

Effect of Core Design Features of the Unconditional Cash Transfer Program on Poverty Reduction among Households in Turkana Central Sub-County, Kenya

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Abstract- *This study examines the effect of core design features of unconditional cash transfer (UCT) programs on poverty reduction among households in Turkana Central Sub-County, Kenya. Using a mixed-methods approach, the research analyzed data from 260 UCT beneficiaries. Findings reveal a significant negative relationship between the effectiveness of core design features and poverty levels ($\beta = -0.628, p < 0.001$), indicating that well-designed UCT programs can substantially contribute to poverty reduction. The study highlights the importance of regular, predictable transfers, appropriate targeting mechanisms, and sustainable program design in maximizing impact. However, challenges related to productive use of transfers, awareness of sustainability mechanisms, and beneficiary participation in program design were identified. Recommendations include optimizing transfer amounts and frequency, enhancing beneficiary support systems, improving communication strategies, and establishing robust feedback mechanisms. The study contributes to the literature on UCTs and poverty reduction in arid and semi-arid regions, supporting the Theory of Change framework in understanding how UCT design features contribute to poverty reduction outcomes.*

Indexed Terms- *Unconditional cash transfers, poverty reduction, core design features*

I. INTRODUCTION

A. Background of the Study

Unconditional cash transfer (UCT) programs have emerged as a prominent poverty reduction strategy in developing countries over the past few decades. These programs, which provide regular monetary payments to eligible recipients without imposing conditions on their behavior, have gained traction as a means to

alleviate poverty and improve the well-being of vulnerable populations. In Kenya, UCT programs have been implemented to address the persistent challenge of poverty, particularly in regions like Turkana Central Sub-County.

The concept of cash transfers as a social protection measure gained momentum in the 1990s, initially in response to debt crises in South American countries (Arnold, 2011; Garcia, 2012). Since then, their prevalence has expanded globally, with a significant surge since the early 2000s. By 2011, an estimated 0.8 to 1.0 billion individuals in low- and middle-income countries were receiving cash transfers (Arnold, 2011).

In Kenya, the implementation of cash transfer programs is relatively recent, with a history spanning less than a decade (Ikiara, 2009). The country has introduced several UCT initiatives, including the Cash Transfer to Orphans and Vulnerable Children (CT-OVC) program, the Older Persons Cash Transfer (OPCT) program, the Persons with Severe Disability Cash Transfer (PWSD-CT) program, and the Hunger Safety Net Program (HSNP). These programs aim to provide financial assistance to vulnerable groups to meet basic needs such as food, shelter, education, and healthcare.

Turkana Central Sub-County, located in the arid and semi-arid region of northwestern Kenya, faces significant challenges related to poverty and vulnerability. The area is characterized by high poverty rates, limited access to basic services, and recurrent droughts that affect livelihoods. In this context, UCT programs have been implemented as a means to address these challenges and improve the socio-economic conditions of households in the region.

B. Statement of the Problem

Despite the implementation of various poverty reduction strategies in Kenya, including UCT programs, there has been a marked increase in the number of poor and vulnerable people in the country. Approximately 45% of Kenyans live below the poverty line, with 50% to 43% residing in rural areas (Milu Muyanga and Burke, 2010). This persistent poverty, particularly in regions like Turkana Central Sub-County, raises questions about the effectiveness of current interventions, including UCT programs.

While UCT programs are designed to assist individuals in meeting basic needs, there is a concern that the unrestricted nature of the cash transfers may lead to misuse. Recipients could potentially use the funds for non-essential items, as there is limited oversight from donors or the government. This lack of conditionality contrasts with Conditional Cash Transfer (CCT) programs, which have shown success in Latin America by attaching educational and health conditions to the transfers (Michelle and John, 2010). Furthermore, there is limited research on the specific impact of UCT programs in Turkana Central Sub-County. The effectiveness of these programs in reducing poverty and improving the socio-economic well-being of beneficiaries in this particular context remains understudied. This gap in knowledge hinders the ability to assess the true impact of UCT programs and to make informed decisions about their design and implementation in the region.

C. Objective of the Study

The primary objective of this study is:

- To establish the effect of core design features of the unconditional cash transfer program on poverty reduction among households in Turkana Central Sub-County, Kenya.

II. THEORETICAL FRAMEWORK

- Theory of Change

The Theory of Change serves as the guiding theoretical framework for this study on the effect of core design features of unconditional cash transfer (UCT) programs on poverty reduction in Turkana Central Sub-County, Kenya. This theory provides a comprehensive approach to understanding and

evaluating complex social interventions, making it particularly suitable for analyzing UCT programs.

The Theory of Change, as applied to UCT programs, outlines the causal pathways through which cash transfers are expected to lead to specific developmental changes, particularly poverty reduction. It helps identify underlying assumptions, risks, and the process by which the intervention contributes to desired outcomes. In the context of this study, the Theory of Change framework is crucial for several reasons:

1. **Root Cause Analysis:** The theory helps in understanding the root causes of development challenges, such as poverty in Turkana Central Sub-County. It allows for an examination of how various factors influencing poverty interact, guiding the prioritization of issues that the UCT program should address.
2. **Logical Framework:** It provides a structure for articulating the rationale behind the UCT program, proposing a strategy expected to yield results in poverty reduction. This logical framework ensures a sound basis for achieving change through the program.
3. **Adaptability:** The Theory of Change facilitates course corrections if the selected approach is not working as intended or if anticipated risks materialize. New insights from monitoring and evaluation can be used to refine assumptions and inform decisions on adapting the UCT program to deliver planned results more effectively.
4. **Stakeholder Engagement:** It fosters consensus and motivates stakeholders by involving them early in the planning process and demonstrating how their work contributes to long-term impact. This aspect is particularly important for UCT programs, which often involve multiple stakeholders including government agencies, donors, and community organizations.
5. **Communication Tool:** The theory serves as an effective communication tool, articulating a shared vision and strategy for how change can happen in reducing poverty through UCTs. It emphasizes real change to counterbalance discussions focused solely on resources and activities.

In the context of UCTs in Turkana Central Sub-County, the Theory of Change framework, as adapted

from UNICEF (2011), outlines the comprehensive impact pathways:

1. Input: Selection of beneficiaries and distribution of cash transfers.
2. Output: Regular cash transfers received by eligible households.
3. Immediate Outcomes: Changes in household spending patterns, increased access to basic needs, and potential changes in adult and child time allocation.
4. Intermediate Outcomes: Improvements in food security, health, education, and asset accumulation.
5. Long-term Outcomes: Advancements in social development, learning outcomes, cognitive development, and overall well-being.
6. Impact: Sustained poverty alleviation and inclusive economic growth.

This framework allows for a systematic examination of how core design features of the UCT program (such as targeting mechanisms, transfer amount, and frequency) influence each stage of the change process, ultimately affecting poverty reduction outcomes.

III. LITERATURE REVIEW

A. Conceptual Framework

The conceptual framework for this study is based on the relationship between the core design features of unconditional cash transfer (UCT) programs and poverty reduction. It illustrates how these features influence poverty reduction outcomes among households in Turkana Central Sub-County, Kenya.

Key components of the framework include:

1. Independent Variable: Core Design Features of UCT
 - Targeting mechanisms
 - Transfer amount
 - Frequency of transfers
 - Duration of program
2. Dependent Variable: Poverty Reduction
 - Household income
 - Access to basic needs (food, healthcare, education)
 - Asset accumulation
3. Intervening Variables:
 - Household decision-making

- Spending patterns
- Local economic conditions

This framework posits that the core design features of UCTs directly influence poverty reduction outcomes, mediated by household-level decisions and local economic factors.

B. Empirical Review of Core Design Features of UCTs

1. Targeting Mechanisms:

Davis and Handa (2022) examined UCT programs in Malawi, highlighting the importance of effective targeting. Their study found that community-based targeting methods improved the accuracy of recipient selection, leading to more significant poverty reduction impacts. However, Bastagli et al. (2022) noted in their systematic review that overly complex targeting mechanisms could lead to exclusion errors, potentially limiting program effectiveness.

2. Transfer Amount:

Haushofer and Shapiro (2013) conducted a study in Kenya that demonstrated larger transfer amounts were associated with greater improvements in food security, asset accumulation, and overall well-being. Their findings suggest that the size of the transfer is a critical factor in determining the impact on poverty reduction.

3. Frequency of Transfers:

Blattman et al. (2016) found that more frequent transfers (e.g., monthly) were associated with improved consumption smoothing and reduced financial stress among recipients. However, Banerjee et al. (2017) noted that less frequent, larger lump-sum transfers could facilitate investment in productive assets, potentially leading to longer-term poverty reduction.

4. Duration of Program:

Barrientos (2011) emphasized the importance of long-term commitment in UCT programs for sustained poverty reduction. His research indicated that programs running for several years were more likely to lead to significant improvements in household welfare and break intergenerational poverty cycles.

C. Research Gap

Despite the growing body of literature on UCTs, several gaps remain in understanding their effectiveness in specific contexts like Turkana Central Sub-County:

1. **Context-Specific Impact:** While studies have been conducted in various settings, there is limited research on the specific impact of UCT core design features in arid and semi-arid regions like Turkana Central Sub-County, where unique economic and social challenges exist.
2. **Interaction of Design Features:** Most studies focus on individual design features, but there is a lack of comprehensive research on how these features interact to influence poverty reduction outcomes in a given context.
3. **Long-term Effects:** There is insufficient longitudinal data on the long-term impacts of UCTs in Kenya, particularly in relation to sustainable poverty reduction and economic empowerment.
4. **Comparison with Other Interventions:** Limited comparative studies exist that evaluate the effectiveness of UCTs versus other poverty reduction strategies in the specific context of Turkana Central Sub-County.
5. **Local Economic Impacts:** There is a gap in understanding how UCT design features affect local markets and economic dynamics in recipient communities, which could have implications for overall poverty reduction efforts.

IV. METHODOLOGY

A. Research Design

This study employed a cross-sectional survey design to investigate the impact of core design features of unconditional cash transfers (UCTs) on poverty reduction in Turkana Central Sub-County, Kenya. This design was chosen for its ability to capture data at a specific point in time, allowing for an examination of the relationship between UCT design features and poverty reduction outcomes.

The research utilized a mixed-methods approach, combining quantitative and qualitative data collection techniques. This approach provided a comprehensive understanding of the complex relationships between UCT design features and poverty reduction, capturing both measurable outcomes and the nuanced experiences of beneficiaries.

B. Target Population and Sampling

The target population for this study consisted of 1,041 beneficiaries of various cash transfer programs in Turkana Central Sub-County, including:

- Old Persons Cash Transfer (OPCT)
- People with Disabilities Cash Transfers (PWSD-CT)
- Cash Transfer to Orphans and Vulnerable Children (CT-OVC)
- Hunger Safety Net Program (HSNP)

The sample size was determined using Taro Yamane's formula: $n = N / (1 + N(e^2))$ Where: n = sample size N = population size (1,041) e = margin of error (0.05) Applying this formula resulted in a sample size of 289 respondents.

Stratified random sampling was used to ensure representation across different programs and geographical areas within the sub-county. The sample was proportionally allocated based on the distribution of beneficiaries across the different programs.

C. Data Collection Methods

1. **Questionnaires:** Structured questionnaires were administered to the selected sample of beneficiaries. These questionnaires collected data on demographic information, experiences with the UCT program, and perceived impacts on poverty reduction.
2. **In-depth Interviews:** Semi-structured interviews were conducted with key informants, including program administrators and community leaders, to gain deeper insights into the implementation and perceived effectiveness of the UCT program.
3. **Focus Group Discussions:** Several focus group discussions were held with beneficiaries to explore their experiences and perceptions of how different design features of the UCT program affected their economic situations.
4. **Document Review:** Relevant program documents, reports, and policy papers were reviewed to gather background information and contextual data on the UCT program in Turkana Central Sub-County.

D. Data Analysis Techniques

The study employed both quantitative and qualitative data analysis techniques:

1. Quantitative Analysis:
 - Descriptive statistics (means, frequencies, percentages) were used to summarize demographic data and responses to closed-ended questions.
 - Inferential statistics, including correlation analysis and multiple regression, were employed to examine the relationships between UCT design features and poverty reduction outcomes.
 - The poverty gap index was calculated to measure the extent of poverty reduction among beneficiary households.
2. Qualitative Analysis:
 - Thematic analysis was used to identify, analyze, and report patterns within the qualitative data collected from interviews and focus group discussions.
 - Content analysis was applied to the document review to extract relevant information on program design and implementation.
3. Data Triangulation:
 - Findings from both quantitative and qualitative analyses were triangulated to provide a comprehensive understanding of the impact of UCT design features on poverty reduction.
4. Statistical Software:
 - SPSS (Statistical Package for Social Sciences) version 26 was used for quantitative data analysis.
 - NVivo software was utilized for organizing and analyzing qualitative data.

V. RESULTS AND DISCUSSION

A. Descriptive Statistics

The study sample consisted of 260 respondents, representing an 89.97% response rate. The gender distribution showed a majority of female participants (62.3%) compared to male participants (37.7%). Age distribution revealed that most respondents were in the productive age brackets, with 41.5% aged 35-64 years and 36.9% aged 25-34 years. Only 5.4% were over 65 years old.

Education levels among respondents were generally low, with 48.5% having attained primary level education and 33.8% having no formal education. Only 13.1% had secondary education, and a mere 4.6% had reached tertiary level education.

Household characteristics reflected the diverse vulnerable groups targeted by the UCT program. Female-headed households were the most represented (39.2%), followed by elderly-headed households (20%). Other vulnerable households, orphaned children's households, and households with persons with disabilities made up the remainder.

The main sources of livelihood for respondents' households were pastoralism (29.2%), agro-pastoralism (22.3%), agriculture (18.5%), and self-employment (16.9%), reflecting the predominantly rural and agricultural nature of the region.

Regarding UCT program features, a large majority of respondents (80.3%) reported receiving cash transfers on a monthly or quarterly basis. Most respondents (85.7%) indicated that no conditions were attached to the cash transfers, aligning with the unconditional nature of the program. A high percentage (85.8%) stated that cash transfers were channeled directly to eligible households, suggesting an efficient delivery mechanism. Overall, 69.6% of respondents agreed that UCTs were useful for reducing poverty and improving social protection.

B. Inferential Statistics

Correlation analysis revealed significant negative correlations between core design features and poverty reduction ($r = -0.628$, $p < 0.01$), indicating that as the effectiveness of these features improved, poverty levels decreased. Similar negative correlations were found between payment methods and poverty reduction ($r = -0.584$, $p < 0.01$), and between sustainability mechanisms and poverty reduction ($r = -0.607$, $p < 0.01$).

Regression analysis showed that core design features had a significant negative effect on poverty reduction ($\beta = -0.628$, $p < 0.001$). The regression equation was established as: Poverty Reduction = 5.140 - 0.628 (Core Design Features). The R-square value of 0.394 indicated that 39.4% of the variation in poverty reduction could be explained by the core design features of the UCT program.

Multiple regression analysis revealed that the combined effect of core design features, payment methods, and sustainability mechanisms explained

50% of the variance in poverty reduction (R-square = 0.500). Among these factors, core design features had the strongest effect ($\beta = -0.363$, $p < 0.001$), followed by sustainability mechanisms ($\beta = -0.280$, $p < 0.001$) and payment methods ($\beta = -0.194$, $p < 0.05$).

C. Discussion of Findings

The significant negative effect of core design features on poverty reduction ($\beta = -0.628$, $p < 0.001$) aligns with existing literature, particularly supporting the work of Bastagli et al. (2016), who emphasized the importance of transfer size and duration in achieving substantial impacts on poverty reduction. These results suggest that as the effectiveness of core design features improves, poverty levels decrease in Turkana Central Sub-County.

The high percentage of respondents (90%) indicating no specific eligibility criteria suggests an inclusive approach to beneficiary selection, aligning with the findings of Davis and Handa (2022) on the effectiveness of community-based targeting methods. However, the study also revealed potential areas for improvement in targeting, as not all vulnerable groups were equally represented in the sample.

The regular receipt of cash transfers (80.3% receiving monthly or quarterly) supports the findings of Blattman et al. (2016), who associated more frequent transfers with improved consumption smoothing. However, the variable nature of transfer amounts reported by some respondents (58.1%) suggests a need for further investigation into the optimal transfer size for maximizing poverty reduction impacts, as highlighted by Haushofer and Shapiro (2013).

The study found that only 26.2% of respondents had been receiving transfers for more than 5 years, which may limit the long-term impacts on poverty reduction. This aligns with Barrientos' (2011) emphasis on the importance of long-term commitment in UCT programs for sustained poverty reduction. The significant effect of sustainability mechanisms ($\beta = -0.280$, $p < 0.001$) in the multiple regression model underscores the need for focus on program longevity. Despite the overall positive impact, the study identified several challenges. Forty percent of respondents reported difficulties in using cash transfers productively over time. Less than half

(48.8%) were aware of mechanisms to ensure program sustainability, and only 33.9% felt that beneficiary feedback was considered in program design and implementation. These findings highlight areas for potential improvement in program design and implementation, particularly in terms of beneficiary support, awareness, and participation.

CONCLUSION

This study examined the effect of core design features of the unconditional cash transfer (UCT) program on poverty reduction among households in Turkana Central Sub-County, Kenya. The findings reveal a significant negative relationship between the effectiveness of core design features and poverty levels, indicating that well-designed UCT programs can contribute substantially to poverty reduction in this context. The study highlights the importance of regular, predictable transfers, appropriate targeting mechanisms, and sustainable program design in maximizing the impact of UCTs on poverty alleviation. However, challenges related to productive use of transfers, awareness of sustainability mechanisms, and beneficiary participation in program design were identified, suggesting areas for potential improvement to enhance the long-term effectiveness of the UCT program in reducing poverty in Turkana Central Sub-County.

RECOMMENDATION

Based on the study findings, it is recommended that policymakers and program implementers:

1. Optimize transfer amounts and frequency to better meet the diverse needs of beneficiary households, considering local economic conditions and cost of living in Turkana Central Sub-County.
2. Enhance beneficiary support systems to promote productive use of cash transfers, including financial literacy training and linkages to complementary services such as agricultural extension or vocational training.
3. Improve communication and awareness strategies to ensure beneficiaries are fully informed about program sustainability mechanisms and their role in long-term poverty reduction efforts.
4. Establish more robust feedback mechanisms to incorporate beneficiary perspectives into program

design and implementation, fostering a sense of ownership and improving program responsiveness to local needs.

5. Conduct regular impact assessments to monitor the long-term effects of the UCT program on poverty reduction and adjust design features as necessary to maximize effectiveness.

IMPLICATIONS OF THE STUDY

This research has several important implications:

1. **Policy Implications:** The findings underscore the need for evidence-based policy-making in social protection programs. Policymakers should consider the specific context of Turkana Central Sub-County when designing and implementing UCT programs, focusing on core design features that have proven most effective in reducing poverty.
2. **Practical Implications:** Program implementers should focus on enhancing the identified effective core design features while addressing the challenges highlighted in the study. This may involve revising targeting mechanisms, adjusting transfer amounts, and improving beneficiary support systems.
3. **Theoretical Implications:** The study contributes to the broader literature on UCTs and poverty reduction, providing context-specific evidence from an arid and semi-arid region in Kenya. It supports the Theory of Change framework in understanding how UCT design features contribute to poverty reduction outcomes.
4. **Future Research:** This study opens avenues for further research, including longitudinal studies to assess long-term impacts, comparative studies with other social protection programs, and investigations into the interaction between UCTs and local economic development in Turkana Central Sub-County.

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