our sample. In addition to often having very different (and much larger) household compositions when compared to the poorest households, these respondents were able to draw upon a social support network in the event of negative economic shocks. These sources of additional social support had significant repercussions for their ability to convert some of their Londö earnings into more lasting investments.

While the least poor participants often also ended up spending significant proportions of their earnings on medicine and hospital bills, their ability to lean on others for help relieved financial pressure in ways that had longerterm consequences for the effects of their Londö income.

Opportunities for Investment

In addition to having sources of support in times of crisis, less socially isolated people also had more options for revenue generation and productive investments (Whitehead 2006). The availability of additional household labor, and

 $^{^{12}\}mathrm{Aim\acute{e}e}.$ Kouango. June 12th, 2019. Phase 2: Interviewee 1.

 $^{^{13}\}mathrm{Gr\^{a}ce}.$ Kouango. June 11th, 2019. Phase 2: Interview 5.

 $^{^{14}\}mbox{Jeanette}.$ Kouango. June 10th, 2019. Phase 2: Interview 8.

 $^{^{15}\}mathrm{Lucy}.$ Grimari. May 25th, 2019. Phase 2: Interview 9.

¹⁶Amelie. Kouango. June 13th, 2019. Phase 2: Interview 43.

Table 2. Sources of household and community support (poorest households)

Gender	Name	Site	Sources of support
M	Leonard	Grimari	Lives with his wife, seven children, and a younger brother. He has borrowed money from an acquaintance in the past and worked to pay off the debt.
M	Max	Grimari	Lives with his wife, twelve children, and his mother. In case of medical emergencies, he borrows money from fellow vendors.
M	Joseph	Kouango	Lives with his wife and two children, and has no one outside the house to ask for help.
M	Timo	Grimari	Lives with his wife, his mother, his younger sisters, and four children. In cases of emergency, he would sell tools to his acquaintances.
M	Thierry	Kouango	Lives with grandfather in grandfather's house. Not married, no children. Works as cart pusher or fisherman when he needs emergency money in a time of crisis.
M	Olivier	Kouango	Lives with wife, seven children, mother, and younger brothers. Borrows from neighbors when in need and pays back little by little.
M	Gerard	Kouango	Lives with wife and seven children. No one to help him. In cases of emergency he is able to borrow money from neighbors and repays them by doing casual labor.
M	Antoine	Kouango	Lives with wife and two young children. Collects firewood with his wife in order to survive. When Londö work was ongoing, he had to go into debt to eat, but his wife was able to continue collecting firewood. In the case of emergencies he would try to negotiate to borrow money from someone in the village or on the road.
M	Milo	Kouango	Lives with wife and four children. Works at MINUSCA welding, repairing motocycles and also sells firewood. His wife sells firewood and trades in cassava bread. In cases of emergency he can borrow from an
M	Alexandre	Grimari	acquaintance, or take an advance on his repair work. Lives with wife and baby, plus three children of relatives. In the case of an emergency he takes loans from co-workers at hospital.
F	Grâce	Kouango	Lives with her husband and three children. Her mother was her main supporter, but she died. She relies on her neighbors in emergencies, but most days cannot find enough to eat.
F	Aimée	Kouango	Her husband and brother died, and her daughter left. She lives only with her elderly mother, and claims to have no one to help her when in need.
F	Fleur	Kouango	Lives with her mother, father, and ten siblings. When her brother got sick, she took on a loan, but has not yet paid it back.
F	Jeanette	Kouango	Her husband died, and she is pregnant living with her great grandmother and her two children. In emergencies, she would borrow
F	Lucy	Kouango	money and work to repay the debt. Lives with her husband and their five children. She claims to have no one to help her if she were in need.
F F	Chantale Odette	Grimari Grimari	Lives with her husband and six children. She has an aunt in Bangui. Lives with her husband, older sister, and sister's children. Had support from a sister and aunt, but both are deceased. Harvests and sells cassava for emergencies or sells household items.
F	Sara	Kouango	Lives with two younger siblings. Her husband does not offer support and he lives with another wife. Sends money to her parents who live elsewhere when she can.
F	Mirabelle	Grimari	Lives with and cares for elderly mother. Not married. No help from outside the household.
F	Annette	Kouango	Lives with many children and grandchildren. Her sons helped her build her house. Husband is deceased.

external sources of support they can rely on in times of need allow better socially networked participants to engage in a more diverse portfolio of activities in general and with their Londö earnings specifically.

For those living in extreme poverty, on the other hand, social isolation also emerged as a salient condition affecting how participants describe their strategies for generating income.¹⁷ The distinct labor and investment opportunities for

the poorest and least poor households, respectively, are also associated with the disparities we observe a year after the program's conclusion.

Table 4 lists the primary income-generating activities of the ten poorest and ten least poor households in our Phase 2 sample. The poverty rank is based on the ownership of a standard list of household and productive assets.

 $^{^{17}\}mathrm{See}$ e.g., Brück and Schindler 2009, and Milazzo and Van de Walle (2015) on the impact of widowhood on poverty traps. Given that widowhood is common

in war-affected contexts, these conditions of social isolation render widows even more vulnerable to subsequent negative shocks, and also less able to maximize benefits from short-term injections of cash.

Table 3. Sources of household and community support (least poor households)

Name	Site	Sources of support	
Carole	Kouango	Borrows from friends or neighbors.	
Phillipe	Kouango	Has savings and owns a mill; can easily access revenue from business acquaintances.	
Jean Paul	Kouango	Can borrow money easily from someone or claim an advance for future work.	
Bertha	Grimari	Gets help from her grandfather and her older brothers.	
Luc	Grimari	Has help from people in Bangui, as well as his father and brothers nearby. Also has a friend who is a pharmacist who will let him take medicine on credit and work to repay the costs.	
Jon	Grimari	Borrows money from friends/vendors.	
Crystaline	Kouango	Borrows money from friends and acquaintances.	
Freddy	Kouango	Claims he can easily go to someone he knows to borrow money if he needs it.	
Taryam	Grimari	Borrows money from savings group.	
Eveline Kouango Borrows money from family members		Borrows money from family members for their children's medical needs. Her husband repays at end of month when he is paid.	

It is evident that the poorest participants have extremely insecure sources of income, often relying on an ability to sell their labor for just a couple of hundred francs per day in order to be able to eat. As observed elsewhere on the continent, casual agricultural labor is associated with vulnerability and extreme poverty (Bezner-Kerr 2005). The poorest households also tend to rely on relatively few people to generate revenue, and they have little diversity in their activities (mostly either farming or selling firewood). They live and eat off what little they earn each day, which means any disruption in their ability to work can imply high welfare losses. As mentioned in the previous section, if they are able to borrow a small amount in case of emergency, they are often required to contribute labor to repay their debt, which means diverting their only source of income. Olivier and his wife faced this problem. Since his wife's fields have become inaccessible, they rely mostly on casual labor, and they are working to support eleven dependants: seven children, his mother, and his three younger siblings. He says that he has no memory of the Londö project because he had to use the money earned to pay past debts incurred to feed his family while working on Londö. 18

For those whose households are highly labor constrained, pursuing a new income-generating activity can result in costly losses from existing activities. Odette explained that, in her opinion, the best livelihood strategy is to cultivate and conduct off-farm work, but she cannot manage to do both. She attests that her cassava cultivation suffers when she is not available to complete the agricultural labor. 19 Labor constraints among the poorest households were felt even during the Londö program. Sandrine reported that her fields were destroyed and she was left with nothing to eat as a function of going to work at Londö. She said: "because of the Londö work, I did not cultivate because I am alone. There is no one to help me and the field got destroyed."²⁰ In the most extreme cases, participants were required to borrow to be able to eat while working on the Londö worksite since they were not paid until the end of the month and unable to perform other casual labor at the same time they were working on the program.

By contrast, the less poor participants not only have a number of household members who can contribute labor to revenue generation but also engage in a wider array of economic activities. This leaves them far less vulnerable to shocks or disruptions to one of their activities. Additionally, it enables them to think more broadly about opportunities for productive investment.

The social isolation facing the poorest women limits their opportunities to diversify their sources of revenue, even when experiencing a positive income shock. Diversification of income sources is a common strategy for mitigating risk in volatile environments and in rural sub-Saharan Africa generally (Barret et al. 2001). Although many women are burdened with housework and care work, those who are labor constrained—with few family members to contribute to household maintenance or revenue generation—face an additional challenge because they are typically only able to engage in a single economic activity. Any effort to diversify their sources of income, even with Londö earnings, would require significant transaction and start-up costs. As a result, Londö earnings may be invested into their existing activities (for example, the petty trade of food items) or on livestock (for instance, purchasing chickens), which was one of the most readily available forms of savings and small investment. However, because these households have minimal diversity in their sources of income, a shock that undermines one economic activity can devastate their future earning potential. If, for example, flocks of chickens die from disease, then a household that relied heavily on their poultry business will have a difficult time rebuilding their productive activities. In our sample, socially isolated households have fewer members, leading to fewer opportunities to diversify economic activities. Without the ability to diversify, these households often see all their economic activities affected when an income shock hits, and they tend to sell the livestock and any assets accrued thanks to the program when they encounter medical or healthcare needs. This has considerable repercussions for the productive potential of Londö earnings.

The unifying experience for the poorest women is one of sole responsibility for both care and income generation, leaving little opportunity for investment. Their explanations of their daily struggle convey physical exhaustion associated with time constraints as well as emotional exhaustion associated with the full responsibility for survival.

 $^{^{18}\}mbox{Olivier}.$ Kouango. June 8th, 2019. Phase 2: Interview 161

¹⁹Odette. Grimari. May 22nd, 2019. Phase 2: Interview 245

²⁰Sandrine. Grimari. May 22nd, 2019. Phase 2: Interview 150

Table 4. Income-generating activities for poor and less poor households

Poverty Rank	Name	Site	Gender	Income-generating activities
1 (poorest)	Aimée	Kouango	F	Casual agricultural labor (250 CFA per day when work is available) and one small farm plot.
2	Leonard	Grimari	M	Casual agricultural labor. One small farm plot. Wife sells firewood.
3	Max	Grimari	M	Sells firewood and one small farm plot. His wife works with him.
4	Joseph	Kouango	M	Fishes, and earns 500 CFA per day on a good day.
5	Grâce	Kouango	F	Sells firewood, and earns 250 CFA per day on a good day. Her husband puts straw on houses, but will not share his profits with her.
6	Timo	Kouango	M	Engages in temporary labor—mostly moving gravel.
7	Fleur	Kouango	F	Her father sells firewood, and she sells oranges.
8	Jeanette	Kouango	F	Casual agricultural labor (250 CFA per day). She also collects firewood for sale and sometimes sells fish.
9	Lucy	Grimari	F	Small farm plot shared with husband. Her husband also occasionally works for others. Takes care of young children and her elderly mother.
10	Chantale	Kouango	F	Used to cultivate the fields, and sell cassava and peanuts from the fields but the war ended these activities. Now she tries to sell firewood. Husband also sells firewood and makes soap for sale.
51	Taryam	Grimari	F	Farms, and sells coffee at market. She also bakes cakes with a group and sells them. Brother works as handyman. Younger siblings help sell goods at market. Receives transfers from relatives in Bangui.
52	Freddy	Kouango	M	Can no longer cultivate because of the war. He sells items like soap, salt, and sugar at market. Wife sells cassava at the market, and lives with five children and other acquaintances who help with revenue-generating activities.
53	Crystaline	Kouango	F	Makes and sells alcohol. She also farms and collects firewood to sell. Can no longer cultivate because of the war. Her children help with alcohol sales.
54	Luc	Grimari	M	Works as a mason and a carpenter, and he farms. Wife helps with farming and hires agricultural laborers when he can.
55	Jon	Grimari	M	Farming and hunting. He used to work in a sugar factory, but now he only farms and hunts. Wife and older children help with farming. Hires laborers when he can.
56	Bertha	Grimari	F	Sells items at market, including beans and clothes she gets from Bangui. Older brothers send transfers from Bangui. Mother helps with farming.
57	Jean-Paul	Kouango	M	Engages in rubble work, brick making, and repairs roofs. His wife sells cassava at the market. Younger siblings contribute labor to brick making.
58	Eveline	Kouango	F	She and her husband have a farm and sell produce in the village. Brother in Bangui sends her items that she can resell in the village. She also sells alcohol and her husband works as a watchman.
59	Carole	Kouango	F	Sells goods at market—salt, cubes, onion, and garlic. Husband helps to support household and she has siblings and other family members nearby.
60 (least poor)	Philippe	Kouango	M	Sells sugar and salt, and is a Taxi-Moto owner. Works as a butcher's assistant. His eldest son runs a cassava processor that he owns. Two wives also work. He used to cultivate, but because of the conflict it is not possible.

As shown in table 4, very poor men can face similar constraints, particularly when they are raising young children and have few other sources of support outside the household. However, the men in our sample differ from women in two ways: they are less frequently living in households where they are the sole able-bodied adult caring for dependents, and they often have a more diverse portfolio of activities. Unloading boats, fishing, pushing wheelbarrows, and transporting goods often give them a broader network of contacts. Socially constructed gender norms sometimes also enable men to pursue a wider range of revenue-

generating activities, particularly when they do not have children to take care of. One of the very poorest men, for example, described the opportunities he had to make money if times were tough. He lives alone with his grandfather after his mother died. Despite being extremely asset poor, if his grandfather gets sick, he is often able to find funds through his wheelbarrow-pushing work or fishing. When his grandfather last became sick, he had to find 1,500 CFA for his treatment. He told us he had two strategies available to him: either he could seek odd jobs like unloading fishing, goods, or passenger boats, or he could borrow money

from his contacts in these industries. These are options that are rarely available to women facing similar circumstances, whose revenue-generating activities and network of contacts typically tend to be more limited.²¹ In the full study sample, women were almost exclusively engaged in casual agricultural labor, agriculture, petty trade of food or household items, collecting firewood, and alcohol production. Moreover, when considering how to use their Londö earnings, women rarely considered options other than these common strategies, whereas men pursued a wider range of activities.

Concluding Discussion

Given that a large portion of the world's ultra-poor live in conflict-affected environments and that poverty reduction efforts in fragile settings are pitched as a vehicle for stabilization, it is important to investigate the dynamics of poverty unique to those contexts. We are particularly interested in the potential for anti-poverty programming to contribute to these objectives and scrutinize their impact for the most vulnerable inhabitants of such settings. This large-scale qualitative study complemented an impact evaluation that quantified the average effects of the Londö public works program in CAR. We focused on the mechanisms through which the program affected the lives of participants, and particularly those most vulnerable, as well as examining the structural constraints that produced systematic differences in program benefits for differently situated populations (Kabeer and Datta 2020).

Previous poverty research has found that the baseline level of assets affects the extent to which poor households benefit from poverty alleviation programs, but this research has tended to emphasize material rather than social assets. Separately, researchers focusing on vulnerability have noted the critical importance of uninsured risk and, in particular, the absence of informal insurance in perpetuating poverty (Barrientos 2013). Drawing these two literatures together, our findings highlight the important role of social isolation—a phenomenon that affects the poorest women far more profoundly than the poorest men and is frequently exacerbated during war due to high mortality rates and the persistence of negative shocks—in preventing the poorest Londö participants from realizing sustainable gains from the program. We further discuss the gendered dimensions of this form of structural vulnerability in war.

Social isolation manifested as living in a household with few working-age and able-bodied adults and having access to very few, if any, sources of support in the community or from outside the household. Similar to the findings of Jones and Tvedten (2019) from research in Mozambique, when asked to explain their living conditions, the poorest respondents, especially women, tended to describe their deprivation in terms of social isolation. Many talked about the loneliness and emotional toll that social isolation has taken on them. Throughout sub-Saharan Africa, women are more likely to live as widows or divorcees than men, and this is probably even more pronounced in contexts such as CAR where men are often absent because they are engaged in or have been killed by war (Djuikom and van de Walle 2018). In our data, women appear to be socially isolated or to report feeling the effects of social isolation more often than men. Kabeer and

Datta (2020) note that it is important to understand which aspects of deprivation are experienced as most harmful by people living in poverty. In the case of the Londö program, short-term assistance enabled many people to better their material well-being, but it did not alter the experience of social isolation felt by the poorest women. Having not facilitated a change in their social conditions, the poorest women in both Grimari and Kouango remarked that they "had no memory of the program" a year after its termination.

Social isolation affected participants' ability to benefit from the program in two ways. First, it undermined their ability to respond to negative shocks and forced them to divert program earnings to dealing with crises. Unpredictable needs for health or funeral expenses were described as the most common and draining shocks across all four research sites. These types of shocks can be especially difficult for women, who, in addition to shouldering some or all of the cost of treatment, usually perform caregiving labor in response to health crises. It is evident that this dimension of social isolation is particularly salient in environments heavily affected by war, violence, and social and political unrest, which are plagued by frequent negative shocks and acute lack of public services. We saw these patterns across all four sites. Second, socially isolated participants faced especially limited opportunities for investment because they are labor constrained with few family members to contribute to household maintenance or income generation. With relatively few earners, these households had less diversity of opportunities in their already existing portfolio of activities and lower bandwidth for engaging in something new. Women were particularly constrained because they considered only a limited range of income-generating activities.

It is evident—and notable—that the Londö program had a significant impact on most program participants, even when assessed a year after the program's conclusion. This is extremely important, particularly given the short-term nature of the program. Against a great many odds, a number of vulnerable households used the employment opportunity to bolster their household revenue, assets, and resilience. However, the social conditions of poverty mean that for the very poorest and most vulnerable, material support was insufficient to change the social and structural conditions that defined their enduring deprivation. In fact, the very features of day-to-day life that render them vulnerable in the first place are the same conditions that prevent them from taking full advantage of the program income. It is clear that these individuals and households need protection beyond a subsistence income to build resilience to negative shocks, including programmatic support such as subsidies for food, health, and education expenses. Program architects might also consider strategies to mitigate isolation while recognizing its deeply social determinants, which cannot easily be overcome. Current debates among policymakers center questions about how best to target social protection programs, as well as how to ensure such programs benefit the ultra-poor (Ravallion 2019). This article provides important insights that are relevant to those discussions. Social programs that intend to provide welfare-enhancing support to extremely poor populations will need to be attentive to the fundamental importance of social isolation for creating and maintaining poverty, especially among the poorest women in conflict-affected contexts. Income support alone, especially when it is temporary and/or comes with work requirements, may be insufficient. Finally, when seeking to build the capacity of the state to alleviate harms born from war and state fragility and provide support to society's most vulnerable inhabitants, practitioners should be attentive to the

²¹Thierry. Kouango. June 9th, 2019. Phase 2: Interview 11. This is reminiscent of much of the literature on poverty traps, wherein "once a household owns assets (land or education or capital) below a certain "threshold," it becomes immensely difficult to initiate a self-sustaining growth process to climb out of poverty" (Sen and Ali 2013: 185). See also Carter and Barrett (2006), and Alamgir (1978), cited in Sen and Ali.

social, political, and gendered dynamics that shape who is able to access and take advantage of new services and opportunities (Kruks-Wisner 2011; Kabeer 2018). In environments of perpetual uncertainty, those who have few social resources to depend on often require additional support, assistance, and modes of engagement to relieve experiences of recurrent marginalization and insecurity.

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Conflict of Interest

The authors, Milli Lake, Rachael S. Pierotti and Arthur Alik-Lagrange have no conflicts of interest that could inappropriately influence, or appear to influence, the research presented in this manuscript.

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