The Impact of Valor Criança - Social Cash Transfer Pilot Programme in Angola

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List of Abbreviations

APROSOC	Apoio à Protecção Social
CTP	Cash Transfer Pilot
DiD	Difference-in-Difference
DRDiD	Doubly Robust Difference-in-Difference
FGD	Focus Group Discussion
HDDS	Household Dietary Diversity Score
HDI	Human Development Index
INE	Instituto Nacional de Estatística

IPW	Inverse Probability Weighting
KII	Key Informant Interview
OLS	Ordinary Least Squares
PDS	Post-double-selection
PPP	Probability proportional to population
QuIP	Qualitative Impact Protocol
VC	Valor Criança
WHO	World Health Organization

Executive Summary

Angola recorded high levels of economic growth in the aftermath of the civil war with GDP per capita nearly doubling from US$ 3,892 (PPP) in 2000 to US$ 6,813 (PPP) in 2014 (World Bank, 2020). In spite of the post-war economic growth, Angola ranks 149th out of 182 countries in the Human Development Index (HDI) of UNDP, whilst poverty levels remain high.[1] In 2019, the incidence of poverty was 40.6 per cent at the national level. Poverty levels are particularly high in rural areas (57.2 per cent) compared to urban areas - 29.8 per cent (Instituto Nacional de Estatística, 2020). With more than fifty per cent of Angola food needs being imported, households are vulnerable to external shocks as well as other internal shocks such as crop failures and climate change (World Bank, 2020).

These shocks burden children and their caregivers. For instance, the 2016 Demographic and Health Survey established that seven out of ten women in Angola have difficulties in accessing health services, one-third of children under the age of five years are stunted, and only 31 per cent of infants between 12-23 months have completed all basic vaccinations. In addition, there is considerable gender inequality in the country. The gender inequality index (GII) for Angola was 0.537 in 2021 and was ranked 136th out of 169 countries in 2021 by the UNDP. In addition, multidimensional poverty rate is 54 per cent at national level disaggregated at 87.8 per cent and 35 per cent at rural and urban areas, respectively (Instituto Nacional de Estatística, 2020).

Social protection, including cash transfers, has the potential to reduce poverty as well as protect households from shocks and vulnerability (see Handa et al. 2018). However, the coverage of poor and vulnerable households by Angola's current social protection system, is still weak. Existing social protection programmes are largely contributory pensions and social insurance that benefit mainly those in the formal sector, which are the minority of the population (World Bank 2020). The Government of Angola and its Development Partners established Apoio à Protecção Social - APROSOC ("Strengthening and expanding social protection to the vulnerable population in Angola") in 2014 as a first step toward a national social protection system. This project, implemented by the Ministry of Social Action, Family and Promotion of Women (MASFAMU), with technical assistance from UNICEF, and financed by the European Union, had as one of its main interventions, the *Valor Criança,* a child-sensitive unconditional social cash transfer programme (SCTP) targeted at households with children zero- to five-year-olds in selected municipalities prone to food-insecurity. This was the first cash transfer programme in Angola, and it was piloted in six municipalities in the provinces of Bié, Moxico, and Uíge. While the pilot phase has now ended, the cash plus programmeprovided, beyond cash transfers, links to other services such as support to birth registration, early childhood development, nutrition counselling, income generation activities, adolescent empowerment, and Community Led Total Sanitation (CLTS).. The intervention provided a monthly cash transfer of AOA 3,000

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1   United Nations Development Plan (2022), Human Development Report 2021/2022. New York.

– increased to AOA 5,000 in response to COVID-19 – per child under the age of five years. The transfer amount was directly paid to the caregiver (predominantly women) of the child, capped at a maximum of three eligible children per household[2].

Evidence on the effectiveness of social assistance programmes in Angola is limited. This study addresses this evidence gap by determining the impacts of the *Valor Criança* programme on various domains of child and household well-being. The study also investigates the impacts on gender equality outcomes using the conceptual framework developed as part of the Gender-Responsive Age-Sensitive Social Protection (GRASSP) research programme (2018-2023) led by UNICEF Innocenti and funded by the UK's Foreign, Commonwealth and Development Office (FCDO).

The study aimed to answer the following research questions: 1) What are the impacts of the SCTP on caregivers and children? 2) What are the broader impacts of the SCTP on households? 3) How do design and implementation features of the SCTP influence programme objectives and outcomes? and 4) How do household and caregiver characteristics shape the impact of the cash transfer programme? To answer the first and second research questions, the study investigates whether the programme improved various outcome domains including gender equality. Examples of indicators include – but are not limited to – women's empowerment and decision making, food security and children feeding practices, households' assets, and economic activities among many others. To answer the third research question, the study assesses how design and implementation features such as beneficiary registration, payment modality, adequacy and regularity and grievance and communication mechanisms influenced the programme objectives and outcomes. To answer the fourth research question, the study analysed how household size and key characteristics of the caregiver such as age and education affected the programme impacts.

Methodology

This study uses a mixed-method approach to examine the impact of the cash transfer programme on children, caregiver, and households. Baseline survey data were collected in October - November 2019 on 2,990 households (1,442 in treatment group and 1,548 in the comparison group) in the provinces of Bié, Moxico, and Uíge. Endline data were collected in July 2022 on 2,586 households (1,326 in treatment group and 1,260 in comparison group) that were successfully traced and re-interviewed. Qualitative data were also collected to deepen insights on the impacts and programme implementation process. This was achieved through key informant interviews (21 KIIs), in-depth interviews (35 IDIs) and focus group discussions (16 FGDs). Data collection activities were carried out by UNICEF Innocenti and UNICEF Angola in collaboration with the National Statistics Institute (INE) and Mundi Consulting.

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2   Caregivers were defined as the household member that performs daily caregiving activities for the child or children. The programme therefore did not impose who the caregiver should be within the household, as it adopted a gender-neutral approach. Hence, household members self-identified who performs most the daily caregiving activities for the child. In the study sample, females from 85 per cent of the household identified as the primary caregiver.

The quantitative analysis combines two correlational/prediction models and three difference-in-difference estimation models to ensure consistency and robustness of the results before drawing conclusions on the programme impacts. The qualitative analysis uses causal analysis for the Qualitative Impact Protocol (QuIP) component, and a thematic analysis for the process evaluation component. QuIP causal analysis involves analysing narrative data by identifying and coding causal statements in the Causal Mapping software in order to establish change attribution. The study faced several data limitations. First, about 70 per cent of intent-to-treat households received programme benefits before baseline data was collected. Steps were thus taken to reconstruct baseline data with built-in recall data on the household's situation prior to receiving the cash benefits, however, recall data tends to have confirmation and social desirability bas, which result in the underestimation of beneficiary outcome levels at baseline. Second, different sampling strategies were employed for the beneficiary and comparison households at baseline. Probability proportional to the size was used for the beneficiary sample (using beneficiary list), whilst the comparison group was sampled through random walks in the comparison areas. Third, the quality of some of the transcriptions within interviews for the QuIP component were affected by translation difficulties.

Research questions and summary of findings

The programme through the provision of cash transfers to households paid directly to the main caregiver of the child or children in addition to support birth registration, early childhood development, nutrition counselling, income generation activities, adolescent empowerment, and CLTS aimed at improving food security of beneficiary households. The programme also defined its aim as improving gender equality outcomes and women's empowerment through direct payment of cash transfers to primarily caregivers who are mostly women. In view of the above, the study thus had four main objectives:

- To explore the impacts and effectiveness of the Social Cash Transfer Programme (SCTP) intervention in rural areas of Angola, to inform the potential continuity and scale-up of the programme or future programmes.

- To assess whether cash transfers had protective impacts on beneficiaries' well-being, and whether it was shock-responsive to the negative effects of the COVID-19 pandemic.

- To evaluate the effectiveness of providing cash transfers and associated services directly to women caregivers in the household, to determine the effectiveness of this approach for social cash transfers.

- To explore the strengths and weaknesses of programme design parameters and operational features related to targeting, selection and registration, payment systems, and communication and grievance mechanisms.

Research Question 1: Impacts on caregivers and children

The programme encouraged investments in household human development as demonstrated by the positive impacts on child material well-being, child feeding practices, immunization, and preventive healthcare. Ownership of pair of sandals/ shoes, clothes, and blanket improved by 47 percentage points, 25 percentage points, and 49 percentage points, respectively, for children in beneficiary households. Postnatal growth monitoring improved by 18 percentage points, whilst completion of required all basic vaccinations increased by approximately 18 percentage points. The evidence on household decision making dynamics is mixed, with positive changes observed in some aspects of decision making and women's income security. Quantitative findings showed that the cash transfers increased social support to caregivers whilst improving joint financial decision making. Qualitative interviews revealed that caregivers collected the cash payments, and they experienced improvements in joint decision making and budgeting with their spouse and in some cases autonomy in the wife's decision making. Yet, other caregivers noted the control that men still have over decision-making as a result of entrenched gender norms. The qualitative findings also documented improvements in women's empowerment through improved income generation, wellbeing, and community relations in the intervention areas. Lastly, qualitative findings indicated that beneficiary households experienced improvements across various food consumption and food security related indicators.

On the other hand, impacts on caregiving practices were less consistent. The programme did not have significant impact on parenting and discipline indicators, a finding that is consistent in qualitative and quantitative results. Qualitative interviews suggested that parenting styles were deeply rooted in local cultural norms, and that the SCTP and its associated services had not produced different behaviours or marked a shift in parenting models for recipients.

Research Question 2: Impacts on households

The analysis focused on asset accumulation, economic activities, food security, as well as household dietary diversity, quantity, and quality. The SCTP had positive impacts on food security, household assets and economic activities. Notable impacts include reduction in food insecurity experience scale by 1.14 points, reduction in household hunger scale by 0.38 points, increased number of meals by 24 percentage points. In addition, the SCTP increased the accumulation of durable assets (e.g., telephone, radio, and motorcycle), ownership of livestock by 14 percentage points, access to land for cultivation by 5 percentage points, crop production by 18 percentage points, as well as processes and trade of agricultural sub-products by 6 percentage points. Qualitative interviews revealed that recipient households had increased and diversified their agricultural activities to include a variety of cultivatable crops which contributed to household food consumption and diversity. In terms of household assets, the interviews revealed that recipients were able to purchase clothes, bedding and beds, as well as hygiene products for their households.

Research Question 3: Influence of design and implementation features on programme outcomes

Key findings from the process evaluation highlighted certain aspects of the intervention design that can be improved to maximize the effectiveness of the SCTP. Beginning with issues at registration, the findings suggest that there were potential exclusion errors owing to eligible caregivers being absent from their domiciles at the moment of field-level registration. Payment points for collecting child benefits payments were found to be resource intensive to set up and maintain, while female beneficiaries claimed that the distance to accessing these entailed time-costs and potential security risks. In terms of payment regularity, the process evaluation found these to be irregular throughout the programme intervention, owing to issues emerging from the COVID-19 pandemic. Payment amounts were also considered to be insufficient for the needs of beneficiaries. While grievance mechanics were implemented, the effectiveness of redress was unclear due to inconsistent documentation and transmission of information from social activists to higher levels of government. Finally, the process evaluation also highlighted the lack of linkages of caregivers to other APROSOC services, which explained the lack of impacts on parental and caregiving practices.

Research Question 4: Moderating role of household and caregiver characteristics, and contextual factors

Further analysis showed that the impacts are largely not moderated by household size nor caregiver age. Caregiver education does influence programme impacts. In households with caregivers who have some formal education, there were positive impacts on minimum dietary diversity of children and agricultural activities compared to those without formal education. Lastly, an average of 66 per cent of both beneficiary and comparison households reported they perceived COVID-19 negatively impacted their income levels and income generating activities.

Using baseline data collected in 2019, and endline data collected in 2022, overall, the cash transfer programme had strong positive impacts across a wide variety of indicators with weak or null impacts on other indicators (see Table 1). The programme generated positive impacts on children and household basic needs. Household decision dynamics also changed, with reported increases in joint decision making by spouses rather than a single decision maker for the household, which usually is undertaken by males. Beneficiaries also reported improvements in women's economic participation (e.g., self-employment and business formation). The effectiveness of the programme could have been maximized by strengthening accountability mechanisms, predictability and regularity of transfers, and accessibility and safety.

Table 1: Summary of impacts

CHILD LEVEL		CAREGIVER LEVEL		HOUSEHOLD LEVEL	
INDICATOR'S DOMAIN	IMPACT	INDICATOR'S DOMAIN	IMPACT	INDICATOR'S DOMAIN	IMPACT
Material well-being	⬆	Financial inclusion and savings	⬆	Assets	⬆
Child healthcare	⬆	Joint decision making	⬆	Economic activities	⬆
Immunization	⬆	Parenting and caregiving practices	↔	Food security	⬆
Child feeding practices and diet	⬆	Nutrition and food knowledge	↔	Dietary diversity, quantity, and quality	⬆
Child development activities and discipline	↔				
KEY: ⬆ Consistent positive impacts ↔ Weak/Null Impacts					

The study's findings help inform the current efforts towards the creation of a nationwide social assistance programme in Angola. The report concludes with policy and research recommendations that can be implemented to further strengthen the impact of the programme. The following policy recommendations can be considered to enhance programme effectiveness:

- Enhance gender responsiveness through integration with and linkages to gender-responsive complementary services and increasing accessibility to payments.

- Ensure the provision of regular, predictable, and adequate cash transfers.

- Enhance communication with beneficiaries and strengthen the coordination of reporting channels within grievance communication mechanisms.

- Institutionalize and expand social assistance coverage.

Furthermore, the following research activities are recommended in support of the programme design and adaptation:

- Determine an adequate transfer value that is shock-responsive.

- Explore the feasibility and impacts of integrating cash transfers with child and gender-sensitive complementary services.

- Investigate the role of gender norms in influencing household decision dynamics.

- Examine the moderating role of payment regularity and timeliness.

1.   Introduction

1.1   Background and programme description

Angola registered impressive economic growth in the aftermath of the civil war with GDP per capita nearly doubling from US$ 3,892 (PPP) in 2000 to US$ 6,813 (PPP) in 2014. The rate of growth elevated Angola to be the third largest economy in sub-Saharan Africa which is classified as lower middle-income (World Bank, 2020). In spite of the post-war economic growth, Angola ranks 149th out of 182 countries in the Human Development Index (HDI) of UNDP, whilst poverty levels remain high. In 2019, the incidence of poverty was 40.6 per cent at the national level[3]. Poverty levels are particularly high in rural areas (57.2 per cent) compared to urban areas (29.8 per cent) (Instituto Nacional de Estatística, 2020). The large differences in poverty incidence between rural and urban areas is reflected in the Gini coefficient of 0.597, making Angola one of the most unequal countries in sub-Saharan Africa (Instituto Nacional de Estatística, 2020). In addition, multidimensional poverty rate is 54 per cent at national level disaggregated at 87.8 per cent and 35 per cent at rural and urban areas, respectively (Instituto Nacional de Estatística, 2020).

In addition to the high levels of poverty and inequality, households are highly vulnerable to poverty due to shocks such as crop failures, climate change, and food prices. More than 50 per cent of Angola's food needs are imported and are therefore susceptible to the supply chain shocks such as those exacerbated by the recent geopolitical landscape and the COVID-19 pandemic (World Bank, 2020). In addition, the Demographic and Health Survey of 2016 showed the many challenges children under the age of five years in Angola face. The under-five mortality rate is 68 deaths per 1,000 live births with the poor households registering a rate of 103 deaths per 1,000 live births. Vaccination rates are also very low with only 31 per cent of children aged 12-23 months having received all basic vaccinations. The vaccination coverage rates are lowest in the Provinces of Cuando Cubango, Bié, Moxico, and Uíge, with coverage rates of eight per cent, ten per cent, ten per cent, and fifteen per cent, respectively. More than one-third of children under the age of five years are stunted, with the Province of Bié having the highest rate of stunting at 51 per cent (Instituto Nacional de Estatística (INE) et al. 2017). Furthermore, gender inequality is entrenched in the country. The gender inequality index (GII) for Angola was 0.537 in 2021 and was ranked 136th out of 169 countries in 2021 by the UNDP. Education attainment and labour force participation are lower for women compared to men in Angola. Whilst 51.5 per cent of male aged 25 years and above have at some secondary education, less than one in three (28.2 per cent) of women in the same age category have some secondary education. With regards to labour participation, 74 per cent and 79 per cent of females and males, respectively, aged from 15 years and above participate in the labour market.

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3   The estimated national poverty line is AOA 12,181 per month.

Social protection, including cash transfers, has the potential to reduce poverty and inequality as well as protect households from shocks and vulnerability (see Handa et al. 2018). However, poor, and vulnerable households are underserved by Angola's social protection system. Existing social protection programmes are largely contributory pensions and social insurance that benefit mainly those in the formal sector (World Bank 2020). Hence, in the absence of a social assistance programmes, households mostly rely on inadequate informal traditional solidarity mechanisms, including during shocks.

In an effort to address the lack of social assistance programmes, the Government of Angola in collaboration with its Development Partners (European Union, Louis Berger and UNICEF) established the Apoio à Protecção Social - APROSOC ("Strengthen and Scale up Social Assistance to Vulnerable Population of Angola") project as the first project, that would pilot and model approaches that inform policy instruments towards the creation of a nationwide social assistance system. The project was funded by the European Union and aimed to contribute to the overall improvements in the delivery and access of national social assistance interventions in Angola. The programme also aimed to strengthen the capacity of the Ministry of Social Action, Family and Women's Promotion (MASFAMU) to design and progressively implement a more ambitious social assistance agenda. This would serve as foundation for the Government-funded expansion of social assistance in future years.

1.2   Description of intervention and targeting mechanism

One of the key interventions under APROSOC is the *Valor Criança* (VC), a child-sensitive unconditional social cash transfer programme (SCTP) targeted at food-insecure households in Angola[4]. The *Valor Criança* programme was piloted in selected municipalities across the country. As a pilot initiative, and considering the limited budget available, a small geographical coverage was selected across the country. The selection of three out of 18 provinces in Angola was based on a situational diagnosis conducted at the early stages of the design of the APROSOC by the MASFAMU in coordination with provincial and municipal governments. During this process, it was determined that one province in each of the regions of the country (south, north and centre) should be represented in the programme. This process established the provinces of Bié, Moxico, and Uíge as the pilot provinces of *Valor Criança*.

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[4]   APROSOC started in 2014, whilst the regulatory framework and approvals for the *Valor Criança* component was obtained in 2018. The first cash transfer payment was made in 2019. The piloted programme had ended at the time of writing this report.

In each of the three targeted provinces, two municipalities were selected and, within these municipalities, only a number of villages were included. In the initial implementation stage, not all villages within selected municipalities of the three provinces were included in the treatment areas due to budgetary limitation. After a budget review at the end of 2020, beneficiary communities were expanded in the selected municipalities of the three provinces. Even though the programme aimed to establish a universal unconditional child grant, budget constraints led to the adoption of eligibility criteria during the pilot phase. The eligibility criteria of *Valor Criança* were established using social categorisation, where households were considered eligible if they were part of a particular demographic group. The intended beneficiaries of the intervention were caregivers with children under five years old who had been living for more than a year in one of the six selected municipalities in the provinces of Bié, Moxico and Uíge. All the households that met these eligibility criteria could be enrolled in the programme and each household could enrol up to three children in the programme. The criteria were defined during the design phase by UNICEF Angola and MASFAMU.

With one of the objectives of the programme to provide infants with the best possible start in life, the cash transfer was directly paid to caregivers of children under the age of five years. Each eligible caregiver was entitled to a monthly transfer amount of AOA 3,000 (about 10 USD at that time) per child, with a maximum of three children per caregiver in 2019. In response to COVID-19, the transfer amount was increased to AOA 5,000 per child per month in 2020. The programme initially adopted a quarterly payment cycle, which was revised to a super cycle payment covering six months of the transfer amount due to disruptions and administrative challenges at the onset of COVID-19 pandemic. The payment cycle was further increased to a megacycle which covered 12 months of transfer value in the latter phases. In the selected localities, a total of 35,411 children under the age of five were reached by the cash transfer programme.

1.3 Objectives of the study

A large number of studies and reviews have underscored consistent positive impacts of cash transfers on beneficiaries' well-being (e.g., Davis et al. 2016; Bastagli et al. 2016; Hidrobo et al. 2014). In Sub-Saharan Africa, evidence by the Transfer Project has shown that Social Cash Transfers, which are mainly unconditional, have wide-ranging positive impacts on beneficiaries across domains such as food security and diets, school enrolment, subjective wellbeing, poverty reduction, reduction of intimate partner violence, livelihoods, and, at the macro level, multiplier effects in the local economy (Natali et al. 2018; Daidone et al. 2019; Tirivayi, Waidler, and Otchere 2021). Research has also shown that cash transfers can be an effective tool for supporting caregivers in rural sub-Saharan Africa. A study by Haushofer et al. (2020) found that cash transfers in Kenya led to improved mental health and reduced stress among female caregivers, and a study by Bhalla et al (2018) found that cash transfers in Zimbabwe led to improved food security and reduced financial stress among caregivers.

Valor Criança targeted caregivers within the household with cash transfers. In Angola, the responsibility of caregiving typically falls on women, who are expected to care for children, the sick, and the elderly in their households. Consequently, caregiver beneficiaries were predominantly women. By targeting mostly women, the programme aimed to provide them with the resources and support needed for their families, while also helping to reduce the gender gap in poverty. The provision of social cash transfers directly to women, arguably, can contribute to the promotion of gender equality in many countries, including Angola.

Evidence on the effectiveness of social assistance programmes in Angola is limited. This study addresses this evidence gap by determining the impacts of the *Valor Criança* programme on various domains of child and household wellbeing. Recognizing the disproportionate burden of caregiving and the impact this has on women's economic opportunities and well-being, along with the increased impact of COVID-19 on caregivers, the study also investigates the impacts on gender equality outcomes as part of the Gender-Responsive Age-Sensitive Social Protection (GRASSP) research programme (2018-2023) led by UNICEF Innocenti and funded by the UK's Foreign, Commonwealth and Development Office (FCDO).

- The study thus had four main objectives: To explore the impacts and effectiveness of the Social Cash Transfer Programme (SCTP) intervention in rural areas of Angola, to inform the potential continuity and scale-up of the programme or future programmes.

- To assess whether cash transfers had protective impacts on beneficiaries' well-being, and whether it was shock-responsive to the negative effects of the COVID-19 pandemic.

- To evaluate the effectiveness of providing cash transfers and associated services directly to women caregivers in the household, to determine the effectiveness of this approach for social cash transfers.

- To explore the strengths and weaknesses of programme design parameters and operational features related to targeting, selection and registration, payment systems, and communication and grievance mechanisms.

1.4 Research questions

To respond to these study objectives, four research questions were designed to guide the overall implementation of this study.

1. What are the impacts of the SCTP on caregivers and children?

Caregivers, who are predominantly women, often face significant economic and social challenges that limit their ability to provide adequate care and support to their families. This research question aims to explore how the SCTP impacts caregivers and children in their care, in terms of nutrition, health, and education.

2. What are the broader impacts of the SCTP on households?

The programme aims to provide support and assistance to vulnerable households, with the ultimate goal of reducing child poverty and improving living standards. This research question seeks to explore the extent to which the programme achieves these goals and how it impacts household income, expenditure, and well-being.

3. How do design and implementation features of the SCTP influence programme objectives and outcomes?

This research question aims to explore how various programme features, such as the amount and frequency of cash transfers, affect the programme's impact on caregivers, children, and households.

4. How do household and caregiver characteristics and contextual factors shape the impact of the cash transfer programme?

This research question considers factors such as the caregiver's age, education, and household size. By exploring how these factors shape the impact of the cash transfer programme, the study can identify areas for improvement to better meet the needs of the most vulnerable households.

The first two research questions aim to respond to the first two objectives: to explore the impact and effectiveness of the SCTP on caregivers and households, as well as to determine the protective impact of the SCTP on beneficiaries during the COVID-19 pandemic. The third research question responds to the objective of determining the effectiveness of providing cash transfers directly to women, while simultaneously responding to the fourth objective to explore the operational and design parameters of the programme. The fourth research question responds to both the first and third objectives: to explore the extent to which household and beneficiary characteristics accentuate or attenuate potential impacts from the SCTP, as well as to evaluate the effectiveness of the targeting strategy by understanding key demographic characteristics of beneficiary caregivers.

1.5   Conceptual framework

The study is aligned with the conceptual framework on gender-responsive and age-sensitive social protection programmes and evidence developed as part of the GRASSP research programme (UNICEF 2020)[5]. The framework proposes a typology for describing the degree of gender integration in a social protection programme while accounting for the life course stage. It also maps out how gender-responsive social protection would

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5   UNICEF (2020). Gender-Responsive Age-Sensitive Social Protection: A conceptual framework, Innocenti Working Papers, no. 2020-10, UNICEF Office of Research - Innocenti, Florence https://www.unicef-irc.org/publications/1116-gender-responsive-age-sensitive-social-protection-a-conceptual-framework.html

address gender inequality, poverty and vulnerabilities and achieve gender-responsive and gender equality outcomes; and how moderating factors (e.g., household and individual characteristics, contextual factors such as gender norms) would influence this change.

The SCTP's focus on young children and their caregivers with majority being femaledemonstrates its age-sensitivity and permits an exploration of how the focus on predominantly female caregivers can lead to improvements in outcomes for women and children and bring about the most change in gender equality. The cash transfers were also age-sensitive as they aimed to reach young children. The programme potentially addressed gender-specific needs and empowered women caregivers through change pathways such as the changing of household decision dynamics and investments in human development including that of children. Finally, the study investigates how factors such as household size, caregiver education and age, and COVID-19 (perceived) moderate programme impacts.

Figure 1 Gendered conceptualization of the study

Core change pathways study focuses on
- Changing household decision-making dynamics and re-balancing power relationships, via a reduction of women's income insecurity and poverty or reducing household poverty and economic stress.
- Encouraging investments in households' human development, including that of children and adolescents, via increased disposable income (reduced poverty and increased income security), incentives or signalling effects.

Outcomes studied:
- Women decision-making and empowerment, women financial inclusion and livelihood, child, and maternal health, household assets and economic activities, and food security.

Young children, adult/adolescent caregivers

Gender-sensitive

GENDER EQUITY OUTCOMES

CHANGE PATHWAYS

ANGOLA *VALOR CRIANÇA* CASH TRANSFER PROGRAMME (APROSOC)

LIFE-COURSE FOCUS

GENDER INTEGRATION CONTINUUM

2. Methodology

This study used mixed-methods impact analysis that relied on quantitative and qualitative data to assess the *Valor Criança* SCTP in Angola. The quantitative component adopted a quasi-experimental longitudinal design to assess the impacts of the intervention on household and individual level outcomes, taking advantage of a baseline data collected in October 2019. In parallel, the qualitative part of the study was partly based on the Qualitative Impact Protocol – QuIP (Copestake, Morsink, and Remnant, 2019; Copestake, 2014) – an approach to impact evaluation designed to explore the breadth and depth of development interventions through semi-structured and in-depth interviews and focus groups discussions – and partly on a process evaluation approach, which looked at the programme design to understand how the intervention worked.

2.1 Quantitative study design

2.1.1 Sampling strategy and attrition

The quantitative component was a longitudinal study design that built on the baseline data collected in October – November 2019. Based on the programme description in Chapter 1, the baseline study adopted a probability proportional to population sampling strategy (PPP). The database of registered beneficiary households was used as the main sampling frame where the number of treated households (those would be enrolled in *Valor Criança*) were randomly sampled (see Table 2.1).[6]

Table 2.1 Distribution of beneficiary and baseline treated households

PROVINCE	NUMBER OF BENEFICIARY HOUSEHOLDS	SHARE OF BENEFICIARY HOUSEHOLDS (%)	NUMBER OF SAMPLED TREATED HOUSEHOLDS	SHARE OF SAMPLED TREATED HOUSEHOLDS (%)
Bié	3,033	52.28	758	52.57
Moxico	960	16.55	311	21.57
Uíge	1,809	31.18	373	25.87
Total	5,802		1,442	

Source: Internal programme database and baseline data

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6 The sample allocation was based on the proportional size of the beneficiary population. This explains why the sample size in Bié is proportional to its the beneficiary size.

In each municipality, two distinctive geographic areas were randomly selected for treatment and comparison areas. The random selection of the areas was done to allow considerable level of distance between the treatment and control areas to minimize risk of contamination and spillovers from treatment areas to comparison areas. A comparison group of 1,548 households were assigned to treated households in each province following a similar multi-stage strategy with a key difference. Whilst the selection of geographic locations followed the same pattern of treated households, the lack of a listing sampling frame or updated census databases differed household-specific selection from that of the treated group. Comparison group households (those with similar characteristics but that would not be enrolled in *Valor Criança*) were sampled by random walks from the lowest multi-stage geographic locations.

A total number of 2,990 households distributed across the three provinces formed the basis of the sample size to trace for the endline study. Out of the expected 2,990 households, 2,586 were traced and interviewed, leading to an overall attrition rate of 13.51 per cent. The Province of Uíge registered the highest level of attrition where two out of ten households interviewed at baseline could not be traced at endline. This was followed by the Province of Moxico where 1.6 out of every ten households could not be found at endline.

Table 2.2: Baseline and endline sample sizes

	NUMBER HOUSEHOLDS AT BASELINE			NUMBER OF HOUSEHOLDS AT ENDLINE			ATTRITION RATE
	COMPARISON	TREATMENT	TOTAL	COMPARISON	TREATMENT	TOTAL	
Bié	848	758	1,606	792	656	1,448	9.84
Moxico	327	311	638	295	240	535	16.14
Uíge	373	373	746	173	430	603	19.17
Total	1,548	1,442	2,990	1,260	1,326	2,586	13.51

To ascertain that the loss of 13.51 per cent of the households between baseline and endline does not threaten the internal validity of the study design, we perform a number of statistical tests between the sample that left the study and the sample that was reinterviewed based on household, caregiver, and household head characteristics. Results in Table A.1.1 in Appendix show that the attritted sample were not systematically and statistically different from the panel sample. Beyond the test between the panel and the attritted samples, we performed further tests cross-comparing within the populations. The results not reported here show no systematic difference between the attritted and panel samples.

2.1.2   Survey instruments

The endline survey instrument was based on the baseline survey. The baseline household questionnaire collected general information related to household members, education and health of all household members, housing and living conditions, debts, credits, and transfers, household food security, assets, livestock ownership, agricultural production, non-farm agricultural enterprises, household nutrition and monthly purchases, and shocks and subsistence mechanisms as well as experience with other programmes.

In addition to the above, the questionnaire also gathered the following information related to children under the age of five years from their primary caregiver: maternal and child health, immunizations, as well as child development and discipline. Other sections of the questionnaire were designed to elicit women's decision-making and empowerment within the household as well as their knowledge on food and nutrition practices.

The endline instrument retained all the sections administered during the baseline with two new sections that gathered information on the programme implementation and knowledge and perceptions of COVID-19 among households. Information on sections of the questionnaire that relate to the household and its members could be provided by the caregiver, household head, or any adult member of the household who had knowledge on household conditions. However, the sections gathering information on children under the age of five years and on caregivers were administered to female primary caregiver. Questions on breastfeeding practices, nutrition knowledge and women's empowerment were designed to elicit information from a gender perspective.

2.1.3 Data collection

Fieldwork activities were led by the Special Survey Department of Angola's National Statistics Institute – Instituto Nacional de Estatística (INE) with support from the UNICEF Innocenti and UNICEF Angola. None of the fieldwork and research team were involved in the implementation of the project. To attenuate infrastructure and logistics challenges due to travel distances and time as well as costs between the three provinces, training for data collection was held concurrently in June 2022 in two training centres as done during the baseline data collection.

Training focused on familiarizing data collection team with the survey instrument as well as the study protocols and ethics of fieldwork. Data collection activities started in all enumeration areas after training, using tablets to record answers during the interview. For the baseline, fieldwork data collection took place from 12th October 2019 and ended on 20th November 2019 in all three provinces. For the endline, fieldwork data collection started on June 20th and 21st 2022 in the provinces of Moxico and Uíge and Bié, respectively. Given the varying progress level and difficulty to retrace some households interviewed at the baseline, the fieldwork teams completed interviews at different dates. Data collection was completed on July 9th, July 13th, and July 18th, 2022, in the Provinces of Bié, Moxico, and Uíge, respectively.

2.1.4   Sample characteristics

Table 2.3 presents characteristics of the main caregiver and household head of the panel households observed at baseline. The table also presents results on the statistical differences between the observed averages for the treatment and comparison groups. The average ages of the caregiver and the household head were statistically similar at approximately 31 and 38 years, respectively, across both the treatment and comparison groups. In both groups, the caregivers were predominantly female at an average of 95 per cent. While the household heads were predominantly male in both groups at 18 and 14 per cent for treatment and comparison groups, respectively, a difference that is statistically significant.

On marital status, 73 and 78 per cent of caregivers in treatment and comparison groups, respectively, were married, whilst 73 and 77 per cent of household heads in treatment and comparison were also married. Both these differences are statistically significant. About 29 per cent of caregivers and 59 per cent of household heads on average across both treatment and comparison groups were literate, thus they were able to read and write in Portuguese or any local language. A slightly higher number of caregivers, 40 per cent had ever attended school, whilst 56 per cent of household heads had also ever attended school across both groups. Finally, the prevalence of any form of disability is reported at five and six per cents for caregivers and household heads, respectively, across both treatment and comparison groups.

Table 2.3: Characteristics of caregiver and household head at baseline

INDICATOR	ALL	TREATMENT	COMPARISON	P-VALUE
	(1)	(2)	(3)	(4)
Caregiver age	30.86	31.37	30.39	0.073
Caregiver is female	0.95	0.95	0.94	0.239
Caregiver is married	0.75	0.73	0.78	0.027
Caregiver is literate	0.29	0.32	0.26	0.159
Caregiver ever attended school	0.40	0.43	0.37	0.164
Caregiver has any disability	0.05	0.05	0.05	0.979
Household head is female	0.16	0.18	0.14	0.002
Household head age	37.95	38.31	37.62	0.369
Household head is married	0.75	0.73	0.77	0.027
Household head is literate	0.59	0.60	0.58	0.489
Household head ever attended school	0.56	0.57	0.56	0.557
Household head has any disability	0.06	0.06	0.07	0.507
N	2,586	1,227	1,359	

Note: Main caregiver and household head characteristics of panel households at baseline.

Table 2.4 presents demographic characteristics of members of the panel households which were observed at baseline. The average household size was 5.22 members with no significant differences between the treatment and the comparison groups. The average age of household members was 16.87 years at baseline. In both treatment and comparisons groups, more than 50 per cent of household members were female. Across each group, children between the ages of zero to 17 years made up 58 per cent of the household with one-third of the household population being children under the age of five years. Young people and adults in the working age of 18-59 years make up 40 per cent of the household population, whilst adult from 60 years and above made up the residual two per cent.

Table 2.4: Demographic characteristics of household members

INDICATOR	ALL	TREATMENT	COMPARISON	P-VALUE
	(1)	(2)	(3)	(4)
Household size	5.22	5.33	5.11	0.165
Average age of household members	16.87	16.91	16.84	0.879
Share of female members	0.52	0.52	0.53	0.241
Share of members aged 0-4 years	0.32	0.33	0.31	0.052
Share of members aged 5-17 years	0.26	0.25	0.26	0.538
Share of members aged 18-59 years	0.40	0.39	0.40	0.375
Share of members 60 years or older	0.02	0.02	0.02	0.674
Dependency ratio	1.56	1.58	1.53	0.306
N	2,586	1,227	1,359	

Note: Panel households characteristics observed at baseline.

2.2   Qualitative study design

The qualitative component was conducted based on two approaches. On the one hand, the QuIP was used to address research questions one and two, that is, the impact-related research questions, aiming to assess the perceived changes in recipient households from both male and female perspectives.

The QuIP is an impact evaluation approach that draws on Contribution Analysis to assess and review causal mechanisms or existing theory of change. It does so by seeking to gather data and information regarding the impact of an intervention directly from the intended beneficiaries, through collection of narrative causal statements across select domains (see Figure 2.1). These domains were based on the same research indicators used in the quantitative survey, which itself was informed by the GRASSP conceptual framework. As a result, the QuIP aimed to supplement the quantitative results with in-depth causal narratives. Typically, the QuIP domains are informed by a Theory of Change (ToC), however, at the time of design no ToC was available for the programme. While the QuIP methodology does not seek to quantify

impact, and therefore does not provide treatment effects or statistically representative results, it serves to highlight and bring forward evidence and stories around change and serves to check on the consequences of a given intervention, in this case the cash transfer and associated services.

On the other hand, the process evaluation component aimed to address research question three. Instead of looking at the impacts or outcomes of the programme, the process evaluation approach looks at the programme design and the characteristics and fidelity of its implementation. For the process evaluation, data was gathered through key informant interviews (KIIs), focus group discussions (FGDs) and observations. This combination of data collection methods allowed the triangulation of the findings and the generation of credible insights related both to the practical aspects of the implementation and the lived experiences of the beneficiaries.

Figure 2.1: Qualitative component domains explored by the QuIP
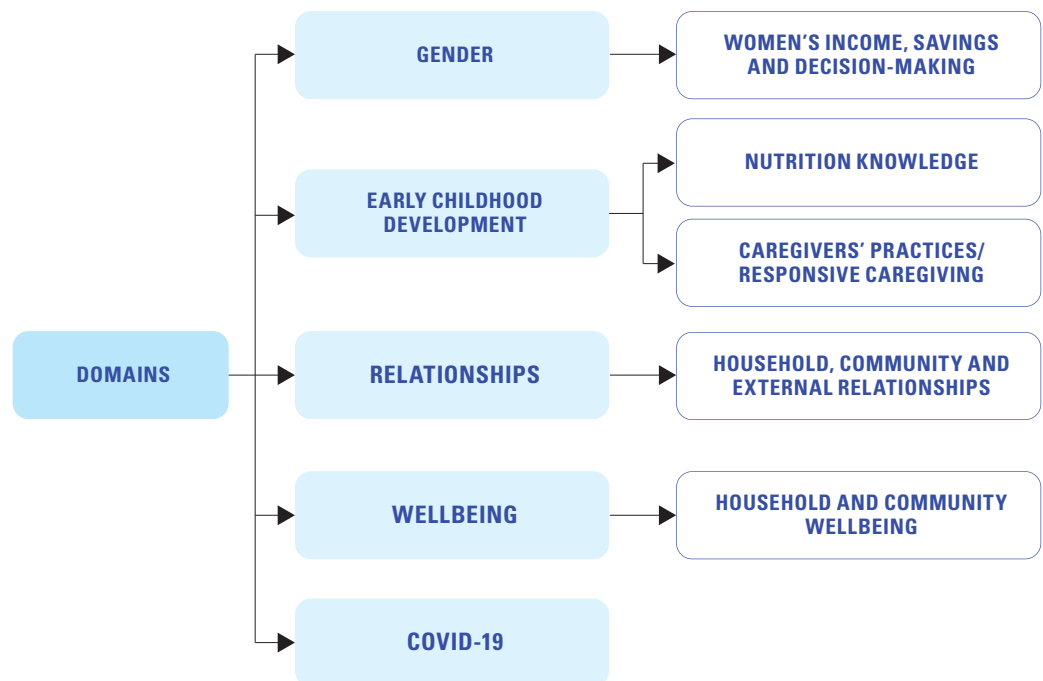
2.2.1 Tools and guides

The evaluation team drafted semi-structured tools to guide the KIIs, IDIs and FGDs. These instruments were tailored to address the respective research questions and provided structure to the overall interaction with the participants, allowing some flexibility for the facilitator and the participants to pursue new directions within the overall themes. The tools were validated by the UNICEF Angola team.

The tools were firstly designed in English and then translated to Portuguese. The FGD guides for the process evaluation were also translated into Chokwe and Umbundu, languages spoken in the provinces of Moxico and Bié. The FGDs in Uíge were conducted in Portuguese.

2.2.2 Data collection

- **QUIP**

To collect data for the QUIP component, UNICEF Innocenti hired a local firm, Mundi Consulting, with experience in data collection in Angola. Training for data collection was provided in June 2022 in the UNICEF Angola Country Office. The training focused on familiarizing the data collection team with the QUIP methodology, presenting the data collection tools as well as the study protocol and ethics of fieldwork. Data collection activities started after the training and involved a team of six qualitative interviewers, two of them collecting data in each of the provinces. IDIs with female beneficiaries were conducted by a female interviewer, while IDIs with male beneficiaries were conducted by a male interviewer. The FGDs were also conducted by a facilitator of the same gender of the participants, with the support from a moderator of the opposite gender. Both the IDIs and FGDs were conducted in the local language of the village with the support from a local translator – Chokwe in the villages located in Moxico; Umbundo in the villages located in Bié; and Kikongo in the village located in Uíge. Some IDIs and FGDs involved a mixture of the local language and Portuguese, depending on the preference of the participants.

- **Process Evaluation**

Key informants were selected based on their involvement with the programme and encompassed stakeholders from national, provincial, municipal and village levels, including governmental and non-governmental stakeholders. All KIIs at the national level were conducted remotely, using teleconferencing platforms. The KIIs with provincial, municipal and village levels were conducted in person and remotely. Most of the KIIs were conducted in Portuguese by a female Portuguese native-speaker team member, except one that was conducted in English by the same team member. The KIIs were about one hour long each and were audio recorded with informed consent from participants, to ensure that the content of the discussion would be fully captured.

All the FGDs were conducted in person by a female Portuguese native-speaker team member. The participants were identified and coordinated with support from the Integrated Social Action Centres - Centro de Acção Social Integrado (CASI) social activists, who supported the evaluation team to find and access the villages. The FGDs were conducted in an open space, with the participants and moderator seated in a circle. FGDs were conducted to obtain participants' perspectives and experiences with the programme and understand its effect on household dynamics particularly concerning gender norms and caregiving practices. FGDs were conducted with female and male beneficiaries who received at least one transfer throughout the implementation of the programme. All the FGDs were held in person with ten to 12 participants of the same gender and took around one and a half hour each. FDGs were also audio recorded including the informed consent from participants.

The process of note taking during fieldwork allowed the documentation of insightful information that has also been incorporated into this report, particularly regarding non-verbal communication among the participants. Furthermore, the observations made before and after each of the FGDs were employed as a contextual backdrop against which to understand data.

2.2.3 Sample

A purposive sample selection procedure was applied to both approaches (QuIP and process evaluation) of the qualitative part of the study. Data provided by UNICEF Angola was used to identify villages with high and low enrolment in the programme as well as the levels of security, accessibility, and the languages spoken. Based on these criteria, beneficiaries were selected purposively in six communes in total (two communes in Bié; two communes in Mexico; and two communes in Uíge).

a. QuIP

Under the QuIP approach, 12 individual interviews were conducted in each of the three treatment provinces, including five with males and seven with females from beneficiaries' households (head of household or spouse), reaching a total of 36 interviews. The participants were purposively selected to ensure representation by age, education, number of children, type of household headship. Additionally, two FGDs were conducted in three treatment provinces with male and female recipients (six FGDs in total) and in two comparison provinces (four FGDs in total). Up to eight respondents of the same gender participated in each FGD, complying with COVID-19 restrictions in Angola. The FGDs were segregated by gender, in order to encourage active participation by all respondents and to limit the potential for one gender to dominate the conversation at the expense of another. These FGDs explored the qualitative research domains listed in the QuIP research approach above. Like the interviewees, FGDs participants were also purposively selected to ensure representation by age, education, type of household headship, and number of children in the household. The geographic distribution of the sample size is described on the table below (Table 2.5).

Table 2.5: QUIP sample size and geographic distribution

COMUNA TREATED (CT) OR COMPARISON (CC)	PROVINCE	MUNICIPALITY	COMMUNE	VILLAGE	NUMBER OF FGDS	NUMBER OF IDIS
CT-1	Bié	Chinguar	Cangala	Chimbi	2 (1F/1M)	7F/5M
CT-2	Mexico	Lucusse	Lucusse	Mulangelo	2 (1F/1M)	7F/5M
CT-3	Uíge	Uíge	Sede	Mbanza	2 (1F/1M)	7F/5M
CC-1	Mexico	Luena	Kachipoque	Kachipoque	2 (1F/1M)	0
CC-2	Bié	Catabola	Sande	Sande	2 (1F/1M)	0
Total					**10**	**36**

b. **Process Evaluation**

A total of six focus groups discussions were conducted with caregivers – two in each of the three treatment provinces. In each of these villages, two FGDs were conducted, one with male and the other with female participants. Efforts were made to form diverse groups, which comprised married and unmarried individuals from different age groups. A total of six FGDs were performed, involving 58 beneficiaries in total (36 female, 30 male). The geographic distribution of the sample size is described in the table below (table 2.6).

Table 2.6: Process evaluation's FGDs sample size

PROVINCE	MUNICIPALITY	COMUNNE	VILLAGE	NUMBER OF FGDS
Bié	Catabola	Chipeta	Bairro Popular	2 (1M/1F)
Moxico	Camanongue	Camanongue	Kamuleke	2 (1M/1F)
Uíge	Uige	Calumbo	Calumbo	2 (1M/1F)
Total				**6**

In addition, 21 KIIs were undertaken with implementers including national-level government and non-government stakeholders, government stakeholders from the selected provinces, municipalities, and communes. Implementers engaged in the programme were identified in consultation with UNICEF Angola and invited to participate in the KIIs.

2.3   Ethics

The study followed all the necessary ethical protocols to ensure the strictest adherence to national and international good practices in social research. Respondents were required to provide consent and were informed of redress mechanisms. The scripts for the informed consent were read at the beginning of all interviews and included information about the study, the intervention being evaluated, potential use of findings, possible risks and benefits for the participants, and the measures that the team would take to ensure confidentiality and consent for use of data and audio recordings. The 'do no harm' principle was followed across all interviews, and COVID-19 prevention protocols were followed at all times during field interviews. Lastly, data security was ensured by anonymizing information during data cleaning and storing data on secure servers. Overall, these measures aimed to protect both the participants and the researchers involved in the evaluation. The study was granted ethical clearance by HML Institutional Review Board with approval number – HML IRB Review #542ANGO22 – following an extensive review of all research protocols and data collection instruments.

2.4   Quantitative data processing and analysis

The study seeks to assess the impacts of the programme in the piloted areas. Assessing impacts requires a counterfactual to estimate what would have happened in the absence of the programme. This study uses a quasi-experimental design. The SCTP was assigned at the "comuna" level within the municipalities that made up the pilot areas.[7] To enable the creation of a counterfactual, the study included a comparison group comprising households and caregivers who were not exposed to the SCTP but had very similar characteristics to the beneficiaries at baseline.

The analysis approach can be summarized in Figure 3.1. Given an outcome indicator of interest reported on the vertical axis observed at baseline Y_t for both the treatment and comparison, it is hypothesized that at baseline, t the value of the outcome variable of interest is statistically similar among the population of interest. Once the programme was rolled out, there would be differences between the beneficiary (treatment) and the non-beneficiary (comparison) groups. Notice that, although Figure 3.1 depicts a hypothetical outcome variable that is expected to increase, the direction of change depends on the variable of interest.

Figure 2.2: Theoretical conceptual framework
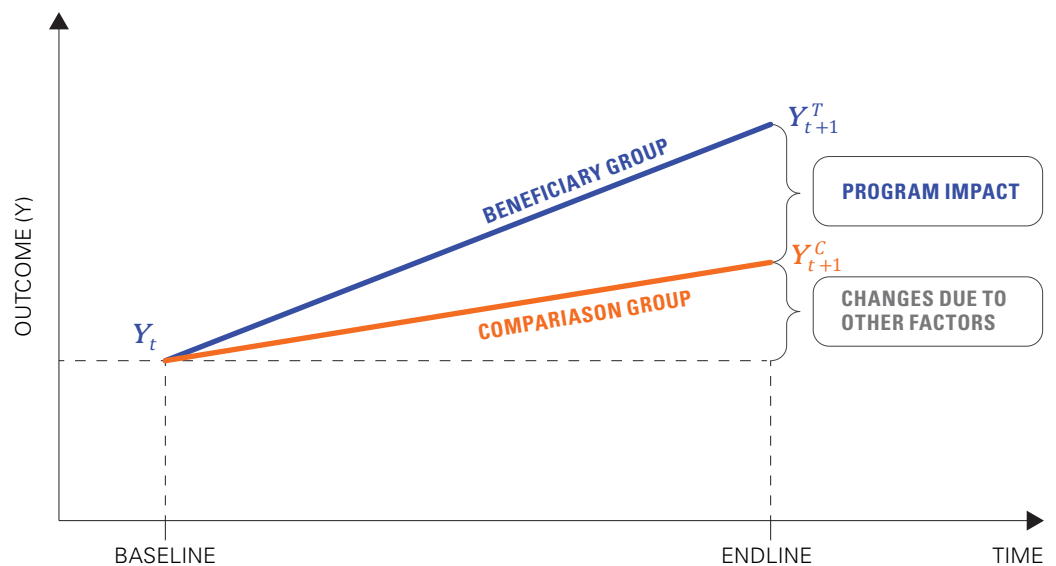
1.1.1   *Baseline data re-construction and balance test*

One of the main assumptions underlying the impact analysis is that the beneficiary and comparison groups are statistically similar prior to any programme intervention. However, challenges experienced by implementers and baseline data collection firm led to approximately 70 per cent of programme beneficiaries receiving cash transfer payments before baseline data collection fieldwork activities. The lack of pre-programme data adversely affects the feasibility of an impact analysis. In addition,

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7   Comunas are the third-administrative level whilst municipalities are second-administrative levels.

this also threatens the parallel trend assumption which requires that the differences between the beneficiary and comparison group remain constant over time. This assumption is fundamental to the econometric analysis (difference in differences).

Recall data on whether the cash transfer amount received was used to purchase particular goods or procure services was used to reconstruct a pre-programme data. Additional information on whether the household used to purchase the particular good/service prior to receiving the social cash transfer money and the frequency was used to further distinguish between households that would have made the purchases regardless of the cash transfer and those whose purchases where conditional on the cash transfer.

To ascertain that the reconstruction lowers the threat to the parallel trends and estimation strategy (for impacts), we perform a balance test on each outcome variable between the treatment and comparison group at baseline. Results reported in Tables B.2.1 – B.4.6 in Appendix B show that both the treatment and comparison groups were statistically similar prior to programme implementation.

1.1.2 *Pooled correlations and estimation strategy*

Given the shortcomings of the sampling strategy and the baseline data, reliance on the canonical (standard) difference-in-difference (DiD) estimation strategy to determine the impact of the intervention on the outcome variables would not be sufficient. To ensure consistency and robustness of the empirical analysis, we combine two correlation/prediction models and three difference-in-difference models before drawing conclusions on the programme impacts.

The first estimation method uses Ordinary Least Squares (OLS) regressions to examine the differences between the treatment and comparison groups using data that is pooled from both the baseline and endline. This is a first step to determine if any differences can be observed between the treatment and comparison group without determining causal impacts. This approach is complemented with a second correlation/prediction model that combines OLS with machine learning. The post-double-selection (PDS) methodology approach by Belloni, Chernozhukov, and Hansen (2014b; 2014a) examines all possible variables to determine if beneficiary/treatment status is correlated with the outcome variable, through a series of eliminations.

The three remaining estimation methods uses difference-in-differences (double difference) estimation strategy to access the impact of a programme intervention. This approach compares the changes in outcomes over time between the treatment and comparison groups. The approach computes the first difference (before and after) in outcomes of the treatment group and then a second difference for the comparison group (before and after). The estimated impact is derived from subtracting the second difference from the first difference i.e., the "difference in differences." The general estimation framework of DiD model can be expressed as:

$$Y_{it} = \alpha + \beta_1 P_i + \beta_2 T_t + \beta_3 (P_i * T_t) + \beta_4 X_{it} + \varepsilon_{it} \qquad (1)$$

where Y_{it} is the outcome of interest for household/individual i at time t. P_i is a binary variable equal to 1 if a household is beneficiary of *Valor Criança* cash transfer, and 0 otherwise. T_t is a binary variable for endline wave observations, and 0 if baseline. $(P_i * T_t$ is the interaction term between programme beneficiary status and time. X_{it} represents a set of observed household characteristics, and ε_{it} is the usual error term.

The three DiD estimation models applies different procedures to obtain our coefficient of interest. The first model is the standard DiD model. The provision of cash transfers to some of the treatment group prior to baseline data collection, clearly points to a potential violation of the parallel trend assumption which is necessary for inference. One solution is to use an estimation methodology that relaxes the strict parallel trend assumption in a DiD framework (see Roth et al. (2022) for detailed review on recent developments in DiD literature). The Inverse Probability Weighting (IPW) method introduced by (Abadie 2005) models the probability of belonging to the treatment group conditional on observed characteristics to derive a propensity score. The derived propensity score is then used as a weight (inverse probability weight) in the DiD regression model. Inferences using the IPW approach will be valid if the propensity score is correctly specified. Testing the correct specification of the propensity scores is the critical evaluation to determine if inferences made with the IPW approach are valid.

The fifth estimation method is a flexible approach that extends the IPW method to allow inferences to be valid whenever either the propensity score and/or the outcome regression are correctly specified. The doubly robust DiD method proposed by Sant'Anna and Zhao (2020) allows inference to be valid whenever either the outcome regression or the propensity is specified. Inferences will still be valid if both the outcome model and the propensity score model are correctly specified. Hence, the flexibility of the doubly robust DiD allows inferences to be undertaken in a wide range of applications. Finally, to reduce sampling bias issues, we use wild bootstrapping standard errors instead of the standard cluster standard errors.

2.4.3 Robustness checks

We perform robustness checks for the results. First, we conduct a placebo test as a proxy for the parallel trend assumption using a fake outcome of interest. We generate a random number for both the treatment and comparison group. The programme is also not expected to have any impact on the share of female members in a household nor exposure to conflict shocks in the communities. To test the robustness of our results, we estimate the correlations and programme impact on the random number, share of household female members, and exposure to conflict shocks. Results reported in Appendix B show no correlation or programme impact on a random generated number, share of female members in the household, and community conflict shocks.

Lastly, we control for the probability of making any type I error – that is the probability of attributing impacts to the programme where there was no impact (false-positive) – by undertaking multiple hypothesis tests in the familywise error rate (FWER) framework. We apply the Romano-Wolf procedure due to its flexibility to accommodate control

variables in the testing procedure (Clarke, Romano, and Wolf 2020). Results in Appendix B shows the adjusted p-values obtained with the Romano-Wolf procedure are similar to the model p-values, which suggest results of the model are consistent.

2.5 Qualitative data analysis methodology

2.5.1 An overview of Qualitative Impact Protocol (QuIP) and Causal Maps

The QuIP is an impact assessment method devised by the Centre for Development Studies at the University of Bath, United Kingdom (now developed and curated by Bath Social & Development Research Ltd – www.bathsdr.org). It is designed to collect credible information directly from intended beneficiaries on significant drivers of change in selected domains of their life (based on the project's theory of change) and on what respondents perceive to be the reasons for those changes over a predefined period. The method is particularly useful in complex contexts where a variety of factors that are hard to disentangle could influence the outcomes of an intervention. Narrative data collected by 'blindfolded' independent field researchers (that have little, or no knowledge of the hypotheses being tested), is cross analysed against the commissioner's project activities to identify unexpected as well as anticipated drivers of change. Partial or total 'blindfolding', the method by which researchers and respondents are not made aware of the commissioning partners of the specific objective of the study, is an important element in mitigating the problem of pro-project or confirmation bias that is otherwise regarded as a major weakness in qualitative research in financial inclusion.

The causal maps used in this report show a visualisation of the narrative data collected in interviews, using a form of causal qualitative data analysis. The maps show where respondents have made a causal connection between factors, and how many times that was made by different respondents in the sample. To analyse the data, an analyst trained in qualitative data analysis (QDA) reviewed the summary transcripts and coded the data looking for causal claims within the stories of change shared by respondents. These transcripts are coded in a QDA software called Causal Map – designed specifically to capture and analyse causal mechanisms. All the maps in this report have a link to the map and the source data in Causal Map[8].

The causal maps in this report have been produced by filtering the data to only show links with a frequency above a certain number (typically more than 3) in order to show the most commonly cited links across the interviews – the key stories of change in the narratives. Maps will also be filtered for specific factors which are identified as important drivers of change or outcomes in the interviews and in some cases for specific groups of respondents. The figure title above the map will describe the filters and where relevant additional filter information will be given alongside a link to the filtered map in Causal Map.

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8   See www.causalmap.app for more about the software, and to create a free account to explore the maps and quotes in more detail.

Causal maps use two different counts:

1. **Frequency count** - refers to the number of times that particular link or factor was mentioned across all the interviews – this can be more than once per respondent.

2. **Source count** - refers to the number of respondents who mentioned that particular link or factor – this value is a maximum of one per respondent (a maximum of 35 in this dataset).

For example, if a respondent mentions the lack of work leading to decreased income five times in the interview – the number of times this link is mentioned in total would be the frequency count, 5, whereas the source count would be limited to 1 for this particular link. If a map link is labelled with '3', this means the link was used by 3 separate respondents, but it does not tell you how many times they mentioned it.

While maps may have been produced searching for links with a frequency above a certain number (e.g., more than 3), the label used over the links in the map is the source count so lower values may appear. For example, one respondent may have mentioned that link more than 3 times across the interview, therefore a link label of 1 would appear. If only one person has mentioned a link only once, then it would not appear in a map which filters out low frequency counts. The causal maps produced in this report all use source counts to scale the links (the size of the arrow) and label the links. Given the small sample size of 35, counts in the maps are expected to be low.

2.5.2 Process evaluation data analysis

A thematic analysis approach was employed to interpret the primary data and answer the research question related to the process evaluation (RQ 3: *How do the design and implementation features of the cash transfer moderate the impacts of the programme?*). The following steps were undertaken to analyse the data:

- The KIIs and FGDs audio recordings were transcribed *verbatim*, and the data generated were anonymised.

- A deductive thematic framework for coding the data was developed based on key themes presented on the data collection tools. This framework was later expanded using an inductive approach, through which additional themes and patterns were identified and included. The final coding framework was agreed by the evaluation team.

- The coding process was carried out by the evaluation team using the NVivo software.

- The initial reflections generated by the coding process were then organised into an initial outline in which the write-up was based on.

2.6   Limitations and caveats

Some limitations were encountered during quantitative data collection and initial study design at baseline. While some of these challenges were addressed, others proved difficult to be fully addressed ex-post. First, sample size determination was based on budget coverage instead of power determination. Though steps were taken to partly address the computation of the sample size, lack of sample listing or updated population data in the comparison areas meant an appropriate sample size could not be determined ex-post. In addition, the baseline design used the two different sample frames for both treatment and comparison groups. The database contained in the management information system of the programme provided the sampling frame for the treated households while the comparison households were purposefully sampled through random walks in the comparison areas.

Second, about 70 per cent of the intent-to-treat beneficiary group receiving cash transfers before baseline data collection were completed. Even though efforts were made to address these violations by re-constructing the baseline data, as supported by the subsequent balance test results, recall bias and social desirability bias may linger on the validity of inference made using the canonical difference-in-difference model.

Third, challenges encountered during data collection, transcription, and translation of the qualitative data presented some additional limitations to the study. These are summarised across three areas: confirmation bias, field-level interview challenges, and transcription quality. Due to unforeseen changes in the research process, an important aspect of the QuIP methodology – the 'double blindfolding' method – was not implemented during data collection. As a result, the interviews may have resulted in respondent confirmation bias. This had the potential impact of dividing respondent narratives into two; narratives describing experiences before the intervention, and experiences after the intervention. Owing to the nature of cash transfers, the incentive to respond positively to the intervention may have biased the results of this QuIP study. Nonetheless, taken with the complementary quantitative and process evaluation components, the findings still provide important indications of the outcomes that emerge from the SCTP.

The length of the questionnaire may have produced interview 'fatigue', in which respondents progressively reduced the depth of their responses as the interview lengthened. Several transcriptions point towards respondents claiming to be tired and having to take breaks, which resulted in interviews being rushed towards the end of the interview. There were also indications that nearby family or community members were present during the interviews, indicating that responses may have been influenced by social bias.

During the qualitative interviews, field researchers frequently used leading questions when prompting respondents resulting in unusable data. These were especially frequent when discussing changes in household spousal relations, and educational

practices. Furthermore, descriptive responses were generally frequent in the qualitative interviews. While the QuIP is primarily designed to explore causal links (i.e. influences of change), it may also code descriptive responses as a secondary exploratory research aim. On the whole, however, descriptive responses are not generally coded since they do not contain causal influences leading to outcomes.

Finally, the majority of the transcriptions were difficult to read and as a result many of the answers could not be faithfully interpreted in the analysis. Several transcriptions, such as BDIDI4F, BCDIFI3F, UMIDI1F, UMIDI2F, and BCIDI6F, were particularly difficult to interpret. The difficult transcriptions may in part be associated to the diversity of local languages, the general literacy of respondents, and in some cases the placement of the microphone. As a result, several interviews contain passages that are labelled 'imperceptible' and were not transcribed.

3. Impacts of cash transfers on women and children

Key findings:

- The cash transfers improved child feeding practices increased, with the consumption of most food groups showing improvements against comparison households. While minimum dietary diversity did not appear to improve for children between 6-23 months, expanding the age range to 6-50 months showed significant improvements. In addition, the cash transfers increased child material wellbeing as beneficiary children had greater possession of shoes, clothes, and blankets. Qualitative interviews noted a similar increase in the variety of food groups consumed by beneficiary children and increased purchases in clothes, bedding and beds, shows and educational supplies.

- Antenatal care visits increased for pregnant women and the number of pregnant women in treated households who had no antenatal care visits decreased by 28 percent. The likelihood of having a health card increased by 15 percent for treated households, while post-birth growth monitoring visits and vaccination (except the fourth dose of Polio and Measles) increased. Qualitative interviews revealed that cash transfers increased access to medical treatments.

- In terms of decision-making and women's empowerment, research findings differ across qualitative and quantitative results, with the latter indicating that cash transfers increased social support but had not increased women's financial autonomy. Qualitative interviews revealed that caregivers collected cash payments and experienced improvements in decision making and budgeting with their spouse, and in some cases increased the autonomy of the wife's decision-making. Among beneficiary households, savings rates increased by 36 per cent among caregivers.

- Both quantitative and qualitative findings indicate that there was no difference between treated and comparison households on caregivers' knowledge of new-born nutritional needs during breastfeeding immediately after birth or exclusive breastfeeding for the first six months. In addition, the programme had no impact on child development and discipline.

- In qualitative interviews, the majority of recipients reported that cultural norms of parenting had long been established and rooted in the community, and there was little need or desire to change these.

3.1   Caregivers

3.1.1   Decision-making and women's empowerment

This sub-section presents correlations and impact analysis of the programme on caregiver's decision making and empowerment. Table 3.1 summarizes the results on financial decisions dynamics for the households, social support structure available to the caregivers, perceptions about justification on domestic violence, education attainment expectation for male and female children. Financial decisions for the household are grouped into three categories, decisions made by the caregiver alone in complete autonomy, decisions made by the spouse, and joint decisions by the caregiver and the spouse. During the survey, caregivers were asked to rate how often they are able to get help/support/assistance to undertake eight activities using a Likert scale from 1 to 5, where 1 represent none and 5 represent always[9]. The responses are summarized into the social support index, which ranges from zero to eight.

Table 3.1: Correlations and Programme Impact on Women's Decision Making and Empowerment

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Financial decisions for households: caregiver alone	-0.013	-0.015	-0.045*	-0.051***	-0.051***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Financial decisions for households: spouse	0.012	0.012	0.012	0.011	0.011
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
Financial decisions for households: caregiver and spouse	-0.003	-0.003	0.022	0.027	0.027
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Social support index	-0.055	-0.077	1.281**	1.310***	1.310***
	(0.25)	(0.25)	(0.62)	(0.49)	(0.49)
It is never justified to beat wife	0.013	0.012	0.015	0.017	0.017
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Expects daughter to complete at least secondary	0.078***	0.081***	0.006	0.006	0.006
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Expects son to complete at least secondary	0.050***	0.053***	0.019	0.017	0.017
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
N	4,161	4,161	4,161	3,450	3,450

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

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9   Social activities captured in the social support index include: (1) need of assistance in case of sickness, (2) assistance to be taken to the healthcare centre/clinic/hospital, (3) assistance to prepare meals when caregiver is unable, (4) assistance to perform daily tasks, (5) companion to spend time together, (6) suggestions to deal with personal problem (7) support to understand problems, and (8) emotional companionship.

Results in Table 3.1 show that financial decisions made alone by the caregiver appear to have decreased for caregivers in treatment households compared to those in comparison households. On the other hand, there appears to be no correlations or impacts on financial decisions made by the spouse or by spouse and caregiver. These findings on financial decisions are consistent in all the correlations and impact analysis models. The impact analysis models appear to show that social support has improved to caregivers in treated households whilst correlation models do not support the finding. Perception on justification of domestic violence did not change in all models suggesting there appears to be no difference on violence justification between treated and comparison households. Finally, expectation on educational attainment for male and female children did not change between baseline and endline for treated and comparison households.

In addition to the impact estimates, Table 3.2, reports descriptive statistics on decisions and queries specifically related to the cash transfer collected only at endline.[10] Approximately 54 per cent of caregivers in beneficiary households reported they decided alone on the use of the received cash transfer, whilst 40 per cent indicated decisions were made by spouse with the remaining being made by other household members. Furthermore, 26 per cent of caregivers reported that decisions made by them does not face any queries whilst 49 per cent indicated their spouse often queries them on decisions made on the usage of cash transfer, with the remaining 25 reporting that they face queries from other household member.

Table 3.2: Decisions and queries on the use of cash transfer

INDICATOR	MEAN	95% LOWER CI	95% UPPER CI	N
Decisions made by caregiver	53.57	49.70	57.44	1,316
Decisions made by household head (non-caregiver)	39.82	35.52	44.12	1,316
Decisions made by another household member (non-caregiver)	6.61	5.05	8.17	1,316
Queries on cash decisions made by caregiver - none	25.96	20.75	31.17	705
Queries on cash decisions made by caregiver - spouse	48.79	42.84	54.74	705
Queries on cash decisions made by caregiver - another household member	25.25	21.22	29.28	705

Qualitative findings from the QuIP and process evaluation components indicate a noticeable change in the decision-making process between the spouse and caregivers, specifically in terms of budgeting and joint decision making. Figure 3.1 shows strong causal relationships between cash transfers and improved joint decision-making practices in relationships, as well as joint-budgeting practices. Similar to the quantitative findings, however, an increase in the main female caregiver's decision-making was not found, with only three respondents suggesting this was the case.

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10   This information was only asked to beneficiary households at endline as part of the process evaluation module.

*"She said, come my husband, let's sit down and let's decide. First, sit down
with the husband before continuing, let's do what makes us best otherwise
we'll ruin it."*   UMIDI1F, S: 684

Figure 3.1: Changes in spousal relations
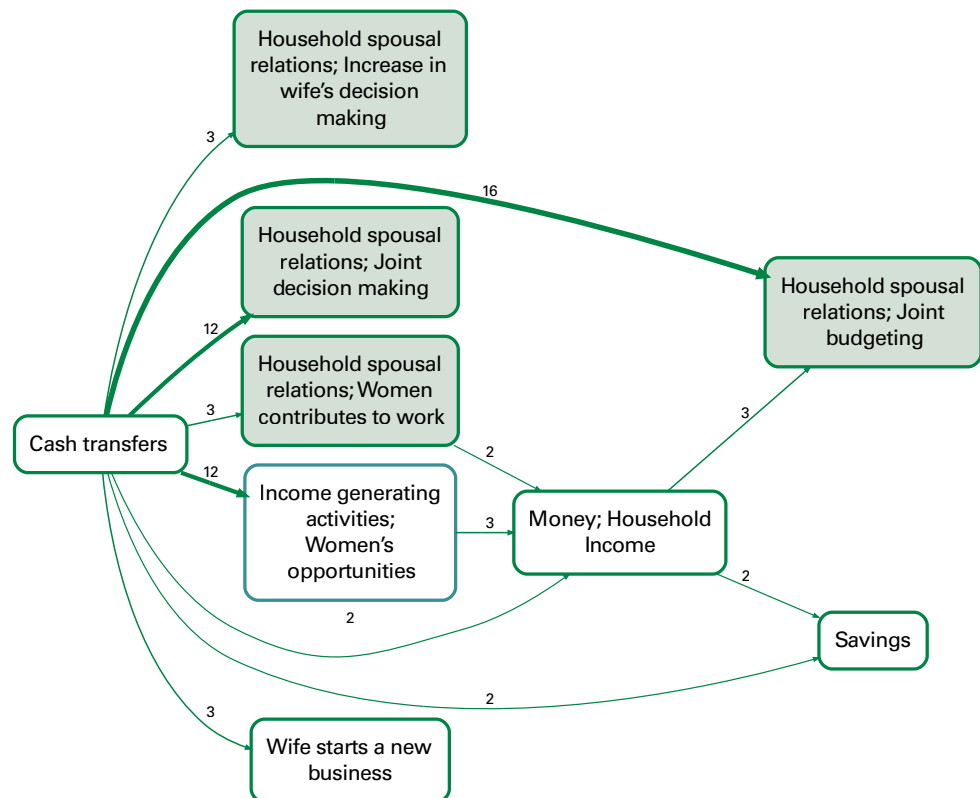
The narratives of the process evaluation focus groups further revealed that women
caregivers were responsible for collecting and managing the cash transfers. It was a
common practice for married women in the three study locations to count the money
together with their partners as they returned from the payment point, and then jointly
decide on the priority needs and spending for the household.

*I go to collect the money and when I get home, I show it to my husband.
We made the child together so the two of us are responsible for deciding
how to spend the money. Sometimes I give part of it to him, so he gets excited,
but most part stays with me to buy things and we make plans together for
those things.*   [Female caregiver in the focus group in Uíge]

Partners of the beneficiaries from all the study sites also stated that their wives were
in charge of collecting the payments. The only instances when men received the
transfers were when they were single caregivers – in these cases, they were enrolled
in the programme as the main caregiver – or when for the woman was absent.

I went back home happy, and she showed me the money. We made plans prioritising the children who are the ones who own the money, we thought about what was missing [at home] and decided to get shoes, food, coats for school and then get some good stuff like a mattress, mosquito nets and from there we would see. We also bought about ten sheets of metal to make a small attachment to the house." [Male caregiver in the focus group in Uige]

Key informant interviews with implementing staff seemed to suggest that the changes in these dynamics produced noticeable improvements in women's self-esteem while increasing their financial autonomy and encouraged them to get involved in the intra-household decision-making process, particularly regarding consumption and expenditures. A municipal-level key informant who works closely with the villages' residents illustrated this point by describing an increased sense of empowerment, authority, and autonomy among female beneficiaries:

It is notable that this money caused an effect on families. What I liked most was to know that while the focus is on the child, it also focused on women. The payments gave the woman a voice, they felt empowered in the community. We live in a community in which women are seen as objects and the cash transfers give them some authority, some autonomy, even if small. This financial aid came to make the women able to make decisions about what they want to do with the money, and to have a voice within their families. [Municipal level key informant]

There are some important caveats to note. Narrative responses in the QuIP study designed to explore changes in spousal decision-making also pointed towards the engrained nature of gendered norms in spousal and household dynamics in these communities. As the following female respondent illustrates, in certain households there remains a strong power imbalance in favour of male financial decision making in male headed households which ultimately limits women's decision making potential;

The man is the one who decides, makes the decision, "my wife let's do this, let's go this". Even when he comes to the conclusion and then does whatever he wants, yes. Inside the house, it's the man who makes that decision. UMIDI2M, S: 979

The above qualitative and quantitative findings suggest that there exists some considerable variation in the experiences of caregivers as it relates to improvements in financial autonomy, and joint decision-making and budgeting. On sole decision-making, both the QuIP and the quantitative findings point towards no significant changes for women caregivers, with the QuIP instead showing causal changes that lead to improvements in joint decision-making and budgeting. Conversely, the process evaluation highlights an improvement in the women caregiver's financial autonomy and decision-making, while also supporting the QuIP finding around improvements in joint-decision-making and budgeting among caregivers. The findings support the analysis that changes are occurring in the decision-making capabilities of women caregivers, but that improvements are hindered by entrenched gender norms described above.

3.1.2 Nutrition and food knowledge

Table 3.3 summarizes correlations and programme impact results on nutrition and food knowledge. The results show impacts on nutrition and food knowledge were not consistent across different estimation models as well as limited to few indicators. There seems to be no statistical difference between treated and comparison households on caregivers' knowledge on the need of new-borns being breastfed immediately after birth or exclusive breastfeeding for the first six months. Likewise, results on knowledge about the benefits of exclusive breastfeeding were not consistent across all models. Pooled OLS showed marginal difference between treated and comparison households, whilst impact estimates using IPW and doubly robust DiD showed improvement by 5 percentage points for caregivers in treated households. However, this result is not corroborated.

Table 3.3: Correlations and Programme Impact on Nutrition and Food Knowledge

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Baby should be breastfed immediately after birth	-0.016	-0.016	-0.038	-0.034	-0.034
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Baby should be exclusively breastfed until 6 months age	0.017	0.016	0.016	0.017	0.017
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Knows about benefits of exclusive breastfeeding	0.018	0.019*	0.051	0.054**	0.054**
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Knows when babies should start receiving liquids	0.038***	0.038***	0.000	-0.000	-0.000
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
Knows when babies should start receiving food	0.041***	0.042***	-0.030	-0.028	-0.028
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Infant between 12-24 months that is still breastfeeding should eat 3-6 meals per day	0.109***	0.111***	0.056	0.055**	0.055**
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
N	5,099	5,099	5,099	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

The qualitative findings were consistent with these findings, as few causal statements from respondents suggested that there was a broad improvement in knowledge of healthy foods, and knowledge of healthy nutrition during breastfeeding. Among the 35 respondents, only two respondents indicated this was the case:

Things changed because my wife inside the house now eats well. Yeah, now my wife is in very good health, so her breastfeeding is good for the child too.
                                                                    BCIDI5M, S: 305

The wife's diet has to change when she's eating. The money helps, we have to buy more vitamins for the wife because it's not just our daughters and our son who need... We need to buy good things for them to grow better, that gives good breastmilk to the woman.   UMIDI3M, S: 820

1.1.3   Financial inclusion

Table 3.4 summarizes correlations and programme impact results on financial inclusion indicators. Financial inclusion indicators include, savings and savings capabilities, credit group in the communities, access to bank account, inward and outward monetary transfers, as well as debt. Results show improvements in financial inclusion along several indicators. Caregivers in treated households are more likely to have savings with respect to caregivers in comparison households. Approximately, savings rate appears to have increased by 36 per cent among caregivers in treated households compared to those in comparison households. The level of savings also appears to have increased in treated household compared to comparison households. On average, caregivers in treated households saved an additional AOA 10,000 over the past month compared to those in comparison households. Though total savings over the past twelve months also increased, the marginal difference with respect of the previous month is approximately AOA 2,400, suggesting much of the available total annual savings derives from accumulated savings over the past month.

Table 3.4: Correlations and Programme Impact on Financial Inclusion

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Caregiver saves money	0.183***	0.183***	0.365***	0.362***	0.362***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Caregiver savings: past month (Kz)	4,699.512***	4,699.426***	10,146.740***	10,182.367***	10,182.367***
	(318.85)	(297.40)	(820.52)	(589.14)	(589.14)
Caregiver savings: past 12 months (Kz)	5,806.162***	5,830.128***	12,490.615***	12,488.819***	12,488.819***
	(409.41)	(371.87)	(1,226.74)	(757.43)	(757.43)
Credit group in the community	0.033***	0.033***	0.006	0.008	0.008
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
A member of the household has a bank account	0.037***	0.036***	0.039**	0.040***	0.040***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Household receives money from people outside household	0.064***	0.064***	0.058***	0.055***	0.055***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Household sends money to people outside household	0.052***	0.052***	0.070***	0.070***	0.070***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Household receives in-kind transfers from people outside household	0.055***	0.054***	0.007	0.007	0.007
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Household has outstanding debt	-0.005	-0.002	-0.042*	-0.040**	-0.040**
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
N	5,099	5,099	5,099	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Another key indicator of financial inclusion that appears to have increased for treated households is access to bank account and hence, banking services. Consistently across all models, access to bank account increased by 5 per cent in treated households compared to comparison households. The result on the availability of credit groups in the communities is mixed across the models. The correlation models show treated households are likely to have credit groups with respect to the comparison households whilst the impact analysis models do not support the correlation. Given that the project does not explicitly elicit formation of credit groups or enhance pre-existing groups, it is plausible that their existence and operation is not influenced by the project. In addition, inward and outward financial transfers with people outside the household also increased. Finally, the impact analysis models appear to show that outstanding debt have reduced in treated households compared to comparison households though the correlations models do not find the reduction to be statistically significant.

While narrative findings on savings did not emerge from qualitative interviews, findings regarding women caregivers' increase in income streams and income generation did and point towards substantial changes. As Figure 4.2 below indicates, recipients of cash transfers have noted improvements in starting or diversifying existing income streams, which in turn contributes to an increase in household income. For example, MMIDI3F, a female participant from Moxico, stated that she took some of the leftover money from cash transfers to buy extra products, as well as hiring extra labourers to help her at the mines. As a result of diversifying her income, she made enough money to purchase and cultivate two additional fields;

With the money I receive I buy the honey. After the honey sells, and the other money goes to the mine [to hire additional labourers], it's enough to cultivate two fields with that extra money. MMIDI3F

Focus groups with beneficiaries likewise revealed that some women used cash transfers to start their own businesses, for instance buying bananas to produce and sell meals or buying chicken to roast and sell closer to the roads. For some of these women, this was the first time they had access to income. These findings suggest that, while cultural norms around gender roles are strong in the communities, the cash transfers promoted a shift on how female beneficiaries deal with money and in some cases allowed women to start activities to self-generate income.

Figure 3.2: Causal changes in income
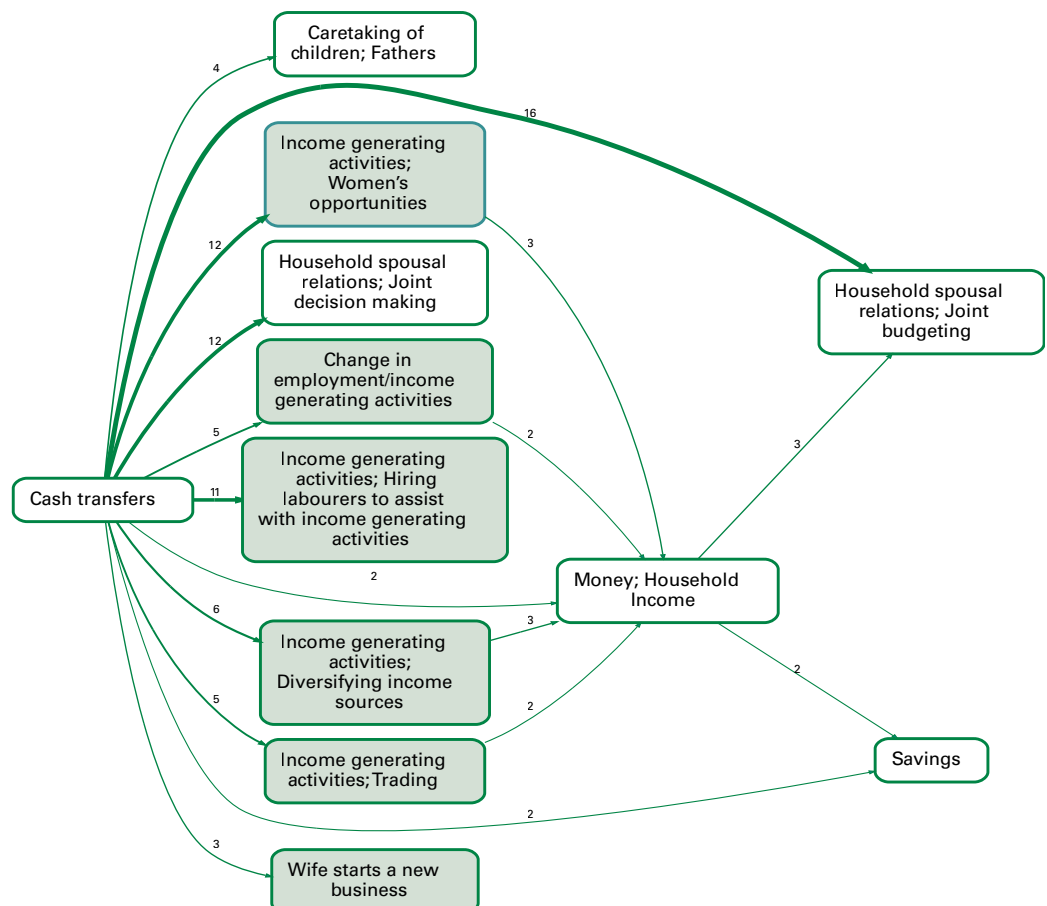
The result of this increased wealth across beneficiary households had an additional community level impact. Figure 3.3 indicates numerous causal statements were made that connected the cash transfers to an improvement in the wealth of the community, as well as community relations generally. Specifically, 11 respondents claimed they had hired additional labourers to assist in income generating activities, often related to agricultural activities. One particular respondent claimed that the cash transfers supported her agricultural activity after her husband's death;

For example, as I don't have a husband, it helps me getting that money. I'll lend it to people to farm for me, and then that money will help me with food, that money will help me with illnesses, that money will help me other concerns that might come. MMIDI1F

As a result of the cash transfers and the ability for beneficiaries to pay community members to support them with income generating activities, the findings note an improvement in community prosperity and community relations. As one respondent from Bié claimed: *The Village has improved and changed. The village has changed through this money that the government has given, the others that were behind are also moving towards finding the others.*

Figure 3.3: Causal changes in income (community)
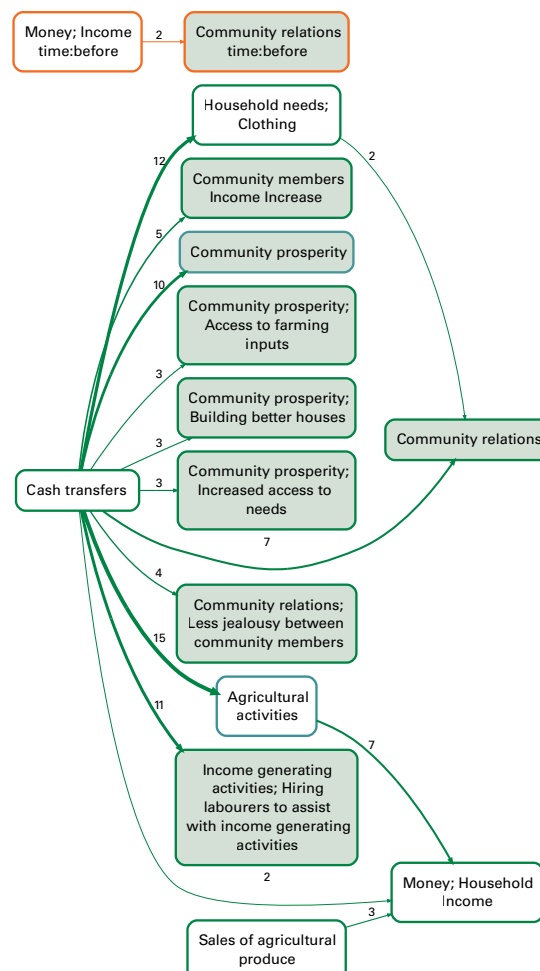
3.2   Children under the age of five years

3.2.1   Material wellbeing

Access to sandals, clothing, and bedding constitute the basic form of child wellbeing and protection against exposure to hazards, injury, and health risks. Results of the analysis of child material wellbeing represented by possession of at least a pair of sandals or shoes, two sets of clothes, blanket are reported in Table 3.5. The results appear to show consistent improvements in child material wellbeing in all indicators across all models. Possession of a pair of sandals or shoes have increased by approximately 47 per cent for children in treated households. Similarly, having at least two sets of clothes and a blanket also increased by 25 per cent and 49 per cent, respectively, on average.

Table 3.5: Correlations and Programme Impact on Child Material Wellbeing (0-59 months)

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Child has a pair of sandals or shoes	0.329***	0.330***	0.472***	0.474***	0.474***
	(0.02)	(0.02)	(0.04)	(0.03)	(0.03)
Child has two sets of clothes	0.175***	0.176***	0.256***	0.254***	0.254***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Child has a blanket	0.287***	0.286***	0.483***	0.489***	0.489***
	(0.02)	(0.02)	(0.05)	(0.03)	(0.03)
N	3,753	3,753	3,753	3,218	3,218

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Qualitative findings in the QuIP and process evaluation components similarly point towards an increase in caregivers purchasing various materials to improve their children's wellbeing. The most common materials include bedding, clothing, shoes, and educational supplies. These items were considered of great importance to caregivers, particularly in encouraging their children to attend schooling, as children would often refuse to go out of embarrassment for their worn-out clothes or shoes;

Two years ago, children aged between 6 and 8 did not like to go to school, they argued because they did not have shoes, but thanks to the money that the government grants them, today I can take 50 and go to school. Even before to push him at school when he is dirty, sometimes he will not accept and say: "I don't have shoes I can't go, I don't have clothes I can't go". But now we are taking good care of them, they are dressing well.   MMIDID3M

Along with the ability to go to school, purchasing bedding and soap has been associated with increased wellbeing across several recipient households. Soap in particular has provided better outcomes to educational achievement, noting that clean children were more likely to want to attend school.

Figure 3.4 below shows the causal maps that emerge from the respondent interviews focussing on changes to wellbeing as a result of receiving cash transfers. While accessing material items is not present on this map, the statements made often claimed a direct causal link between receiving cash transfers and household, individual, and children's wellbeing.

Figure 3.4: Impact on Child Material Wellbeing (0-59 months)
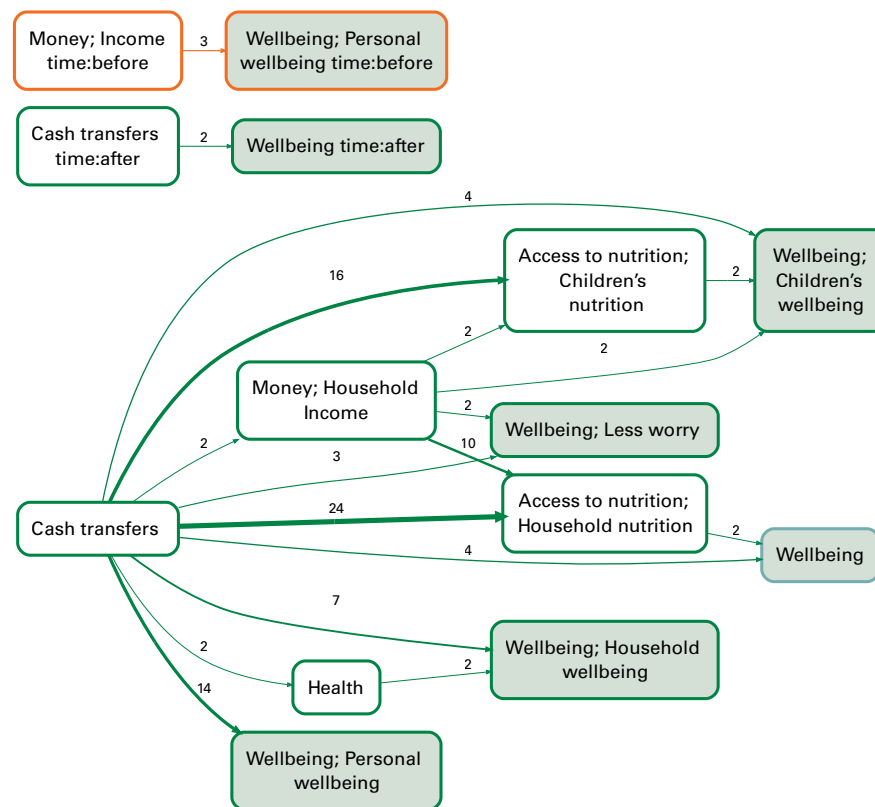
3.2.2 Maternal and child health

Table 3.6 report results on household's demand and use of healthcare services for maternal health and children under the age of five years. The World Health Organization (WHO) recommend pregnant women receive at least four times antenatal care visits as this increases the likelihood of receiving maternal health interventions such as blood pressure measurement, urine testing for bacteriuria and proteinuria, blood testing to detect syphilis and severe anaemia, and many others. Results in Table 3.6 shows that pregnant women who received four or more antenatal care visits increased by 15 per cent in treated households compared to those in comparison households. Furthermore, pregnant women who had no antenatal care visits decreased by 28 per cent in treated households.

Table 3.6: Correlations and Programme Impact on Maternal and Child Health (0-59 months)

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Antenatal care visits four times or more	0.090***	0.091***	0.160***	0.154***	0.154***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
No antenatal care visit during pregnancy	-0.065***	-0.068***	-0.295***	-0.287***	-0.287***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Delivery with assistance from skilled provider – Traditional Birth Attendant	0.075***	0.076***	-0.012	-0.014	-0.014
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Delivery with assistance from skilled provider	0.181***	0.182***	0.010	0.012	0.012
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Delivery in health facility	0.177***	0.178***	-0.022	-0.017	-0.017
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Child has health card	0.271***	0.272***	0.158***	0.151***	0.151***
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
Size at birth small/very small	-0.036***	-0.036***	-0.026	-0.028	-0.028
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
No growth monitoring visit	-0.067***	-0.068***	-0.272***	-0.273***	-0.273***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
At least three monitoring growth visits	0.124***	0.125***	0.175***	0.183***	0.183***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Received Vitamin A supplements in last 6 months	0.135***	0.137***	0.123***	0.123***	0.123***
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Received deworming medication in last 6 months	0.122***	0.124***	0.138***	0.138***	0.138***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Child had diarrhoea in the last 2 weeks	0.059***	0.061***	-0.021	-0.021	-0.021
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Child had fever in the last 2 weeks	0.069***	0.068***	0.004	0.006	0.006
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Child had cough in the last 2 weeks	0.059***	0.059***	0.012	0.014	0.014
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
N	4,992	4,992	4,992	5,138	5,138

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

On the other hand, the improvement observed in access to antenatal care visits during pregnancy does not translate into birth delivery with assistance from skilled provider (either trained traditional birth attendant or formal healthcare practitioner) and delivery in health facilities. This could be driven by different factors such as distances between homes and health facilities as well as logistics challenges to reach a health facility in the shortest possible time. However, the results highlight several afterbirth healthcare services demands. The likelihood of a child having a health card appears to have increased by 15 per cent in treated households compared to comparison households. Similar to antenatal care visits, post-birth growth monitoring visits increased in treated households compared to comparison households.

Other preventive care investments such as vitamin A supplements and deworming medication also increased approximately by 12 and 14 per cent, respectively, in treated households compared to comparison households. Finally, incidence of common ailments such as diarrhoea, fever, and cough showed no statistical significance variation from baseline to endline between treated and comparison households.

The QuIP analysis is consistent with these findings, suggesting that healthcare practices have broadly improved as a result of cash transfers; however, the data is ambiguous in terms of the specific treatments and to whom the treatments were provided. As Figure 3.4 demonstrates, 10 recipients claimed that access to cash transfers improved their access to medical treatments. More specifically, the ability to purchase medication or to provide payment for treatments was often a direct outcome of accessing cash transfers:

In the illness, at the doctor's office, the nurse asks for money from the person that he treated [and] we take from that money [cash transfers].　　　　BCIDI1M

They give them a prescription at the hospital, they [the recipients] take that money with which they can buy medication. This here is what is improving in the master's house.　　　　MMIDI5M

In terms of antenatal medical care, the QuIP results found few direct causal statements, with only three respondents claiming that access to children's medical treatments had improved, and two respondents claiming to have improved treatments during their pregnancy.

Claiming that cash transfers generally facilitate bringing children to the hospital, one respondent said;

"I think [the cash transfers] are making it easier for us in our work [and] in our sickness. When a child is sick you just take them there, go to the hospital - it makes it easier, it's making it easier."　　　　BCIDI1M

Figure 3.5: Programme Impact on Access to Medical Treatments
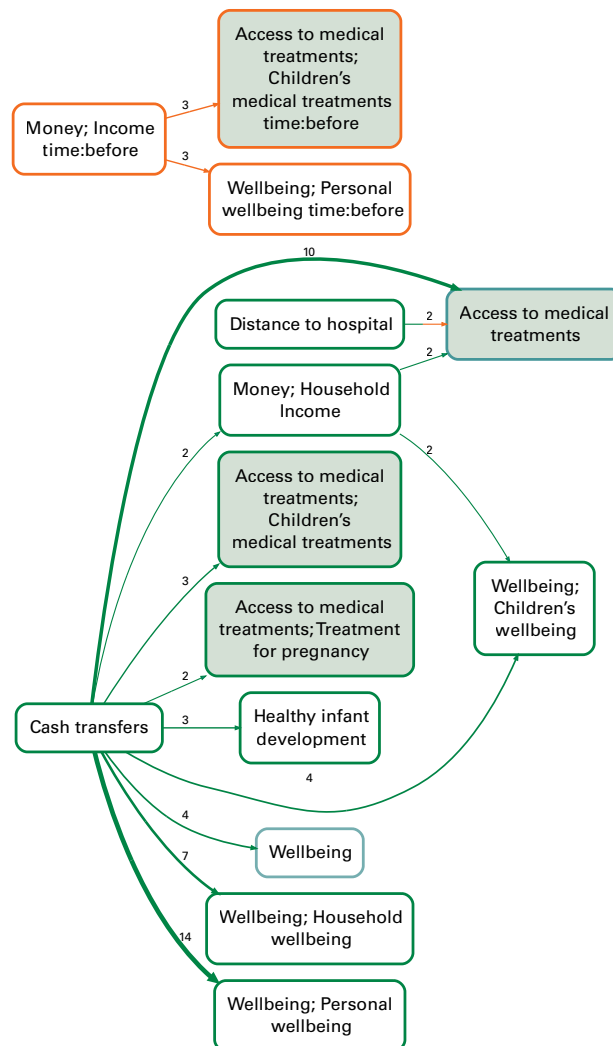
3.2.3 Immunization

As observed on the demand for prenatal and postnatal healthcare services in the previous sub-section, similar trends can also be observed for the demand of immunization. Ownership and availability of vaccination card have increased for infants in treated households compared to those in comparison households (see Table 3.7). For accuracy, vaccination status for each vaccine type were directly recorded from vaccination.[11] There were improvements in all vaccination types except for the fourth dose of Polio and Measles. The number of infants who had received their complete schedule of vaccination increased by 18 per cent for infants in treated households.

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11   Beyond recording vaccination status from children vaccination card as the preferred source, the information is then captured by picture which is securely stored. The capturing of the information enabled cross-validation for data accuracy.

Table 3.7: Correlations and Programme Impact on Immunization Rate (12 - 23 months)

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Vaccination card ownership	0.263***	0.264***	0.125***	0.116***	0.116***
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
Vaccination card availability (seen)	0.123***	0.122***	0.046	0.048***	0.048***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
BCG	0.140***	0.147***	0.165**	0.208**	0.208**
	(0.03)	(0.03)	(0.07)	(0.08)	(0.08)
Polio 1	0.152***	0.159***	0.165**	0.168*	0.168*
	(0.03)	(0.03)	(0.07)	(0.09)	(0.09)
Polio 2	0.156***	0.162***	0.239***	0.202**	0.202**
	(0.03)	(0.03)	(0.06)	(0.09)	(0.09)
Polio 3	0.165***	0.172***	0.210***	0.199**	0.199**
	(0.03)	(0.03)	(0.06)	(0.08)	(0.08)
Polio 4	0.150***	0.157***	0.157**	0.108	0.108
	(0.03)	(0.03)	(0.06)	(0.08)	(0.08)
Pentavalent 1	0.133***	0.142***	0.153**	0.199**	0.199**
	(0.03)	(0.03)	(0.06)	(0.08)	(0.08)
Pentavalent 2	0.131***	0.139***	0.196***	0.224***	0.224***
	(0.03)	(0.03)	(0.06)	(0.08)	(0.08)
Pentavalent 3	0.123***	0.132***	0.180***	0.184**	0.184**
	(0.03)	(0.03)	(0.05)	(0.08)	(0.08)
Measles	0.115***	0.115***	0.123*	0.126	0.126
	(0.03)	(0.03)	(0.07)	(0.08)	(0.08)
Received 2 doses of Rotavirus	0.099***	0.103***	0.190***	0.184**	0.184**
	(0.02)	(0.02)	(0.05)	(0.08)	(0.08)
Received 3 doses of Pneumococcal Conjugate Vaccine	0.097***	0.102***	0.177***	0.230***	0.230***
	(0.03)	(0.03)	(0.06)	(0.08)	(0.08)
Received all vaccinations	0.109***	0.113***	0.210***	0.177**	0.177**
	(0.03)	(0.03)	(0.05)	(0.08)	(0.08)
N	1,326	1,326	1,326	526	526

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

3.2.4 Child development and discipline

Tables 3.8 and 3.9 present results child development and discipline indicators, respectively. The quantitative survey instrument elicited information on child development activities such as reading of books to the child, telling stories, singing of songs, walking with the child outside the home, playing with the child and undertaking simple arithmetic activities such as counting of object and drawing. These activities have the potential to stimulate child development. The results in Table 3.8 shows no statistically significant changes on child development indicators between children in treated and comparison households from baseline to endline.

Table 3.8: Correlations and Programme Impact on Child Development (0-59 months)

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Number of activities with mother (if biological mother lives with child)	-0.011	0.001	-0.248	-0.178	-0.178
	(0.06)	(0.06)	(0.19)	(0.13)	(0.13)
Number of activities with the father (if biological father lives with child)	0.050	0.043	0.031	0.073	0.073
	(0.05)	(0.05)	(0.12)	(0.09)	(0.09)
Number of activities with other adult member of the household	0.208***	0.203***	-0.060	-0.056	-0.056
	(0.04)	(0.04)	(0.14)	(0.08)	(0.08)
4+ activities with an adult household member	0.018	0.020	-0.055	-0.044*	-0.044*
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
1+ activities with the mother	0.007	0.010	-0.039	-0.029	-0.029
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
1+ activities with the father	0.003	0.004	0.017	0.015	0.015
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
N	4,992	4,992	4,992	5,138	5,138

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Table 3.9: Correlations and Programme Impact on Child Discipline (0-59 months)

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Phycological aggression	0.033**	0.033**	0.011	0.017	0.017
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
Physical punishment	0.004	0.004	0.010	0.009	0.009
	(0.02)	(0.02)	(0.04)	(0.03)	(0.03)
Any violent discipline	0.037**	0.036**	0.017	0.029	0.029
	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)
Any non-violent discipline	0.018	0.024	-0.005	-0.029	-0.029
	(0.02)	(0.02)	(0.04)	(0.04)	(0.04)
N	2,807	2,807	2,807	1,810	1,810

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Similar to the quantitative findings, the QuIP found little causal evidence that cash transfers produced changes to child discipline and caregiving practices. Recipients claimed that cultural norms of parenting and caregiving had long established these practices as rooted in the community, and there was little need or desire to change these.

There has not been a difference for a long time. The one who takes care of the child is Laura [the respondent]. The father walks a lot, the one who knows the child is Laura. Laura is the one who takes care, is the one who bathes, is the one who takes the child to school. *BCIDI5F, S: 493*

As Figure 3.6 indicates with low source numbers, few respondents made the causal claim that cash transfers had positively impacted caregiving and child discipline practices in their households.

Figure 3.6: Correlations and Programme Impact on Child Caretaking Practices (0-59 months)
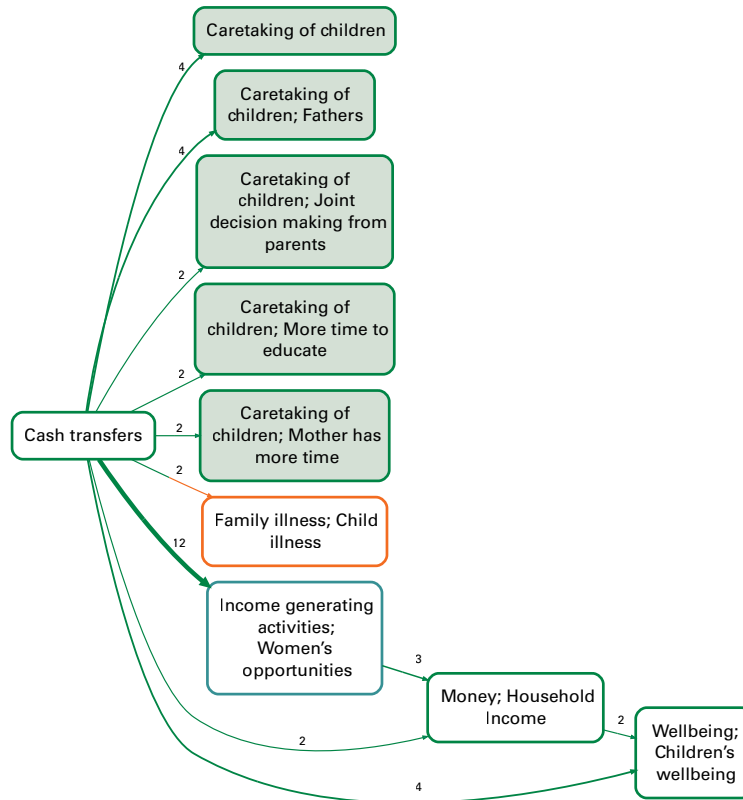
3.2.5 Child feeding practices and diet

Table 3.10 shows correlations and programme impact on child feeding practices and diet. The various foods consumed are classified into seven major food groups based on their nutritional component. Consumption of carbohydrate-based food group – grains, roots, and tubers – increased about 18 per cent for children in beneficiary households. Legumes and nuts also appear to increase by 12 per cent, whilst the consumption of dairy product did not appear to have changed. Children in beneficiary households' consumption of meats, fish, poultry, liver/organ as well as eggs increased by 24 and 12 per cent, respectively, compared to those in comparison households. Consumption of vitamin A rich fruits and vegetables as well as other fruits and vegetables also increased by approximately 10 per cent each. Lastly, there was no difference on continuous breastfeeding for children between 6-23 months in beneficiary and non-beneficiary households.

Table 3.10: Correlations and Programme Impact on Child feeding practices and diets (6-59 months)

| DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Food Group 1: Grains, roots, and tubers	0.143***	0.144***	0.161***	0.180***	0.180***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Food Group 2: Legumes and nuts	0.069***	0.069***	0.116***	0.119***	0.119***
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
Food Group 3: Dairy products (milk, yogurt, cheese)	0.024*	0.026**	0.023	0.037	0.037
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
Food Group 4: Fresh foods (meat, fish, poultry, liver/organ meats)	0.166***	0.165***	0.239***	0.241***	0.241***
	(0.02)	(0.02)	(0.04)	(0.03)	(0.03)
Food Group 5: Eggs	0.086***	0.085***	0.122***	0.120***	0.120***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Food Group 6: Vitamin A rich fruits and vegetable	0.067***	0.067***	0.089*	0.096***	0.096***
	(0.01)	(0.01)	(0.05)	(0.03)	(0.03)
Food Group 7: Other fruits and vegetables	0.053***	0.053***	0.106***	0.107***	0.107***
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Children 6-23 months still breastfeeding	-0.006	-0.005	0.021	0.015	0.015
	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)
Minimum dietary diversity: 6-23 months	0.113***	0.113***	0.131***	0.073	0.073
	(0.02)	(0.02)	(0.05)	(0.07)	(0.07)
Minimum dietary diversity: all children 6 months & above	0.137***	0.136***	0.172***	0.187***	0.187***
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Minimum meal frequency: children 6-23 months	0.084***	0.083***	0.097**	0.048	0.048
	(0.02)	(0.02)	(0.04)	(0.05)	(0.05)
Minimum meal frequency: all children 6 months & above	0.034***	0.034***	0.032	0.024	0.024
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Minimum acceptable diet: children 6-23 months	0.044***	0.045***	0.053***	0.039*	0.039*
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Minimum acceptable diet: children 6 months & above	0.021***	0.021***	0.020**	0.022**	0.022**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
N	4,259	4,259	4,259	3,828	3,828

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Three indicators, minimum dietary diversity, minimum meal frequency, and minimum acceptable diet are derived from food groups and information on breastfeeding. Minimum dietary diversity did not improve for children between 6-23 months. However, extending the age group to capture children 6-59 months showed improvement on dietary diversity. On minimum meal frequency, there was no impact both on children 6-23 months and 6-59 months. Minimum acceptable diet showed marginal improvement for children 6-23 months and those between 6-59 months.

The QuIP results, on the other hand, provide strong indications that children are consuming more food groups as a result of households accessing cash transfers. Figure 3.7 shows strong causal links across five factors; Diversity of child food sources, Children's food consumption, Infant food consumption, food consumption during pregnancy, diversity of food groups consumed, and general household food consumption. Each of these factors provide strong indications that accessing cash transfers has had a positive impact on the diversity and the overall amount of food consumed across infant, child, and pregnant mothers' food consumption levels.

Interviews across the process evaluation component likewise noted that beneficiaries, partners of beneficiaries, and local key informants in most study sites stated that cash transfers were often used to buy food and provide nutritious meals for children. In the focus groups, female and male caregivers mentioned milk, greens, oil, and grains such as soy and rice among the types of food bought after receiving the cash transfers.

As one respondent claimed:

Because it buys you good things that you are feeding them, [such as] oil there. Good oil that the person can eat so then the children are enjoying eating [and] are eating well.   MMIDI7F, S: 588

The mention of oil was made several times across respondents in the QuIP study and during focus groups and interviews with beneficiaries for the process evaluation component. The findings indicated that oil is a key ingredient both in terms of health outcomes, and in elevating the taste of the various foods and dishes consumed by members of the household. As a result of more flavourful meals, the general consumption of food was improved.

Because in the past the food had no taste now the current food has a taste because it was cooked with oil and other products.   MMIDI3F, S: 113

In contrast, respondents claimed that a lack of income, or the period before the intervention, was often characterized by a reduced dietary diversity and a lower food intake. This was reflected in respondents claiming to often eating only one meal a day, that meal often being restricted to a bowl of cassava or a meal of funge. The restrictive diet had important outcomes for caregivers, some of whom claimed that even infants would occasionally make do with eating only funge for extended periods of time:

It was different, because even before, the baby was required to eat funge. BCDIDI3M

Others claimed that the restrictive diets had negative consequences for health outcomes;

We had no way of getting some money or how to have the money that we are getting now; we suffered, we ate badly. Sometimes if you are not very healthy and if you are sick, the thing you are going to eat is also bad, so it is always suffering. Nowadays with this money that is helping us, we buy something as soon as we can to give us health.   MMIDI3M

Figure 3.7: Impact on Child Feeding Practices, before and after cash transfers[12]

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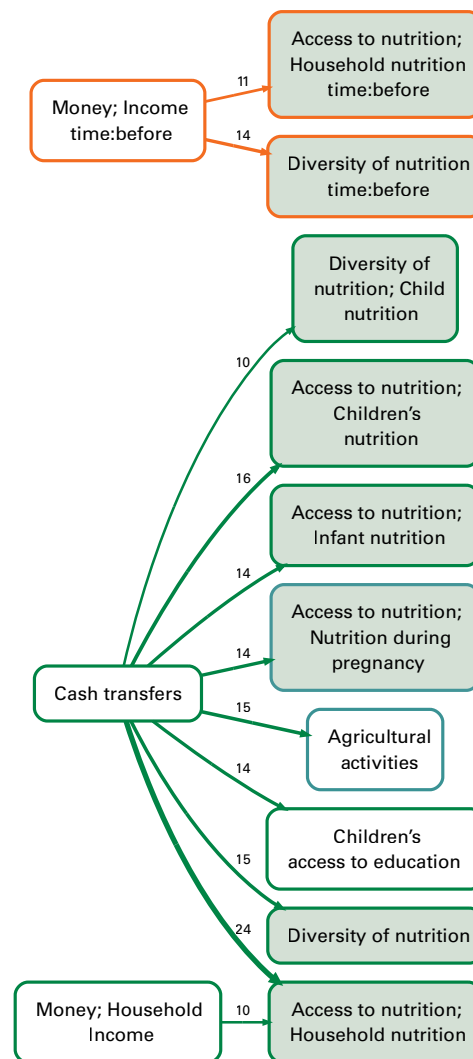
12   This causal map is a work in progress. The labels need to be amended.

4. Impacts of cash transfers on households

Key findings:

1. The programme increased household assets. Likewise, monthly household purchases grew with purchases of clothing and footwear increasing by 44 and 55 percentage points for beneficiary households compared to non-beneficiary households. Qualitative analysis supports these findings, as it shows a direct causal relationship between receiving cash transfers and investments in clothing, bedding, and, to a lesser extent, hygienic products such as soap.

2. The cash transfers improved household economic activities. The percentage of households with livestock increased by 14.2 percent in treated households, and improvements were also registered in the number of crops cultivated and ownership of land for cultivation. Qualitative interviews point towards similar findings, and also improved beneficiary crop diversification as a result of accessing cash transfers. The causal analysis further demonstrates a connection between increased agricultural activities and income generation, which results in improved household food consumption.

3. Several food security and food intake indicators improved in treated households, with the number of meals per day increasing by 24 per cent and, while anxiety about lack of food dropping by 14.7 percent compared to non-beneficiary households. Qualitative causal analysis supports these findings, with a majority of respondents claiming more diverse food consumption, and an increase in food consumption generally. The analysis also shows that both food consumption and food diversity were lower prior to becoming programme beneficiaries.

4.1   Household assets

Table 4.1 presents correlations and programme impact on household assets accumulation. The results show the number of assets increased significantly for treated households compared to comparison households. This is also reflected in the household asset index – constructed by principal component analysis – which appears to have increased by 36 per cent for treated households compared to comparison households. On item-specific asset, three items have registered positive and statistically significant improvement. Possession of telephone, radio, and motor bicycle improved by 12.8, 26.5, and 8.6 percentage points, respectively. Other remining assets did not register consistent statistical improvement.

Table 4.1: Correlations and Programme Impact on Household Assets Accumulation

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Number of assets	0.303***	0.302***	0.610***	0.594***	0.594***
	(0.03)	(0.03)	(0.06)	(0.05)	(0.05)
Asset index	0.174***	0.174***	0.365***	0.356***	0.356***
	(0.02)	(0.02)	(0.04)	(0.03)	(0.03)
Telephone	0.073***	0.075***	0.133***	0.128***	0.128***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Radio	0.128***	0.128***	0.268***	0.265***	0.265***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Motor bicycle	0.059***	0.059***	0.088***	0.086***	0.086***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Fridge	-0.001	-0.001	0.002	0.004	0.004
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Computer	-0.000	-0.000	0.007**	0.007***	0.007***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Bicycle	0.010**	0.010**	0.012*	0.012	0.012
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
Cart	-0.003*	-0.003*	0.001	-0.001	-0.001
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Fishnet	0.000	0.000	0.012**	0.010	0.010
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
N	5,026	5,026	5,026	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

4.2 Household economic activities

Table 4.2 presents correlations and impact on household economic activities that includes livestock, agriculture, and non-farm enterprises. The percentage of households that had any livestock increased by 14.2 percentage points for treated households compared to comparison households between baseline and endline. However, there was no improvement in the number of livestock owned measured in the standardized tropical livestock units. Similarly, the number of households that had land for cultivation increased by 5.4 percentage points for programme beneficiaries compared with non-beneficiaries. The number of crops cultivated increased by 18.3 percentage points for beneficiary households compared to non-beneficiary households. However, crops diversification in terms of different categories of crops remained unchanged between beneficiary and non-beneficiary households.

Table 4.2: Correlations and Programme Impact on Household Economic Activities

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Household has any livestock	0.110***	0.108***	0.144***	0.142***	0.142***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Number of Livestock Owned in Tropical Livestock Units	0.042	0.046	-0.048	0.050	0.050
	(0.06)	(0.06)	(0.24)	(0.23)	(0.23)
Has land for cultivation	0.062***	0.062***	0.056**	0.054***	0.054***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Number of crops cultivated	0.205***	0.209***	0.181*	0.183***	0.183***
	(0.03)	(0.03)	(0.10)	(0.07)	(0.07)
Crop diversification - at least two different crops categories	0.072***	0.073***	0.039	0.039	0.039
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Household owned/operated service trade (e.g., tailor, carpenter, barber etc.)	0.055***	0.056***	0.093***	0.099***	0.099***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Household processed and sold any agricultural sub-products, meat, and fish	0.048***	0.048***	0.059**	0.058***	0.058***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Household owned/operated other non-agricultural trade incl. street market	0.074***	0.075***	0.106***	0.113***	0.113***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
N	5,026	5,026	5,026	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Additionally, beneficiary households reported consistent improvement in non-farm enterprise activities compared to non-beneficiary households. The percentage of households that owned or operated service trade such as tailor, carpentry, hair services among others, increased by approximately 10 per cent for beneficiary households compared to non-beneficiary households. Similarly, the number of beneficiary households that operated other non-agricultural trade such as street market increased by 11.3 per cent for beneficiary households. Finally, beneficiary households were also more likely process and sell agricultural produce such as meat and fish compared to non-beneficiary households.

As Figure 4.1 indicates, the causal analysis similarly indicates that cash transfers have impacted a range of agricultural practices. Overall, recipients were able to use cash transfers to plant new cultivatable crops, such as onions, potatoes, limes, and corn, and improved the ability to access fertilizer and other farming inputs. More broadly, 15 respondents suggested that cash transfers had generally improved their agricultural activities. An important outcome of these improvements is that respondents linked these agricultural activities to higher yields and increased sales of agricultural products, suggesting that cash transfers can be causally linked to increases in income generating activities and consequently, household income.

Because from that, from that project I was able to buy more agricultural inputs that increase my production and from there I can take a part to sell and I can buy other goods that I couldn't have and buy also others, I can make exchanges.   BCIDI4M

Figure 4.1: Correlations and Programme Impact on Household Economic Activities
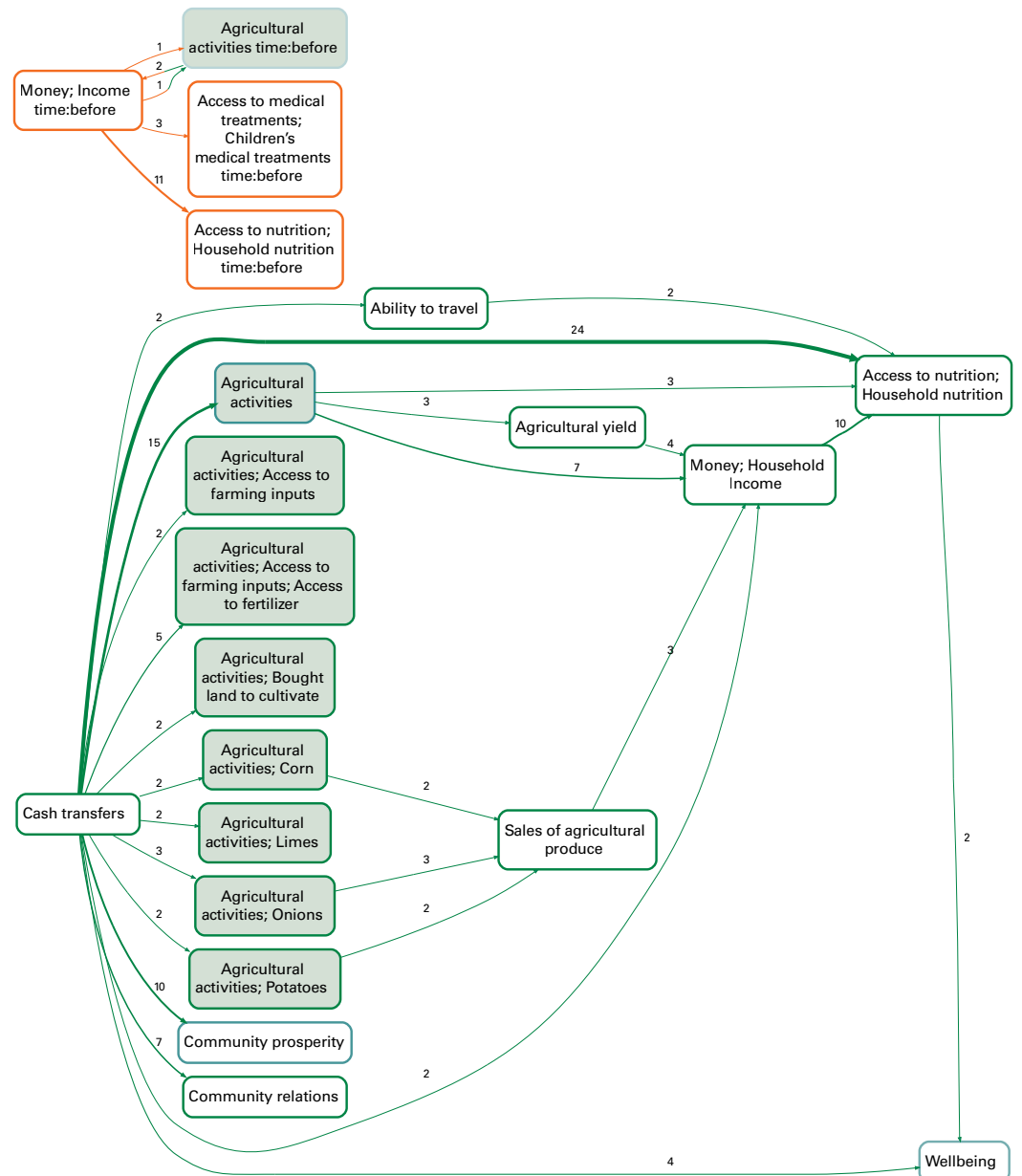
These outcomes are also linked to household nutrition, with the diversity of plants cultivated and increased agricultural activities showing an important role in providing a wider range of food sources for consumption.

4.3   Household food security and food intake

One of the main objectives of the programme is to access the effectiveness of cash transfer to address basic needs of the targeted population. Table 4.3 presents assessment of the programme on food security and food intake at the household level. In a nutshell, several measures of food security and food intake indicators

improved between baseline and endline. The number of meals per day increased by 24 per cent for beneficiary household compared to non-beneficiary households. The improvement in the number of meals per day consumed reflected in other dimensions of food security. For instance, households that worried about lack of food or had no food for a full day decreased by 14.7 and 12.2 percentages points, respectively. Moreover, experience-based food security indicators – food insecurity experience scale and household hunger scale – which summaries various aspects of food insecurity corroborates the findings on the improvement on food security (see T. Ballard et al. 2011; and T. J. Ballard, Kepple, and Cafiero 2013 for technical guidelines on the above-mentioned indicators). Beneficiary households reported improvement in their food insecurity experience scale and the household hunger scale compared to non-beneficiary households.

Table 4.3: Correlations and Programme Impact on Household Food Security

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Number of meals per day	0.219***	0.220***	0.240***	0.239***	0.239***
	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
Worried about lack of food, last 4 weeks	-0.100***	-0.099***	-0.156***	-0.147***	-0.147***
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
Went without food for a day, last 4 weeks	-0.166***	-0.166***	-0.127***	-0.122***	-0.122***
	(0.01)	(0.01)	(0.04)	(0.03)	(0.03)
Food Insecurity Experience Scale	-1.061***	-1.062***	-1.150***	-1.139***	-1.139***
	(0.09)	(0.09)	(0.26)	(0.17)	(0.17)
Household hunger scale	-0.486***	-0.488***	-0.394***	-0.382***	-0.382***
	(0.04)	(0.04)	(0.12)	(0.07)	(0.07)
Grains and cereals (gram/week/per capita)	254.821***	251.484***	1,263.439***	1,260.305***	1,260.305***
	(69.99)	(66.22)	(214.68)	(133.81)	(133.81)
Roots and tubers (gram/week/per capita)	18.382	21.076	107.403***	105.821***	105.821***
	(13.98)	(14.65)	(33.34)	(26.06)	(26.06)
Vegetables (gram/week/per capita)	-4.074	-2.127	126.174**	128.141***	128.141***
	(16.69)	(15.24)	(50.85)	(31.12)	(31.12)
Fruits (gram/week/per capita)	-269.397	-269.595	-619.274	-584.258	-584.258
	(241.49)	(270.91)	(490.82)	(506.15)	(506.15)
Meats (gram/week/per capita)	703.899	650.907	1,362.368	1,348.223	1,348.223
	(449.34)	(535.92)	(854.88)	(850.47)	(850.47)
Eggs (gram/week/per capita)	0.042***	0.042***	0.059***	0.059***	0.059***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Fish and seafood (gram/week/per capita)	176.584***	173.888***	517.255***	520.454***	520.454***

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
	(31.84)	(29.27)	(92.79)	(59.86)	(59.86)
Pulses, legumes, and nuts (gram/week/per capita)	47.357	47.616	142.109	178.375**	178.375**
	(42.26)	(50.05)	(99.61)	(88.64)	(88.64)
Milk and dairy products (gram/week/per capita)	65.715	66.756	271.950	269.928	269.928
	(190.02)	(202.63)	(407.00)	(325.72)	(325.72)
Sugar (gram/week/per capita)	87.146***	83.186**	262.124***	265.582***	265.582***
	(33.28)	(32.32)	(76.14)	(64.37)	(64.37)
Oils and fats (gram/week/per capita)	86.930***	88.645***	298.944***	297.520***	297.520***
	(16.78)	(16.02)	(45.71)	(30.97)	(30.97)
Household Dietary Diversity Score	0.967***	0.969***	2.962***	2.990***	2.990***
	(0.07)	(0.08)	(0.21)	(0.13)	(0.13)
Berry Index	0.039***	0.039***	0.123***	0.127***	0.127***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Healthy Food Diversity Index - FCSBI	0.028***	0.028***	0.048***	0.049***	0.049***
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
N	4,698	4,698	4,698	4,518	4,518

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

We complement the analysis on food security with food intake using detailed information on food consumption gathered during data collection. All the various food items are grouped into the following macro food groups: grains and cereals; roots and tubers; vegetables; fruits; meats; eggs; fish and seafood; pulses, legumes, and nuts; milk and dairy products; sugar, oils, and fats; and miscellaneous that gather other food items (see Table 4.3). Three indicators are computed from these food groups to capture household food intake. The first indicator, Household Dietary Diversity Score (HDDS), counts the number of distinct food groups consumed by the household. The HDDS for a representative can be expressed as:

$$HDDS_h = \sum fg.$$

Results in Table 5.3 shows that beneficiary households were more likely report an increase in the number of food groups consumed by approximately three units of food groups compared to non-beneficiary households. Whilst the HDDS has registered improvement in the diversity of food groups consumed by households, it does not consider the relative quantities of the food groups. To overcome this limitation, we

supplement the HDDS with the Berry Index, which accounts for the actual quantity of food consumed in each food group category. The Berry Index for a representative household can be expressed as:

$$BI_h = 1 - \sum s_i^2,$$

where s_i is the share of food group i in the total quantity of food consumed by a household. The Berry index thus captures relative weight of each food group on a normalized scale between 0 and 1. If Berry Index equals zero, it indicates that the household consumes only one food group. The results in Table 4.3 shows that the Berry index also increased for beneficiary households by approximately 12.7 per cent compared to non-beneficiary households.

Lastly, whilst the Berry index improves on the HDDS, it does not account for the nutritional value of each food group. We exploit information on the nutritional content of each food group as validated in the World Food Programme's (WFP) food consumption score indicator to propose a Healthy Food Diversity Index (HFDI). The HFDI can be expressed as:

$$HFDI_h = \left(1 - \sum s_i^2\right) nv_h,$$

where nv is nutritional value of each food group composition. Like the Berry Index, the HFDI ranges between 0 and 1. Results of the indicator in Table 4.3 shows that, the nutritional food diversity score increased per 5 per cent for beneficiary households compared to non-beneficiary households.

Consistent with the above quantitative results, QuIP research findings indicate that there has been an important diversification in the types of foods that recipient's households have access to and consume. Figure 4.2 shows a causal map whereby respondents provide evidence as to the types of foods they have access to as a direct causal consequence of cash transfers. These include meats, oil, rice, pasta, and fish. Additionally, 15 respondents claimed no specific types of food sources, but rather comment generally that they had access to wider food groups as a result of accessing cash transfers.

The government managed to bring this amount, which is making it much easier, because there was a time when they only ate soba, but now they are able to buy chicken, oil and so on. MMIDI5F

14 respondents suggested that diversity in food sources were especially important in the diet's children and infants. Claiming that:

Now they [the children] are ok. Now the food they couldn't eat before they are being able to. Before we were not able to buy fish, meat - we couldn't buy things that were expensive. UMIDI6F

Figure 4.2: Programme Impact on Household Food Security
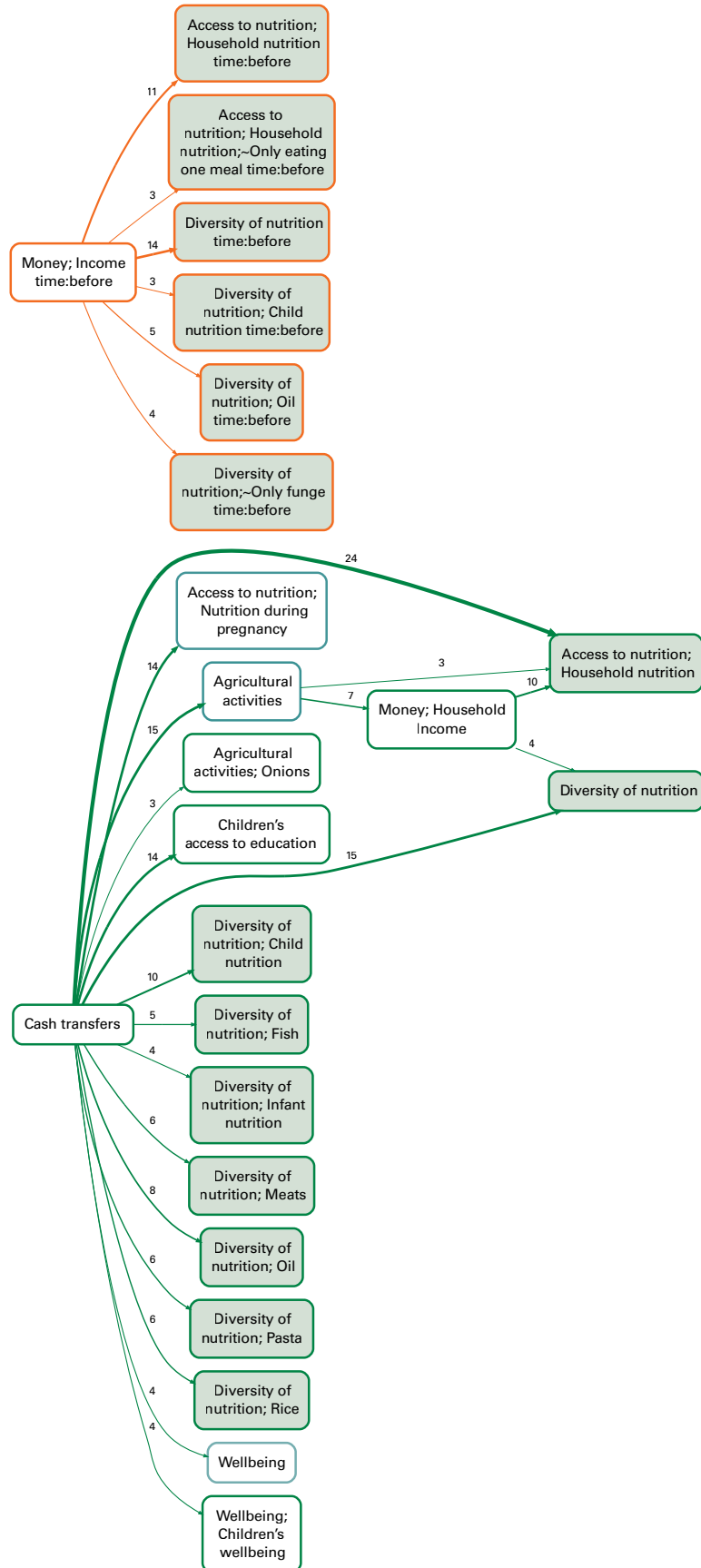
Conversely, statements made by respondents referring to their food consumption before receiving the cash transfers show a definite lack in diversity in food consumption and a generally low ability to access food sources. Figure 4.3 below represents the causal claims from respondents in which beneficiaries' comment on the causes of a lack of income prior to enrolment in the social cash transfer programme.

Figure 4.3: Household food security previous to cash transfers
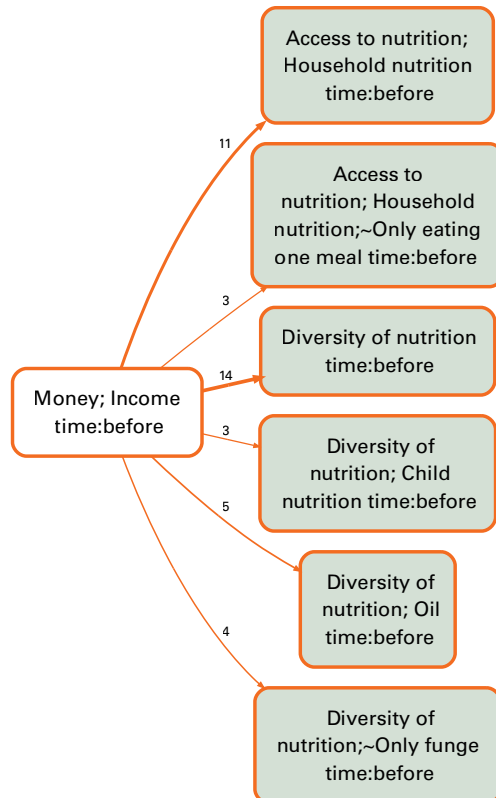
4.4   Monthly purchases

Table 4.4 presents correlations and programme impact on household non frequent large purchases. Beneficiary households are more likely to report purchases of fabrics or textiles which increased by 40 per cent compared to non-beneficiary households. Likewise, purchases of clothing and footwear also increased by 44 and 55 per cent, respectively, for beneficiary households compared to non-beneficiary households. In addition, there was also improvement in the purchases of mosquito nets and detergents and soaps for beneficiary households, which can lead to positive preventive healthcare practices.

Table 4.4: Correlations and Programme Impact on Household Large Purchases

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Fabrics and textiles	0.206***	0.207***	0.398***	0.400***	0.400***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Clothing	0.217***	0.216***	0.437***	0.440***	0.440***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Footwear	0.311***	0.310***	0.551***	0.552***	0.552***
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Mosquito nets	0.029***	0.029***	0.033***	0.034***	0.034***
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
Detergents and soaps	0.119***	0.119***	0.396***	0.403***	0.403***
	(0.01)	(0.01)	(0.04)	(0.02)	(0.02)
N	5,026	5,026	5,026	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Likewise, recipients in qualitative interviews claimed cash transfers had improved their ability to purchase clothes for their children, as well as educational materials and hygiene products. In figure 4.4, the causal map shows a high number of causal statements linking cash transfers to children's clothing, as well as an important number of statements linking cash transfers to accessing clothing needs more generally. Interestingly, while the numbers are low, the causal map indicates that improved access to clothing improved the beneficiaries' relationships with community members.

Figure 4.4: Causal Changes in Monthly Purchases
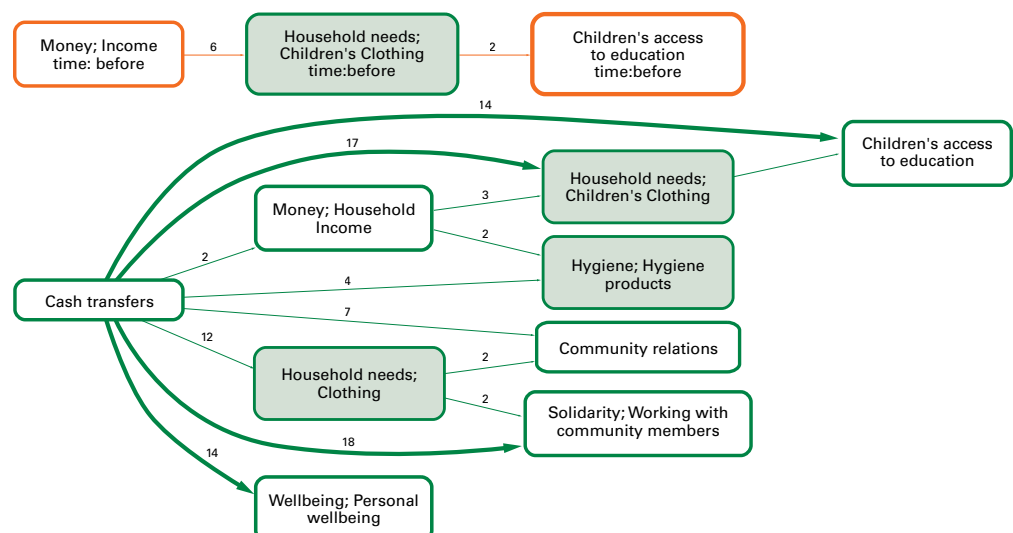
5. Influence of design and implementation on programme objectives and outcomes

Key findings:

1. There were possible exclusion errors at registration as some eligible caregivers were not enrolled (could not be reached, away from home).

2. Manual payment points required significant human and financial resources to set up and maintain. Additionally, there was a time burden for women (including breastfeeding mothers) in rural and remote areas who had to travel to the pay points, as well as safety risks for women returning from these payment points.

3. The COVID-19 outbreak in 2020 contributed to delayed and irregular cash transfers during the programme.

4. The transfer size was perceived as inadequate for basic needs by beneficiaries.

5. While grievance mechanisms were established, the effectiveness of redress was unclear due to inconsistent documentation and transmission of information from social activists to higher levels of government.

5.1 Registration process

5.1.1 Pre-registration (or silent registration)

To identify the eligible caregivers in the selected villages, UNICEF Angola and MASFAMU performed what was internally called the *silent registration* ('*cadastramento silencioso*,' in Portuguese), in which potential beneficiaries were initially identified without being informed about the intervention. As part of this process, the teams responsible for the identification – including social activists and external enumerators recruited and trained specifically for this purpose – visited the targeted villages and collected data about the families, particularly about how many children under five were living in the same household. Key informants mentioned that one of the reasons explaining the decision of performing the silent registration was the possibility of geographical mobility, motivated by the knowledge of the targeted areas for the cash transfer.

"Initially it was performed a silent registration, upon request of the Ministry [of Social Action] because, being the first programme of this type, there were concerns that there could be a lot of movement between geographical areas. Therefore, in the beginning, it was not said exactly for which programme they were being registered for, only that we would be collecting data for potential registration in future programmes that the Government of Angola would define within the scope of social protection." [Key informant from UNICEF Country Office]

National key informants also reported that the decision was in part taken as a result of the disbelief from potential beneficiaries in social protection initiatives, particularly in one involving a direct transfer payment, which was a new concept in Angola. As a result, the first phase of the registration obtained a low enrolment rate, which later motivated a sensitization process coordinated by the MASFAMU and implemented mainly by the traditional authorities and local social activists. The sensitization strategy included going door to door to speak to the household members and holding community meetings to promote the programme.

"In the first phase, the population did not know why they were being registered. In some places there was a low enrolment rate, we could hear the population saying 'a group comes around, takes our names, points on papers and nothing is never done, no issue is solved'. So we started a sensitization process, and a lot of work was done with the traditional authorities and any other community agents, any social worker who goes to the targeted locations. We realized that the traditional authorities should have been involved from the first phase, so that they could have helped us to mobilize and sensitize the population from the beginning". [National level key informant]

The sensitization process helped the communities to build trust in the pre-registration process, resulting in more households opting to register. This change of behaviour can be in part attributed to the fact that those promoting the sensitization activities were local leaders already known in the villages, which contributed to lessening the household's sentiment of a top-down process introduced into the communities with little explanation about its objectives.

To ascertain whether the silent registration achieved its intended objective to limit contamination between treated and comparison areas, Figure 5.1, plots the spatial distribution of treated and comparison households showing provinces boundaries. First, all households were located within their province boundaries. Secondly, in the Provinces of Bié and Moxico, there seems to be a clear geographic separation of treated and comparison households. In the Province of Uíge, one municipal area showed clear distinction between treated and comparison areas, whilst there was an overlap in the other municipal area. This overlap was due to a revision of the programme implementation plan to expand beneficiary coverage, which resulted in about 33 per cent of households in designated comparison areas becoming treated households[13]. Overall, the registration process seemed to have achieved its intended objective to limit contamination between comparison and treated areas[14].

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13 The revision of programme expansion occurred before the rollout of programme implementation and thus did not constitute households switching status after implementation begun.
14 The plot in Figure 5.1 is condensed to preserve the privacy of the households.

Figure 5.1: Spatial allocation of households at Province level
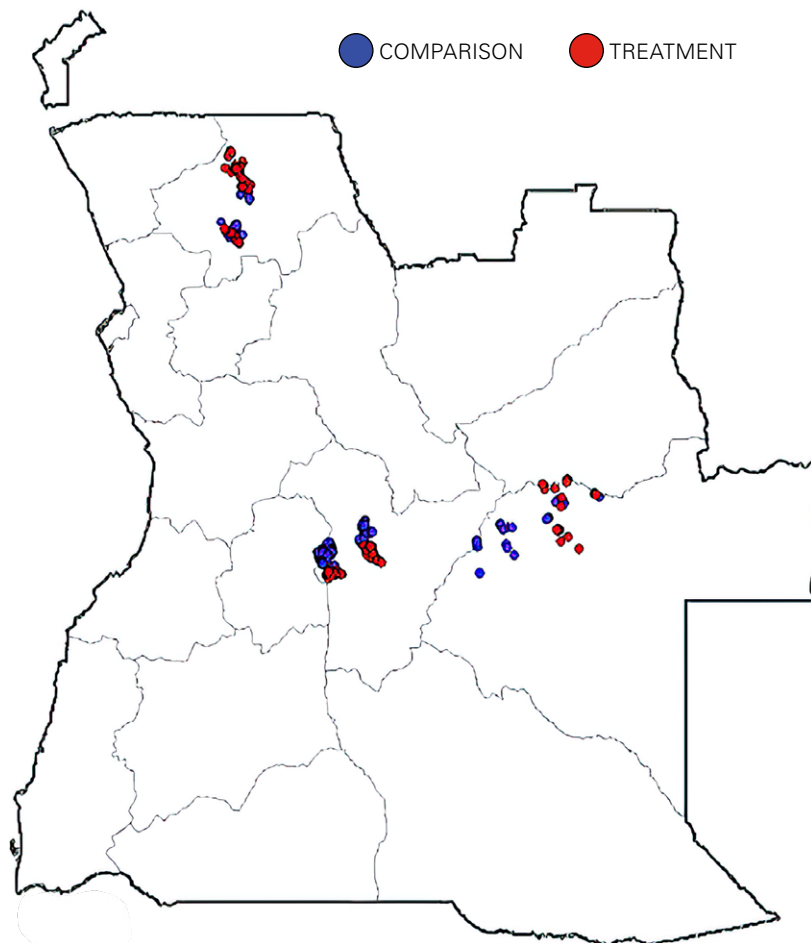
5.1.2 Challenges in the registration process

While the silent registration strategy was unanimously considered by the key informants from all levels as the best possible approach in face of the country's context at that time, it also resulted in some challenges in the registration process. Even though the registration process was continuous, for different reasons, a number of eligible caregivers were left out of the pre-registration and ended up not enrolled in the programme.

Firstly, despite the fact that the traditional authorities were informed about the date when the pre-registration teams would visit the villages so they could communicate this to the residents, not all the eligible caregivers were at home at the moment of the visit. During the focus groups, a number of female beneficiaries demonstrated disappointment when mentioning that neighbour caregivers were not registered because they were farming or were far away from the village for other reasons, such as health treatments or trips to the town for selling products. A provincial-level key informant described a common situation where families travel long distances seeking traditional/spiritual health care and spend long periods of time away from the village. According to this and some other key informants, this was a major reason why some of the households could not be found in the village in the occasion of the pre-registration.

"Many women go farming every day, the farms are very far from the areas where they live and on the day scheduled for registration, some of them were not present. Despite the mobilization and all the work done through the traditional authorities, there were cases where women were not registered because they were not present on the day scheduled for their village. There were also cases where they needed to move to the town because a relative is in the hospital. And another very common situation was that at the time of the registration they were in Kimbanda. Kimbanda is a kind of traditional treatment in which families stay for long periods of time in a place and during the treatment period they are forbidden to leave. So, in these cases, some families missed the opportunity to get registered." [Provincial level key informant]

Secondly, some caregivers decided not to pre-register because they did not trust the process or did not know the reason behind the need to provide personal data. Despite the efforts from the local governments and traditional authorities to sensitize the communities, the main reason they gave for pre-registration was that this was necessary for future programmes that could be launched by the Angolan government to benefit children. Both key informants and beneficiaries shared that the lack of information on why data was being collected was a major reason why some families opted out.

Another challenge during the registration process, emanating from the targeting strategy, was the limited number of villages included within the targeted municipalities. Some villages were included while others with similar sociodemographic characteristics were not, leading to community members often questioning why neighbouring families with children under five were excluded from the intervention. Key informants from the local government shared that disclosure of information about *Valor Criança* and targeted villages resulted in people moving from non-targeted to targeted villages. The local governments worked with traditional authorities to identify the households who were living in the village for at least a year, and those who had recently relocated were not allowed to enrol in the programme.

Some caregivers also faced difficulties in registering in the programme in cases where they were not the mother or father of the child, or when the mother was under 18 years of age. For instance, children living with grandparents or other extended family members were in some instances not recognised for inclusion. During the focus group discussions, participants from Moxico and Uíge shared that some caregivers could be recognised through witnesses such as the traditional authority, while others never managed to enrol them in the programme. Key informants from the local and provincial levels confirmed that cases like these happened, but also pointed out a few situations where those trying to register were not proven to be the children's caregivers.

5.2   Eligibility confirmation and enrolment

The silent registration was followed by the eligibility confirmation, which involved inputting data on a system managed by the MASFAMU to assess whether those pre-registered caregivers met the eligibility criteria, – households with children under five years old who had been living for more than a year in one of the six selected municipalities in the provinces of Bié, Moxico and Uíge. There was also another round of visits to the targeted villages to verify whether the household members had identification documents to support the information provided in the pre-registration and to issue an enrolment receipt. In cases where the identification document either from the caregiver or from the child was not available and the age of the child could not be confirmed, the social activists would calculate the date of birth based on information provided by the family members, such as the season when the child was born or the age of other children in the village that were born around the same date.

The enrolment was confirmed once the caregiver received a card containing a photo and a personal number. This card was validated and accepted both by the Ministry of Justice and Human Rights (MINJDH) and the National Bank of Angola as a substitute for the official identification document, making it possible for the beneficiaries to use it to open their bank accounts and receive the payments. During the pre-registration process, information about whether the caregivers and children had birth certificates and vaccination cards were also collected for profiling purposes. While these were not criteria for eligibility and enrolment and were not used with such purpose, the information collected allowed government-led birth registration campaigns to take place. Mobile birth registration brigades were arranged in the targeted villages and at the CASIs and, before and after enrolment, the communities were strongly encouraged to complete the birth registration both for adults and children, not only because this would be necessary at a later stage to receive the payments, but as a way to promote the citizenship rights of the beneficiaries.

"So one of the benefits of Valor Criança *started to emerge, which is what we call citizenship. It means that children and even parents began to be de facto citizens. Before* Valor Criança *some of them were not officially citizens because they had no birth registration, no official identity."* [Key informant from UNICEF Country Office]

As mentioned earlier, in 2021 the programme was expanded both vertically and horizontally. On the one hand, more households living in the initially targeted villages who had not registered before had another opportunity to do so. On the other hand, new geographical areas that initially were not targeted were selected and households residing in those villages could benefit from the programme. The new villages included were located in the same provinces and municipalities already covered by APROSOC, and the following additional criteria were defined to select the new villages:

• Rural vs. Urban: Preference for rural areas;

- Equity: All the three provinces part of the APROSOC should be included and new geographical areas should be selected within the provinces and municipalities already targeted;

- Number of children: The expansion should cover around 15,000 additional children, 5,000 in each village;

- Location: Newly targeted villages should be accessible from the geographical areas already covered, to avoid extra logistical costs;

- Local government capacity: The expansion should prioritise geographical areas where CASIs were already established.

5.3   Payment mechanism

The payment mechanism of *Valor Criança* was defined during the design process. Considering the social and geographical characteristics of the villages, it was decided by UNICEF in coordination with the Ministry of Social Action that payment points would be installed, and the payments done manually, instead of via bank transfers or mobile money. Terms of reference for selecting the banks that would manage the payments were developed. These already stated some of the implementation procedures, including the installation of payment points within 10 kilometres radius of each of the villages to avoid the beneficiaries walking long distances and that payments would be done in cash.

During the interviews, key informants from all levels highlighted that this was the best strategy for payments considering the Angolan context. Most of the villages targeted by the programme are rural and some are hard to reach, while the banks are only available in towns and bigger cities. This means that beneficiaries would need to travel long distances to access a bank station, spending time and resources on transportation. Key informants involved in the design also reported that a payment system involving electronic cards or mobile phones would not work due to the low level of financial literacy of the beneficiaries.

"We know that payments via electronic card would not work in these contexts. In terms of daily usage, beneficiaries would have a hard time withdrawing cash as there are no ATM machines available or they would not know how to use the card. This would be viable in an urban site, but would not work in the villages where we are implementing the programme".

[Key informant from UNICEF Country Office]

In addition to barriers related to the beneficiaries' financial and technological literacy, the possibility of spending money via debit cards or mobile money appeared to be low as a result of challenges with communication and network systems in the rural

communities (i.e., non-availability of card machines and ATMs, etc.). The option of using mobile money was also considered during the design process. A national-level key informant revealed awareness of experiences of other African countries such as Mozambique and Malawi and explained why this option would not work in Angola.

"Considering our reality, as we still have many problems with access to the mobile network and general communication services, this was the best way found to make payments to families. Even in big cities where access to a mobile network and computer systems are of better quality, we still face challenges with flooding, lack of electricity, issues that affect these communication systems."

[National level key informant]

While the payment points seemed to be the best option for the local context, they required significant resources for the set up and implementation. They especially involved substantial human resources including national, provincial, and municipal governments, UNICEF staff and banks staff. On the one hand, some key informants at the municipal level suggested cost-effective alternatives such as operationalising the payments through the municipal governments. On the other hand, national key informants explained that the legal and operational structures necessary to implement the payments through the municipal administrations would need to be defined during the design process and negotiated with all parties involved, including the national government and donor.

"I think that the delegation that comes from Luanda, sometimes involving 16 or more people, is not necessary because the payments could be done locally. It would be less expenditure, the money spent on this delegation of X people who come and stay for X days in hotels, food, etc., could be the money of many families. I still think the focus should be on training local staff. I think it was a waste of money for the delegation to go back and forth to do the work that could be done locally."   [Municipal level key informant]

Most of the higher-level key informants described the payment operation as challenging and resource-consuming and acknowledged the importance of training local staff on all tasks related to the programme including the payment mechanism. However, they also emphasised that the framework developed during the design of the programme did not foresee the involvement of local administrations in this process. UNICEF staff members reported that the Country Office was a key factor in the payment mechanism, establishing agreements between the donors and banks, managing service providers, and ensuring the payment flow. The payments were not processed by the national government and therefore this responsibility could not be transferred to a lower level of the government without due legal procedures.

5.4 Adequacy of the size and regularity of the payments

5.4.1 Transfer Size

The transfer size was calculated using socioeconomic data from Angola, particularly the value of a basic basket of goods and the national minimum wage. Eligible caregivers started receiving quarterly payments equivalent to monthly cash transfers of AOA 3,000 (about 10 USD at that time) per child (up to maximum of three children per household). Cash disbursement began in October of 2019. In response to the COVID-19 crisis, the monthly cash benefit was increased to AOA 5,000 per child in 2020 and the quarterly payments were substituted by two biannual lumpsum payments (worth six months of transfers each) denominated as super-cycles, with no variation to the maximum number of children per household (three children). In 2021, the frequency was reduced again to a single payment corresponding to 12 months, called a megacycle, amounting to AOA 5,000 per child per month.

While beneficiaries from the three provinces were appreciative of the cash benefit, they also reported that the amount paid at the beginning was not enough to cover basic expenses. In the focus groups, female and male participants revealed that during the early payments they would need to choose between purchasing food for the children and family or buying seeds to invest in familiar agriculture. They expressed satisfaction with the increased amount in the second year of the intervention and reported that after the increase, they could also invest in agriculture and in some cases, open small businesses and start building their houses.

Key informants from national, provincial, and municipal levels considered the cash amounts to be adequate for covering the basic needs of the children and to enable small investments in agricultural activities. UNICEF staff members also viewed the amount as adequate, since it was adjusted based on the number of children rather than being a fixed amount per household.

"In the week when we started paying, we saw the greatest joy of the population running to the markets, to the warehouses to buy goods like soap, sugar, oil, to buy food, clothing for the children. We informed the population that payment would be made every 3 months. They also received information on financial literacy from the banks, several lectures were given on how to organise and use the money, invest in small businesses and productive initiatives." [National level key informant]

Most of the key informants highlighted that the amount would be insignificant if considering the living costs practiced in the capital of the country or even in other bigger towns, but that it was sufficient to improve the livelihoods of those living in rural areas. The evidence indicates that the cash benefit is sufficient to keep beneficiaries enrolled in the programme as they see its value in enabling them to improve their living standards.

5.4.2 Regularity of transfers

Originally, payments were scheduled in cycles of three months. This was because monthly payments would incur high costs to operate the payment points. Indeed, the two first payments were done quarterly, but after March 2020 and the outbreak of the COVID-19 pandemic, it was not possible to sustain the frequency of the planned payments. A UNICEF staff member noted that when the pandemic began, they were in the process of organising the third payment. However, the Angolan government's response to the outbreak included travel restrictions across the country, making it impossible for the payment delegations to travel from Luanda to the provinces where the cash transfer was being implemented. Even after the relaxation of travel restrictions, organising the logistics became challenging as some of the provinces are only reachable by flight, and the local flight company was not operating.

As a result, the third payment was delayed with beneficiaries waiting more than a year. The pandemic induced delays left the beneficiaries uncertain of the timing of the next cash disbursement, which strongly affected their decision making and perceptions about the programme's benefits. In one of the focus groups, a female beneficiary reported that without the money they could not afford to purchase seeds and as a consequence, they missed the timing for cultivating some crops. The same participant also mentioned that as soon as the beneficiaries received the payment, they invested in goods such as blankets, shoes, and clothes for the children.

"During the year when we did not receive the money, we waited a lot, and the money did not come. Many of us did not cultivate because we did not have seeds, we did not have the money to buy seeds. We spent the entire year without cultivating. After receiving the money, we bought corn seeds, clothes for the children, blankets for this cold weather, shoes and many other things."
[Female focus group participant from Moxico]

Key informants from the national, provincial, and municipal levels reported that they were aware of the challenges faced by the beneficiaries and efforts were made to find alternative strategies for cash disbursement.

"This really was a situation that caused constraints. The families were desperate, they were anxious to receive the payment in the timeframe that had been indicated. But this happened because we had to arrange an alternative and see what measures the team could adopt to avoid the risk of contamination not only of the team but also of the communities we were going to visit, to whom we were going to make payments."   [National level key informant]

A UNICEF staff member explained that several scenarios were considered to facilitate the payments, including the feasibility of operationalising it through the municipal governments. However, as discussed above (*Payment* mechanisms section) this was not possible because only UNICEF was in charge of all the activities related to the

operationalisation of payments, and also there were no legal precedents to shifting this responsibility onto the government, either the national or municipal levels.

When asked about what the ideal transfer regularity should be, the most common answer in both male and female focus groups was six months. They demonstrated a preference for accumulating the amount for a longer period instead of receiving it in smaller instalments. A male beneficiary from Bié responded that *"it is better to increase the time span for six months for the amount to double",* concurring with a woman from Moxico who said that *"it is better every six months, so we can bring home more money".* A female participant from a focus group in Uíge further explained this preference:

"Every six months is better because the amount will be accumulated, then we can also buy something that is missing at home. If it is every three months we will not be able to buy what we need because the amount would not be enough. For those who pay rent, where we live the landlords only accept payment every six months. After six months we need to have the amount available." [Female focus group participant from Uíge]

As mentioned in the previous section, the COVID-19 pandemic delays ended with beneficiaries receiving large lumpsums and an increase in the transfer size. The beneficiaries received a single payment corresponding to 12 months, called a megacycle, amounting to AOA 5,000 per child per month. The focus group discussions were conducted a few weeks after the completion of this megacycle, which could explain the beneficiaries' preference for a larger time span.

Payments spaced for longer than six months as happened during the pandemic do not seem to be adequate, especially when the beneficiaries had no knowledge of when the next payment would be made. Regular and timely payments would allow the beneficiaries to plan their spending, however this was hindered by the COVID-19 outbreak and consequent restrictions.

5.5   Challenges in receiving the payments

In addition to the COVID-19 pandemic that deeply impacted the regularity of the payments, beneficiaries experienced additional challenges in accessing the cash transfers. The main challenges raised during the interviews and focus groups were related to the distance to payment points and security issues.

5.5.1   *Distance to payments points*

During the design of the programme, payment points were intended to be installed within 10 kilometres of each of the villages to prevent beneficiaries from walking long distances. However, some beneficiaries reported that they had to walk up to 22 kilometres to reach the payment points. Many of the villages are located in areas accessible only by foot and those which are closer to the road do not have regular

transportation services. In a focus group with female caregivers, they mentioned that on payment dates the women would leave the village early in the morning and return at the end of the day. The long distances and difficult terrain have a marginalising effect on caregivers' access to the payments and put a heavy load on women, who often need to carry their babies particularly when they are still breastfeeding.

5.5.2 Safety risks for women

Also, as a result of the distance to the payment points, some beneficiaries reported concerns about the personal security of those who travel to collect the payments. In Moxico, women reported that when returning to the village in the evening after the megacycle payment (large amount), they had been followed and intimidated by a group of men who they did not know. Exposure to this risk is particularly concerning as most of the caregivers enrolled in the programme are women and they are generally the ones responsible for collecting the payments. While the opportunity to receive and manage the payments proved to be highly empowering for the women living in these communities, the manually delivered transfers pose a risk that could be reduced if there was adequate infrastructure for enabling electronic transfers.

5.5.3 Overcrowded payment points

Members of the evaluation team were present in one of the provinces in the last payment and observed that the venue was overcrowded, which raised concerns about risks both in relation to recipients' safety as well as to sanitary safety, particularly in face of the still ongoing COVID-19 pandemic. Scheduling disbursement dates could be an alternative for the beneficiaries to receive their payments on different days of the month, avoiding large gatherings especially during the first few days.

Payment points in Uíge province. Source: UNICEF Innocenti team.

5.6   Programme satisfaction

Overall, beneficiaries report favourable satisfaction with the programme. An average of 94 per cent of beneficiary households indicate that the selection process is clear. This is complemented by 90 per cent of the beneficiaries reporting they were satisfied with communication and awareness activities (see Table 5.1). Informal gift solicitation at the payment point was reported by 12 per cent of the beneficiaries, whilst the majority feel safe to withdraw money at the various payment points. Other features of the programme greatly appreciated include: direct payment to caregivers as opposed to household heads or any other member of the household; and access to payment points in terms of travel time and cost were reported to be satisfactory by 76 per cent of the beneficiary households. Lastly, the least levels of satisfaction were expressed towards biannual and annual payment cycles, indicating that the quarterly payment cycles were popular among beneficiary households.

Table 5.1: Programme satisfaction

INDICATOR	MEAN	95% LOWER CI	95% UPPER CI	*N*
Selection process is clear	93.78	92.30	95.26	1,319
Gift solicitation at payment points	12.21	9.58	14.83	1,319
Feel safe to withdraw money at payment points	81.05	75.61	86.49	1,319
Transport expenditure to payment points (AOA)	441.12	331.08	551.16	1,319
Amount received - last payment (AOA)	121,986.53	115,966.64	128,006.41	1,112
Amount received - total payments (AOA)	205,587.55	196,921.31	214,253.80	1,157
Programme satisfaction - Awareness and communication	90.83	89.28	92.37	1,319
Programme satisfaction - Household registration	93.86	92.13	95.59	1,319
Programme satisfaction - Direct payments to caregivers	84.69	81.96	87.41	1,319
Programme satisfaction - Access to payment points (travel time)	76.72	72.62	80.83	1,319
Programme satisfaction - Access to payment points (travel cost)	76.27	72.00	80.54	1,319
Programme satisfaction - Transfer frequency (quarterly)	78.70	75.83	81.56	1,319
Programme satisfaction - Transfer frequency (biannual)	68.76	66.36	71.17	1,319
Programme satisfaction - Transfer frequency (annual)	62.24	58.15	66.34	1,319
Programme satisfaction - Transfer size	84.00	81.65	86.36	1,319

5.7   Communication and grievance mechanisms

According to the design of *Valor Criança*, the programme's communication mechanisms were intended to mostly rely on the CASIs social activists, who performed periodical home visits to the caregivers enrolled in the programme. The social activists are key actors in the APROSOC model, working at the commune level to support the most vulnerable communities with the objective of promoting the municipalization of social action. Many social activists were recruited to support

the implementation of *Valor Criança*. Other responsibilities of the CASIs social activists, beyond the cash transfer programme (CTP), included identifying and tracking the most vulnerable families across the APROSOC municipalities; supporting the implementation of community projects; and providing information to the municipal and provincial levels about the implementation of the APROSOC.

Indeed, evidence from the FGDs has shown that the social activists were the main point of contact with the households in all stages of the programme and were the ones to whom the beneficiaries would turn to if they had questions about registration, enrolment, or frequency of payments. The role of the social activists also included sensitization activities covering topics such as the use of latrines, caregiving practices and domestic violence. Most beneficiaries indicated that they could rely on the social activists whenever they had questions or complaints. Some also mentioned that they would speak to the sobas [village's heads] or would go directly to the municipal administration whenever they had a query of complaint.

"The CASIs accepted all the complaints that came from both Valor Criança and those resulting from the situation of vulnerability experienced by the community members. However, the centres are based in the communal level so most of the concerns were taken either to the social activists or to the traditional authorities, who intermediated the communication with the CASIs. This is how the communication system worked. The social activists also had the responsibility to monitor and identify any failed payments." [Provincial level key informant]

While it is clear that the social activists were the first points of contact with beneficiaries, the documentation and report flow appeared to be inconsistent and did not fully address the queries and complaints. In interviews with both national and municipal key informants, it remained unclear how the information was transmitted from the social activists to the municipal administration and finally to the higher levels of the government, and whether and how these complaints were addressed.

"The CASIs do have a reporting mechanism, the activists report to the municipal administration level, then the documentation is sent to the provincial level, and from the provincial to the central level. But we know that in their reports the information was not always up to date, and we are not sure if all the complaints were addressed and so on. So I would say that the information could be incomplete or insufficient or not so accurate." [Key informant from UNICEF Country Office]

The evaluation team did not have access to any grievance system or register of grievances in order to analyse this flow or which were the most common types of complaints.

6. Moderating role of contextual factors

Key findings:

1. Household size moderates the programme's impacts on children's healthcare. Children living in smaller households were more likely to be taken for antenatal and postnatal care visits and were on average more likely to be fully vaccinated, while children living in larger households, were more likely to have health and vaccination cards.

2. Age of the caregiver does not influence the programme's impacts. Caregiver outcomes were similar across both old and young caregivers.

3. Caregivers with primary education were more likely to purchase shoes for their children and participate in antenatal care visits compared to those without primary education. They were also more likely to have land for cultivation and cultivated more crops, perhaps explaining why this group also showed a higher number of meals per day.

This section presents analysis on contextual factors that could lead to different impacts based on the household characteristics. We expand the analysis by examining the heterogenous impacts between large and small households, young and old caregivers, as well as caregivers with at least primary education and those without any formal education. To analyse the heterogenous impacts of the programme, we augment equation (1) by estimating a triple difference equation. The heterogenous analysis will thus produce impacts for each categorical group – for example small and large households – as well as relative impact difference between the two groups.

6.1 Household size

Household size at baseline ranged from a minimum of two-persons to a maximum of fourteen-persons households, with a median of five-persons households. Using the median we categorise households into two groups – small and large – households. Small households are households with members less than five-persons, whilst large households are classified as those with five or more members. Beneficiary small and large households reported to have received an average per capita total transfer size of AOA 48,445 and AOA 33,041, respectively. A simple statistical test on the difference of AOA 15,403 between small and large households showed that the difference is statistically significant. We therefore examine whether the observed results differ by small or large households.

Tables 6.1, 6.2, and 6.3, report household size heterogenous analysis on caregivers, children, and household, outcome indicators, respectively. Columns (1) of the tables

report the overall impact results obtained using the doubly robust difference-in-difference presented in the chapters above. Columns (2) and (3) report results related category – large and small – households, respectively. Lastly, columns (4) reports results related to a triple difference, that report the additional impact for small households relative to large households.

With regards to results on caregivers' large parts of the results are very similar to those obtained in the overall impact estimation. However, few differences emerge. First, while caregivers in both small and large households reported an increase in savings, smaller households are likely to save 11 percentage points more than large households. On the other hand, caregivers in large households are more likely to have social support network than caregivers in small households.

Table 6.1: Heterogenous analysis based on household size: caregiver outcome indicators

VARIABLE	OVERALL	LARGE HH	SMALL HH	TRIPLE DIFFERENCE
	(1)	(2)	(3)	(4)
Financial decisions for households: caregiver alone	-0.033*	-0.025	-0.044	0.019
	(0.019)	(0.026)	(0.033)	(0.042)
Caregiver saves money	0.368***	0.416***	0.304***	0.112**
	(0.022)	(0.029)	(0.038)	(0.047)
Credit group in the community	0.012	0.015	0.017	-0.002
	(0.014)	(0.018)	(0.025)	(0.030)
Social support index	0.996**	0.111	2.293***	-2.182**
	(0.504)	(0.664)	(0.784)	(1.028)
It is never justified to beat wife	0.024	0.031	0.013	0.019
	(0.022)	(0.029)	(0.036)	(0.046)
Expects daughter to complete at least secondary	0.012	0.000	0.017	-0.017
	(0.030)	(0.036)	(0.046)	(0.058)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

In Table 6.2, similar trend emerges on similar and differential impact between small and large households. First, result on child material well-being through the provision of sandals, the observed impact does not statistically differ between small and large households. However, results on antenatal and postnatal care visits were mostly driven by small households compared to large households. Children living in small households were more likely to be taken for antenatal and postnatal care visits by 18 and 12 percentage points, respectively, more than those living in large households. The differences in postnatal care visits reflected on vaccination uptake as children in small households were 17 percentage points more likely to receive full vaccinations compared to those in

large households. On the other hand, children in small households were more likely to be subjected to psychological aggression and physical punishment compared to those in large households. Likewise, children in larger households were more likely to possess both health and vaccination cards in addition to receiving deworming medication.

Table 6.2: Heterogenous analysis based on household size: children outcome indicators

VARIABLE	OVERALL	LARGE HH	SMALL HH	TRIPLE DIFFERENCE
Child has a pair of sandals	0.483***	0.481***	0.465***	0.016
	(0.032)	(0.040)	(0.050)	(0.063)
Antenatal care 4 times or more	0.132***	0.055	0.237***	-0.182***
	(0.033)	(0.043)	(0.055)	(0.068)
Delivery in health facility	-0.037*	-0.023	-0.058	0.035
	(0.022)	(0.034)	(0.047)	(0.056)
Child has health card	0.143***	0.196***	0.069	0.126**
	(0.030)	(0.040)	(0.047)	(0.062)
Postnatal monitoring visits at least 3 times	0.094***	0.062	0.185***	-0.123*
	(0.033)	(0.042)	(0.052)	(0.066)
Vitamin A supplements	0.062*	0.065	0.083	-0.019
	(0.036)	(0.042)	(0.055)	(0.068)
Deworming medication	0.082**	0.101**	0.057	0.043
	(0.035)	(0.043)	(0.054)	(0.068)
Vaccination card ownership	0.111***	0.128***	0.046	0.083
	(0.030)	(0.040)	(0.046)	(0.061)
Received all vaccinations	0.184**	0.114*	0.284***	-0.170*
	(0.078)	(0.065)	(0.075)	(0.099)
Number of activities with mother	-0.556	-0.279	-0.651	0.372
	(0.392)	(0.321)	(0.399)	(0.507)
1+ activities with the mother	-0.072	-0.118	-0.030	-0.088
	(0.089)	(0.072)	(0.085)	(0.111)
Phycological aggression	0.137**	0.038	0.119*	-0.081
	(0.058)	(0.051)	(0.063)	(0.081)
Physical punishment	0.104	0.023	0.084	-0.061
	(0.069)	(0.054)	(0.065)	(0.084)
Any violent discipline	0.244***	0.053	0.173**	-0.120
	(0.075)	(0.062)	(0.071)	(0.094)
Minimum dietary diversity	0.081	0.090	0.150*	-0.060
	(0.082)	(0.069)	(0.084)	(0.109)
Minimum meal frequency	0.022	0.055	0.071	-0.016
	(0.065)	(0.055)	(0.070)	(0.087)
Minimum acceptable diet	0.041	0.066	0.051	0.015
	(0.050)	(0.041)	(0.057)	(0.069)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Heterogeneous analysis results reported in Table 6.3 on household-level indicators produced the most similar results between small and large households. Few differences to highlight include household economic activities and purchases of mosquito nets where the overall results seem to be mostly driven by large households. On the other indicators such as, assets, livestock, and food security, results are statistically similar between small and large households.

Table 6.3: Heterogenous analysis based on household size: household outcome indicators

VARIABLE	OVERALL	LARGE HH	SMALL HH	TRIPLE DIFFERENCE
Number of assets	0.662***	0.716***	0.580***	0.136
	(0.050)	(0.077)	(0.087)	(0.117)
Asset index	0.408***	0.444***	0.355***	0.089
	(0.035)	(0.054)	(0.070)	(0.087)
Household has any livestock	0.142***	0.181***	0.101***	0.079
	(0.024)	(0.032)	(0.038)	(0.050)
Number of livestock TLU	0.025	-0.241	-0.234	-0.007
	(0.300)	(0.376)	(0.289)	(0.509)
Has land for cultivation	0.044	0.010	0.044	-0.035
	(0.032)	(0.031)	(0.035)	(0.047)
Number of crops cultivated	0.104	0.126	0.086	0.040
	(0.127)	(0.120)	(0.142)	(0.186)
Household owned/operated service trade (e.g., tailor, carpenter, barber etc.)	0.110***	0.175***	0.061	0.114*
	(0.034)	(0.034)	(0.052)	(0.060)
Household processed agricultural sub-products	0.089**	0.067*	0.085	-0.018
	(0.041)	(0.040)	(0.055)	(0.066)
Number of meals per day	0.210***	0.165***	0.293***	-0.129
	(0.045)	(0.054)	(0.064)	(0.084)
Food Insecurity Experience Scale	-1.148***	-1.040***	-1.432***	0.392
	(0.326)	(0.337)	(0.413)	(0.531)
Household hunger scale	-0.318**	-0.313**	-0.648***	0.335
	(0.141)	(0.154)	(0.172)	(0.234)
Household Dietary Diversity Score	2.959***	3.017***	2.389***	0.627
	(0.245)	(0.279)	(0.328)	(0.432)
Berry Index	0.116***	0.120***	0.078***	0.043
	(0.027)	(0.024)	(0.026)	(0.036)
Healthy Food Diversity Index	0.057***	0.054***	0.058***	-0.004
	(0.009)	(0.009)	(0.012)	(0.015)

VARIABLE	OVERALL	LARGE HH	SMALL HH	TRIPLE DIFFERENCE
Fabrics and textiles	0.441***	0.411***	0.449***	-0.039
	(0.042)	(0.043)	(0.056)	(0.070)
Mosquito nets	0.041**	0.060***	0.033	0.028
	(0.020)	(0.017)	(0.022)	(0.027)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

6.2 Caregiver's age

This sub-section heterogeneous impact on caregiver, children, and household levels outcome variables based on the age of the caregiver. At baseline, caregivers of children under the age of five years ranged from 15 years to 60 years, with a median age of 29 years. Using the sample distribution, we classify caregivers under the median age as "young", whilst caregivers from the median age and above as "old". Tables 6.4 – 6.6, replicates the analysis in sub-section 6.1, reporting results on caregiver, children, and household outcome indicators, respectively.

Heterogenous analysis results on caregiver level outcome indicators reported in Table 6.4 largely remains similar across both categories of age. Hence, results on caregiver outcome indicators does not seem to be significantly influenced by the age of the caregiver. On children outcome indicators reported in Table 6.5, few results are worth mentioning. Overall, wherever an impact is observed in both "young" and "old" categories of caregivers, there seem to be no statistically significant differences between the two groups. On the other hand, there are few instances where the observed overall results are driven by only one category. Postnatal monitoring visits seem to be driven by old caregivers, whilst results on deworming medication, phycological aggression, and violent discipline are driven by young caregivers.

Lastly, similar trends are observed on household level outcome indicators where results are very similar between young and old caregivers. Results in Table 6.6 show both young and old caregivers reported similar results without significant difference between the two groups. To ascertain that none of these results are driven by the age cut-off, we re-estimated the results in Tables 6.4 – 6.6 classifying caregivers from the ages of 15 to 24 as young and caregivers between the ages of 25 to 65 as old. Results were very similar to those obtained using the median age cut-off point[15].

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15   Results of the robustness check available on request.

Table 6.4: Heterogenous analysis based on caregiver age: caregiver outcome indicators

VARIABLE	OVERALL	OLD CAREGIVER	YOUNG CAREGIVER	TRIPLE DIFFERENCE
Financial decisions for households: caregiver alone	-0.033*	-0.052*	-0.004	-0.049
	(0.019)	(0.029)	(0.029)	(0.041)
Caregiver saves money	0.368***	0.346***	0.394***	-0.049
	(0.022)	(0.031)	(0.034)	(0.046)
Credit group in the community	0.012	0.013	0.016	-0.003
	(0.014)	(0.019)	(0.021)	(0.029)
Social support index	0.996**	0.989	1.127	-0.138
	(0.504)	(0.709)	(0.726)	(1.015)
It is never justified to beat wife	0.024	0.027	0.030	-0.003
	(0.022)	(0.031)	(0.033)	(0.045)
Expects daughter to complete at least secondary	0.012	0.056	-0.064	0.119**
	(0.030)	(0.039)	(0.042)	(0.057)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Table 6.5: Heterogenous analysis based on caregiver age: children outcome indicators

VARIABLE	OVERALL	OLD CAREGIVER	YOUNG CAREGIVER	TRIPLE DIFFERENCE
Child has a pair of sandals	0.483***	0.447***	0.495***	-0.048
	(0.032)	(0.045)	(0.042)	(0.062)
Antenatal care 4 times or more	0.132***	0.158***	0.125***	0.033
	(0.033)	(0.048)	(0.047)	(0.068)
Delivery in health facility	-0.037*	-0.042	-0.036	-0.006
	(0.022)	(0.040)	(0.039)	(0.057)
Child has health card	0.143***	0.129***	0.159***	-0.030
	(0.030)	(0.045)	(0.042)	(0.062)
Postnatal monitoring visits at least 3 times	0.094***	0.156***	0.070	0.085
	(0.033)	(0.047)	(0.046)	(0.066)
Vitamin A supplements	0.062*	0.071	0.075	-0.004
	(0.036)	(0.050)	(0.047)	(0.069)
Deworming medication	0.082**	0.066	0.118***	-0.052
	(0.035)	(0.048)	(0.045)	(0.066)
Vaccination card ownership	0.111***	0.094**	0.102**	-0.009
	(0.030)	(0.045)	(0.043)	(0.062)
Received all vaccinations	0.184**	0.207***	0.167**	0.040
	(0.078)	(0.075)	(0.066)	(0.100)

VARIABLE	OVERALL	OLD CAREGIVER	YOUNG CAREGIVER	TRIPLE DIFFERENCE
Number of activities with mother	-0.556	-0.677*	-0.346	-0.332
	(0.392)	(0.381)	(0.338)	(0.515)
1+ activities with the mother	-0.072	-0.120	-0.060	-0.060
	(0.089)	(0.086)	(0.073)	(0.113)
Phycological aggression	0.137**	0.031	0.115**	-0.084
	(0.058)	(0.057)	(0.056)	(0.082)
Physical punishment	0.104	0.036	0.036	-0.000
	(0.069)	(0.064)	(0.054)	(0.084)
Any violent discipline	0.244***	0.062	0.126**	-0.064
	(0.075)	(0.072)	(0.063)	(0.096)
Minimum dietary diversity	0.081	0.088	0.118*	-0.030
	(0.082)	(0.082)	(0.069)	(0.107)
Minimum meal frequency	0.022	-0.003	0.076	-0.079
	(0.065)	(0.071)	(0.055)	(0.088)
Minimum acceptable diet	0.041	0.021	0.054	-0.033
	(0.050)	(0.051)	(0.043)	(0.067)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school

Table 6.6: Heterogenous analysis based on caregiver age: household outcome indicators

VARIABLE	OVERALL	OLD CAREGIVER	YOUNG CAREGIVER	TRIPLE DIFFERENCE
Number of assets	0.662***	0.695***	0.626***	0.069
	(0.050)	(0.078)	(0.084)	(0.115)
Asset index	0.408***	0.445***	0.366***	0.079
	(0.035)	(0.059)	(0.056)	(0.082)
Household has any livestock	0.142***	0.180***	0.093**	0.088*
	(0.024)	(0.033)	(0.037)	(0.050)
Number of livestock TLU	0.025	0.113	-0.522	0.635
	(0.300)	(0.261)	(0.401)	(0.470)
Has land for cultivation	0.044	-0.006	0.030	-0.036
	(0.032)	(0.029)	(0.034)	(0.045)
Number of crops cultivated	0.104	-0.022	0.249*	-0.272
	(0.127)	(0.124)	(0.138)	(0.184)
Household owned/operated service trade (e.g., tailor, carpenter, barber etc.)	0.110***	0.123***	0.153***	-0.030
	(0.034)	(0.038)	(0.046)	(0.059)

VARIABLE	OVERALL	OLD CAREGIVER	YOUNG CAREGIVER	TRIPLE DIFFERENCE
Household processed agricultural sub-products	0.089**	0.049	0.121**	-0.072
	(0.041)	(0.045)	(0.050)	(0.067)
Number of meals per day	0.210***	0.153***	0.250***	-0.097
	(0.045)	(0.057)	(0.060)	(0.083)
Food Insecurity Experience Scale	-1.148***	-0.819**	-1.828***	1.009*
	(0.326)	(0.353)	(0.389)	(0.524)
Household hunger scale	-0.318**	-0.357**	-0.714***	0.357
	(0.141)	(0.153)	(0.168)	(0.227)
Household Dietary Diversity Score	2.959***	2.667***	2.894***	-0.227
	(0.245)	(0.286)	(0.342)	(0.443)
Berry Index	0.116***	0.089***	0.100***	-0.010
	(0.027)	(0.025)	(0.028)	(0.037)
Healthy Food Diversity Index	0.057***	0.054***	0.058***	-0.004
	(0.009)	(0.010)	(0.012)	(0.015)
Fabrics and textiles	0.441***	0.447***	0.447***	-0.000
	(0.042)	(0.045)	(0.046)	(0.065)
Mosquito nets	0.041**	0.034**	0.071***	-0.036
	(0.020)	(0.015)	(0.022)	(0.026)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

6.3   Caregiver education

To conclude the section, this sub-section examines the heterogenous impact of the cash transfer programme focusing on the education level of the caregiver. As in previous sub-sections, the results are reported in Tables 6.7 – 6.9. we distinguish between caregivers that have completed at least primary school education and those without any formal education or only attended pre-primary school.

Caregivers with primary education are more likely to save money compared to caregivers with no primary education. In the communities, caregivers with some primary education are more likely to count on additional social support than those without any formal education. On the other hand, beneficiary caregivers with primary education expects their daughters to complete secondary education, whilst those without formal education report a negative result leading to an overall non-significant.

On child outcome indicators reported in Table 6.8, caregivers with primary education are more likely purchasing a pair of sandals for their children as well as participating in

antenatal care visits compared to those with no primary education. Besides instances where the impacts differs in terms of percentage points between the two groups, the impact of the programme for caregivers with primary education relative to those without any formal education, do not statistically differ. On household level indicators reported in Table 6.9, the most significant difference between the two groups of caregivers is observed on agricultural activities and number of meals consumed per day. Caregivers with some primary education are more likely to have land for cultivation and cultivated more crops than those with no primary education. Lastly, the number of meals per day is 17 per cent more for caregivers with primary education.

Table 6.7: Heterogenous analysis based on caregiver education – caregiver outcome indicators

VARIABLE	OVERALL	PRIMARY EDUC.	NO PRIMARY EDUC.	TRIPLE DIFFERENCE
Financial decisions for households: caregiver alone	-0.033*	0.020	-0.066***	0.086**
	(0.019)	(0.035)	(0.025)	(0.043)
Caregiver saves money	0.368***	0.439***	0.330***	0.109**
	(0.022)	(0.042)	(0.027)	(0.048)
Credit group in the community	0.012	0.051	-0.006	0.057*
	(0.014)	(0.032)	(0.014)	(0.030)
Social support index	0.996**	1.584*	0.867	0.718
	(0.504)	(0.850)	(0.640)	(1.087)
It is never justified to beat wife	0.024	-0.007	0.041	-0.049
	(0.022)	(0.040)	(0.027)	(0.047)
Expects daughter to complete at least secondary	0.012	-0.132***	0.082**	-0.214***
	(0.030)	(0.048)	(0.034)	(0.058)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Table 6.8: Heterogenous analysis based on caregiver education – children outcome indicators

VARIABLE	OVERALL	PRIMARY EDUC.	NO PRIMARY EDUC.	TRIPLE DIFFERENCE
Child has a pair of sandals	0.483***	0.559***	0.421***	0.138**
	(0.032)	(0.053)	(0.037)	(0.065)
Antenatal care 4 times or more	0.132***	0.241***	0.079**	0.161**
	(0.033)	(0.059)	(0.040)	(0.070)
Delivery in health facility	-0.037*	-0.037	-0.040	0.004
	(0.022)	(0.052)	(0.032)	(0.058)
Child has health card	0.143***	0.152***	0.137***	0.015
	(0.030)	(0.052)	(0.038)	(0.065)
Postnatal monitoring visits at least 3 times	0.094***	0.118**	0.097**	0.021
	(0.033)	(0.058)	(0.039)	(0.069)
Vitamin A supplements	0.062*	0.091	0.066	0.025
	(0.036)	(0.057)	(0.041)	(0.070)
Deworming medication	0.082**	0.110*	0.081**	0.030
	(0.035)	(0.058)	(0.040)	(0.070)
Vaccination card ownership	0.111***	0.071	0.106***	-0.035
	(0.030)	(0.049)	(0.038)	(0.064)
Received all vaccinations	0.184**	0.209**	0.156***	0.053
	(0.078)	(0.088)	(0.060)	(0.105)
Number of activities with mother	-0.556	0.080	-0.573*	0.653
	(0.392)	(0.428)	(0.306)	(0.528)
1+ activities with the mother	-0.072	-0.037	-0.068	0.031
	(0.089)	(0.093)	(0.068)	(0.117)
Phycological aggression	0.137**	0.074	0.082*	-0.008
	(0.058)	(0.070)	(0.048)	(0.084)
Physical punishment	0.104	0.092	0.023	0.069
	(0.069)	(0.074)	(0.048)	(0.086)
Any violent discipline	0.244***	0.167**	0.077	0.090
	(0.075)	(0.082)	(0.056)	(0.098)
Minimum dietary diversity	0.081	0.220**	0.045	0.175
	(0.082)	(0.090)	(0.062)	(0.108)
Minimum meal frequency	0.022	0.060	0.045	0.016
	(0.065)	(0.073)	(0.053)	(0.091)
Minimum acceptable diet	0.041	0.074	0.033	0.041
	(0.050)	(0.059)	(0.038)	(0.068)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Table 6.9: Heterogenous analysis based on caregiver education – household outcome indicators

VARIABLE	OVERALL	PRIMARY EDUC.	NO PRIMARY EDUC.	TRIPLE DIFFERENCE
Number of assets	0.662***	0.702***	0.635***	0.067
	(0.050)	(0.109)	(0.068)	(0.123)
Asset index	0.408***	0.447***	0.372***	0.075
	(0.035)	(0.083)	(0.044)	(0.085)
Household has any livestock	0.142***	0.104**	0.162***	-0.058
	(0.024)	(0.046)	(0.029)	(0.052)
Number of livestock TLU	0.025	-0.297	-0.176	-0.121
	(0.300)	(0.295)	(0.370)	(0.566)
Has land for cultivation	0.044	0.109**	-0.012	0.121***
	(0.032)	(0.044)	(0.024)	(0.046)
Number of crops cultivated	0.104	0.391**	-0.022	0.413**
	(0.127)	(0.158)	(0.108)	(0.189)
Household owned/operated service trade (e.g., tailor, carpenter, barber etc.)	0.110***	0.136**	0.139***	-0.002
	(0.034)	(0.055)	(0.034)	(0.062)
Household processed agricultural sub-products	0.089**	0.133**	0.053	0.080
	(0.041)	(0.057)	(0.041)	(0.071)
Number of meals per day	0.210***	0.309***	0.136***	0.174**
	(0.045)	(0.070)	(0.049)	(0.085)
Food Insecurity Experience Scale	-1.148***	-1.333***	-1.166***	-0.167
	(0.326)	(0.413)	(0.323)	(0.543)
Household hunger scale	-0.318**	-0.599***	-0.365***	-0.234
	(0.141)	(0.178)	(0.141)	(0.237)
Household Dietary Diversity Score	2.959***	3.057***	2.572***	0.485
	(0.245)	(0.392)	(0.253)	(0.454)
Berry Index	0.116***	0.111***	0.076***	0.035
	(0.027)	(0.029)	(0.023)	(0.038)
Healthy Food Diversity Index	0.057***	0.053***	0.056***	-0.003
	(0.009)	(0.013)	(0.009)	(0.015)
Fabrics and textiles	0.441***	0.498***	0.421***	0.078
	(0.042)	(0.055)	(0.040)	(0.068)
Mosquito nets	0.041**	0.033	0.059***	-0.026
	(0.020)	(0.021)	(0.017)	(0.028)

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

6.4   Perceived impacts of the COVID-19 pandemic

This sub-section presents findings on households self-reported perceived impacts of COVID-19 pandemic. Table 6.10 shows that negative impact on income is the most perceived impact self-reported by households. It is followed by perceived impact on children schooling self-reported by 38 per cent of the households. Lastly, perceived increase in violence either experienced or witnessed was self-reported by 18 per cent of the households. In all three indicators, self-reported average differences between treatment and beneficiary households are not statistically significant.

Table 6.10: Perceived impacts of COVID-19

INDICATOR	ALL	TREATMENT	COMPARISON	P-VALUE
	(1)	(2)	(3)	(4)
Perceived negative impact on income	0.66	0.70	0.63	0.051
Perceived increase in violence	0.18	0.18	0.19	0.890
Perceived impact on children schooling	0.38	0.41	0.36	0.160
N	2,586	1,227	1,359	

The qualitative interviews found little causal evidence suggesting the COVID-19 pandemic had mitigating impacts on programme outcomes for beneficiaries. Of all 35 QuIP qualitative interviews, only five respondents claimed that COVID-19 had an impact.

No impact. No, when we had a pandemic, people were not dependent, but were already walking independently, eating independently.   MMIDI2F

Several respondents, however, noted an awareness of the hygienic practices necessary to reduce the incidence of COVID-19 illnesses in the community. However, it is unclear where this knowledge was gleaned.

In his family, none of them [contracted] this disease of COVID-19. He only watched it on television and heard it on the radio. Because the ceremony that took place was always careful to wash hands with soap and water and use face masks [they] could keep meeting.   MMIDI4M

It is equally unclear whether the lack of perceived impact was the result of using the cash transfers to weather the shock of the pandemic, or whether, as a respondent from Uige suggests, it was harder for people in urban areas where travel was highly restricted.

It did affect some because it was not like before [...] but at least here it was not as bad as in Luanda. It really affected them because some jobs were paralyzed and also people could not move around.   BCIDI5F

The inability to travel locally, however, had impacts on community activities, and social support. Religious festivals and community-based festivities were cancelled, and sporting activities such as football was likewise discontinued during the pandemic:

We didn't go to the parties through COVID-19, the party of the municipality passed just like that, there weren't many people through COVID-19.   UMIDI5M

COVID-19 created so many difficulties for us. We could not participate in the football activities, and we always liked to play football. COVID prevented us who liked playing because of the number of people. It created difficulties.   UMIDI1M

7. Conclusion and policy recommendations

7.1 Summary of findings

This study sought to generate evidence on the impacts of the first social cash transfer programme in Angola. The study assesses programme impacts on various domains of child and household wellbeing, including gender equality outcomes, based on the GRASSP programme conceptual framework (reference).. The study sought to answer four research questions that investigated the following; the impacts of the SCTP on caregivers and children; the broader impacts on households, how design and implementation of the SCTP influenced programme objectives and outcomes, and the role of household and caregiver characteristics in shaping the impact of the SCTP. The study used a mixed method approach, that combined qualitative and quantitative methods over a three-year period.

The findings show that the SCTP had strong positive impacts across a wide variety of indicators and factors relating to child wellbeing, women's empowerment, and household economic activities, despite implementation during the COVID-19 pandemic. Beneficiary households had higher household and child food consumption, dietary diversity (with children eating a greater diversity of food groups), and lower food insecurity than the comparison group. Child and household medical outcomes likewise improved. Children benefitted from an increase in inoculation across almost all vaccination types, while access to medical services and treatments improved. These outcomes suggest the SCTP had a positive impact on households and children, implying that the goals of the SCTP were successful in tackling some of the key causes of rural poverty in Angola.

The programme largely had not impact on parenting and discipline. Qualitative interviews suggested that parenting styles were deeply rooted in local cultural norms, and that the SCTP and its associated services had not produced different behaviours or marked a shift in parenting models for recipients. Likewise, there were no impacts on knowledge of breastfeeding practices for new-borns, despite educational services being provided to recipients on this topic.

The SCTP had positive impacts on households. Beneficiaries of the SCTP were more likely to have increased income through sales of agricultural products and were more likely to have increased land for cultivation than comparison households. Similarly, the number of household assets reported in treated households significantly increased, specifically fabrics, textiles, and clothing, as well mosquito nets and detergents. Qualitative findings pointed towards beneficiaries improving community relationships as a result of wearing better clothing, while children were more likely to attend school after accessing new clothes. Qualitative findings further indicated that access to these assets contributed to a sense of wellbeing, and a reduction in stress for caregivers.

The study also explored the impact of providing cash transfers to women caregivers. Quantitative findings showed that there was a significant decrease in sole decision making in the household. However, qualitative findings suggest that there was an increase in joint-budgeting and joint-decision making arising directly from the SCTP. Women caregivers and their spouses reported that receiving cash transfers had encouraged them to consider carefully how the cash could be used – to invest in their children or to invest in agricultural or other income generating opportunities. Nevertheless, a substantial proportion of the respondents in qualitative interviews suggested that decision-making was the man's domain, indicating that rooted gendered social structures still play a key role in intra-household decision making dynamics.

In qualitative interviews, beneficiaries also reported positive impacts on women's empowerment. This includes an increase in women's access to income generating opportunities as a direct result of accessing cash transfers. These economic opportunities were varied among respondents, with some women focussing on purchasing trading goods while others increased their work on agricultural activities. Although these results are promising, the study did not find clear indications as to whether this increase in paid work was made at the expense of time spent with children. Qualitative findings suggest that the increased wealth of SCTP recipients was shared among community members, and this may have resulted in higher rates of shared caregiving among household members. These findings support the rationale for targeting women recipients in order to increase women's economic and social empowerment within rural areas.

The SCTP had no impact on caregivers' knowledge of new-born nutritional needs including breastfeeding. Additionally, the SCTP did not have an impact on child development and discipline are inconsequential. In qualitative interviews, a majority of recipients reported that cultural norms of parenting had long been established and rooted in the community, and there was little need or desire to change these.

Beneficiary households were more resilient to external or macro-economic shocks, as indicated by the increase in household income generation and household assets during the three-year study period. In qualitative data, there was little indication that the COVID-19 pandemic impacted rural communities significantly, other than a temporary restriction to travel and community activities. Indeed, a small minority of respondents reported that travel to urban areas had been disrupted, but that this had been temporary and that these inconveniences had long since been alleviated at the time of follow up data collection in 2022. Given the rurality of the communities included in the programme, it is likely that travel disruptions were minimal during the height of the pandemic. Still, a few qualitative findings suggested that inflationary pressures increased the inability to purchase key agricultural inputs and food staples.

The study faced several limitations. Around 70 per cent of beneficiary households received programme benefits before baseline data was collected and this was addressed through the reconstruction of baseline data using recall questions. Recall data suffers from confirmation and social desirability bias, can underestimate outcome

levels. In addition, different sampling strategies were employed for the beneficiary and comparison households at baseline. Finally, the quality of some of the transcriptions for the QuIP (qualitative) component were affected by translation difficulties and interview techniques that did not focus on causal narratives

Overall, the evidence shows that pilot SCTP was a significant step towards establishing resilient social protection mechanisms in Angola, alleviating food insecurity and child vulnerability, and empowering women in rural areas. However, several areas of the implementation of the SCTP could be improved in the future in order to reduce some of the burden on women caregivers and to further strengthen some of the impacts noted in the findings above. The size of the cash transfers was universally considered by recipients and implementing staff as appropriate for the areas, but several factors affected the quality of cash transfer delivery to the recipients. Foremost, the payment points for the cash transfer disbursements were far for many recipients. As a result of this distance, women caregivers were burdened with day-long walks to access these disbursements. This, along with the biannual payment structure, led to women travelling with lumpsums for long distances, which left them vulnerable to insecurity. In addition, the disbursements were irregular and unpredictable for the recipients, with longer intervals between payments experienced during the pandemic. This may have prevented the SCTP from achieving maximum impacts.

7.2   Recommendations

Based on the findings from this study, the following non-exhaustive recommendations can be considered.

Programmatic recommendations

1. Enhance gender responsiveness through integration with and linkages to gender responsive complementary services and increasing accessibility to payments.

Although, this study found evidence that payment of the cash transfers to caregivers improved children and household-level basic needs and economically empowered women, impacts on several caregivers related outcomes (e.g., nutritional knowledge and caregiving practices) were limited. This in part is explained by the lack of integrated services to address specific outcomes, for example, nutrition knowledge. Furthermore, the payment of the cash transfers to women added additional burden on them such as undertaking long journeys by foot to payment point with related safety risk. This can be done by exploring electronic payment options as well as increasing the number of payments points to reduce travel times and safety risks.

2. Ensure the provision of regular, predictable, and adequate cash transfers

Programme implementation was adversely affected by the COVID-19 pandemic which resulted in irregular lumpy payments with long intervals in-between. Consequently, the

cash transfers were not predictable to the beneficiaries. Moreover, towards the end of the programme, inflationary pressures began to erode beneficiaries' purchasing power. These challenges may have attenuated the programme's effectiveness.

3. Enhance communication with beneficiaries and strengthen the co-ordination of reporting channels within grievance communication mechanisms

Grievance mechanisms were not as effective as beneficiaries faced challenges in following the appropriate reporting channels and information was not properly communicated to the appropriate departments. The programme would benefit from improving communication with beneficiaries and identify and remove bottlenecks in the reporting channels.

4. Institutionalize and expand social assistance coverage.

Angola's National Development Plan 2018-2022 recognizes social protection as a key policy instrument to achieve its first target of human development and well-being. However, existing social protection programmes are mostly contributory social insurance in the form pensions with the poor and vulnerable households not covered national-level social assistance programme. The piloted *Valor Criança* was the first social cash transfer programme in the country. Evidence of the impacts of the programme on children and household wellbeing in this report suggest that an institutionalized child-sensitive social assistance programme would be a key policy instrument to fight child and household poverty as envisioned in the sustainable development goals.

Research Recommendations

1. Determine an adequate transfer value that is shock responsive. The lack of expenditure and/or income data at baseline impeded the research team to calculate the relative share of the transfer amount to pre-intervention expenditure levels. The process evaluation from this study presented conflicting results on the adequacy of the transfer amount. Hence, a re-evaluation of the transfer amount is needed to determine its adequacy and its shock responsiveness to events such as price inflation and macroeconomic trends.

2. Explore the feasibility and impacts of integrating cash transfers with child- and gender-sensitive complementary services. Such research would provide insight into the acceptability of a cash-plus modality and whether such a modality achieves synergistic impacts in this context.

3. Investigate the role of gender norms in influencing household decision dynamics. This could be achieved through qualitative research and research on behavioural (spousal) preferences.

4. Future research on similar programmes could examine the moderating role of payment regularity and timeliness. This would involve comparing the impacts of different payment schedules for beneficiaries.

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9. Appendix

Appendix A: Attrition and balance tests

Attrition test

Table A.1.1: Attrition test on household, caregiver, and household head characteristics

VARIABLES	PANEL SAMPLE		ATTRITION SAMPLE		ATTRITION TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Housing conditions index	-0.045	2,586	0.290	404	0.335	0.201	0.156	0.335
Intention to migrate out of current municipal	0.372	2,586	0.448	404	0.076	0.033	0.070	0.156
Climate & Environmental shocks: drought, floods, and cyclones	0.190	2,586	0.171	404	-0.019	0.029	0.542	-0.049
Agricultural & Livestock shocks: pets, harvest, and livestock death	0.187	2,586	0.156	404	-0.031	0.020	0.182	-0.081
Dependency ratio	1.555	2,586	1.451	404	-0.105	0.049	0.086	-0.112
Household size	5.216	2,586	4.973	404	-0.243	0.117	0.092	-0.126
Average age of household members	16.872	2,586	16.885	404	0.012	0.385	0.976	0.002
Share of members aged 0-4 years	0.323	2,586	0.332	404	0.009	0.014	0.568	0.056
Share of members aged 5-17 years	0.259	2,586	0.233	404	-0.026	0.015	0.144	-0.124
Share of members aged 18-59 years	0.400	2,586	0.417	404	0.017	0.011	0.187	0.121
Share of members 60 years or older	0.018	2,586	0.017	404	-0.001	0.003	0.789	-0.013
Caregiver age	30.857	2,585	29.374	404	-1.483	0.564	0.047	-0.136
Caregiver is married	0.755	2,532	0.685	375	-0.069	0.013	0.004	-0.159
Caregiver ever attended school	0.400	2,550	0.436	392	0.037	0.045	0.451	0.075
Caregiver has any disability	0.050	2,586	0.045	404	-0.005	0.004	0.248	-0.025
Household head age	37.945	2,583	36.455	402	-1.490	0.527	0.037	-0.117
Household head gender	0.162	2,586	0.200	404	0.039	0.018	0.079	0.104
Household head ever attended school	0.560	2,585	0.582	404	0.022	0.033	0.547	0.043
Household head has any disability	0.062	2,586	0.074	404	0.012	0.013	0.390	0.049

Balance test on caregivers' outcome indicators

Table A.1.2: Balance Test on Women's Decision Making and Empowerment Outcome Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Financial decisions for households: caregiver alone	0.206	1,246	0.240	1,340	0.033	0.020	0.157	0.080
Financial decisions for households: spouse	0.232	1,246	0.233	1,340	0.001	0.052	0.987	0.002
Financial decisions for households: caregiver and spouse	0.502	1,246	0.463	1,340	-0.039	0.058	0.531	-0.078
Social support index	27.399	1,246	26.598	1,340	-0.801	0.732	0.324	-0.086
It is never justified to beat wife	0.823	1,246	0.831	1,340	0.008	0.012	0.544	0.021
Expects daughter to complete at least secondary	0.651	946	0.727	1,117	0.076	0.036	0.092	0.164
Expects son to complete at least secondary	0.753	944	0.796	1,111	0.043	0.028	0.185	0.102

Table A 1.3: Balance Test on Women Nutrition and Food Knowledge Outcome Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Baby should be breastfed immediately after birth	0.778	1,246	0.783	1,340	0.005	0.018	0.787	0.012
Baby should be exclusively breastfed until 6 months age	0.188	1,246	0.196	1,340	0.008	0.030	0.807	0.020
Knows about benefits of exclusive breastfeeding	0.725	1,246	0.721	1,340	-0.004	0.028	0.896	-0.009
Knows when babies should start receiving liquids	0.221	1,246	0.266	1,340	0.045	0.052	0.429	0.105
Knows when babies should start receiving food	0.225	1,246	0.288	1,340	0.063	0.049	0.249	0.145
Infant between 12-24 months that is still breastfeeding should eat 3-6 meals per	0.324	1,246	0.427	1,340	0.103	0.051	0.100	0.212
Knows Salt is often fortified with iodine	0.632	1,246	0.647	1,340	0.015	0.024	0.556	0.032
Knows at least one property of iron	0.596	1,246	0.607	1,340	0.010	0.026	0.708	0.021
Can identify at least one food rich in iron	0.581	1,246	0.579	1,340	-0.002	0.030	0.950	-0.004
Knows at least one appropriate behaviour in case of diarrheal	0.503	1,246	0.571	1,340	0.068	0.045	0.189	0.136

Table A 1.4: Balance Test on Women Financial Inclusion Outcome Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Caregiver saves money	0.148	1,246	0.171	1,340	0.022	0.037	0.573	0.061
Caregiver savings: past month	7,405.341	185	6,034.891	229	-1,370.450	502.430	0.041	-0.147
Caregiver savings: past 12 months	8,569.730	185	7,669.432	229	-900.297	630.806	0.213	-0.090
Credit group in the community	0.028	1,246	0.075	1,340	0.047	0.027	0.146	0.209
A member of the household has a bank account	0.055	1,246	0.095	1,340	0.039	0.026	0.197	0.149
Household receives money from people outside household	0.040	1,246	0.080	1,340	0.040	0.023	0.142	0.166
Household sends money to people outside household	0.056	1,246	0.076	1,340	0.020	0.018	0.328	0.080
Household receives in-kind transfers from people outside household	0.051	1,246	0.101	1,340	0.050	0.030	0.160	0.188
HH has outstanding debt	0.109	1,246	0.129	1,340	0.020	0.024	0.449	0.062

Balance test on children outcome indicators

Table B.2.1: Balance Test on Children Material Wellbeing Outcome Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Child has a pair of sandals: children under 5	0.337	846	0.419	934	0.082	0.094	0.425	0.168
Child has two sets of clothes: children under 5	0.638	846	0.675	934	0.036	0.102	0.737	0.076
Child has a blanket: children under 5	0.372	846	0.408	934	0.036	0.080	0.674	0.073

Table B.2.2: Balance Test on Maternal and Child Health Outcome Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
ANC 4 times or more	0.365	1,238	0.388	1,331	0.023	0.092	0.817	0.047
No ANC visit during pregnancy	0.401	1,238	0.465	1,331	0.064	0.092	0.521	0.128
Delivery with assistance from skilled provider - TBA	0.695	1,238	0.789	1,331	0.093	0.046	0.100	0.214
Delivery with assistance from skilled provider	0.248	1,238	0.457	1,331	0.209	0.119	0.140	0.436
Delivery in health facility	0.129	1,238	0.354	1,331	0.225	0.134	0.154	0.522
Child has health card	0.385	1,238	0.623	1,331	0.238	0.084	0.037	0.475
Size at birth small/very small	0.159	1,238	0.134	1,331	-0.025	0.016	0.168	-0.072
No growth monitoring visit	0.462	1,238	0.516	1,331	0.054	0.096	0.597	0.108
at least 3 monitoring growth visits	0.330	1,238	0.385	1,331	0.054	0.076	0.505	0.113
Received Vitamin A supplements in last 6 months	0.389	1,238	0.485	1,331	0.096	0.042	0.071	0.194
Received deworming medication in last 6 months	0.342	1,238	0.418	1,331	0.077	0.049	0.178	0.158
Child had diarrhoea in the last 2 weeks	0.218	1,238	0.292	1,331	0.074	0.019	0.011	0.170
Child had fever in the last 2 weeks	0.235	1,238	0.309	1,331	0.074	0.012	0.002	0.165
Child had cough in the last 2 weeks	0.271	1,238	0.322	1,331	0.050	0.017	0.034	0.110

Table B.2.3: Balance Test on Children Immunization Rate

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Vaccination card ownership	0.447	1,238	0.690	1,331	0.242	0.073	0.021	0.490
Vaccination card availability (seen)	0.149	1,238	0.274	1,331	0.125	0.072	0.145	0.304
BCG: 12-23 months	0.501	337	0.576	413	0.075	0.095	0.467	0.150
Polio 1: 12-23 months	0.570	337	0.663	413	0.094	0.095	0.367	0.193
Polio 2: 12-23 months	0.510	337	0.581	413	0.071	0.081	0.422	0.142
Polio 3: 12-23 months	0.409	337	0.504	413	0.094	0.083	0.310	0.189
Polio 4: 12-23 months	0.338	337	0.436	413	0.098	0.075	0.250	0.200
Penta 1: 12-23 months	0.451	337	0.545	413	0.094	0.077	0.277	0.187
Penta 2: 12-23 months	0.377	337	0.448	413	0.071	0.068	0.341	0.144
Penta 3: 12-23 months	0.320	337	0.392	413	0.072	0.061	0.289	0.149
Measles: 12-23 months	0.448	337	0.516	413	0.068	0.097	0.518	0.135
Received all vaccinations: 12-23 months	0.249	337	0.281	413	0.032	0.053	0.574	0.071
Received 2 doses of RV (Rotavirus): 12-23 months	0.329	337	0.375	413	0.046	0.053	0.422	0.096
Received 3 doses of PCV (pneumococcal conjugate vaccine): 12-23 months	0.306	337	0.346	413	0.041	0.068	0.574	0.086

Table B.2.4: Balance Test on Child Development Indicators

VARIABLES	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Number of activities with mother (if biological mother lives with child)	1.424	1,169	1.532	1,275	0.107	0.252	0.687	0.051
Number of activities with the father (if biological father lives with child)	0.510	1,012	0.548	1,044	0.038	0.096	0.708	0.028
Number of activities with other adult member of the household	0.488	1,238	0.705	1,331	0.218	0.095	0.071	0.153
4+ activities with an adult household member	0.233	1,238	0.264	1,331	0.031	0.050	0.566	0.072
1+ activities with the mother	0.417	1,238	0.448	1,331	0.031	0.032	0.379	0.063
1+ activities with the father	0.153	1,238	0.144	1,331	-0.010	0.020	0.632	-0.028

Table B.2.5: Balance Test on Child Discipline and Violence Indicators

VARIABLES	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Phycological aggression	0.146	554	0.178	686	0.032	0.038	0.440	0.085
Physical punishment	0.159	554	0.162	686	0.003	0.034	0.933	0.008
Any violent discipline	0.218	554	0.251	686	0.032	0.047	0.520	0.076
Any non-violent discipline	0.204	554	0.236	686	0.032	0.021	0.187	0.077

Table B.2.6: Balance Test on Child Nutrition Indicators

VARIABLES	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Food Group 1: Grains, roots, and tubers	0.465	1,019	0.519	1,144	0.054	0.096	0.598	0.108
Food Group 2: Legumes and nuts	0.200	1,019	0.216	1,144	0.016	0.033	0.658	0.039
Food Group 3: Dairy products (milk, yogurt, cheese)	0.231	1,019	0.251	1,144	0.020	0.030	0.527	0.047
Food Group 4: Fresh foods (meat, fish, poultry, liver/organ meats)	0.414	1,019	0.468	1,144	0.054	0.076	0.510	0.108
Food Group 5: Eggs	0.096	1,019	0.121	1,144	0.024	0.023	0.339	0.078
Food Group 6: Vitamin A rich fruits and vegetable	0.563	1,019	0.582	1,144	0.019	0.059	0.761	0.038
Food Group 7: Other fruits and vegetables	0.240	1,019	0.250	1,144	0.010	0.041	0.823	0.022
Children 0-23 months still breastfeeding	0.917	629	0.902	661	-0.016	0.019	0.440	-0.055
Min dietary diversity: 6-23 months	0.202	410	0.264	474	0.061	0.069	0.414	0.144
Min dietary diversity: all children 6 months & above	0.221	1,019	0.278	1,144	0.057	0.045	0.264	0.132
Minimum meal frequency: children 6-23 months	0.122	410	0.167	474	0.045	0.026	0.140	0.127
Minimum meal frequency: all children 6 months & above	0.117	1,011	0.133	1,136	0.016	0.024	0.532	0.049
Minimum acceptable diet: children 6-23 months	0.019	629	0.044	661	0.025	0.014	0.126	0.141
Minimum acceptable diet: children 6 months & above	0.012	1,011	0.026	1,136	0.014	0.009	0.174	0.100

Balance test on household outcome indicators

Table B.3.1: Balance Test on Household Assets Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Number of assets	0.706	1,246	0.767	1,340	0.061	0.072	0.436	0.059
Asset index	-0.029	1,246	0.011	1,340	0.040	0.057	0.511	0.056
Telephone	0.202	1,246	0.242	1,340	0.040	0.059	0.530	0.095
Radio	0.238	1,246	0.237	1,340	-0.001	0.021	0.964	-0.002
Motor bicycle	0.128	1,246	0.143	1,340	0.015	0.015	0.356	0.044
Fridge	0.005	1,246	0.004	1,340	-0.000	0.005	0.949	-0.005
Computer	0.005	1,246	0.001	1,340	-0.003	0.002	0.227	-0.060
Bicycle	0.026	1,246	0.031	1,340	0.004	0.007	0.604	0.025
Cart	0.006	1,246	0.005	1,340	-0.001	0.004	0.757	-0.016
Fishnet	0.018	1,246	0.013	1,340	-0.005	0.007	0.496	-0.040

Table B.3.2: Balance Test on Household Economic Activities Indicators

	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
VARIABLES	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Household has any livestock	0.211	1,246	0.244	1,340	0.033	0.025	0.251	0.079
Number of Livestock Owned in Tropical Livestock Units	0.237	1,246	0.333	1,340	0.096	0.045	0.085	0.067
Has land for cultivation	0.855	1,246	0.882	1,340	0.027	0.032	0.430	0.081
Number of crops cultivated	1.666	1,246	1.751	1,340	0.085	0.098	0.424	0.068
Crop diversification - at least two different crops	0.564	1,246	0.606	1,340	0.042	0.036	0.301	0.085
Household owned/operated service trade (e.g., tailor, carpenter, barber etc.)	0.071	1,246	0.084	1,340	0.013	0.014	0.384	0.048
Household processed and sold any agricultural sub-products, meat, and fish	0.097	1,246	0.121	1,340	0.024	0.028	0.434	0.076
Household owned/operated other non-agricultural trade incl. street market	0.096	1,246	0.123	1,340	0.028	0.013	0.081	0.088

Table B.3.3: Balance Test on Household Food Security Indicators

VARIABLES	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Number of meals per day	2.030	1,246	2.163	1,340	0.132	0.050	0.044	0.281
Worried about lack of food, last 4 weeks	0.723	1,246	0.698	1,340	-0.025	0.031	0.457	-0.056
Went without food for a day, last 4 weeks	0.599	1,246	0.490	1,340	-0.108	0.040	0.044	-0.218
Food Insecurity Experience Scale	5.623	1,226	5.100	1,294	-0.523	0.145	0.015	-0.169
Household hunger scale	1.964	1,246	1.660	1,340	-0.304	0.094	0.023	-0.230
Household hunger scale: moderate hunger in household	0.120	1,246	0.125	1,340	0.005	0.016	0.774	0.015
Grains and cereals (gram/week/per capita)	938.558	1,246	597.425	1,340	-341.133	195.340	0.141	-0.271
Roots and tubers (gram/week/per capita)	245.315	1,246	219.920	1,340	-25.395	19.681	0.253	-0.062
Vegetables (gram/week/per capita)	402.544	1,246	339.790	1,340	-62.754	19.532	0.024	-0.156
Fruits (gram/week/per capita)	332.023	1,246	495.744	1,340	163.721	54.338	0.030	0.155
Meats (gram/week/per capita)	82.720	1,246	108.163	1,340	25.443	12.108	0.090	0.081
Eggs (gram/week/per capita)	0.059	1,246	0.077	1,340	0.018	0.019	0.382	0.074
Fish and seafood (gram/week/per capita)	269.008	1,246	217.156	1,340	-51.852	28.206	0.125	-0.130
Pulses, legumes, and nuts (gram/week/per capita)	202.788	1,246	231.184	1,340	28.396	47.416	0.575	0.080
Milk and dairy products (gram/week/per capita)	4.982	1,246	15.285	1,340	10.303	6.204	0.158	0.108
Sugar (gram/week/per capita)	82.149	1,246	71.837	1,340	-10.312	16.070	0.549	-0.069
Oils and facts (gram/week/per capita)	132.883	1,246	83.133	1,340	-49.751	9.486	0.003	-0.371
Household Dietary Diversity Score	4.212	1,246	3.835	1,340	-0.377	0.292	0.253	-0.144
Berry Index	0.556	1,164	0.540	1,204	-0.016	0.021	0.487	-0.060
Healthy Food Diversity Index - FCSBI	0.068	1,164	0.074	1,204	0.005	0.003	0.136	0.062

Table B.3.4: Balance Test on Household Monthly Purchases Indicators

VARIABLES	COMPARISON		TREATMENT		BALANCE TEST			EFFECT
	MEAN	N1	MEAN	N2	MEAN DIFF	DIFF SE	P-VALUE	SIZE
Fabrics and textiles	0.066	1,246	0.082	1,340	0.016	0.010	0.173	0.062
Clothing	0.083	1,246	0.087	1,340	0.005	0.013	0.734	0.017
Footwear	0.065	1,246	0.107	1,340	0.042	0.016	0.050	0.148
Mosquito nets	0.022	1,246	0.035	1,340	0.013	0.005	0.068	0.075
Detergents and soaps	0.256	1,246	0.203	1,340	-0.053	0.034	0.177	-0.126

Appendix B: Placebo test and Multiple hypotheses test

Table B.1: Placebo Test

DEPENDENT VARIABLE	POOLED OLS	POOLED OLS WITH PDSLASSO	CANONICAL DID	ABADIE (2005) IPW	DOUBLY-ROBUST DID
	DIFFERENCE	DIFFERENCE	IMPACT	IMPACT	IMPACT
	(1)	(2)	(3)	(4)	(5)
Random number	-0.001	-0.001	-0.009	-0.004	-0.004
	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)
Share of female members	-0.007	-0.007	0.002	0.003	0.003
	(0.01)	(0.01)	(0.00)	(0.00)	(0.00)
Community conflict shocks	0.001	0.001	-0.003	-0.003	-0.003
	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)
N	5,026	5,026	5,026	5,172	5,172

Note: Robust and bootstrap [column (5) with 10,000 repetitions] standard errors in parenthesis. ***, **, and * represent statistical significance at 1, 5, and 10 percent levels. All estimates' controls for the following covariates fixed at their baseline values: housing conditions quality index, intention to migrate, climate and environmental shocks, (droughts, floods, cyclones), agricultural and livestock shock, household dependency ratio, number of children 0-5 years, caregiver gender, caregiver marital status, household head gender, household head can read and write in Portuguese, and household head ever attended school.

Table B.2: Multiple Hypothesis testing on selected caregiver's outcome indicators

OUTCOME VARIABLE	MODEL P-VALUE	RESAMPLE P-VALUE	ROMANO-WOLF P-VALUE
Financial decisions for households: caregiver alone	0.1838	0.1868	0.4675
Caregiver saves money	0.0000	0.0010	0.0010
Credit group in the community	0.0000	0.0010	0.0010
Social support index	0.8424	0.8452	0.8452
It is never justified to beat wife	0.2349	0.2388	0.4675
Expects daughter to complete at least secondary	0.0000	0.0010	0.0010

Table B.3: Multiple Hypothesis testing on selected children's outcome indicators

OUTCOME VARIABLE	MODEL P-VALUE	RESAMPLE P-VALUE	ROMANO-WOLF P-VALUE
Child has a pair of sandals	0.0000	0.0010	0.0010
Antenatal visits 4 times or more	0.0000	0.0010	0.0010
Delivery in health facility	0.0000	0.0010	0.0010
Child has health card	0.0000	0.0010	0.0010
Postnatal growth monitoring	0.0000	0.0010	0.0010
Received Vitamin A supplements in last 6 months	0.0000	0.0010	0.0010
Received deworming medication in last 6 months	0.0000	0.0010	0.0010
Vaccination card ownership	0.0000	0.0010	0.0010
Received all vaccinations: 12-23 months	0.0001	0.0010	0.0010
Minimum meal frequency: all children 6 months & above	0.0000	0.0010	0.0010
Minimum meal frequency: all children 6 months & above	0.0017	0.0020	0.0130
Minimum acceptable diet: children 6 months & above	0.0000	0.0010	0.0010

Table B.4: Multiple Hypothesis testing on selected household outcome indicators

OUTCOME VARIABLE	MODEL P-VALUE	RESAMPLE P-VALUE	ROMANO-WOLF P-VALUE
Number of assets	0.0000	0.0010	0.0010
Asset index	0.0000	0.0010	0.0010
Household has any livestock	0.0000	0.0010	0.0010
Has land for cultivation	0.0000	0.0010	0.0010
Number of meals per day	0.0000	0.0010	0.0010
Food Insecurity Experience Scale	0.0000	0.0010	0.0010
Household hunger scale	0.0000	0.0010	0.0010
Household Dietary Diversity Score	0.0000	0.0010	0.0010
Berry Index	0.0000	0.0010	0.0010
Healthy Food Diversity Index - FCSBI	0.0000	0.0010	0.0010
Fabrics and textiles	0.0000	0.0010	0.0010
Footwear	0.0000	0.0010	0.0010
Mosquito nets	0.0000	0.0010	0.0010
Detergents and soaps	0.0000	0.0010	0.0010

Appendix C: QuIP sample and respondent codes

	MALE RESPONDENTS	FEMALE RESPONDENTS
MOXICO	MM_IDI1_M, MM_IDI2_M, MM_IDI3_M, MM_IDI4_M, MM_IDI5_M	MM_IDI1_F, MM_IDI2_F, MM_IDI3_F, MM_IDI4_F, MM_IDI5_F, MM_IDI6_F, MM_IDI7_F
UíGE	UM_IDI1_M, UM_IDI2_M, UM_IDI3_M, UM_IDI4_M, UM_IDI5_M	UM_IDI1_F, UM_IDI2_F, UM_IDI3_F, UM_IDI4_F, UM_IDI5_F, UM_IDI7_F, UM_IDI6_F
BIÉ	BC_IDI1_M, BC_IDI2_M, BC_IDI3_M, BC_IDI4_M, BC_IDI5_M	BC_IDI1_F, BC_IDI2_F, BC_IDI3_F, BC_IDI4_F, BC_IDI5_F, BC_IDI6_F, BC_IDI7_F

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