

REPUBLIC OF KENYA
MINISTRY OF LABOUR AND SOCIAL PROTECTION
STATE DEPARTMENT FOR SOCIAL PROTECTION



**LINKING SOCIAL PROTECTION
TO IMPROVED PRODUCTIVITY:
AN INVESTMENT CASE FOR
CASH-PLUS PROGRAMS IN
KENYA**

ACKNOWLEDGMENTS

The Investment Case for Cash-Plus Programmes in Kenya (Linking Social Protection to Improved Productivity) was prepared and produced under the guidance of the National Social Protection Secretariat in the Ministry of Labour and Social Protection. The concept development and subsequent development process including valuable inputs, guidance and regular review of the research work was steered by the National Social Protection Secretariat (NSPS) team headed by Cecilia Mbaka assisted by John Gachigi, Jacynter Omondi and Richard Obiga. Their contribution and tireless efforts of organizing and linking the research team with various respondents at the national, counties and community levels. The team's commitment and the desire to see credible evidence generated to inform policy direction is highly acknowledged.

The Ministry of Labour and Social Protection recognizes and appreciates the generous financial support provided by the Swedish Government through the World Food Programme (WFP) and the United Nations Children Fund (UNICEF) for this research work. During the development of this report, extensive reviews and technical guidance were provided by Lara Fossi (Head of Country Capacity Strengthening Unit, WFP Kenya) David Kamau (Policy Officer-Social Protection, WFP Kenya), Ousmane Niang (Chief Social Policy, UNICEF Kenya), Yves Dublin (Social Policy Specialist, UNICEF Kenya), Susan Momanyi (Social Policy Specialist, UNICEF Kenya) and Gloria Chepkoech (Social Protection Consultant, WFP Kenya).

The Ministry of Labour and Social Protection recognizes with gratitude the work carried out by the team of international and national consultants from UNU-MERIT Maastricht School of Governance who undertook the exercise. This research report was written by Franziska Gassmann (team leader), Stephan Dietrich, Aline Meyssonat, Georg Schmerzeck, Eszter Timár and Nyasha Tirivayi. Yamei Du from UNU-MERIT/Maastricht University provided valuable research assistance. We are grateful to the African Population and Health Research Centre (Estelle Sidze, Hazel Anyango Odhiambo and Daniel Mbuvi) who collected the qualitative data for this project. Special thanks go to James T. Gatungu and his team from the Kenyan National Bureau of Statistics for their support in navigating the Kenya Integrated Household Budget Survey. We would also like to thank Ndungu Kahihu and James Chepyegon from the CAP Youth Empowerment Institute and Luigi Luminari and the staff from National Drought Management Authority (NDMA).

Citation:

Government of Kenya. (2019). Linking Social Protection to Improved Productivity: an Investment Case for Cash-Plus Programs in Kenya. Ministry of Labour and Social Protection: Nairobi, Kenya.

TABLE OF CONTENTS

	Acknowledgments.....	iii
	Executive Summary.....	x
01	Introduction	01
	1.1 Study objectives.....	03
	1.2 Structure of the report.....	04
02	Complementary programming – A conceptual framework.....	05
	2.1 First-, second- and third-order outcomes of cash transfers.....	06
	2.2 Mediating factors and structural barriers.....	08
	2.3 Linking cash transfers with complementarity programs and services.....	09
	2.4 The evidence on complementarities and linkages.....	11
	2.5 Best practices and lessons to learn	13
	2.5.1 Tanzania Productive Social Safety Net (PSSN).....	13
	2.5.2 Chile Solidario.....	14
	2.5.3 Ethiopia Productive Safety Net Program.....	15
03	The Social Protection Landscape of Kenya.....	17
	3.1 Health Insurance.....	19
	3.2 Social Assistance: The National Safety Net Program	19
	3.2.1 Management and administration	21
	3.2.2 Identification of beneficiaries.....	22
	3.2.3 The way forward.....	22
	3.3 Existing complementarities and linkages.....	23
	3.3.1 Imarisha Afya ya Mama na Mtoto.....	23
	3.3.2 Nutrition Improvements through Cash and Health Education.....	25
	3.3.3 CAP Youth Empowerment Institute programs	27
	3.3.4 Asset Creation.....	28
04	Research strategy.....	30
	4.1 Quantitative Analysis.....	32
	4.1.1 Data	32
	4.1.2 Methodology.....	37
	4.1.3 Design Parameters for the micro-simulations.....	42
	4.1.4 Limitations	45

4.2	Qualitative Analysis.....	46
4.2.1	Data Collection and Sampling Strategy	46
4.2.2	Qualitative Data Analysis	48
4.2.3	Ethical considerations	49
4.2.4	Limitations and caveats.....	51
05	Results	52
5.1	The relation between education and income.....	53
5.2	The relation between income and nutrition	56
5.3	The potential effect of NSNP on nutritional outcomes (immediate effect).....	58
5.4	The rates of return of investing in NSNP (dynamic microsimulation).....	59
5.5	Validation of program impacts and the relevance of context.....	60
5.5.1	HSNP program impacts	61
5.5.2	CT-OVC.....	63
5.5.3	Differences in program effects	64
5.6	Productive investments, enablers and constrainers (qualitative findings).....	68
5.6.1	The role and utilization of cash transfers - first-order outcomes	68
5.6.2	Transfer-induced changes - second-order outcomes	69
5.6.3	Transformative effects and third-order outcomes	71
5.7	Mediating factors: enablers and barriers to productive investments.....	72
5.7.1	Enablers of productive investments of cash transfers.....	72
5.7.2	Barriers preventing long-term productive impacts of cash transfers.....	73
5.8	Complementing cash with other types of support	79
5.8.1	Imarisha Afya ya Mama na Mtoto in Kakamega	79
5.8.2	Nutrition Improvements through Cash and Health Education (NICHE) in ... Kitui.....	83
5.8.3	Asset Creation Programs in Kitui and Turkana.....	85
5.8.4	CAP-YEI in Kisumu City	88
06	A Theory of Change	90
6.1	Summary of findings.....	91
6.2	A Theory of Change for complementary programming	91
07	Lessons learnt and recommendations.....	94
7.1	Invest in scaling up the National Safety Net Program.....	95
7.1.1	Increase the coverage of children, moving towards a universal child grant	96
7.1.2	Improve the adequacy, design and delivery of cash transfers	96

7.2	Strengthen the linkages between cash transfers and complementary services to enhance outcomes	97
7.2.1	Enroll all NSNP recipients in the National Health Insurance Fund.....	97
7.2.2	Offer counselling and other nutrition education to all CT-OVC recipient mothers with young children.....	97
7.2.3	Provide cash top-up for pregnant women and mothers with young children in CT-OVC households.....	98
7.2.4	Expand the cash-for-asset creation programs in counties that are susceptible to environmental risks.....	98
7.2.5	Invest in the creation and training of chamas and other community-based organization.....	99
7.2.6	Provide cash transfers to participants of youth training programs and explicitly link existing youth funds to these programs.....	99
7.3	Increase the productive potential of social protection interventions by investing in other sectors.....	99
	References	101
	Annex	108
7.4	Methodology.....	108
7.5	More tables from quantitative analysis.....	110
7.6	Explanation on tags used to identify respondents in the qualitative analysis....	117
7.7	Qualitative data collection: respondents' socio-demographic characteristics ...	117
7.8	Qualitative data collection tools	122

LIST OF FIGURES

Figure 1 A framework linking cash transfers to socio-economic development.....	07
Figure 2 The role of complementary programs and services in support social protection outcomes	10
Figure 3 Life-cycle approach to social protection in Kenya.....	18
Figure 4 The National Safety Net Program	19
Figure 5 Government institutional stakeholders in social assistance provision.....	21
Figure 6 Reduced simulation framework for nutrition	39
Figure 7. Reduced simulation framework for returns from education.....	41
Figure 8 Relationship between household consumption per capita and calorie intake	57
Figure 9 Distribution of predicted Calorie Intake with and without National safety Net Program	58
Figure 10 Simulation results.....	60
Figure 11 Heterogeneous effects on education	65
Figure 12 Heterogeneous effects on nutrition	66
Figure 13 Heterogeneous effects on productivity.....	68
Figure 14 Theory of Change.....	92
Figure 15 Outline of simulation procedures	110
Figure 16 Simulation of the rates of return (marginal propensity to consume of 100%).....	115

LIST OF TABLES

Table 1	Targeting, number of beneficiaries and transfer values of NSNP programs.....	20
Table 2	Poverty Profiles	33
Table 3	Percentage of beneficiary households and value of benefits	34
Table 4	Summary statistics of outcome variables in the HSNP and OVC data at baseline and difference between treatment (T) and control households.....	36
Table 5	NSP Program Budget allocation 2017-2018, KES	44
Table 6	Locations and complementary programs for qualitative data collection.....	47
Table 7	Key livelihood characteristics of selected sites.....	47
Table 8	Overview FGD sample	49
Table 9	Overview of IDI respondents.....	50
Table 10	Descriptive Statistics of the main outcome variables	53
Table 11	Consumption effect on the probability of school attendance and completed years of schooling (Probit estimation)	55
Table 12	The effect of school attainment on consumption.....	56
Table 13	Summary Statistics of selected nutrition indicators, KIHBS 2015/16.....	57
Table 14	Calorie intake elasticity with respect to household consumption per capita.....	58
Table 15	Predicted calorie intake with and without National Safety Net Programs.....	59
Table 16	Overall time and treatment effects for HSNP.....	62
Table 17	Overall time and treatment effects for OVC	63
Table 18	Dependent variables and mediating factors considered in heterogeneous effects analysis.....	64
Table 19:	HSNP2 County allocation of households.....	110
Table 20	Descriptive statistics of the control variables in the microeconomic simulations	110
Table 21	OLS and 2SLS specifications of the consumption effect on school attendance	112
Table 22	The effect of school attainment on consumption - full model	114
Table 23	Summary of household characteristics at baseline and difference between treatment (T) and control households.....	114
Table 24	Summary of household characteristics at baseline and difference between treatment (T) and control households.....	116
Table 25	Kitui County	116
Table 26	Kakamega County	117
Table 27	Kisumu County.....	119
Table 28	Turkana County	120

LIST OF ACRONYMS

ASAL	Arid- and Semi-Arid Lands
BCC	Behavior Change Communication
CT-OVC	Cash Transfers for Orphans and Vulnerable Children
DFID	Department for International Development
GDP	Gross Domestic Product
HSNP	Hunger Safety Net Program
KIHBS	Kenya Integrated Household Budget Survey
KES	Kenyan Shilling
M&E	Monitoring and Evaluation
MoE	Ministry of Education
MoLSP	Ministry of Labour and Social Protection
NICHE	Nutrition Improvements through Cash and Education
NSNP	National Safety Net Program
OP-CT	Older Persons Cash Transfer
PWSD-CT	Persons with Severe Disabilities Cash Transfer
RCT	Randomized Controlled Trial
SCP	Senior Citizens' Pension
TVET	Technical and Vocational Education and Training
UNDAF	United Nations Development Assistance Framework
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USD	United States Dollars
WFP	World Food Programme

EXECUTIVE SUMMARY

Kenya has experienced rapid economic development, yet (extreme) poverty is widespread in the country.

Kenya is categorized as lower middle-income country with medium human development, scoring higher on the Human Development Index (HDI) than the Sub-Saharan African average. Despite the socio-economic development, (extreme) poverty remains an issue in Kenya. In 2013, 42% of the population was estimated to consume less than the international extreme poverty line of USD 1.25. Salient regional inequalities exist in the country, with the arid Northern regions registering poverty rates between 60-80% in the same year.

Kenya has made significant and sustained efforts to build a comprehensive social protection system.

2010, the new constitution has recognized social protection as a human right and as a tool to achieve inclusive growth and socio-economic development. The National Social Protection Policy (NSNP) puts

focus on the harmonization and consolidation of policies, envisioning a comprehensive and integrated system. Kenya now provides a wide range of programs to its population, including unconditional cash and in-kind transfers, school feeding, and asset creation programs. The position of social protection on the Government's agenda is proven by the on-going expansion of coverage. In 2018, a universal social pension for people including and above the age of 70 has been introduced.

Social protection has great potential in accelerating inclusive growth and socio-economic development.

Besides its direct impacts on the distribution of income and consumption, social protection can support broader objectives, such as human capital accumulation and increased productivity. Alderman & Yemtsov (2012) note a recent shift in the view economists hold on social



In 2013, 42% of the population was estimated to consume less than the international extreme poverty line of USD 1.25.

Salient regional inequalities exist in the country, with the arid Northern regions registering poverty rates between 60-80% in the same year.



protection, increasingly seeing it as an investment rather than a mere expenditure. By easing the budget constraint of households, cash transfers allow them to invest in their nutrition, health, education and livelihood activities. There is now a growing evidence-base on the returns to social cash transfers as an investment (see for an overview van Kesteren, Gassmann et al., 2018).

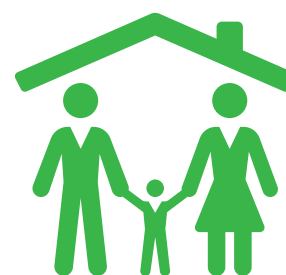
Cash alone is sometimes insufficient to sustainably address structural barriers that prevent households from investing transfers in the most optimal way for long-term change. Structural barriers can exist at the household-, local or macro-level. Examples of household-level barriers are members' labour capacity, pre-transfer assets, human and social capital. At the local- and macro-levels, the infrastructure, the state of the economy and the agro-ecological context are some of the potential barriers hindering the productive impacts of cash transfers. Certain design and implementation characteristics of cash transfers, such as low benefit values, can also act as barriers.

Cash Plus is the programming option of complementing cash transfers with other types of support, aimed at addressing specific structural barriers. Cash Plus interventions can take various forms, the adequate response depending on the specific context and the barriers they are aimed at. We differentiate between complementary interventions that are either integral to the program or provide linkages to other existing services (e.g. education or health care). Integral components usually deliver additional types of support together with cash, such as in-kind transfers, education, behaviour change communication or psycho-social support. Linkages to other support facilitate access to external services, for example by providing health insurance cards to cash transfer beneficiaries. Graduation programs are essentially Cash Plus programs that sequence multiple types of additional support over time, aiming to maximize sustainable livelihood gains.

The Government's flagship social protection program National Safety Net Program (NSNP), launched in 2013, provides predictable and regular social assistance cash transfers to targeted groups. The NSNP consists of 4 sub-programs, namely: the Cash Transfers for Orphans and Vulnerable Children (CT-OVC), the Older Persons Cash Transfer (OP-CT), the Persons with Severe Disabilities Cash Transfer (PWSD-CT) and the Hunger Safety Net Program (HSNP). While most social protection programs are offered nation-wide, the HSNP is available only in four arid- and semi-arid lands of Kenya, where poverty is widespread, and livelihoods are more vulnerable. Overall, approximately 8.2% of the population lived in a household in receipt of the National Safety Net Program in 2017 (Gachigi, 2018). This number is likely to have increased substantially throughout 2018, when an additional 560,000 individuals started receiving the Inua Jamii social pension (Gachigi, 2018). The political will to expand social protection is well demonstrated by the growing number of beneficiaries.

Approximately
8.2%

of the population lived in a household in receipt of the National Safety Net Program in 2017 (Gachigi, 2018).



Meanwhile, county governments and development partners implement social protection interventions that complement the national cash transfer programs.

The *Imarisha Afya ya Mama na Mtoto* in Kakamega provides cash transfers conditional on delivery in a medical facility and the utilization of pre- and post-natal care services, created in 2014 to address the high rates of maternal and under-5 mortality observed in the county. The Nutrition Improvements through Cash and Health Education (NICHE) program was piloted as a response to child malnutrition in Kitui county in 2017 and provides nutrition and hygiene education alongside a cash top-up to the CT-OVC program. The CAP Youth Empowerment Institute provides Technical and Vocational Education and Training programs in 10 counties of Kenya. Specifically targeting the youth out of school, they aim to support the disadvantages youth in increasing their productivity. Asset Creation is a program jointly administered by the Government of Kenya (through NDMA and County Governments) and the World Food Programme (WFP), providing cash or in-kind transfers conditional on participating in asset-building activities. The aim of the program is to strengthen resilience and livelihoods, with the activities tailored to meet the specific barriers faced by the communities.

This study applied a mixed methods approach, combining quantitative analysis of existing data with qualitative data collection and analysis. The quantitative analysis assessed the potential of Kenya's social safety net to enhance the population's human capital and productivity. More specifically, the quantitative analysis utilized three different household survey datasets and four distinct methods. First, using the Kenya Integrated Household Budget Survey (KIHBS) 2015/16, we estimated the relations between household income and human capital outcomes, such as education and nutrition, using various econometric models. Secondly, we analyzed the effects of social protection programs on nutrition using a static micro-simulation model. Thirdly, we apply a dynamic micro-simulation model to analyze the returns to

social protection through human capital accumulation, with a focus on the returns to education.

The qualitative analysis explored beneficiary households' productive investment patterns, the barriers preventing households from making productive investments, and the benefits accrued by participating in complementary programs. The qualitative analysis also looked at the state of the labour market and productive employment opportunities for the urban youth. To this end, in-depth interviews and Focus Group Discussions were conducted with cash transfer and complementary program participants in four counties: Kitui, Kakamega, Kisumu and Turkana.

Transfers increase schooling duration at all education levels, but the increase in household income associated with an additional year of school remains limited.

An additional year of schooling is estimated to increase income by 5%, about half the international standard. Even though the changes in household consumption due to increased education do not pay for the costs of the programs in the review period, the rate of return improves over time. As the simulation models only one way in which NSNP affects schooling and consumption, these results should be interpreted as lower bound estimates. For example, NSNP might increase school performance and subsequent incomes via improvements in child health and the ability to dedicate more time to learning. Lacking data on school performance, effects like these are not reflected in the estimates.

Cash transfers under the NSNP umbrella are estimated to increase beneficiaries' daily energy availability by 132 kcal (per adult equivalent) on average. The prevalence of severe energy insufficiency can be effectively decreased with cash transfers: the share of poor households with caloric availability below requirements is estimated to decrease by 2.5 percentage points as a result of the programs. Impacts decrease at higher income levels, where caloric adequacy is higher and NSNP transfer receipt is less likely.

Both CT-OVC and HSNP transfers positively impact nutrition indicators, but only CT-OVC has a significant positive effect on education.

Increases in caloric adequacy and in food value are associated with both programs, albeit not reaching statistical significance in the HSNP transfer. CT-OVC leads to significant increases in school attendance and education expenditure, whereas HSNP does not seem to be associated with any measurable effects.

Moving away from averages and analyzing impacts for different sub-groups, we find important context-related differences in program impacts. For example, program impacts on education expenditure tend to increase with monetary returns to schooling, suggesting that education investments might increase with labor market conditions. Clear positive impacts on food expenditure are found for households hit by a drought and with low baseline food expenditures, suggesting that transfers are effective in safeguarding nutrition during or following shocks. Building capacity to rapidly identify such situations and scale up transfer payments accordingly might therefore be expected to increase transfers' nutritional benefits.

Expenditures on everyday basic necessities is the primary use of transfers, but whenever possible, households try to invest in human capital, livestock or small businesses. A large share of transfers is used on food, clothing and housing. But households also used the cash to access services including education, healthcare and community-based financial services (mainly in the form of contributing to table-banking or merry-go-round groups). Education-related expenditures were prioritized in households with children, which resonates with respondents' view that education is the key to breaking the cycle of poverty. Many households use what remains of the transfers for productive investments: they purchase chicken, goats or other livestock, or spend on their businesses.

Households reported various positive changes in their lives and livelihoods associated with receiving cash transfers.

Improvements in dietary diversity and overall food security were mentioned by respondents as a result of using the cash to buy food, but also as a benefit of purchasing livestock and seedlings. Cash transfer receipt affects schooling in various ways. Paying the fees for secondary or higher education, or purchasing books and uniforms allows children to stay in education. While the transfer by itself does not cover all school-related costs, it does reduce demand-side barriers of accessing education. Households' ability to utilize healthcare services has been a major benefit voiced by respondents, who would otherwise struggle with affording transportation or medicines. Cash transfers also enabled beneficiaries to join chamas and borrow from these groups or from vendors. Over the longer term, cash transfer programs increased households' human and social capital, as well as their resilience and livelihood strategies.

The qualitative analysis identified a range of structural barriers that may impede the long-term productive impacts of cash transfers in the Kenyan context. Key challenges integral to the cash transfer are the low benefit adequacy and issues with implementation. Transfers have to be spread across many needs, which often means that there is nothing left for households to invest. Frequent and prolonged delays with the distribution of cash transfers, as well as the costly and time-consuming payment mechanisms further dilute transfers.

Capital, the composition and labor capacity of the household have far-reaching implications in Kenyan households' ability to achieve lasting change with the help of cash transfers. Households with larger capital of various forms are in an advantageous position to make productive investments with their cash transfers. For example, those with land ownership are able to increase farm production by investing in livestock and farm assets. The larger the household and the lower its members' labor capacity, the less likely it is that households can invest after meeting pressing immediate needs such as food purchase.

The state of the labor market and the lack of productive and stable employment opportunities were consistently pointed out as major obstacles to escaping poverty for current and future generations alike.

Respondents voiced the overall lack of jobs, particularly formal and reliable jobs, across all four sampled counties. In the absence of reliable jobs, young people in Kisumu resort to casual work (*jua kali*) such as running errands, fetching water, or cleaning. Others try running their own small businesses of selling boiled eggs, second-hand clothing (*mitumba*) or fuel. Frequent thefts (perceived by respondents as a result of poverty) make these small businesses risky and vulnerable.

Infrastructure and the agro-ecological context are important local-level factors which may hamper the long-term positive impacts of cash transfers.

The agro-ecological context and related covariate shocks are particularly challenging households in Kenya's ASAL regions. In Kitui and Turkana, where the majority of the population relies on agriculture or livestock holding, the unproductive lands and failing rains make it very difficult to cope.

The four studied complementary programs are good examples of how Cash Plus can tackle existing barriers.

Participants of the Imarisha program reported better access and use of health care services during and after pregnancy, as well as meeting the specific needs of the infant and making investments with the conditional cash transfer. NICHE beneficiaries voiced that the nutrition and hygiene education helped them understand how to nourish children, and the cash top-up allowed them to purchase what is needed for the infant. The Asset Creation program

supported households in coping with the adverse agro-ecological context and helped them accumulate productive assets and livestock. By matching its training to the demands of the labor market, the CAP-YEI program operates with high effectiveness in facilitating employment or sustainable entrepreneurship for its graduates.

Social protection is an investment in people, which effect can be enhanced by a) perfecting its design and implementation, b) combining it with accessible social policies (e.g. education, health and employment), and c) by using Cash Plus to address specific barriers.

Social cash transfers have to be of adequate scale and soundly implemented to allow productive investments. Their long-term impacts are reached through the utilization of other goods and services; hence, their effectiveness will be related to the availability and quality of these goods and services. For example, the presence of infrastructure, markets, education and health services is required for households to invest cash transfers. Cash Plus is an option to enhance the effectiveness in reaching specific desired outcomes.

Cash Plus is not a silver bullet, but it is a strong programming option to address specific environmental or household-level barriers.

If cash transfers are well designed and operated, and other sectorial policies are in place, household- and individual-level factors will be decisive in how benefits are used. Cash Plus as a programming option has great potential to address barriers that exist at the micro-level, particularly those stemming from low levels of physical, human and social capital.



CHAPTER ONE

INTRODUCTION

Kenya is an East African country endowed with diverse natural resources, and some of the region's most productive lands and farming areas located in its highlands (WFP, 2014). The country has seen rapid economic development in the past two decades, transitioning from low-income to lower middle-income status in 2014 (WFP, 2014). In the years following the 2008 global economic crisis, GDP growth of the economy has seen a speedy recovery, reaching 5.8% in 2016 (World Bank, 2017). Recent years have brought about positive changes in socio-economic development and the quality of life of Kenyan citizens. Between 2000 and 2015, the average life expectancy at birth grew from 51.7 to 66.7 years (World Bank, 2017). Following the introduction of free universal primary education in 2003, primary school attendance and completion rates have risen to 88% and 78.5% in 2015, respectively (WFP, 2016a). The country's Human Development Index has improved by 17% since 1990, which was mainly driven by the increase in life expectancy, and to a lesser extent by an improvement of schooling indicators and economic growth. Kenya is now categorized as a country with medium human development, scoring higher on the HDI than the Sub-Saharan African average (UNDP, 2016).

Nevertheless, (extreme) poverty is widespread in Kenya. In 2013, 42% of the population was estimated to consume less than the international extreme poverty line of USD 1.25 (WFP, 2014). Salient regional inequalities exist in the country, with the arid Northern regions registering poverty rates between 60-80% in the same year (WFP, 2014). Agriculture being an important economic driver and a key source of livelihoods for rural populations, poverty is interlinked with increasingly frequent and devastating floods and droughts. Such shocks force vulnerable households to resort to adverse coping strategies, such as selling productive assets or pulling children out of school (WFP, 2014). Poverty is interconnected with food insecurity, which remains a serious issue in the country, particularly in counties located in the former North-Eastern, Coast and Rift Valley provinces. The magnitude of the challenge is demonstrated by the fact that



Primary school attendance and completion rates have risen to

88% and 78.5%

in 2015, respectively (WFP, 2016a).

in 2014, 26% of children under 5 were stunted (Kenya National Bureau of Statistics et al., 2015). Youth unemployment is increasingly identified as a pressing issue in the country, with the population between the ages 18 and 34 registering an unemployment rate twice as high at the national average (UNDP, 2013).

In the past decades, Kenya has made significant and sustained efforts to build a comprehensive social protection system. The new constitution, in effect since 2010,

recognizes social protection as a human right and as a tool to achieve inclusive growth and socio-economic development. This shift is demonstrated by the exponential growth of social protection financing: while in 1990, only 0.02% of GDP was spent on this function (IFPRI, 2015), the corresponding figure rose to 1.3% by 2017 (Government of Kenya, 2017a). Notably, most of this expenditure is consumed by contributory schemes, and social assistance spending amounts to only 0.3% GDP in fiscal year 2016/17 (Gachigi, 2018). The National Social Protection Policy (2011) puts focus on the harmonization and consolidation of policies, envisioning a comprehensive and integrated system. Kenya now provides a wide range of programs to its population, including unconditional cash and in-kind transfers, school feeding, and asset creation programs. The position of social protection on the Government's agenda is proven by the on-going expansion of coverage. In 2018, a universal social pension for people including and above the age of 70 has been introduced. In 2016/17, almost 12% of Kenyan households were in receipt of predictable and regular social transfers, mainly in cash, and some in the form of food assistance (Gachigi, 2018).

Cash transfers can effectively improve a range of indicators related to human well-being, including food security, health, education, productivity, social capital, and social mobility. Cash alone, however, cannot sufficiently and sustainably address the structural and behavioural barriers that prohibit poor or marginalized populations from enhancing their capabilities (Roelen et al., 2017; Tirivayi et al., 2016; Bastagli et al., 2016). Barriers to covering basic needs and accessing services can prohibit cash transfers from reaching their desired outcomes. Hence, complementing cash transfers with additional interventions specifically aimed at these structural factors has gained increased attention in both developing and developed countries' social protection agendas. These complementarities and linkages are referred to as Cash Plus in the contemporary social protection discourse.

1.1 Study objectives

The Government, with the support of its development partners, is looking to further enhance social protection's ability to support inclusive socio-economic development by strengthening the links between cash transfers and complementary interventions, in line with the global Cash Plus agenda. The main purpose of this study is to develop a social protection investment case for Kenya, thereby linking the national safety nets with social services, livelihood and/or labor market services. The framework of analysis will focus on the link between social protection and the promotion of productivity and employability, aligned with the key strategic objectives envisioned in the Governments' Economic Transformation Plan (Treasury, 2018). The study will further explore the role of social protection in supporting young adults in effectively integrating in the labor market. More specifically, the assignment aims to

- Provide policy guidance and strategic advice to the Ministry of Labor and Social Protection, other line ministries (including the Ministry of Devolution and Arid and Semi-Arid Lands, Ministry of Agriculture, Livestock & Fisheries, Ministry of Education, Ministry of Health, the National Treasury and Planning, the Ministry of Public Service, Youth and Gender Affairs) and other stakeholders on how best to link the existing national safety net with other services, in order to strengthen the promotive nature of social protection;
- Support the UNDAF Social Protection Group in developing an advocacy strategy for the social protection investment case;
- Assist the Ministry (and other relevant ministries) in planning and allocating financial resources such that they enhance existing complementarities.

1.2 Structure of the report

The report is structured as follows: chapter 2 introduces the conceptual framework that guides the analysis and summarizes recent literature on the evidence of Cash Plus programming. Chapter 3 describes the social protection landscape in Kenya and introduces the four focus Cash Plus programs in more detail. The research strategy, including the data and methodology, is provided in chapter 4. Chapter 5 presents the results from both the quantitative and qualitative analysis. The report culminates in chapter 6 with the development of a theory of change based on the findings of the analysis and the broader literature.



CHAPTER TWO

COMPLEMENTARY PROGRAMMING - A CONCEPTUAL FRAMEWORK

This research study has a dual objective: to estimate the rates of returns to social protection cash transfers, and to assess the need for and the impacts of introducing complementarities and linkages to other services. This section introduces the dual analytical framework that guides the two study components.

2.1 First-, second- and third-order outcomes of cash transfers

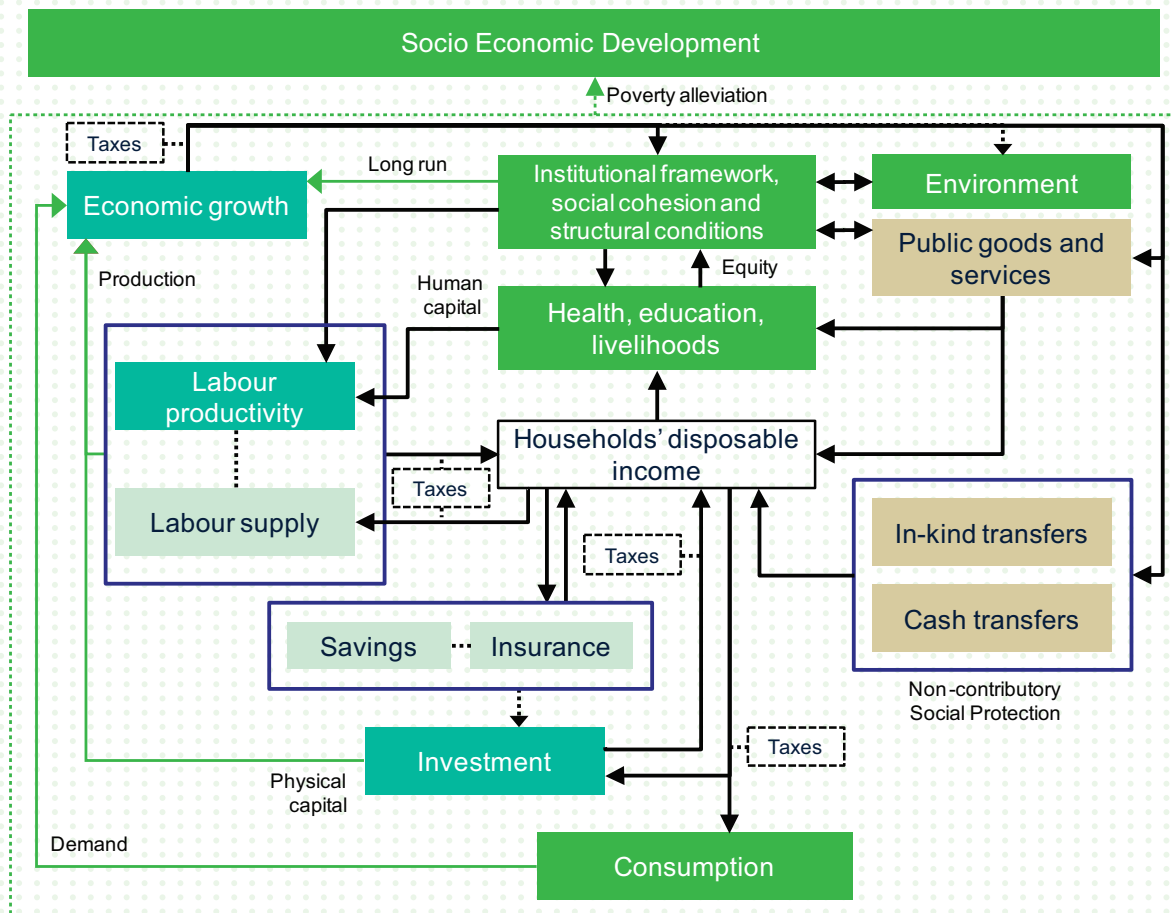
Social protection has the potential to achieve objectives of human rights, economic growth and socio-economic development. In the past decades, a wide evidence-base has been created on the transformational impact social protection can achieve through the reduction of poverty and vulnerability. On top of direct impacts on the distribution of income and consumption, social protection can support broader objectives, such as food security and nutrition, health, education, or gender equity. Its potential as an accelerator of (inclusive) growth and socio-economic development, however, has only started to receive attention recently. Alderman and Yemtsov (2012) note a recent shift in the view economists hold on social protection, increasingly seeing it as an investment that can contribute to economic growth. Several authors have developed frameworks which link social protection to pro-poor economic growth, including Barrientos (2012), Alderman and Yemtsov (2012) and Cherrier et al. (2013). These frameworks all identify human capital accumulation and investments in productive assets as key mechanisms through which social transfers contribute to inclusive economic growth. Figure 1 elaborates on the conceptual framework developed by Cherrier et al. (2013), which builds on the existing evidence on the links between (non-contributory) social protection and socio-economic development. As cash and in-kind transfers, as well as public goods and services ease the budget constraints that households face, their consumption patterns are expected to change. Income security, or the presence of additional income, can incentivize households to invest in their health, education, productive assets

and livelihoods. Such investments lead to an accumulation of both physical and human capital, contributing to economic growth via production impacts. With respect to the effect of social transfers on labor supply, evidence shows that the myth of work disincentives frequently associated with cash transfers does not hold. Most studies report either no effect at all on adult labor supply or even positive effects related to the additional income easing credit constraints and help afford transportation costs (Bastagli et al., 2016). Social cohesion and institutional changes may as well be promoted by social transfers.

Following the framework of Bastagli et al. (2016), the impacts of social protection instruments such as cash transfers can be categorized into first-, second- and third-order outcomes:

- **First-order outcomes** are the direct income and consumption effects of cash transfers, such as expenditure on health and education, savings and access to credit, investing;
- **Second-order outcomes** are the behavioral changes that arise as a consequence of first-order outcomes, for example school attendance, the utilization of health services, labour participation, and dietary diversity, or even migration in search of employment opportunities;
- **Third-order outcomes** are the final outcomes observed over the medium- or long-term, and include school performance, health status, nutritional status, social capital, livelihood strategies, productivity and resilience.

Figure 1 A framework linking cash transfers to socio-economic development



Note: Grey indicates a policy decision; light blue a household decision; green refers to economic performance; dark blue represents outcomes. Note that most relations are neither linear nor unidirectional.
 Source: Cherrier et al. (2013)

Mainly first-, but also second-order outcomes have been widely researched in the academic literature, providing a compelling evidence-base for the multidimensional impacts of social protection. Building an investment case for social protection requires the quantification of third-order outcomes, as these medium- and long-term impacts can be translated into human capital, physical capital and finally productivity and economic growth. There is a growing body of academic evidence measuring third-order outcomes to challenge the notion of social cash transfers being unsustainable “handouts”. Positive rates of return have been confirmed both as an increase of household consumption over time, and as spillovers in the local economy around the globe – including in Sub-Saharan Africa.

In Cambodia, Mideros et al. (2016) estimated the economic returns to an unconditional social assistance cash transfer. Through human capital accumulation (measured via education and the returns to education), the study found positive rates of return after 12 years. In the Sub-Saharan African context, Dietrich et al. (2016) and Dietrich et al. (2017a, 2017b) measured rates of return to cash transfers in Lesotho and Uganda, respectively. While the time needed for investments to mature and yield positive returns varied, both evaluations found that every unit spent on cash transfers translates into a higher increase in household consumptions.

Data collected over decades of program implementation have allowed the emergence

of empirical evidence on long-term impacts at the household level. Mexico's Prospera conditional cash transfer program has first been rolled out in 1996. Both Kugler and Rojas (2018) and Parker and Vogl (2018) analyzed the very long-term effects of childhood exposure to the program, and found significant and positive impacts on school attainment, as well as a higher probability and quality of employment in adulthood. Handa et al. (2018) used experimental data to quantify the long-term effects of Zambia's Child Grant Program and Multiple Category Cash Transfer Program and found that both have achieved positive returns in the form of household income and consumption, asset base, savings, education and food security. On average, Handa (2018) estimated the income multiplier effect of the transfers at 1.67. On the other hand, Haushofer and Shapiro (2018) found that most of the short-term increase in well-being experienced by recipients of Give Directly's Kenyan lump sum cash transfer program has dissipated over time. Similarly, Baird et al. (2016) report dissipating effects of a cash transfer pilot targeting school-aged girls in Malawi. Neither of these programs provided sustained cash support to households, which should be taken into consideration when assessing their long-term impact.

Cash transfers not only generate positive returns on the micro-level but also create spill-overs in the local economy by stimulating effective demand for goods and services. Non-beneficiary households may increase their production to meet boosted local demand, creating an expansion of the local economy (Taylor, Thorne et al., 2014). Such multiplier effects of social cash transfers have been confirmed in several Sub-Saharan African countries, including Ghana, Lesotho, Zambia and Kenya (Taylor & Filipinski, 2014; Gupta et al., 2016; Seidenfeld et al., 2014; Thome et al., 2014; Thome et al., 2015). These studies estimate the local economy multipliers to range between 1 and 3 to each unit transferred. However, Kuss, Llewellyn and Gassmann (2018) note that multiplier effects also depend on the level of market integration of the treatment communities.

2.2 Mediating factors and structural barriers

The extent to which social protection outcomes are achieved is determined by mediating factors that exist within the household and in the local socio-economic context (see Tirivayi et al., 2016; Sabates-Wheeler & Devereux, 2011; Bastagli et al., 2016). These mediating factors can act as structural barriers, preventing households from investing in human and productive capital, thus hindering second-order and final outcomes. Program design features can also act as enablers and constrainers of cash transfer impacts.

At the household level, mediating factors and constraints can be the following (based on Bastagli et al., 2016; Tirivayi et al., 2016; Sabates-Wheeler & Devereux, 2011):

- **Asset base and pre-transfer incomes/ livelihoods:** including all agricultural and non-agricultural assets, importantly land- and livestock-ownership;
- **Household size and composition:** household size can affect the dilution of transfers, while age and gender have implications on the intra-household use of transfers and labour- and time-responses;
- **Labour capacity of the household:** households with labour-constraints face challenges in achieving productive investments or modify labour market participation;
- **Human and social capital (e.g. levels of education, knowledge of proper feeding practices, social networks):** overall levels of human and social capital impact the extent to which households can make informed investment decisions, including in nutrition, health, and education. Social capital has important implications on households' shock resilience and access to services;
- **Idiosyncratic shocks:** shocks can hinder a wide range of cash transfer outcomes.

At the local level, the following mediating factors matter (based on Tirivayi et al., 2016; Bastagli et al., 2016; Sabates-Wheeler & Devereux, 2011; Kuss, Llewellyn and Gassmann, 2018; Touré and Escot, 2018):

- **Context, socio-cultural norms and social dynamics:** societal and religious norms can affect the way money is spent, as well as the role of members within the household (including labour/time allocation and bargaining powers);
- **Infrastructure (e.g. roads, electricity, mobile communication networks) and supply of services (e.g. Water, Sanitation and Hygiene (WASH), health, education, social services):** the infrastructure and presence of services affects the possibility and outcomes of productive investments, and the extent to which first- and second-order outcomes can translate into final outcomes (e.g. expenditure on education translating to increased school attainment and finally increased productivity);
- **Agro-ecological context and access to natural resources (e.g. rainfall, drought, seasonal variations, soil quality):** agro-ecological context has far-reaching effects on agricultural production and subsequently on incomes, consumption, food security and nutrition;
- **Local markets and prices:** the presence of local markets, their sizes, prices and physical accessibility determine the options for households to spend their incomes;
- **Labour market, economic opportunities, technologies and factors of production:** impact the extent to which final outcomes of productivity and livelihoods can be achieved;
- **Covariate shocks:** natural disasters particularly expose the poor/vulnerable and undermine their abilities to make investments in human and productive capital.

Moreover, both Sabates-Wheeler and Devereux (2011) and Tirivayi et al. (2016) identify program-specific enablers and constrainers, which are characteristics of program design that facilitate or hamper cash transfer outcomes. The scale of programs is one of the key program-specific enablers. Scale in this sense refers to both the value of the benefit transferred to households, as well as the coverage of transfers within the geographic area or community of focus (Sabates-Wheeler & Devereux, 2011). Sabates-Wheeler & Devereux (2011) argue that the positive externalities of transfers at the community level show a correlation with the scope of the transfer program and call these effects agglomeration effects. Other program-specific enablers include targeting approaches, re-targeting procedures (particularly the frequency of re-targeting) and benchmarks set for existing the program (Sabates-Wheeler & Devereux, 2011).

2.3 Linking cash transfers with complementarity programs and services

By easing the budget constraint of households, cash transfers can effectively improve a range of indicators related to human well-being, including food security, health, education, productivity, social capital, and social mobility. Recent studies however show that cash transfers alone have limited ability in addressing the structural and behavioural barriers that prohibit poor or marginalized populations from enhancing their capabilities (Roelen et al., 2017; Bastagli et al., 2016,).

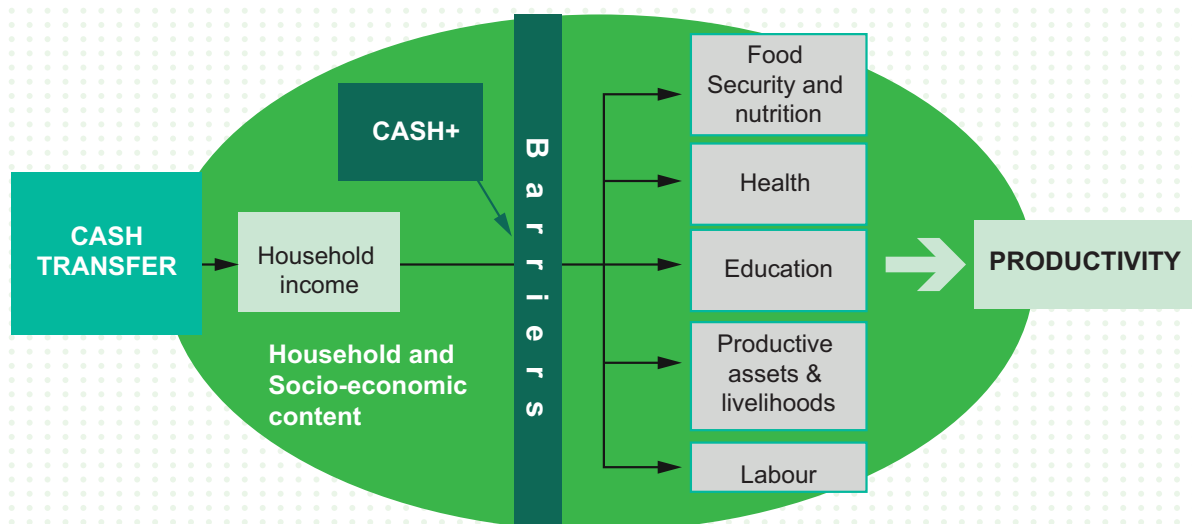
The evidence suggests that barriers other than budget and liquidity constraints undermine the impact of cash on a wide range of outcomes. For example, in the domain of education, cash transfers alone have been found to successfully increase school enrolment but have been limited in achieving long-term learning outcomes (Bastagli et al., 2016). A recent study in Rwanda finds that although cash transfers did support children who are already in school on complementary education expenses, such as school uniforms; it did not remove the

barrier for marginalized children to gain access to education (Sabates et al., 2018). Findings related to cash transfers, child nutrition and health are mixed (Manley & Slavchenska, 2017; de Groot et al., 2016), and suggest that there are non-financial factors to be addressed, for example knowledge of feeding practices, the presence of WASH facilities, and the overall availability of food. In the Kenyan context, Dietrich and Schmerzeck (forthcoming) find that the HSNP cash transfers achieve hardly any improvement in beneficiaries’ nutritional status in the arid lands, where food availability is a daunting challenge. In Niger, no significant impact on children’s nutrition status was associated with an unconditional cash transfer provided during the pre-harvest lean season (Sibson et al., 2018). In Zambia, Handa et al. (2016) found that cash transfers increased the frequency of skilled delivery, but only in communities with higher quality and better access to health facilities – signalling

the importance of mediating factors such as infrastructure and access to services.

Structural and behavioural barriers can undermine the pathways through which cash transfers and the consequently increased household income and consumption achieve second-order impacts (see Figure 2). Complementing cash transfers with additional interventions specifically aimed at these structural barriers has gained increased attention in both developing and developed countries’ social protection agendas, most commonly referred to as Cash Plus in the current discourse. This paper defines Cash Plus as the programming option of complementing cash transfers with other forms of support, with the objective of addressing structural barriers that prohibit households from investing in food security and nutrition, health, education, productive assets and livelihoods and labour market participation.

Figure 2 The role of complementary programs and services in support social protection outcomes



Source: authors’ own elaboration

Cash Plus interventions can take various forms, the adequate response depending on the specific context and the pertaining structural and behavioural barriers. Following the conceptualization of Roelen et al. (2017), we differentiate between complementary interventions that are either integral to the program or provide linkages to support that is external to the cash transfer.

Integral components include:

1. additional benefits or in-kind transfers;
2. information/sensitization/behaviour change communication (BCC);
3. psycho-social support.

The provision of additional benefits is based on the understanding that regular cash transfers are used to address various needs and are often too thinly spread across the household to reach significant outcomes in any single area (Roelen et al., 2017). This can be a conditional top-up to a cash transfer, an asset transfer or the provision of supplementary feeding or fortified food. The provision of information, sensitization or BCC aims to overcome barriers arising from the lack of knowledge, attitudes and social norms. Many programs have attached such components to their regular cash transfers, predominantly around the topics of child rearing practices, nutrition and health (Molyneux, et al., 2016). Psycho-social support includes counselling, home-visits and social casework, which can be crucial to achieving transformational impacts (Molyneux et al., 2016).

Linkages to external support may:

1. Provide access to services and other programs;
2. Facilitate linkages to services and other programs.

External support may be provided in the form of direct access to services or a facilitation of linkages to services. Examples of providing direct access to services include waiving tuition fees, giving health insurance cards, or enrolling beneficiaries in financial inclusion programs, training programs, or other

sectoral support programs in addition to cash transfers, facilitating linkages to services and include referral systems to other programs (for example via social workers and case management) or introducing conditionality upon the use of certain services (Roelen et al., 2017).

Graduation programs are essentially complementary or Cash Plus programs that sequence multiple types of additional support to achieve sustainable livelihood gains. Their overall aim is to equip beneficiaries with adequate resources and skills that enable them to “graduate” from (extreme) poverty (Devereux & Sabates-Wheeler, 2015). This approach was pioneered by BRAC, and soon spread to several Asian, Latin-American and African countries. Traditional graduation programs include cash transfers, an asset transfer, training and financial services (Banerjee, 2015), but it is possible to tailor interventions to the specific context they operate in. Policy-makers may find the concept of ‘graduation’ particularly appealing as it can ease pressure on the program budget by removing beneficiaries from the program, as Berhane and Hirvonen (2018) argue.

2.4 The evidence on complementarities and linkages

The empirical evidence-base on the effectiveness and efficiency of Cash Plus interventions is so far limited but indeed promising. Complementarities have been effectively used in a wide array of development objectives, such as nutrition, health, education, employability and even to reduce criminality. In an overview of social protection programs aimed at reducing youth vulnerability in Sub-Saharan African countries, Watson & Palermo (2016) found combinations of financial support and social or human capital interventions are more effective than providing just one form of support. In a 2017 study, Blattman, Jamison and Sheridan (2017) provided cash transfers, cognitive behaviour therapy, or the combination of both to Liberian men who were engaged in criminal activities. Only the combination of cash and therapy

brought about lasting impacts on criminality, which persisted even a year after the end of the intervention (Blattman, Jamison & Sheridan, 2017). Two UNICEF (2018a, 2018b) studies on the Productive Social Safety Net in Tanzania report that complementary training increased adolescents' educational aspirations and contributed to female empowerment. Roelen and Devereux (2018) evaluated the 'Graduation Model Program' in Burundi. They found that complementing cash transfer with training and coaching assisted recipients in generating higher incomes and accumulating productive assets. Positive spill-over effects were also observed among non-participants.

In search for a solution to the unsatisfactory effects of cash transfers on nutrition, Ahmed et al. (2016) compared five programming options in Bangladesh: cash, food, cash and food, cash plus nutrition BCC and food plus nutrition BCC. The combination of cash and nutrition BCC was the only programming option to achieve significant improvements in children's nutritional status (Ahmed et al., 2016). In Nepal, an evaluation by Saville et al. (2018) suggests that incorporating food supplements into a community-based nutrition education program brings more effective impact on birth weight than either the education intervention alone, or a combination of cash and education (Saville et al., 2018). In Northern Uganda, a combination of cash and psychotherapy was more effective in improving traumatized women's economic resilience than cash transfers alone (van Reisen et al, 2018).

There are several examples of enhancing synergies between social protection and health sector interventions, even within the Sub-Saharan African context. In Ghana, for instance, the LEAP program combines cash transfers with the free provision of health insurance. As a result, 90% of households receiving the LEAP transfers have enrolled in the national health insurance scheme, and the transfer allowed households to pay for treatment and medication for their members (Davis et al., 2014). Shuka et al. (2017) compared various health and livelihood indicators among people who either participate in Ethiopia's Productive

Safety Net Programme, are enrolled in the Community Based Health Insurance scheme, or both. All measured indicators showed the highest impacts for those who participated in both programs, with effects on livestock ownership, off-farm labor, use of outpatient care and debt reduction.

Agriculture and livestock play important roles in the livelihoods of Kenyan people, which makes synergies between social protection and the agricultural sector a sensible tool to enhance productive outcomes. In Zambia, a one-time distribution of livestock combined with trainings on livestock management improved household resilience, as indicated by higher average asset holdings and decreasing variance thereof (Phadera et al, 2019). The complementarities between a cash transfer and a farm input subsidy program in Malawi were researched by Pace et al. (2017). The authors found that participating in both programs at the same time raised the benefit-cost ratio of programs by increasing expenditure and the value of agricultural and livestock production. While some stakeholders viewed the enrolment in both programs as "double-dipping" and an undesirable phenomenon, the findings suggest that the benefits of combined participation may bring about even higher returns than the mere sum of the programs (Pace et al., 2017). Despite the rationale for coordinated agricultural and social protection programming, the six African, Latin-American and Asian case studies synthesized by Slater et al. (2016) suggest that fragmentation and a lack of synergies persist among these sectors.

Other livelihood promotion activities can also be linked to social protection interventions. Skill development, training, and access to financial services (including savings and investment schemes) can be tailored to the specific characteristics of the local labor market and can support both self-employment and waged employment. Chakravarty et al (2019) report that vocational training in Nepal has improved the employability, particularly among female participants who rely on non-farm self-employment for their livelihoods.

Blattmann, Green et al (2014) evaluate a micro-enterprise support program for ultra-poor women in rural Uganda. Participants received a five-day business skill training, a lump sum transfer of USD 150 cash (to be spent on the micro-enterprise), regular supervision and the encouragement to form informal support groups. Participants' incomes have risen significantly after the intervention, and the number of non-farm enterprises in the local community have doubled. The program has proven to be cost-efficient, with a rate of return of 24% (Blattmann, Green et al., 2014).

In an experimental evaluation of BRAC's Graduation Approach in six different sites (including African, Asian and Latin-American locations), Banerjee et al. (2017) measured the mid-term impacts of sequenced interventions. The evaluated programs consisted of a regular cash transfer, a productive asset (picked by the beneficiary), training related to the chosen asset, at-home counseling visits and financial inclusion services. According to the experiment, the program did improve the well-being of recipients in multiple dimensions across all six sites. By the end of the program, beneficiaries' consumption has increased, with the effect still present a year after the intervention's end. Three years after the asset transfer (and a year after the last interventions), eight out of the ten measured

indicators showed a statistically significant increase compared to the baseline. The program's impact on key variables (household consumption, asset base and food security) showed no or minimal decline throughout time. Importantly, the benefits were measured to outweigh the costs in all but one locations (Banerjee et al., 2015) – suggesting that even high programming complexity might be affordable and an investment with returns.

Generalizing findings from one population to another, however, should be done very carefully, precisely because of the importance of contextual factors discussed before. For example, the provision of BCC might be the most effective complementary nutrition-intervention in a context where food is available but not utilized according to standards and recommendations due to prevailing norms or lack of knowledge. In a context where malnutrition is high due to the lack of availability of food, however, BCC will not be able to give nutrition the same 'push'.

2.5 Best practices and lessons to learn

The following section introduces three international examples of Cash Plus programming.



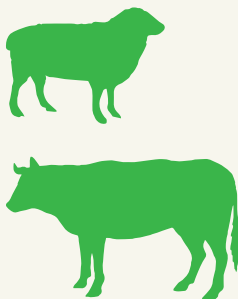
2.5.1 Tanzania Productive Social Safety Net (PSSN)

The Government of the United Republic of Tanzania initiated the Productive Social Safety Net (PSSN) in 2012. The project targets poor and vulnerable groups in the country and provides cash transfers to eligible households based on household composition: (i) a basic monthly transfer to all households registered in the program, and (ii) a Variable Conditional Transfer for households with children or pregnant women. Additional components of the program include livelihood training and a Public Work Program (PWP) subsidy that provides a seasonal supplement to households during lean seasons.

The cash transfer intervention is intended to increase household disposable income on a long-term basis. The Variable Conditional

Transfer encourages recipients to invest extra cash in education as well as the health of children and pregnant women. The seasonal transfer provides predictable income during the lean season, therefore, helps beneficiary households to avoid making negative coping decisions such as selling assets, pulling children out of school, and sending school-aged children to work. The livelihood training aims to improve the well-being of the youth by equipping them with opportunities and capacities and help them to have a safe transfer to adulthood by providing nutrition sensitization, youth livelihood training, and contraceptive knowledge sensitization.

UNICEF has conducted a study examining PSSN program effects on youth well-being and the transfer to adulthood. During the baseline study, researchers identified the challenges adolescents face, which include school drop-out, lack of access to markets, depression, perceived poor quality of life, early pregnancy, financial motivation to engage in a partnership and violence (UNICEF, 2018a). PSSN substantially improved children's education outcomes, increased school attendance and literacy. Furthermore, PSSN participation increased households' ownership of livestock by 47 percent, which is deemed a welfare enhancement that is likely a positive change for children and youth. In the domain of youth well-being, PSSN has increased measures of material well-being, particularly for women. This shows that the transfers have been utilized to improve living conditions and provide basic needs to households and youth. The study also finds that PSSN increased contraceptive knowledge among women, but the increase is not transferred to contraceptive use. Finally, there is no quantitative evidence suggesting that the PSSN influenced sexual behavior, including partnership formation, risk behavior, transactional sex and perceived HIV risk (UNICEF, 2018a, 2018b).



PSSN participation increased households' ownership of livestock by

47%

2.5.2 Chile Solidario

Chile Solidario is an anti-poverty program that was introduced by the Chilean government in 2002, aimed at alleviating extreme poverty. It was designed based on the multidimensional poverty framework. Consequently, the program combines three key elements: (i) cash transfer to the beneficiaries; (ii) psychosocial support, which is offered in the form of a sub-program Puente (Bridge); (iii) preferential access to the social services offered by the State (Hoces de la Guardia, Hojman, & Larrañaga, 2011).

Program participation is limited to five years. Participants receive a monetary transfer on a sliding scale: the initial transfer is 10,500 pesos (USD 15.45), which will be reduced to 3,500 pesos (USD

5.15) per month after 6 months. In the first two years, participants also receive psychosocial support. From the third year onwards, beneficiaries only receive an unconditional cash transfer without further psychosocial support (Roelen et al, 2017).



Program participation is limited to five years. Participants receive a monetary transfer on a sliding scale

The interaction between the psychosocial support and the network of social services is perceived as the most innovative component of the program because it addresses the structure cause of poverty (Roelen et al, 2017). The psychosocial support is deemed vital for bringing the vulnerable groups into the social service network (Cecchni et al, 2012). Each participating household is assigned a household support worker, who meets all members of the household to identify the capability deficits from seven different dimensions of well-being; including education, health, employment, income, housing condition, family dynamics, and identification. Based on this assessment, each household received a tailor-made social protection plan that corresponds to its needs. In addition, social workers played an intermediary role to connect participants and social services. They provide household members with information and training to access health and education services and existing social programs.

The well-trained social workers are crucial to the success of the program. Roelen et al.'s (2017) study shows the contribution of social workers was key to bringing positive change in education and health, as well as to promoting the take-up of additional monetary subsidies that were provided to participant households.



2.5.3 Ethiopia Productive Safety Net Program

The Government of Ethiopia initiated the Productive Safety Net Program (PSNP) in 2005. This program addresses food insecurity and hunger in rural areas, targeting households that are chronically food insecure. Beneficiaries receive the combination of cash and food transfers depending on the season and their needs. The support is provided for six months a year, for a duration of up to five years (Devereux, 2008). An evaluation by Berhane et al (2011) finds that the program has increased household food security and resilience in terms of responding to shocks. However, it has little impact on child nutrition and health service utility (Roelen et al, 2017).

The fourth stage of the Productive Safety Net Program (PSNP4) was launched in 2015, with an innovative design to advance impact on nutrition and health. The Integrated Nutrition Social Cash Transfer (IN-SCT) pilot project was implanted in two PSNP4 regions. This “Plus” component is an integrated package of nutrition-



of women have received some form of antenatal care during their last pregnancy

sensitive interventions, including engaging in nutrition-sensitive activities, psycho-social support and linkages to services.

A study reports that PSNP4 participants have good knowledge of child feeding practices and high breastfeeding rates. 78 percent of women received some form of antenatal care during their last pregnancy, and there has been a spread of knowledge on nutrition. Furthermore, children's outcomes, such as hand-washing practices, the use of latrines, and getting children immunized have improved among the participants (Devereux et al, 2016). These positive findings can be attributed to the training and knowledge-sharing in the local communities by the social worker, whose performance is a key element for the success of the pilot (Roelen et al, 2017).



CHAPTER THREE

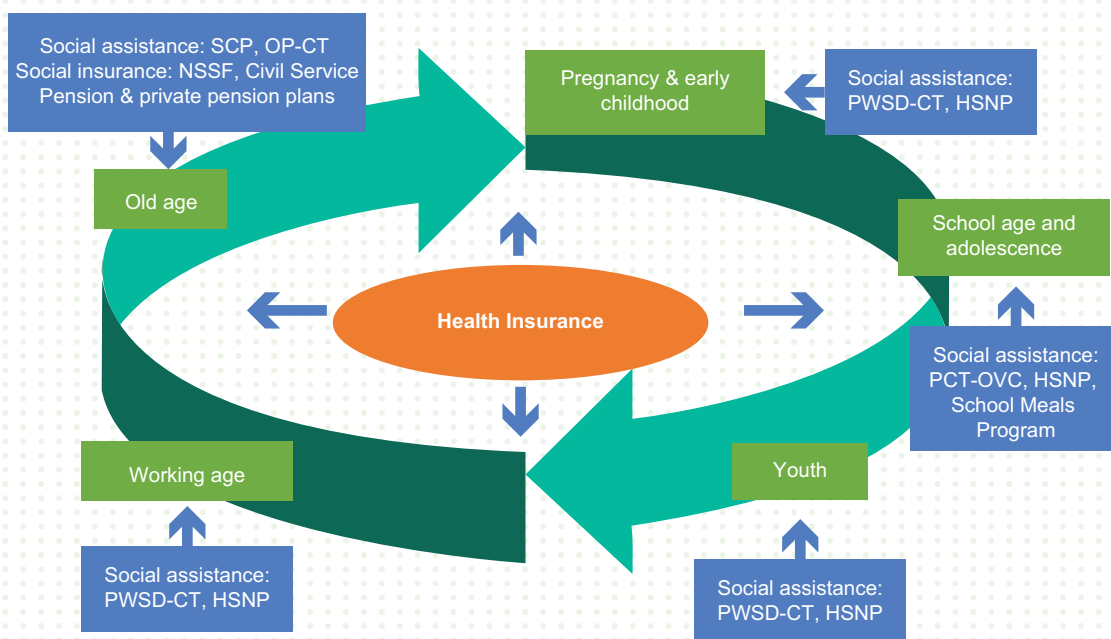
THE SOCIAL PROTECTION LANDSCAPE OF KENYA

With the right to social security entrenched in its 2010 Constitution, Kenya has developed a rather comprehensive social protection system following a life-cycle approach. The Government provides several types of social assistance, social insurance and health insurance schemes. In addition, the private sector plays an important role in providing insurance against contingencies (including pension plans), while various international and national organizations run in-kind and in-cash social assistance programs. Informal safety nets, such as personal remittances (World Bank, 2017), informal savings and support groups complement formal mechanisms throughout the country. A recent study on the country's social protection system mapped out 448 different programs operated in 46 counties, with most of them being limited in geographical scope and coverage (Kimetrica, 2017). While flagship social protection programs (including social security and the National Safety Net Programme cash transfers) belong to the national Government, additional programs and access to health care are

devolved functions, hence the responsibilities of the counties. Because of the complexity and fragmentation of small-scope and/or county-level social protection programs, this report focuses on social assistance transfers that are provided (at least partially) by the national Government.

The national social protection system rests on three basic pillars: social assistance, social security and health insurance. The Government of Kenya recognizes the importance of applying a life-cycle approach to social protection and has put into place specific programs to cushion against the challenges faced by people across life (see Figure 3). Children, people with disabilities, and elderly people are recognized as those in need of support to overcome their specific challenges. While some social protection programs are offered nation-wide, there are additional support mechanisms available only in the arid- and semi-arid lands of Kenya, where poverty is widespread, and livelihoods are more vulnerable.

Figure 3 Life-cycle approach to social protection in Kenya



Source: own elaboration based on Social Protection Secretariat (2017)

3.1 Health Insurance

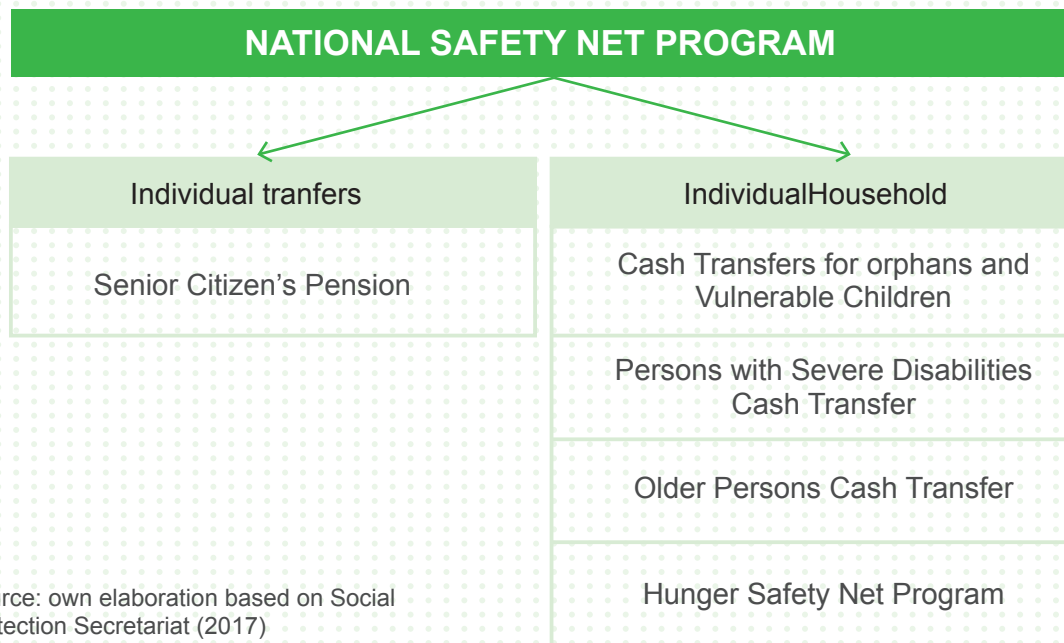
The National Hospital Insurance Fund (NHIF) is the parastatal overseeing the provision of health insurance to the Kenyan population. With access to basic health care both a right enshrined in the Constitution of Kenya and a key strategic tool for inclusive socio-economic development, the expansion of health insurance coverage among the population is among the priorities of the Government (Treasury, 2018; Government of Kenya, 2017a). Universal coverage is still far from reality with 18,000,000 people belonging to a household with at least one NHIF member, but there has been a steep increase of the insured population since 2010 (Government of Kenya, 2017a).

The NHIF provides different schemes, including for formal sector workers (on a statutory deduction basis), informal sector workers (on a voluntary basis) and for population groups ‘sponsored’ by development partners or county governments. Starting in 2018, all people receiving the NSNP transfers will be gradually enrolled with NHIF.

3.2 Social Assistance: The National Safety Net Program

Social assistance programs are rather diverse, including direct cash transfers, food for assets, cash for assets, school feeding and education bursaries. The unconditional cash transfer programs constitute elements of the National Social Protection Policy, and hence are owned and administered by Government bodies. Other programs – typically those providing in-kind transfers – are at least partially funded and implemented by international partners. Most of these programs are also integrated within the national Social Protection Policy or the Ending Drought Emergencies framework.

Figure 4 The National Safety Net Program



Source: own elaboration based on Social Protection Secretariat (2017)

The Government’s flagship social protection program is the National Safety Net Program (NSNP), or *Inua Jamii* in Swahili. It provides predictable, regular social assistance cash transfers to groups of the population identified as in need of support. The NSNP was established in 2013, as part of Kenya’s strategic blueprint for social and economic development called Vision 2030 (Government of Kenya, 2016). It consists of four sub-programs, namely: the Cash Transfers for Orphans and Vulnerable Children (CT-OVC), the Older Persons Cash Transfer (OP-CT), the Persons with Severe Disabilities Cash Transfer (PWSD-CT) and the Hunger Safety Net Program (HSNP) – as shown on Figure 4.

The National Safety Net Program provides monthly cash transfers delivered to beneficiaries’ bank accounts every two months. Despite belonging to a common umbrella of programs, there are several differences in how these interventions are designed, targeted

and implemented. First, while the new social pension is an individual entitlement, the other transfers are provided on the household level. This means that there can be multiple social pension beneficiaries within a household, but a household can only receive one of the other four programs. Second, targeting approaches vary. The Senior Citizens’ Pension applies a universal (categorical) targeting approach, with all Kenyan citizens from the age of 70 being eligible regardless of their economic situations. The other cash transfers use hybrid targeting, which consists of a proxy means-test, a categorical criterion and community validation (see Table 1). Third, benefit values differ. The Hunger Safety Net Program provides a higher transfer than the other programs: KES 2,700 per month versus KES 2,000. Fourth, while the HSNP’s benefit values are annually adjusted to inflation, the rest of the transfers have not been indexed since their national roll-out.

Table 1 Targeting, number of beneficiaries and transfer values of NSNP programs

Name of program	Target beneficiaries	Number of beneficiaries (2018/19)	Transfer value
Cash Transfers for Orphans and Vulnerable Children	Extremely poor* households with an orphan or vulnerable child member.	379,000 households	KES 2,000/ month
Older Persons Cash Transfer	Extremely poor households with a member between the ages 65 and 69.	65,000 households	
Senior Citizens’ Pension	Individual Kenyan citizens from the age of 70 who are not in receipt of a social insurance pension.	523,000 individuals	
Persons with Severe Disabilities Cash Transfer	Extremely poor households with a severely disabled member.	44,000 households	
The Hunger Safety Net Program	Extremely poor households in Turkana, Marsabit, Wajir and Mandera counties.	102,000 households	KES 2,700/ month

Source: based on Social Protection Secretariat (2017). *: Extreme poverty is defined as a monthly household income below KES 2,000 for urban, and KES 1,500 for rural areas (MoLSP, 2018).

Overall, approximately 8.2% of the population lived in a household in receipt of the National Safety Net Program in 2017 (Gachigi, 2018). This number is expected to increase substantially from March 2018, when an additional 560,000 individuals start receiving the Senior Citizen’s Pension (Gachigi, 2018). The political will to expand social protection is well demonstrated by the growing number of beneficiaries. While the overall coverage of NSNP programs was 226,730 households in fiscal year 2012/13, it rose quickly to 450,000 in 2013/14 (Mwasiaji, 2015), and is expected to reach 1,444,000 in 2018/19 (Social Protection Secretariat, 2017).

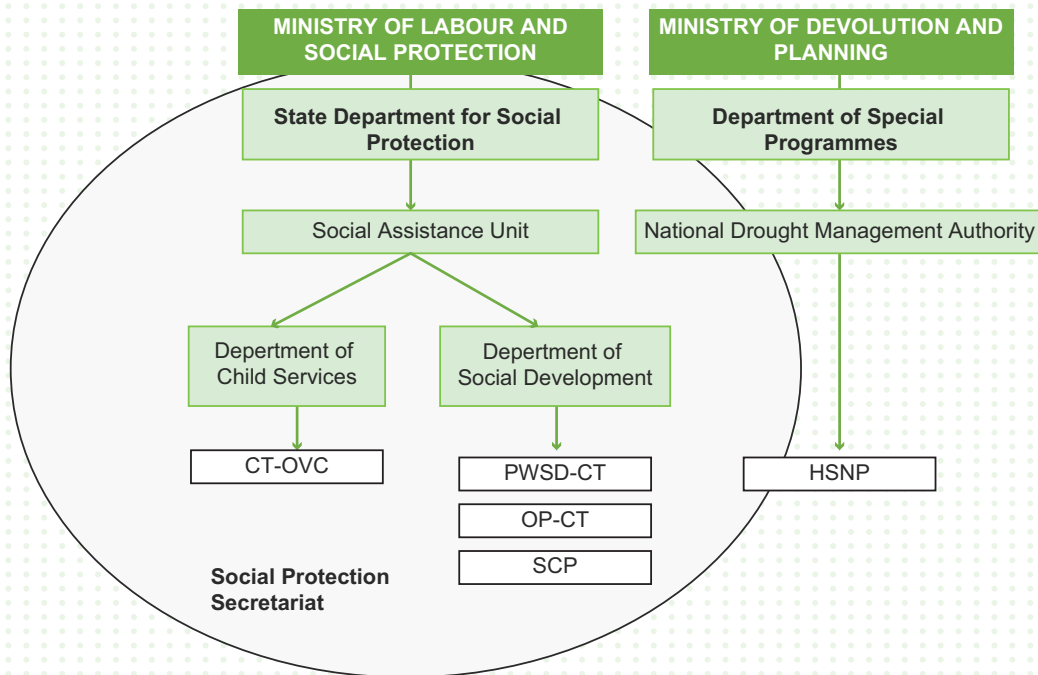
Neither the value of social transfers, nor the income threshold for eligibility are linked to socio-economic standards such as the cost of basic needs or a statistically derived poverty line. According to key informants, they are rather a function of the available budget and the perceived size of the population in need of support. Since benefits are provided at the

household level (except the Senior Citizen’s Pension), the larger the household size, the lower the adequacy of the received transfer.

3.2.1 Management and administration

The National Safety Net Program is jointly administered and managed by the Ministry of Labour and Social Protection, and the Ministry of Devolution and Arid and Semi-arid Lands. The former is responsible for the CT-OVC, the PWSD-CT, the OP-CT and the SCG, while the latter oversees the Hunger Safety Net Program. In order to enhance synergies in the overall social protection system, a National Social Protection Secretariat has been established. This entity is responsible for strategic direction, technical support, policy development and inter-agency coordination. At the county level, the County Departments of Social Development and of Child Services are in charge of implementing and administering the three cash transfer programs.

Figure 5 Government institutional stakeholders in social assistance provision



Source: authors’ own elaboration based on Ministry of Labour, East African Community and Social Protection (2016)

Recent years have seen important reforms in the administrative and management processes steering social protection in the country. The individual Management Information Systems for cash transfers are now all linked to the Single Registry, which allows for a comprehensive overview of social protection beneficiaries and payments. A national M&E framework which will also be hosted by the Single Registry, is currently being developed.

3.2.2 Identification of beneficiaries

The different components of the National Safety Net Program use different targeting approaches to identify eligible beneficiaries. The CT-OVC, the PWSD-CT, the OP-CT and the HSNP target extremely poor households (in addition to their respective categorical criteria). Programs are scaled up following the Expansion Plan, which gives preference to constituencies with higher incidences of poverty. Using census data and information from the KIHBS dataset, the number of households that are expected to fulfill the criteria is estimated. This estimation is verified or adjusted by the Constituency Social Assistance Committees, who provide a list of potentially eligible households within their area. Listed households are first visited by Locational Targeting Committees for an initial data collection, and later by the official enumerators who collect data for the Proxy Means-Test (PMT). The questionnaires are analyzed by the Social Assistance Unit, who generate a list of households that have been found to fall below the eligibility threshold based on the PMT. The list ranks households by their welfare and allocates benefits to a number of them determined by the resources provided to the constituency in the Expansion Plan. As a final step, this list is subject to community validation, during which households deemed ineligible by the community might be removed, but no new households can be added.

The PMT is based on the 2005 round of the Kenyan Integrated Household Budget Survey and uses an eligibility cut-off point of KHS 2,000 for urban, and KHS 1,500 for rural households (MoLSP, 2018). However, despite the common cut-off point, there are currently three different PMT formulas in use: one for the HSNP, one for the CT-OVC and one for the OP-CT and PWSD-CT. The Household Living Conditions Score currently used for targeting the HSNP is expected to replace all other formulas¹.

A **new Harmonized Targeting Tool** is being developed and piloted with technical lead from the HSNP Office. This tool utilizes a PMT-approach which derives its indicators and weights from a nationally representative household survey. It is envisioned that the Harmonized Targeting Tool will replace all other methods of identifying beneficiaries of NSNP, making it a key element in increasing coordination and efficiency in operation. The Harmonized Targeting Tool has already been used in the four counties with HSNP coverage (Mandera, Marsabit, Turkana and Wajir).

3.2.3 The way forward

While the benefits of investments in cash transfers are widely recognized, their returns can be increased by effectively integrating them with other social services. As emphasized by the National Treasury's (2018) plan, social protection measures help build a strong and productive workforce and stimulate economies by increasing entrepreneurial activity and boosting demand. The Government's vision to scale up cash transfers and move towards more integrated systems for social protection is well articulated in the Medium-Term Budget Policy Statement (Treasury, 2018). The Policy Statement, and within it the "Big Four" agenda identifies four key priorities of the Government for the next medium-term:

- Increase the share of the manufacturing sector in the country's GDP, in order to create jobs and reduce poverty;

¹ According to stakeholder discussions at the National Drought Management Agency and HSNP Office.

- Invest in food security and improved nutrition;
- Increase the health care coverage of the population, with universal coverage being the ultimate target;
- Improve living conditions by providing affordable housing.

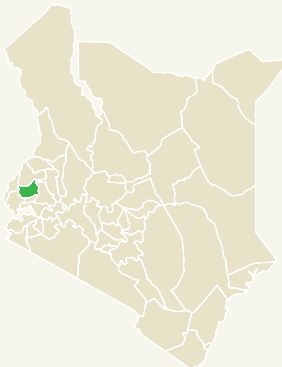
The current study will also add to the dialogue on how to best make the “Big Four” agenda a reality by reviewing four “complementary” programs outside of the scope of pure cash transfers which can contribute to the goals envisioned in the Medium-Term plan.

3.3 Existing complementarities and linkages

While the National Safety Net Program is managed by the central Government, county

governments and development partners can implement social protection interventions that complement the national cash transfer programs. While presumably all counties have some kind of complementary programs, we have selected a limited number of flagship programs which resonate well with the general bottlenecks and challenges of social protection in Kenya and fit in the Government’s strategic vision. These are:

1. the ‘Imarisha Afya ya Mama na Mtoto’ program in Kakamega county;
2. the Nutrition Improvements through Cash and Health Education in Kitui county;
3. the CAP Youth Employment Project in Kisumu city;
4. and the Asset Creation program currently implemented in 15 ASAL counties;



3.3.1 Imarisha Afya ya Mama na Mtoto

Kakamega County’s flagship healthcare program is the Imarisha Afya ya Mama na Mtoto, a conditional cash transfer seeking to increase poor women’s attendance of skilled delivery and pre- and post-natal care services. The program was created in 2014 to address the high rates of maternal and under-5 mortality observed in the county. A bottleneck analysis conducted by UNICEF in 2011 found that the key demand-side barriers preventing poor mothers from seeking such health services include the high direct costs of travelling and attending medical care, opportunity costs (such as foregone earnings), cultural factors and lack of knowledge on the importance of check-ups and skilled delivery. The program is available in 25 high volume health facilities in total, two in each sub-county and the Kakamega Referral Hospital.

The Imarisha program has been designed as a Cash Plus intervention to remove these demand-side barriers. The cash transfer is disbursed in six instalments of KES 2,000 (totaling KES 12,000), which is conditional on attending four ante-natal health check-ups, delivering in a skilled facility, and attending four post-natal growth monitoring and immunization services. The amount of the transfer was decided upon by stakeholders based on the usual costs of traveling to facilities and the anticipated opportunity costs experienced by mothers, as well as aligned with the NSNP cash transfers’ value. It is important to note that next to the Imarisha



program, supply-side interventions were introduced in the 25 participating facilities, such as fee waivers on key medical services for pregnant mothers and infants, and increased investments in health facilities and staff. Thus, the cash transfers do not have to be spent on medical fees.

Each instalment is paid out following a mile-stone. The first payment is made after the fourth ante-natal check-up, the second after delivering in a health facility, and the remaining transfers follow each of four growth monitoring and immunization visits.

In addition to the cash transfer and the conditionality facilitating linkages to health care services, the Imarisha program also contains integral program elements of BCC and sensitization. When attending medical services, beneficiary mothers receive counselling on recommended health, hygiene and infant-feeding practices.

Targeting of the program is done using a proxy means-test which aims to identify mothers consuming below a dollar a day. Applicants have to answer the PMT survey questions at the data clerks' desks located at health facilities. Following the application, community health volunteers conduct a home visit in order to verify the living conditions of the applicant.



During 2017, efforts were made to learn about the impacts of the program and build an investment case (Imarisha Afya ya Mama na Mtoto Program, 2017). This, however, had several shortcomings and limitations, most of which stemmed from the fact that the

data collected for monitoring and evaluation is not suitable for measuring impacts. The Management Information System only registers beneficiaries' basic personal details and PMT score at the time of enrolment, whether the milestones have been met, and the payment information. With inadequate information, the benefits of the program cannot be reliably measured, making any meaningful cost-benefit analysis hardly possible.

The Imarisha program is currently not linked to the NSNP cash transfer programs. This lack of synergy and linkages has been mentioned as an important caveat by key stakeholders during the inception mission.



3.3.2 Nutrition Improvements through Cash and Health Education

The Nutrition Improvements through **Cash and Health Education** (NICHE) program is a pilot project which started in Kitui county in April 2017 and is foreseen to encompass an eighteen-month period until April 2019. The project is implemented by the Department of Children Services and the County Health Management Team, with technical support from UNICEF. The pilot runs as a Randomized Controlled Trial (RCT) for a period of two years, with baseline, mid-line and end-line survey data feeding into a rigorous evidence-base on program impacts.

NICHE was launched as a response to child malnutrition, which is the single largest cause of under-5 mortality in Kenya. Children under the age of 5 in Kitui county are twice as likely to be stunted than the country average (UNICEF, 2017). Investments in nutrition and health of children in the first 1,000 days after conception are crucial determinants of the overall physical and cognitive development of the child. Therefore, NICHE targets pregnant mothers and those taking care of infants under the age of 2 in households receiving the CT-OVC. Following our conceptual framework, the **NICHE provides two types of Cash Plus interventions**, which are integral to the program design: additional cash benefits and sensitization/BCC. By easing the structural barriers of food utilization (such as dietary diversity, feeding practices, use of WASH facilities etc.), it aims to enhance the second- and third-order nutrition and health outcomes of the CT-OVC program. According to the program design report, the objectives of the RCT are the following:

- *“To understand if cash can benefit food and nutritionally insecure households enough to improve nutrition outcomes in under 2yrs;*

- *Secondly, to explore if the programme can indeed be seen to provide some basic level of social protection within food insecure households; what are the mechanisms by which these dynamics operate;*
- *Thirdly, to provide learning from the above two questions that can inform a scale-up of activities across more vulnerable households in other Counties under Government of Kenya leadership” (UNICEF, 2017:4).*

NICHE is a Cash Plus intervention complementing the CT-OVC, consisting of two components: a top-up cash transfer of KES 500 per beneficiary per month (distributed bi-monthly) and intensive weekly nutrition counseling (UNICEF, 2017). The cash transfer per household is maximized at KES 1,000 per month, which is paid to households with two or more pregnant mothers or infants (Kitui County Government, 2017). The latter utilizes a multi-layer approach, providing one-on-one counseling sessions, small group counseling, the distribution of print-outs and information brochures, wider community events and campaigning strategies. Weekly one-on-one counseling addresses the barriers to optimal nutritional and resilience practices, such as the quality of diets, frequency of meals, uptake of health services, as well as appropriate infant-feeding practices, vitamin supplementation and diarrhea management. These sessions take place once a week for 45-60 minutes, provided for the primary caregiver at the household.



3.3.3 CAP Youth Empowerment Institute programs



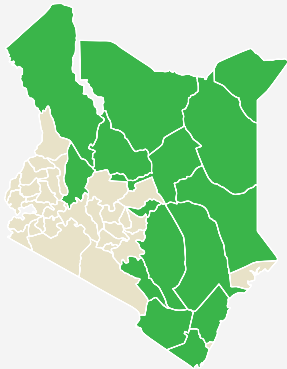
89%

Of the graduates transition into paid jobs or entrepreneurship start-ups

The CAP Youth Empowerment Institute provides Technical and Vocational Education and Training programs in 10 counties of Kenya. Specifically targeting the youth out of school, they aim to support the disadvantaged youth in increasing their productivity. Besides providing TVET, they also carry out financial literacy and work preparedness trainings, field visits to potential job sites, and link participants to internships, placements and job opportunities through their partnerships across the country. CAP-YEI's model puts emphasis on matching their trainings with the labor market realities of each location they work in. Thus, their operations in new sites start with a market scan, the results of which determine the curriculum of trainings and the strategic partnerships to be developed with local enterprises. This helps avoid a mis-match between the skills acquired and the skills required in the labor market.

In the school year of 2016/17, CAP-YEI institutes had a total of 4,498 youth enrolled, of which 2,638 were female and 1,870 male (CAP-YEI, 2017). Overall, the trainings have been very successful, with 89.93% of graduates transitioning into paid jobs or entrepreneurship start-ups (CAP-YEI, 2017).





3.3.4 Asset Creation

The asset creation is a program jointly administered by the Government of Kenya (through NDMA and County Governments) and the World Food Programme (WFP) since 2010 in response to the organizations shift of focus from direct food relief to resilience building and asset creation. The aim of the program is to re-establishing livelihoods, food security and nutrition of the most vulnerable following environmental shocks (WFP, 2016b).

The asset creation program is implemented in 15 counties; six of them are semi-arid including Kitui, Makueni, Kilifi, Kwale, Taita Taveta and Tharaka and nine of them are arid (Turkana, Baringo, Samburu, Isiolo, Marsabit, Wajir, Mandera, Garissa and Tana River). In total, the program serves 800 000 people (WFP, 2016b).

Participants of the asset creation program work on community-selected programs for 12 days a month in return for cash or an in-kind food transfer, depending on the climatic conditions of the county it is operating in. In semi-arid counties the preferred modality is cash, while in arid counties beneficiaries are compensated with in-kind food. In the semi-arid counties, beneficiaries receive 40% of their daily nutritional intake, which translates approximately into 2000 Kenyan Shillings for 12 days of work on the asset. In the arid counties, the ration is at 50% of the daily nutritional intake which approximates 36 Kgs of cereals, 7.2 Kgs Pulses and 2.7 Kgs of veg. oil for 12 days worked (WFP, 2016d). Cash amounts vary depending on the on the equivalent local market value of the food ration. The cash-transfers are further complemented with technical assistance and capacity building in various areas such as water conservation, agricultural production, product diversification and marketing strategies.



The program supports approximately

3,000

asset projects such as bunds and terraces, tree planting, fodder production, irrigation channels, harnessing run-off water, water pans and dams.

Asset creation projects vary from one location to the other as they are identified and implemented by communities according to their particular needs. The program supports approximately 3,000 asset projects such as bunds and terraces, tree planting, fodder production, irrigation channels, harnessing run-off water, water pans and dams. The assets built are designed to improve household's living standards by increasing access to water for production purposes (livestock and agricultural), diversification of food sources and increasing crop yields. Assets aim to firstly, strengthen resilience to climatic shocks and secondly enable beneficiaries to become independent of food assistance through potential production of food surpluses and achieving resilient, diversified livelihoods.

Recently, WFP has started transitioning towards a program that encourage activities to enable beneficiaries to transition out of (extreme) poverty, termed “graduation”. In addition, those families that have attained food security would be linked to government or other development programs for further assistance. In particular, WFP envisages to closely collaborate with and provide technical assistance to the Kenyan government to take more responsibility in resilience building, food security and nutrition. The long-term goal is to shift the leadership and implementation role of asset creation program from WFP to the Kenyan Government to ensure ownership and sustainability of the programme. However, Asset Creation activities are currently not linked to any NSNP programs and benefiting simultaneously from both types of supports has been referred to as undesirable “double dipping” by key informants. It is partnering closely with other development agencies such as the FAO and IFAD with funding from USAID to complement the asset creation program with other partners’ activities. In combining these efforts, WFP expects to graduate 22,000 households under the food assistance for assets program out of the program by 2023.





CHAPTER FOUR

RESEARCH STRATEGY

The study applied a mixed methods approach, combining quantitative analysis of existing data with qualitative data collection and analysis. The review of the national social protection landscape in Kenya, as well as the literature on social protection and productive outcomes, the economic returns to social protection investments, and complementarities and linkages to enhance the productive outcomes of social protection (see chapter 2) supported the establishment of the conceptual framework. This framework guided the subsequent quantitative and qualitative analyses.

The quantitative analysis assesses the potential of Kenya's social safety net to enhance the population's human capital and productivity. The effects of social protection on income growth are diverse and complexly interrelated (Barrientos, 2013). Hence, possible impacts of and returns to investments in social protection can at best be estimated in separate models.² Moreover, returns to social protection investments are not easily quantifiable. For example, while social protection returns related to education can be measured through impacts on wages and incomes, returns to other domains of human capital such as health are difficult to quantify in monetary terms. Therefore, the quantitative analysis focuses on sub-branches of the conceptual framework (as for example depicted in Figure 1) and combines results from different approaches to analyze the effects and returns to human capital investments and livelihoods.

More specifically, the quantitative analysis utilizes three different household survey datasets and applies four distinct methods. First, using the Kenya Integrated Household Budget Survey (KIHBS) 2015/16, we estimate the relations between household income and human capital outcomes, such as education and nutrition, using various econometric models. Secondly, we analyze the effects of social protection programs on nutrition using a static micro-simulation model. Thirdly, we

apply a dynamic micro-simulation model to analyze the returns to social protection through human capital accumulation, with a focus on the returns to education. NSNP cash transfers are compared to the hypothetical scenario without social protection policies to test how expected household incomes change over time and how these changes relate to program costs. Finally, using panel data from HSNP and CT-OVC impact evaluations, we shed some light on aspects that cannot be assessed with micro-simulation and validate the simulation results within the context of the regions in which the evaluation studies took place.

Micro-simulations are a simplification of reality that hinge on assumptions on the behavior of households and individuals living in these households. An axiomatic prerequisite of micro-simulations is that there is full knowledge about the relationship between the simulated elements. For example, to simulate the returns to education through social protection investments, we need to know how additional income affects schooling decisions and how an additional year of school affects incomes. These relationships can be quantified using existing data sets (see step 1 above). However, other potential returns to social protection are more complex and cannot be quantified that easily, which means that they cannot be analyzed *ex ante*. Livelihood decisions are an example of a component that is too complex to be assessed with a micro-simulation approach as decisions depend on aspects that are only partially covered in standard survey data and the causal effects of income and livelihood choices runs in both directions. Similarly, it is difficult to simulate the returns to additional services as the decision to take up those services is voluntary, and the returns cannot be quantified reliably.

Given the limitations of the quantitative analysis in assessing the linkages between cash transfers and other complementary programs and services, a qualitative study was

² The combined impact of all pathways could potentially be assessed with a general equilibrium model.

conducted with beneficiaries of cash transfers and complementary interventions. Recipient households' ability to translate cash transfers into better nutrition, health, education and productivity depends on mediating factors and structural barriers (see Conceptual Framework). These may exist at the household and at the wider community level and can vary across the life-cycle and across different livelihood contexts. In developing and strengthening linkages and complementarities between different programs, it is important to understand beneficiaries' perceptions and experiences about these factors, and about the support that the analyzed complementarities and linkages provide. The main objective of the qualitative study was to understand:

- The role and utilization of NSNP cash transfers (including investments in human capital and productive assets), as perceived and experienced by beneficiaries and communities;
- The existing linkages (or lack thereof) between NSNP cash transfers and complementary programs;
- Structural barriers that hinder social protection's impact on second- and third-order outcomes;
- The benefits accrued from being covered by both cash and complementary services as compared to being covered by cash only;
- The existing linkages (or lack thereof) between social protection schemes and other community interventions addressing poverty and exclusion.

In this chapter, we describe the data and methodology underlying the quantitative and qualitative analysis.

4.1 Quantitative Analysis

As indicated above, the quantitative analysis consists of four parts. First, using the Kenya Integrated Household Budget Survey (KIHBS) 2015/16, we estimate the relations between household income and human capital outcomes, such as education and nutrition,

using various econometric models. Secondly, we analyze the effects of social protection programs on nutrition using a static micro-simulation model. Thirdly, we apply a dynamic micro-simulation model to analyze the returns to social protection through human capital accumulation, with a focus on the returns to education. Finally, using panel data from HSNP and CT-OVC impact evaluations, we apply an ex-post evaluation of program impacts in order to identify factors that may influence program returns in the regions in which the evaluation studies took place.

4.1.1 Data

The quantitative analyses in the study rely on three different datasets: the KIHBS 2015/16, the HSNP impact evaluation household surveys and the CT-OVC impact evaluation household surveys. An overview is provided below.

KIHBS 2015/16

The KIHBS 2015/16 is an integrated survey designed to capture a wide range of socio-economic indicators. The survey has the objectives to compute poverty/welfare measures (incidence, gap and severity), to update the national accounts benchmarks and form a basis for updating household expenditure weights to be used in the development of new Consumer Price Index (CPI) (KIHBS, 2016). The survey is carried out nation-wide in Kenya, covering all counties, and representative at the national level, at the county-level and place of residence (urban versus rural). The survey gathers extensive information on households and individuals, including information on the household and its members, health outcomes, educational status, disability, orphanhood, dietary intake and expenditures, market prices of goods, housing conditions, agricultural holdings, agricultural output, livestock, household enterprises, income, shocks, food security and credit.

The survey covers 21,773 households and includes information on 92,846 individuals. Table 2 presents summary statistics of the whole population and poor households according to the KIHBS. Households are

classified as poor if household consumption per adult equivalent falls below the national poverty line of 3252.735 KES per month for rural households and 5995.902 KES per month for urban households. Households are

considered extremely poor if their (per adult equivalent) consumption falls below 1953.296 KES per month in rural areas and 2551.101 KES per month in urban areas (KNBS, 2018).

Table 2 Poverty Profiles

	Poverty rate	Extreme Poverty rate	Share among the poor	Share of the population
Total, %	36.1	8.6	100.0	100.0
Region, %				
urban	29.1	3.9	28.8	35.8
Rural	40.1	11.2	71.2	64.2
Household size, number	6.5	6.9		
Household size (groups), %				
1 member	10.1	2.4	1.3	4.8
2 members	15.5	2.4	2.7	6.4
3 members	19.8	3.2	6.2	11.3
4 members	26.2	4.3	11.6	16.0
5 members	34.2	6.7	15.7	16.6
6 members	40.8	9.0	16.4	14.5
7+ members	54.7	16.0	46.1	30.4
Sex*, %				
Male	36.2	8.6	49.5	49.4
female	36.1	8.6	50.5	50.6
Age, %				
0-4	35.6	8.4	13.2	13.4
5-14	43.8	11.1	33.5	27.7
15-24	36.3	8.5	20.1	20.0
25-64	29.9	6.5	28.9	35.0
65-69	38.9	10.7	1.5	1.4
70+	39.1	11.3	2.8	2.6
Number children below 18, number	3.8	6.9		
Number children below 18 (groups), %				
none	16.5	2.8	5.7	12.5
1 child	22.3	3.8	8.2	13.3
2 children	26.5	5.6	14.6	20.0
3 children	35.4	7.3	18.2	18.6
4 children	44.8	10.6	17.3	14.0
5 children	55.7	15.0	15.4	10.0
6 children	57.0	17.7	9.8	6.2
7+ children	70.3	22.0	10.7	5.5

Employment household head, %				
no	47.2	17.5	13.1	10.0
yes	34.9	7.6	86.9	90.0
Completed level of schooling of household head, %				
none	63.7	25.6	26.4	15.0
pre-primary	63.9	15.7	0.7	0.4
primary	40.8	8.3	52.2	46.2
post primary/vocational	19.0	1.8	0.7	1.2
secondary	25.6	2.8	16.6	23.4
college	8.2	0.9	2.0	8.6
university	3.1	0.1	0.4	4.2
madrassa/duski	42.2	9.3	0.3	0.3
other and missing	43.6	11.0	0.8	0.7

Notes: Population level weights.

More than a third of Kenya’s population is poor and 8.6% of the population is considered extremely poor. Compared to a decade ago, poverty has decreased from 46.6% in 2005 to 36.14% in 2015, marking a decrease of around 10 percentage points (KNBS, 2018). A third of the poor live in urban areas, with the largest share living in rural areas. Children and old people are more likely to be poor; households with three children or more are twice as likely to be poor than households with only one child.

Table 3 presents summary statistics of the percentage of the population that benefit from social protection programs. According to the KIHBS 2015/16, 3% of the population received official government assistance from one of the four national programs. It should be

noted that the prevalence of social protection beneficiaries in the KIHBS data is significantly lower compared to official numbers (12% according to single registry) with a discrepancy of about 10 percentage points.

The HSNP program constitutes the largest share, followed by the OP-CT program. 3.1 % of the population benefits from additional programs, including cash for work, school feeding or a bursary. Around 2.8% of the population benefit from a bursary. In total 5.6% of the population benefit from either a national cash transfer program or other programs. In total, a third of population has received some type of support in the previous year, either in cash or in kind from sources outside of the household (including other family member, institutions or individuals).

Table 3 Percentage of beneficiary households and value of benefits

	Beneficiaries		Value of benefits	
	%		(KES)*	
	N	Mean	N	Mean
Any support** Government Transfers	21773	34.60		
CT-HSNP	21773	1.28	351	14873
CT-OVC	21773	0.47	109	15806
OP-CT	21773	0.90	271	18389

PwSD-CT	21773	0.08	19	14971
total	21773	2.67	719	16192
Other Programs				
Cash for Work	21773	0.08	10	3271
School feeding	21773	0.09	13	10482
Bursary	21773	2.82	506	11505
other programs	21773	0.19	42	29614
Any transfer	21773	5.62	1238	22327

Notes: *Value of benefits received per household over the last 12 months. ** Any cash or in-kind transfer. Individual level weights.

The KIHBS data are used (1) to estimate the relations between household income and human capital outcomes, (2) to simulate the effects of the NSNP on nutrition, and (3) for the dynamic micro-simulation model where we analyze the returns to social protection through education.

HSNP Evaluation Survey 2009-2012

The HSNP evaluation data cover its pilot phase between 2010 and 2012, when a transfer of KES 2150 every two months was given to beneficiary households (12% of the average beneficiary household's consumption expenditure). The HSNP aims to reduce poverty, hunger, and vulnerability of poor populations in the north of Kenya by means of an unconditional cash transfer. We have data of a three-wave, cluster-randomized controlled trial using a perfect mimicry approach. Data was collected in the north of Kenya (Mandera, Marsabit, Turkana and Wajir) in a pre-program baseline survey (2009/2010) and two follow-up surveys (2011 and 2012) for eligible and non-eligible households. Clusters of eligible households were randomly assigned to control and treatment groups after the baseline survey. 2866 households were interviewed in both baseline and follow-up 1. Although the sample was reduced by 8 of 40 sub-locations in follow-up 2, the study design remains robust and broad balance between treatment and control households remains given (Merttens et al. 2013).

The HSNP data include information on household members' schooling

attainment, health status and employment. Anthropometric (body size) measurements for children under five have been collected, and household level food intake data is available. Broader program effects on livelihood decisions can be evaluated using detailed information on income generating activities and coping strategies, for example. It is worth noting that the three-tier targeting system employed during the pilot period differs from the one currently used in HSNP2, and that transfer amounts were smaller.

CT-OVC Evaluation Survey 2007-2011

The CT-OVC aims to encourage the fostering and retention of orphans and vulnerable children in their host families and to promote their human capital development. To this end, poor households hosting OVCs received a bi-monthly payment of 3000 KES in the study period (conditional for some treatment locations). Three survey waves were undertaken between 2007 and 2011 in seven districts. Similarly to the HSNP, treatment locations were selected randomly. However, in contrast to the HSNP, this happened before the baseline survey (Ward et al. 2010).

Data for the CT-OVC impact evaluation were collected in household surveys in 2007, 2009 and 2011. 2,222 households were interviewed in both baseline and follow-up 1, and 1,783 households were interviewed in baseline and follow-up 2. Relevant outcome variables at the individual level include data on household members' highest attained or ongoing school education and illnesses and health status.

For children, anthropometric data and information on vaccinations are available. Furthermore, information on jobs, income and household food intake was collected. Program effects on livelihood decisions can further be assessed by household level data on savings, income generating activities and asset ownership. The study’s geographic scope is limited to seven districts in the south of Kenya. Due to considerable changes in the survey instrument, some waves include information on more dimensions than others.

HSNP and CT-OVC

A list of selected outcome variables and a summary of mean values is presented for both surveys in Table 4. Productivity indicators clearly demonstrate the differences in livelihood structures between beneficiaries of the two cash transfers. While HSNP is targeted to four arid northern counties in which farming has a subordinate role compared to livestock herding, the opposite is true of OVC beneficiaries, who are located throughout Kenya. Paid work is relatively uncommon among beneficiaries of both transfer programs, but considerably more so in HSNP program areas.

Uptake of both health and education services seems to be higher among OVC beneficiaries. Mean expenditures are more than double compared to HSNP beneficiaries

in both dimensions, while total expenditure is approximately equal. While school attendance is near-universal among children in OVC households, less than half of children in HSNP households go to school. A considerably lower average schooling duration among the latter confirms that this is an engrained phenomenon. Reasons for this lower uptake may vary, but, to a certain extent, they are likely to reflect the difficulty of providing regular health and education services to nomadic populations, which make up an important part of HSNP beneficiaries.

In both surveys, only slightly more than half of beneficiary households are able to meet their caloric needs and all anthropometric scores are below reference values. While the nominal value of food consumption is substantially higher in HSNP households, OVC households seem to enjoy more balanced diets, as indicated by higher diversity scores and iron adequacy. One reason for these phenomena might be supply shortages in HSNP households, which could raise prices such as to make even a monotonous diet relatively expensive. Also, child anthropometric measures suggest a temporary dip in diet quality, as wasting, the indicator of recent malnutrition, is substantially farther from reference values than stunting, the indicator of long-term malnutrition.

Table 4 Summary statistics of outcome variables in the HSNP and OVC data at baseline and difference between treatment (T) and control households

	HSNP			OVC		
	N	Mean	Difference T-C	N	Mean	Difference T-C
Productivity						
Tropical livestock units	3050	3.57	-0.80	2246	0.80	-0.11
Farm land (square meters)	3035	439.35	239.41	2245	6110.75	-1092.65
Income from livelihood activities	2868	481.46	-8.59			
Income from agriculture	2846	217.84	-51.83			
Income from employment	2850	44.74	7.12			
Paid primary occupation (individuals 18 and older)	7799	0.10	-0.02	5015	0.35	0.09
Consumption expenditure	3062	1407.38	-2.53	2246	1221.38	-2.10
Present value of productive assets	3038	129.25	-15.50			

Education						
Education expenditure per child	2465	59.55	17.07	2241	128.23	25.24
School attendance (individuals 6 to 17)	8065	0.47	0.15*	5419	0.95	-0.02
School days missed in the past year (students)	3986	0.61	0.56	5196	1.52	-0.27
Years of schooling (individuals 6 to 17)	6308	1.87	0.19	5946	3.31	0.31
Health						
Health expenditure	3034	14.57	2.68	2244	42.09	-2.39
Illness/injury in the past 3 months (individuals)	17660	0.22	0.02	12812	0.15	-0.03
Recovery period (ill individuals)	3748	7.18	0.32	1969	13.28	0.23
Nutrition						
Food value per week	2994	254.91	-12.92	2112	123.89	0.89
Purchased share of food	2992	0.59	0.01	2161	0.74	0.00
Food diversity score (0-10)	2907	5.83	0.45	2169	6.48	-0.33
Household kcal need met	2907	0.54	-0.03	2169	0.51	-0.02
Household iron need met	2907	0.55	-0.01	2169	0.70	0.03
Height-for-age z-score (individuals 0 to 5)	1451	-0.22	-0.01	858	-1.20	0.16
Weight-for-height z-score (individuals 0 to 5)	1596	-1.32	-0.13	850	-0.19	-0.16

Note: *, ** and *** denote significance at 10%, 5%, and 1% level using a two-tailed distribution. Variables are on the household level (unless indicated otherwise) and monetary values are normalized by household size and scaled to monthly values unless otherwise noted. Years of schooling exclude repetitions and universities. Data on income sources and productive assets was not collected in the OVC baseline survey.

4.1.2 Methodology

Estimating income elasticities (1)

The core variable of our analysis is in principle the income of a household. Given the challenges in the KIHBS data associated with measuring household income, we approximate household income with consumption per capita.³ We first estimate the effect of an increase in income on school attendance. To this end we estimate a probit regression model, and include a variety of control variables, including location, gender of the household head, gender of the respondent and education status (a full list of control variables and descriptive statistics is displayed in Table 20 in the Appendix). We also estimate the relationship between household income and school attainment, measured in years of schooling, using an Ordinary Least Square

(OLS) regression model.

Some challenges might arise in establishing the relationship between school attendance and income due to the approximation of income through household consumption which could lead to biased estimates (for example, household consumption includes expenditures on education which are determined by school attendance). Hence, we also estimate a 2SLS model by instrumenting consumption using household characteristics correlated with consumption, but uncorrelated with the outcome variable. After preliminary diagnostics, we instrumented consumption using the median wage per cluster and household assets. Our results are robust under the instrumental variable specification.

3 For robustness, in the analysis we also instrument household income using wages and other household assets in addition to using consumption per capita.

Secondly, we estimate the relation between school attainment and household consumption. Higher school attendance increases educational attainment, which generates returns to education. The relationship between education and earnings has been widely studied in the literature (for surveys of this literature, see, e.g., Card (1999, 2001); Heckman et al. (2006a); Oreopoulos and Salvanes (2011); McMahon (2009); Oreopoulos and Petronijevic (2013)). The argument is that increased education increases potential earnings as individuals become more productive. One difficulty with this approach is that in developing countries wages might not always be reported in the data, or individuals might be working on a self-employed basis on a farm or on a non-agricultural basis. Following Dietrich et al. (2017) we approximate income using consumption per capita and estimate the effect of education on consumption using an OLS specification.

Finally, to understand to what extent an increase in disposable income may affect the demand for food, we analyze the relationship between income and the demand for calories. A high elasticity of the demand for calories with respect to income would suggest that households adjust their demand for calories to changes in incomes while a low elasticity suggests that a change in income has little consequences for the demand of calories. The link between income and calorie demand is, however, not constant and may differ substantially depending on a household's level of wealth. Therefore, so called Engel curves are

typically estimated to describe the relationship between the intake of calories and income (Gibson & Rozelle, 2002).

Based on the consumption module of the KIHBS data, we transform household's food consumption expenditures to calorie intakes using food conversion tables. We apply standard procedures of the nutritional literature to estimate the availability of calories at the household level (the methods are summarized in box 2). As the consumption data are collected on the household level, it is not possible to calculate the intra-household allocation of calories. It should also be noted that the approach gives a rough estimate of calorie intake and does not reflect the exact amount of calories consumed for which other, nutrient specific, data collection methods would be required. Besides that, misreports in the consumption module directly translate to measurement errors in the caloric intake estimates.

To quantify the relationship between household consumption and the intake of calories, we estimate parametric and semi-parametric regression models following the methodology as outlined in Gibson & Rozelle (2002). We use a parametric model assuming a logarithmic functional form to estimate the calorie elasticity with respect to household consumption per capita. However, the standard OLS estimates are likely to be biased and we additionally estimate two stage least squares models using local daily wages as instrument for household consumption per capita.

BOX 2: NUTRIENT AVAILABILITY

In line with an established approach in the study of household level food data, we use nutrient availabilities per adult equivalent in our estimates (Ahmed & Shams, 1994; Baulch, 2011; Claro, Levy, Bandoni, & Mondini, 2010; Dary & Imhoff-Kunsch, 2011; Leroy, Gadsden, Rodríguez-Ramírez, & Cossío, 2010; see for example Maitra, Rammohan, Ray, & Robitaille, 2013). To obtain these, we match foods as reported in the questionnaires with food composition tables in accordance with FAO guidelines on food matching (FAO/INFOODS, 2012)(FAO/INFOODS 2012).

We use a calorie table prepared for the KIHBS survey and rely on a Tanzanian food composition table (Lukmanji et al., 2008) for the ex post evaluation. For items in

the questionnaires that are not available in these sources, we use data from the U.S. Department of Agriculture (2017). To make different households' nutrient availability comparable, we divide it by age- and sex-specific recommended dietary allowances for all household members. Data from the U.S. National Academies' Institute of Medicine (2017) is relied on for nutrient allowances. For energy requirements, we follow a methodology suggested by FAO, WHO and UNU (2002), estimating minimum dietary energy requirements (for compact overviews of the method, see Anríquez, Daidone, & Mane, 2013; Moltedo, Troubat, LoKESin, & Sajaia, 2014). To correct for outliers, we exclude intake values of households in the lowest and the highest 1% of energy intake from the analysis in all periods.

Several limitations of the approach should be kept in mind. First, we can only consider dietary intakes, lacking data on additional supply via supplementation and on excessive losses in case of disease or due to uptake inhibitors. The identification of intakes via food composition tables and of requirements via recommended dietary allowances is necessarily broad-brush and cannot account for specificities in food composition or individual needs. Furthermore, nutrient losses in food preparation and issues of intra-household food distribution are not considered.

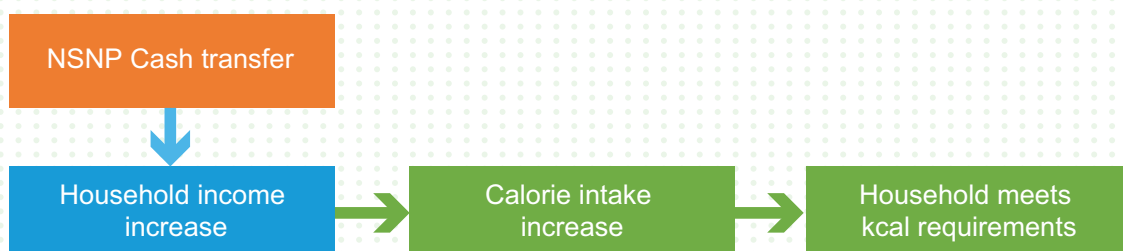
Micro-simulation - nutrition (2)

We simulate the immediate program impact on nutrition using a static micro-simulation model. In the simulation, we explore the calorie Engel curve to estimate how social transfers may change caloric intake and how these shifts relate to household's recommended energy requirements. That is, we test how and to what extent programs could reduce calorie deficits. The results, however, need to be interpreted with caution as we can only simulate the pure income effect of the programs, but we cannot model potential transformational effects that have been found in the literature. For example, there is academic evidence showing that targeting women as primary recipient of cash transfers changes the ways in which

households use their resources (Attanasio & Lechene, 2014; Team, 2012). These transformational effects matter and can have additional effects on household's nutrition, which we cannot model. The simulation procedure comprises four steps:

1. Transform food consumption to calorie intakes using food matching tables;
2. Estimate the relationship between income and calorie intake (see above);
3. Simulate program targeting and assign transfers to eligible households;
4. Simulate how program induced changes in the disposable income change calorie intake and calorie deficits.

Figure 6 Reduced simulation framework for nutrition



Micro-simulation - education (3)

To quantify program-induced returns to education, we construct a dynamic micro-simulation model that accounts for the returns over a period of 15 years on a year-by-year basis. The dynamic micro-simulation model includes the predicted program effects on school enrolment, education attainment, returns to education (as estimated in (1)) and the predicted program costs. Figure 7 shows the reduced framework and the components of the simulation of the returns to social protection through increased household income. The model is used to quantify the direct (transfers) and indirect benefits (returns to education) and compares them to program costs. Based on the comparison of costs and benefits we simulate the internal rate of return (RoR) calculated as:

$$RoR = \left(\frac{\sum_{t=1}^T (B_t)(1 - \delta)^{-t}}{\sum_{t=1}^T C_t(1 - \delta)^{-t}} - 1 \right) * 100$$

(1)

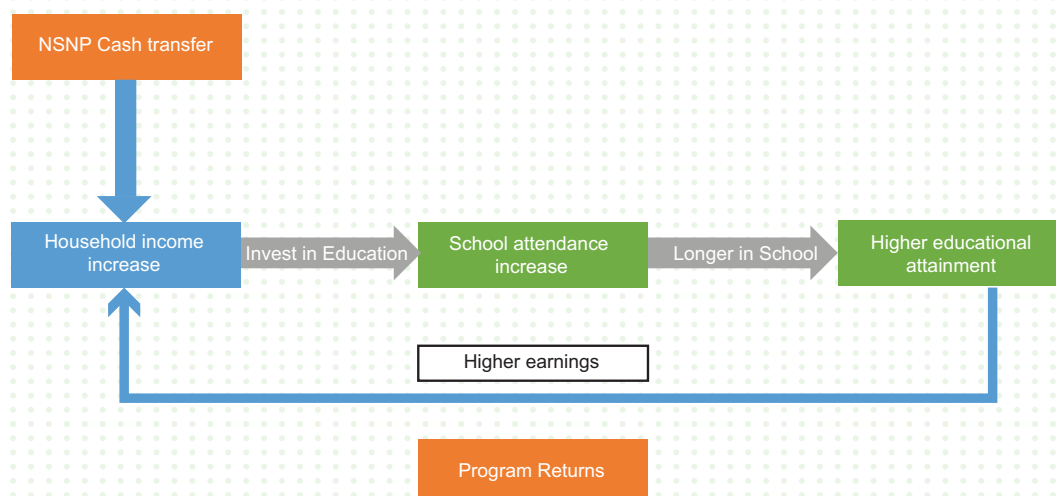
where RoR is the expected rate of return B_t is the benefit at time t , δ is the discount rate and C_t is the cost at time t . The simulation procedures comprise four steps (see also Figure 15 in the Annex):

1. Estimation of the semi-elasticities of income, education, and returns to education. Education is measured using school attendance for primary, secondary and tertiary education of school age children (age 6 – 24). We estimate OLS, Probit and two stage least squares regression (2SLS) models and compare results to existing evidence (see above).

2. The estimated semi-elasticities feed the dynamic micro-simulation model to analyze the program effects over 15 years on the national level. The simulation procedures are the same in each period as outlined in Figure 15 in the annex. First, eligible households receive the program transfer, which increases their consumption level. Based on the new consumption level, the model predicts the likelihood of school attendance, separately for primary, secondary, and tertiary school age. Subsequently, educational attainment is adjusted if an individual completed an additional year of schooling, which generates additional income according to the estimated returns to education.
3. Program induced changes in the income indicator are compared to a control scenario without the program transfers. The new income levels are calculated as the sum of the previous income level plus the direct effect (transfer) and the indirect benefit (return to education). The difference in income in a scenario with and without the programs reflects the overall benefits of the NSNP in our model.
4. The dynamic micro-simulation model also includes a demographic module accounting for demographic changes over time. We incorporate mortality rate projections by age and sex to probabilistically determine deaths and births in each period.

To capture the increasing returns to education over time, we analyze the programs over a period of 15 years. The model estimates the direct and indirect benefits of social protection generated through higher education levels and returns to education. Similar studies have been conducted in Uganda (Dietrich et al., 2017), Cambodia (Mideros, Gassmann, & Mohnen, 2016), and Lesotho (Dietrich, Gassmann, Röth, & Tirivayi, 2016).

Figure 7. Reduced simulation framework for returns from education



Evaluation of program impacts (ex-post) (4)

The CT-OVC and the HSNP were evaluated based on a randomized controlled trial (RCT) approach facilitating a clear identification of program impacts. The estimated average treatment effect may hide strong heterogeneity of program impacts depending on certain household characteristics or the environment in which households reside. Even with large observed average treatment effects,

some treated households may not benefit from the program. In order to test where and under which circumstances program impacts were largest, we estimate how and if program impacts changed along different dimensions. The analysis of heterogeneous effects casts light on the mediating factors for effective cash transfers (see the Annex for more details on the methodology).

BOX 1: EVALUATION FINDINGS FOR HSNP AND CT-OVC

After about two years of program implementation, both the HSNP and the CT-OVC transfer program have substantially increased beneficiaries' consumption expenditure, and expenditure on food in particular. An improvement of dietary diversity is found for CT-OVC beneficiaries but not for HSNP beneficiaries. Indicators of general health status and of child nutritional status were unaffected by the program. While neither program had an impact on education expenditure or primary school enrolment, there is evidence that HSNP improved school performance and CT-OVC increased secondary school enrolment (Merttens et al., 2013; Ward et al., 2010). As both programs transferred a constant sum to all beneficiary households during the evaluation period, smaller and poorer households were found to experience more important impacts in general (Merttens et al., 2013; Ward et al., 2010). Beyond direct beneficiaries, there is evidence that the cash transfers contributed to strengthening local economies (Taylor et al., 2013; Merttens et al., 2013). The potential for expansion by cash plus type interventions has been evaluated and judged promising with regards to both cash transfer projects by a recent scoping study (Slater and Nyukuri, 2016).

4.1.3 Design Parameters for the micro-simulations

The description of the landscape of social protection showed the variety of implemented programs in Kenya. However, only those social protection programs can be included in the micro-simulation for which the respective targeting procedures can be replicated with the data. For example, modeling the CT-OVC requires data on individuals' orphan status or another credible strategy that allows allocating the benefits in the simulation model in similar ways to the real procedures. After reviewing the questionnaire, the micro-simulations will include the CT-OVC, OP-CT, PWSD-CT, and the HSNP.

Targeting and benefit allocation

The current targeting methodology for the national social protection programs is not uniform across programs. Each program has its own targeting methodology. In addition, the programs are mutually exclusive: households are not eligible for a second cash transfer program, if they already benefit from another program.

The HSNP program is only active in the counties of Turkana, Marsabit, Mandera and Wajir and provides benefits to a maximum of 102,000 households. The quotas for each county were determined by using a modified version of the Commission for Revenue Allocation (CRA) formula, which consists of 25% equalization share, 45% population share and 30% poverty share. The equalization share is determined by calculating 102,000 households divided by 4 multiplied by 25% and equals 6,250 households.⁴ The population share is determined by calculating the HSNP household population as a share of the total HSNP Household population in all four countries, and the poverty allocation share is determined by calculating the Proxy Mean Test (PMT) score for each household, ranking

the households from poorest to richest and selecting the 100,000 households with the lowest PMT score. The resulting quotas are displayed in Table 19 in the Appendix.

The three other government programs are implemented nationwide. A PMT score identifies the beneficiaries of the CT-OVC. According to the current CT-OVC rules, a household can participate in the program if the household has an orphan or vulnerable child and

- has a PMT score below KES 1,791 (classified as extremely poor)
- has a PMT score between KES 1,791 (extremely poor) and KES 2,219 (poor)

Households with a PMT score higher than KES 2,219 are not classified as poor and are therefore not eligible.⁵

For the OP-CT and PwSD-CT programs households have to be classified as poor using a PMT calculated based on analytical weights and have a person that is older than 65 years old (OP-CT) or a member with disability (PwSD-CT) (MLSP, 2018). In addition to these criteria, poor households are verified by the community. This applies to all national safety net programs.

The weights and categories used to determine the PMT score of a household are still based on the 2005/2006 KIHBS dataset. Because targeting methodologies differ between programs, the GoK is currently working on a Harmonized Targeting Tool based on the 2015/2016 KIHBS to consolidate the different targeting methodologies of the NSNP into a single comprehensive methodology. This may result in changing weights and coefficients for the identification and ranking of poor households.

4 During a drought, the number of households can be expanded to 300,000 households. However, for the calculation of the quota in this analysis we assume a non-drought situation.

5 Targeting methodology sent by Ministry of Labour and Social Protection.

Given that it is not possible to accurately replicate the current targeting methodology with the available information in the data, we apply a simplified targeting procedure for determining the beneficiaries of each program (see below). In order to account for potential targeting errors, we randomly exclude a share of eligible households based on existing program targeting reports (Khondker and Freeland (2014b)). We assume a targeting error of 30% in the main results. Similar exclusion errors have been used in Lesotho (Dietrich, Gassmann, Röth, & Tirivayi, 2016).

Because the NSNP transfers are mutually exclusive, we target the beneficiaries in a step-wise approach:

- We use household consumption per adult equivalent to determine whether a household is poor. A household is considered poor if it falls below the national poverty line of 3252.735 KES for rural households and 5995.902 KES for urban households. We assume that the PMT will measure consumption with an error of +/- 30%. Next, we rank poor households according to their household consumption per adult equivalent.
- We use the county quotas for the HSNP2 (Table 19 in the Appendix) as the basis for participation in the HSNP program and assume that the quotas stay constant for the simulated time period. After ranking the households, the poorest households for each county are targeted until the respective quota is fulfilled. For example, in Turkana, the poorest 39,918 households receive HSNP.
- Next, we determine the beneficiaries of the CT-OVC program. If a household is poor (as defined in step 1), has at least one child

below 18 years old and does not receive HSNP, it is assigned the CT-OVC benefit.

- Next, we identify the beneficiaries of the OP-CT. A household receives OP-CT if it is poor, has at least one member of 65 years or older, and does neither receive HSNP nor CT-OVC.

Finally, a household receives the PwSD-CT if it is poor, has a person with severe disability and does not receive any other national cash transfer program.

One of the limitations of targeting the programs step-wise is that once a household receives the cash transfer of the first program it cannot receive any other cash transfer. Therefore the order in which programs are targeted matters. Here, we start with the HSNP program as it is only applied in four counties and offers the highest benefits, and continue with the CT-OVC and OP-CT, ordering them in descending number of beneficiaries (KNBS,2018). The last program targeted is the PwSD-CT.

Program costs

A key element to calculate the internal rates of return to social protection programs are the program costs, as the RoR is calculated comparing the costs of the program against its benefits (see equation 1). Table 5 displays the total program costs for the government social protection programs, OP-CT, CT-OVC and PwSD-CT, respectively. The costs of HSNP could not be established. According to Table 5, 60% of the total budget is allocated to the OP-CT, followed by the CT-OVC (35%). The administrative costs for OP-CT are lower, at 2.5 % compared to 5.3% for the CT-OVC. The PwSD-CT is the smallest program (5%) with an administrative cost ratio of 4.6%.

Table 5 NSP Program Budget allocation 2017-2018, KES

ITEM(S)	OP-CT	CT-OVC	PwSD-CT	TOTAL
Direct Cash Transfer	13,818,840,975	7,925,030,062	1,128,000,000	22,871,871,037
Bank Charges	81,773,212	155,512,983	22,560,000	259,846,195
Field: Quarter 3 AIE Allocation	57,107,245	20,725,096	-	77,832,341
HQS: Operational Expenses	200,729,149	241,219,250	29,440,000	471,388,399
TOTAL :	14,158,450,581	8,342,487,391	1,180,000,000	23,680,937,972
As % of total NSNP	59.8	35.2	5.0	100
Cost Ratio (%)*	2.46	5.27	4.61	3.54
Percentage of GDP (%)**	1.78	1.02	0.15	2.95

Source: Ministry of Labour and Social Protection, 2018. *Cost ratio calculated as operational and administrative costs (bank charges, field costs and operational expenses) per direct cash transfers.** GDP 2017: 7,749,425,739.9 KES (World Development Indicators, 2018)

BOX 1: SIMULATION MODEL ASSUMPTIONS

The simulations are based on assumptions to make prediction on future outcomes, i.e. simulation models are dependent on their design and parameter specifications. Some of the key parameters that need to be set are the following:

- It is assumed that transfers given to individuals are shared equally within households. This is the standard for modeling intra-household allocation in analyses of household surveys (Deaton 1997), and enjoys empirical support in a number of dimensions (for an application to food see Berti 2012).
- The program rate of compliance with targeting criteria and program uptake needs to be specified. The baseline assumption is that there is a targeting error of 30%. This includes exclusion and inclusion errors.
- Households consume a fixed share of the transfers. Similar to other simulations, we assume that households consume 80% of transfers. We test the robustness of this assumption by varying the assumed propensity to consume.
- Program transfers are comparable to other income sources and show the same marginal propensity to education expenditures. That is, households treat income from different sources the same

For simplicity, we use the average administrative cost ratio of 3.54% for all programs in the simulations. This is necessary because of the step-wise program targeting approach described above. While the overall number of beneficiaries would not change (all beneficiaries get targeted) if we would use program-specific costs, the overall costs of

social protection programs would be different depending on which program is targeted first, thereby also changing the rates of return. In order to avoid varying costs and because the costs for the HSNP program are unknown, we assume a cost ratio of 3.54% for each program respectively, noting that this is an approximation of the actual costs incurred.

4.1.4 Limitations

Given the assumptions underlying the model, several limitations have to be considered. First, measuring individual incomes is not possible with the available data. In addition to potential reporting issues in the context of informal or in-kind income or reciprocity agreements with other households, the KIHBS data provide only a categorized household income measure. Therefore, household consumption per capita is used as a proxy for income. Hence, cash transfers increase consumption in relation to the size of the cash transfer value. However, impact evaluation evidence suggests that households do not consume the entire transfer, but use parts to save or invest. To account for that and to avoid an overestimation of the investment effect, a conservative measure of the propensity to consume is applied assuming that only 80% of the benefits are used for consumption purposes (Angelucci and Attanasio, 2009).⁶

Second, the currently used NSNP targeting methodologies are based on the KIHBS 2005/2006. They will be replaced with a Harmonized Targeting Tool. However, at the time of writing this report, the new tool was not yet available. Given that not all the steps in identifying eligible households can be replicated with the data at hand, we apply a simplified targeting methodology and introduce an exclusion error similar to studies found in Lesotho (Dietrich, Gassmann, Röth, & Tirivayi, 2016). For instance, the CT-OVC relies on four instances of selection: geographic selection, household listings by the communities, the proxy means test and a community-based assessment. While the KIHBS dataset contains information on orphanhood, age and poverty, it is not possible to identify community-based decisions.

Third, the KIHBS 2015/2016 dataset is a cross-sectional dataset that provides information on a nationally representative sample of households in the year 2015/2016, but does not track households over time. As a result, the impact of NSNP programs can only be

simulated using information from the survey in 2015/2016. In addition, Table 3 shows that the KIHBS only contains few observations on NSNP program participation and even more limited information on “cash plus” and services. Even though participation in the asset creation program itself can be identified, community assets that were built cannot be identified. In addition, there is no information available on services and “cash plus” programs, with the exception of the school feeding program. As a result, a quantitative analysis of these programs is not possible.

Lastly, cash transfers are provided to the households, with no distinction on which member of the household receives the cash transfer. In our models we assume that cash transfers are treated the same way as any other income. We can only model the direct income effect of NSNP transfers on household income, but we cannot model potential transformational effects that have been found in the literature. In particular, academic evidence shows that providing cash transfers to women might lead to a more efficient use of household resources, which can have additional positive effects on educational outcome. However, we cannot model these effects in our simulations.

The simulation model presented in this report is a simplification of real life and carries some limitations. For example, the ex-ante assessment is based on a reduced framework considering the monetary returns through higher education. Other indirect effects such as returns to improved adult health, increased agricultural investments, and improved risk management are missing, as they are too complex to be simulated with the data at hand. Despite these limitations, the study helps to understand the magnitude of the program induced returns to human capital. The results show how the effects add up over time and how indirect program effects can further fuel promotional and transformational effects.

6 Different propensities to consume are used in the sensitivity analysis.

4.2 Qualitative Analysis

Recipient households' ability to translate cash transfers into better nutrition, health, education and productivity depends on mediating factors and structural barriers (see Conceptual Framework). These may exist at the household and at the wider local level and can vary across the life-cycle and across different livelihood contexts. In developing and strengthening linkages and complementarities between different schemes, it is important to understand beneficiaries' perceptions and experiences about these factors, and about the support that the cash transfers and other provisions present. Qualitative data has been collected and analyzed in four counties across Kenya, selected based on the variation of livelihoods and the presence of complementary programs. During initial stakeholder consultations, the following key topics emerged: youth employment, enhancing rural livelihoods, healthcare, nutrition and education. The main objective of the qualitative study is to understand:

- The role and utilization of social protection cash transfers (including investment in human capital) as perceived by communities and experienced by beneficiaries;
- Structural barriers and mediating factors that hinder or enable social protection's impact on second- and third-order outcomes;
- The existing linkages and synergies (or lack thereof) between cash transfers and analysed complementary programs;
- The interaction between analysed complementary programs and structural barriers prevalent in the local contexts.

4.2.1 Data Collection and Sampling Strategy

Information was collected in 11 Focus Group Discussions (FGDs) and 60 semi-structured individual In-Depth Interviews (IDIs). The rationale behind using both methods lies in the different nature of information that can be captured with each, complementing each other in a meaningful manner. FGDs have proven to be powerful tools of exploratory research. They have the advantage of generating more information from a larger sample than by using in-depth interviews alone. The potential to gather concentrated information is particularly useful in exploring the common realities and challenges of everyday life experienced by communities in various locations or life situations. By providing insights into the similarities and differences of perceptions, definitions and experiences among group members, information from FGDs can help in framing findings from other study components (including the IDIs, but also quantitative results). In-depth interviews have the advantage of providing detailed and more factual information about individual experiences and perceptions, without breaking the "continuity and completeness of the narratives" (Morgan, 1988:11) of interviewees. Moreover, by adding greater control to the interviewer over the conversation, in-depth interviews allow for the strategic gathering of information on topics of interest.

Qualitative data were collected in four counties, in which both NSNP cash transfers and complementary programs are available. Selected sites had to fulfil two objectives. First, to represent the diversity of livelihoods and everyday realities in Kenya; including urban and rural, non-arid and arid/semi-arid (ASAL) areas. Second, to have key complementary programs as agreed with stakeholders during the Inception Mission. The selected data collection sites are summarized in Table 6 below.

Table 6 Locations and complementary programs for qualitative data collection

County	Complementary program	Program objective	Service provided
Kakamega	Imarisha Afya ya Mama na Mtoto	Reduce maternal and under-five mortality	Pre-natal check-ups, skilled delivery in medical facility, growth monitoring and vaccination of the child
Turkana	Asset creation (Food for Assets)	Reduce vulnerability and improve productivity of the household and community	Skills training, financial literacy training, community organizing
Kitui	NICHE	Reduce infant mortality and child malnutrition	Counselling on nutrition and hygiene practices, information campaigns, community sensitization
Kitui	Asset Creation (Cash for Assets)	Reduce vulnerability and improve productivity of the household and community	Skills training, financial literacy training, community organizing
Kisumu	CAP Youth Employment Program	Improve employability of the youth	Vocational and skills training

The sampled communities represented a diversity of livelihood sources and vulnerabilities. Based on the interview

transcripts, a brief overview of the key characteristics of sample sites is presented in Table 7.

Table 7 Key livelihood characteristics of selected sites

County	Climate	Location	Key sources of livelihoods	Key threats to livelihoods
Kakamega	Non-arid	Urban	Casual work, small businesses such as selling of kerosene, bananas, mitumba, as well as subsistence farming in households' shambas.	Lack of stable and suitable employment opportunities, corruption and competition in the labor market
Turkana	Arid	Rural	Agricultural production and livestock rearing, fishing, burning and selling charcoal, weaving and selling mats.	Low productive capacity of land, adverse climate context and low access to infrastructure and markets
Kitui	Semi-arid	Rural	Agricultural production, livestock rearing, casual work on neighboring farms.	Adverse climate context, limited access to infrastructure and markets
Kisumu	Non-arid	Urban	Casual work and small businesses (e.g. selling of clothing, food, barbershops), hospitality and marketing, work at NGOs.	Lack of stable and suitable employment opportunities, corruption and competition in the labor market

Source: interview and FGD transcripts

For the purpose of sampling, all members of a household in which at least one person receives a NSNP cash transfer have been defined as beneficiaries. In Turkana, Kakamega and Kisumu, respondents could be recipients of any of the four cash transfer programs under the NSNP umbrella, since there is no deliberate connection between cash receipt and participation in the local complementary program. In Kitui, however, only beneficiaries of the CT-OVC program have been recruited, since the NICHE program is specifically targeted at CT-OVC beneficiaries. The final samples for FGDs and IDIs are summarized in Table 8 and Table 9 below. More detailed socio-demographic characteristics of the participants are provided in the Annex of this report. The interview- and FGD-guides used for data collection are also included in the Annex.

The qualitative data was collected by the African Health & Population Research Centre(AHPRC). Research assistants were trained for data collection jointly by the team of Maastricht University and AHPRC in a five-day training mission that took place in June 2018 in Nairobi. The research assistant responsible for Turkana was trained in Turkana by AHPRC staff. The training materials included the basic concepts of social protection and Cash Plus programming, the objectives of the study, interview techniques and ethical considerations. Interview guides were tested in urban slums of Nairobi with respondents randomly selected by the Sub-County Social Development Office. Following the testing, the interview guides were revised and finalized to ensure comprehensibility.

Respondents for in-depth interviews were identified and mobilized with the help of Social Protection Officers and staff from the World Food Programme and UNICEF. Respondents were randomly selected from lists of beneficiaries of the selected programs that match the pre-defined socio-demographic criteria. Identified respondents were then located, contacted via telephone to inquire whether they agree to participate; and those who did not wish to participate were replaced

from the same list. Mobilizers received a compensation for airtime and travel costs and a remuneration of their work of KES 2,000 per day.

In-depth interviews were conducted in respondents' homes in Kitui and Kakamega, and at the private room provided by CAP-YEI in Kisumu. In Turkana, where the vast distances and the terrain made it difficult for the research team to travel to the scattered homes of respondents, interviews were conducted in a central location and a reimbursement of travel costs offered to participants. Focus Group Discussions were facilitated in central locations in the communities in Kitui, Kakamega and Turkana, and in the CAP-YEI office in Kisumu. Travel costs were reimbursed for all FGD participants, but those in Turkana refused to accept it. Incentives were not provided.

Turkana has very specific community dynamics, which make it hard to follow traditional data collection instructions. During the fieldwork in Turkana, issues were reported on the mobilization of respondents, which resulted in one Focus Group Discussion not being implemented. In others, the methodology had to be amended to match local community dynamics, meaning that FGDs were run with a mix of female and male participants (instead of separated by gender). This mixing of genders represents local norms and the preferences of the community on how to be interviewed and is therefore not considered an issue. Moreover, there is a discrepancy in the quality of data produced in Turkana and the other sampled locations. In Turkana, interview transcripts are of lower quality as not all interview questions were completed, and saturation has not been fully achieved.

4.2.2 Qualitative Data Analysis

Interviews and Focus Group Discussions have been audio-recorded, transcribed and translated to English. Transcripts have been stripped of all identifying information of participants to enhance confidentiality, but some non-sensitive socio-demographic data

was used to disaggregate patterns. Data has been analyzed using NVivo analysis software following a thematic framework approach. Initial themes were developed based on the research questions, the conceptual framework of the research project and findings from the quantitative study. Other themes emerged from the data during the analytical process.

4.2.3 Ethical considerations

Ethical approval for the qualitative study was obtained from AMREF Health Africa Ethics & Scientific Review Committee. Several measures have been taken to minimize any potential stress on our respondents. First, we ensured that interviews are conducted in a suitable, comfortable and private environment. The research assistants handling the interviews were trained to listen and observe without displaying any judgmental attitude towards the informants or the information received. They have also been trained on the meaning and process of informed consent, and the importance of protecting the privacy of participants, and confidentiality of the information obtained from participants. Second, study participants were provided with information about the study before any

consent to participate was sought. Participants were informed about the purpose of the study and methods used, the institutional affiliation of the researchers, anticipated indirect benefits, the lack of direct benefits such as material compensation, potential risks and follow-up of the study, the discomfort participation may entail, the right to abstain from participating in the study or to withdraw from it at any time without reprisal, and the measures taken to ensure the confidentiality of the provided information. All participants signed an informed consent/assent form. Third, interviews were conducted in the language preferred by respondents. Research assistants spoke the dominant local language of each site, as well as Kiswahili and English. Fourth, all transcripts have been de-identified before analysis to ensure the privacy of respondents. They have been assigned a unique tag in order to link them to non-sensitive socio-demographic characteristics and allow for disaggregation of response patterns. These tags consist of an indication of the study location, whether the transcript is from an in-depth interview or a FGD, the gender of the participant and a numeric identifier (see Annex).

Table 8 Overview FGD sample

Location	Group	Gender	Age	Other characteristics	NSNP	Complementary program participation	Participants
Turkana, rural	1.A	Mixed	18+		Yes (any)	No	10
	1.C	Mixed	18+		No	Asset creation (FFA)	10
	1.D	Mixed	18+		No	Asset creation (FFA)	10
Kakamega, urban	2.A	Female	18-40	Mother of infant	Yes (any)	Imarisha Afya ya Mama na Mtoto (current or former beneficiary*)	10
	2.B	Female	18-40	Mother of infant	Yes (any)	No	10
Kitui, rural	3.A	Female	18-40	Primary caretaker infant	Yes (CT-OVC)	NICHE	10
	3.B	Female	18-40	Mother of infant	Yes (CT-OVC)	No	10

Kitui, rural	4.A	Male	18+		Yes (any)	No	10
	4.B	Male	18+		No	Asset creation (CFA)	10
Kisumu, urban	5.A	Male	18-25		Yes or No**	Mixed – CAP beneficiaries and non-beneficiaries	10
	5.B	Female	18-25		Yes or No**	Mixed - CAP beneficiaries and non-beneficiaries	10
Total number of groups							11
Total number of participants							110

Notes: *In the Imarisha program it is reasonable to allow former beneficiaries of the program to participate. First, according to key informants there have been serious delays in payments, making the experiences of currently participating mothers subject to these disruptions. Second, the program's impacts on child and maternal health are only more visible with time after all visits have been completed. **\ Given that there are no cash transfer schemes targeting the youth, it is not a requirement for our sample in Kisumu to be a beneficiary.

Table 9 Overview of IDI respondents

Location	Interview	Gender	Age	Other characteristics	NSNP beneficiary	Complementary program beneficiary	Number of interviews
Turkana (rural)	i1A	Male	18-75		Yes	No	2
	i1B	Female	18-75		Yes	No	3
	i1C	Male	18-75		No	Asset creation (FFA)	2
	i1D	Female	18-75		No	Asset creation (FFA)	3
Kakamega (urban)	i2A	Female	18-40	Mother of infant	Yes	No	5
	i2B	Female	18-40	Mother of infant	Yes	Imarisha Afya ya Mama na Mtoto	5
Kitui (rural)	i3A	Female	18-40	Primary caretaker of infant	Yes (CT-OVC)	No	5
	i3B	Female	18-40	Primary caretaker of infant	Yes (CT-OVC)	Niche	5
Kitui (rural)	i4A	Male	18-75		Yes	No	5
	i4B	Female	18-75		Yes	No	5
	i4C	Male	18-75		No	Asset creation (CFA)	5
	i4D	Female	18-75		No	Asset creation (CFA)	5
Kisumu (urban)	i5A	Male	18-30		Yes	No	2
	i5B	Female	18-30		Yes	No	3
	i5C	Male	18-30		Yes/No*	CAP	2
	i5D	Female	18-30		Yes/No*	CAP	3
Total number of interviews:						60	

Notes: *\ Given that there are no cash transfer schemes targeting the youth, it is not a requirement for our sample in Kisumu to be a beneficiary.

4.2.4 Limitations and caveats

The methodology has limitations, which should be recognized to correctly interpret results. First, given the relatively small sample size and the priorities guiding the sample selection, the information derived through the FGDs and IDIs are not representative of the whole country. They reflect the specific experiences and opinions of social assistance beneficiaries in the sampled locations and in sampled population groups. Although the findings cannot be generalized for the entire Kenyan

population, this is not necessarily problematic given the objective of the qualitative research: to understand the potential impacts of selected complementary interventions on productive outcomes. Moreover, the purposive sampling deployed for the study took into account the diversity in livelihoods and ensured the representation of genders and stages in the life-cycle, aiming to increase the generalizability of findings for the Kenyan context.



CHAPTER FIVE
RESULTS

5.1 The relation between education and income

We are interested in the effect of the NSNP on household education levels. We consider two variables: school attendance and school attainment. School attendance is measured by a binary variable that determines whether a person in the household currently attends primary, secondary or tertiary education.

School attainment is measured by the completed years of schooling of all members above 16. We assume that primary school is eight years of education, secondary school consists of four years of education and tertiary education comprises of four or more years. Moreover, we assume that those individuals that never attended school, obtained zero years of education.

Table 10 Descriptive Statistics of the main outcome variables

	All			Rural			Poor		
	N	mean	sd	N	mean	sd	N	Mean	sd
Monthly consumption expenditure per capita	92846	5120	5859	60943	3633	3466	38931	2167	980
School attendance primary education *	17852	0.99	0.08	12356	0.99	0.08	8279	0.99	0.11
School attendance secondary education **	9362	0.94	0.24	6358	0.95	0.22	4451	0.94	0.24
School attendance tertiary education ***	10056	0.52	0.50	6177	0.57	0.50	4004	0.53	0.50
Completed years of schooling****	47261	8.446	4.387	29433	7.31	4.29	17647	6.50	4.18

Note: Household level weights. The number of observations may vary due to age filters. * Current school enrollment primary education age 6-12 (yes=1); ** Current school enrollment secondary education age 13-16 (yes=1); *** Current school enrollment tertiary education age 17-22 (yes=1); **** all individuals 17 years and older.

Table 10 presents the descriptive statistics for the main outcome variables. We use monthly consumption expenditure per capita⁷ to get an accurate estimate of consumption per household member (including children). The average monthly consumption expenditure per capita is 5,120 KES.

Almost all children between the age of 6 and 12 attend primary school, which follows from the fact that primary school is mandatory and free in Kenya. 94% of children between 13 and 16 attend secondary school, despite having to pay school fees for secondary education. Half of the population between 17 and 22 years

old attends tertiary education. On average, Kenyans completed 8.4 years of education, which is a little bit more than primary school level.⁸ Two thirds of Kenyans live in rural areas. The average monthly consumption per capita in rural areas is 3,663 KES (approximately 26 dollars); in poor households, the average monthly consumption per capita is 2,167 KES (21 dollars). Almost all of the children between the age of 13 and 16 attend secondary school in rural areas, a similar result holds for the poor. In addition, half of all children between 17 and 22 years old attend tertiary education for both rural areas and poor households.

⁷ We re-calculate the monthly per adult equivalent consumption to consumption per household member.

⁸ Note that we consider the years of education for those individuals that never attended school zero. Excluding these individuals and only considering those individuals that ever attended school results in an average completed years of schooling of 9.5 years.



We first quantify the relations between household income and education by estimating the effect of an increase in income on school attendance. In turn, improved school attendance leads to higher educational attainment in a household, which generates positive returns to education by increasing the earning potential of a household.

The average marginal effects of income on the probability of attending primary, secondary and tertiary education are presented in Table 11 (a full list of control variables and descriptive statistics is displayed in Table 20 in the Appendix). The coefficients suggest that there is a significant and positive effect of household income on school attendance. Models (1) until (3) estimate the effect of household income on school attendance directly. For primary, secondary and tertiary education, consumption increases the likelihood of attending school. The effect is strongest for tertiary education, which might be due to the fact that secondary and tertiary education require the payment of school fees. Increases

in consumption are particularly effective for the attendance of tertiary education, the effect being five times stronger than for secondary education. Living in rural areas or being female has little influence on the likelihood of attending primary or secondary school. For the attendance of tertiary education, women are less likely to attend tertiary education. Given that almost all children attend primary and secondary education, the scope to improve school attendance is limited. For tertiary education, which only half of young adults between 17 and 22 attend, the effect of an increase in consumption is considerably larger. With respect to school attainment, a one percent increase in consumption raises the completed years of education by 1.1 years (Model (4)).

Table 11 Consumption effect on the probability of school attendance and completed years of schooling (Probit estimation)

	(1)	(2)	(3)	(4)
	School attendance (6-12)	School attendance (13-16)	School attendance (17-22)	Completed Years of schooling (17-22)
	Marginal Effects	Marginal Effects	Marginal Effects	
Ln consumption	0.01**	0.02**	0.10***	1.10***
	(2.87)	(2.83)	(8.17)	(21.52)
rural	-0.00	0.01	0.04**	-0.56***
	(-1.37)	(0.96)	(3.00)	(-8.70)
female	0.00	0.01	-0.07***	-0.05
	(1.39)	(1.31)	(-5.39)	(-1.02)
N1	10360	9268	10038	10607
County Fixed Effects	yes	yes	Yes	yes
controls	yes	yes	Yes	yes
regression	Probit	Probit	Probit	OLS
Notes: t statistics in parentheses * p<0.05 ** p<0.01 *** p<0.001				

1 Several observations were dropped due to collinearity between the counties as control variables. Our results remain robust even when dropping the county fixed effects (increasing the number of observations).

The estimated relationship between school attendance and income could be biased given that we use consumption as a proxy for income, which could lead to biased estimates. After all, total household consumption also includes expenditures on education, which are determined by school attendance. Table 21 in the Annex shows the results of an alternative estimation, where household consumption is first predicted based on the median wage per sub-location and household assets. The results are robust under this model specification.

More education increases the earnings potential of individuals as they become more productive (see, e.g., Card (1999, 2001); Heckman et al. (2006a); Oreopoulos and Salvanes (2011); McMahon (2009); Oreopoulos and Petronijevic (2013)). Table 12 shows the relation between average school attainment and maximum school

attainment and household consumption in Kenya. Higher school attendance increases educational attainment, which generates returns to education. An increase in one year of maximum school attainment in the household is associated with a 5% percent increase in consumption. An additional year of the average level of schooling increases household consumption by 5%. Similar results have been found for Uganda, where for every additional year of maximum level of education household consumption increases with 5% to 11% depending on the model specification (Dietrich et. al, 2017). In Lesotho, returns to education were estimated at 9% for every additional year of schooling (Dietrich et. al, 2016). Overall, our estimates imply positive returns to education, but at a lower level than the international standard of approximately 10% (Psacharopoulos and Patrinos, 2018). For the simulation, we use model 1 of Table 12.

Table 12 The effect of school attainment on consumption

	(1)	(2)
	Ln Consumption	Ln Consumption
Maximum school attainment	0.05***	
	(36.67)	
Mean School Attainment		0.05***
		(30.34)
female	-0.02*	-0.00
	(-2.05)	(-0.43)
rural	-0.23***	-0.24***
	(-25.64)	(-26.81)
N	21666	21666
	0.45	0.44
County Fixed Effects	yes	yes
controls	yes	yes
regression	OLS	OLS
t statistics in parentheses		

* p<0.05 ** p<0.01 *** p<0.001

5.2 The relation between income and nutrition

In order to understand to what extent an increase in disposable income may affect the demand for food, we analyze the relationship between income and calorie intake. In Table 13, we present selected nutrition variables based on the KIHBS data. The calorie estimates suggest that 67% of households meet or exceed the daily energy requirements.⁹ While more than half of the calories stem from cereals, food diversity is high. Over a period of seven days, households consume from seven out of nine food groups on average.¹⁰

Apart from stimulants¹¹, fruits, vegetables and meat are the least-consumed food categories, each contributing less than 4% to total calorie intake.

There are some notable differences between rural and urban households. For example, while urban dwellers buy 73% of their foodstuffs, only 51% of rural households' foods are purchased on markets. Households living under the poverty and the extreme poverty line are more likely to experience dire nutrition situations, with only 37% of the former and 10% of the latter meeting their daily energy requirements.

9 For energy requirements, we follow the methodology suggested by FAO, WHO and UNU (2002), estimating age- and sex-specific minimum dietary energy requirements. The caloric requirement of adult males (30 to 34 years) is estimated to lie at 2376 kcal per day.

10 The food groups are: cereals, dairy products, fruits, meat, oils and fats, roots tubers and pulses, stimulants, sweets and spices, vegetables.

11 Includes alcohol, tobacco and various narcotics.

Table 13 Summary Statistics of selected nutrition indicators, KIHBS 2015/16

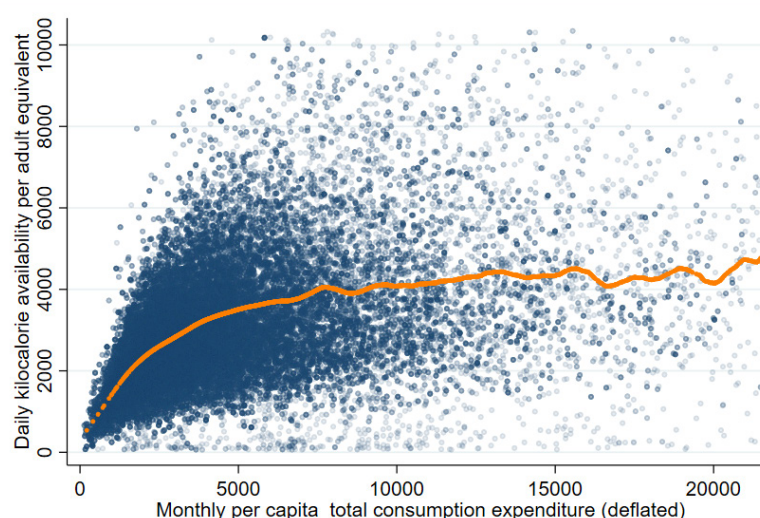
Description	Overall	Urban	Rural	Poor	Extremely poor
Food value per week (and capita) KES	817.01	1029.93	654.74	357.41	225.17
Purchased share of food (%)	60.16	72.71	50.54	56.37	52.70
Kcal availability meets needs (%)	66.98	65.34	68.23	37.05	9.83
Food diversity score (0-9)	7.18	7.31	7.07	6.60	5.69
Cereal share of calories (%)	54.52	52.55	56.01	60.58	63.33
N	21333	8477	12856	7005	1601

Source: own calculations based on KIHBS 2015/16

Figure 8 displays the relationship between household consumption and the intake of calories. The estimates indicate a strong positive correlation between total household consumption and calorie intake, particularly at low levels of consumption. The effect diminishes with increasing consumption levels. Above the poverty line of about 6,000 KES in urban areas, there is almost no increase in a household's calorie intake (Figure 8). This could be because households use additional income to consume non-food goods, or because households use additional income to substitute staple goods or lower quality food without affecting the calorie intake.

As in the previous section, we use household consumption per capita to approximate incomes. The estimates suggest that a 10% increase in household consumption is associated with a 2.7% to 4.6% increase in calorie intake (Table 14). However, the standard OLS estimates are likely to be biased and we additionally estimate two stage least squares models (2SLS) using local daily wages as instrument for household consumption per capita (column 4). The results suggest that an increase in consumption of 10% is associated with an increase of 3% in calorie intake on average controlling for household and regional characteristics. For the simulation exercise in the next section, we rely on this elasticity to predict the effects of NSNP on calorie intake.

Figure 8 Relationship between household consumption per capita and calorie intake



Local-linear estimates
kernel = epanechnikov bandwidth = 315.9285

Source: own calculations based on KIHBS 2015/16

Table 14 Calorie intake elasticity with respect to household consumption per capita

	(1)	(2)	(3)	(4)
	Log Kcal	log Kcal	log Kcal	log Kcal
Log Consumption (p.c.)	0.30	0.27***	0.46***	0.30***
		(33.60)	(44.48)	(0.06)
N	20671	21333	21314	17926
		0.13	0.26	0.23
County Fixed Effects	no	no	yes	yes
controls	no	no	yes	yes
regression	Local linear OLS	OLS	OLS	2SLS
t statistics in parentheses. Complete estimation tables in the Annex Table 22.				

* p<0.05 ** p<0.01 *** p<0.001

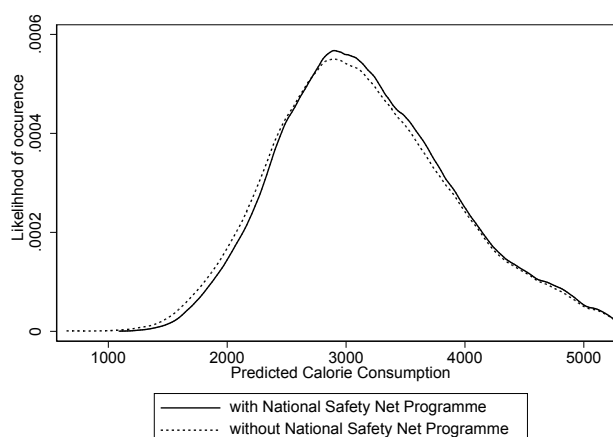
5.3 The potential effect of NSNP on nutritional outcomes (immediate effect)

The rationale of cash transfers is that by relaxing the budget constraints, programs allow households to purchase goods helping to sustain a more balanced and healthy diet. In the simulation, which focuses on the immediate program effects on household’s calorie deficits, we test how an increase in household income through the NSNP may affect the demand for calories compared to a scenario without NSNP. To estimate changes in the demand for calories, we apply the calorie-consumption elasticity as shown in column 4 of Table 14. Note, that we solely model the income effect of the programs, but do not account for other transformative effects that are likely affecting the demand for calories.

Figure 9 shows the distribution of the predicted intake of calories with and without NSNP. The results suggest that the programs increase calorie intake particularly of poorer households leading to a shift in the distribution from low to intermediate calorie intake levels. With NSNP in place, the model predicts an increase in calorie consumption of 50 kcal per adult equivalent. This translated into an

average increase of almost two percentage points for the whole country. The effect more than doubles if we only consider beneficiary households, where calorie consumption would increase with 132 kcal per adult equivalent. The absolute increase in calorie intake reduces the number of calorie deficient households by almost one percentage point. Among poor households, the reduction in calorie deficiencies is higher with 2.5 percentage points (Table 15).

Figure 9 Distribution of predicted Calorie Intake with and without National safety Net Program



Source: own calculations based on KIHBS 2015/16

Table 15 Predicted calorie intake with and without National Safety Net Programs

	Without NSNP	With NSNP	Change
Calorie intake (kcal per adult equivalent)	3,075 kcal	3,125 kcal	
Change in kcal (average)			50 kcal
Change in kcal (only NSNP HH)			132 kcal
Change in share of HH that meet kcal requirements			0.9 pp
Change in share of poor HH that meet Kcal requirements			2.5 pp

Source: own calculations based on KIHBS 2015/16

5.4 The rates of return of investing in NSNP (dynamic microsimulation)

In this section we discuss the results of the dynamic micro-simulation model that estimates the returns of investing in the NSNP, using the stepwise approach described in chapter 4. We utilize the above-estimated semi-elasticities of income, education, and returns to education to analyze the extent to which cash transfers will result in greater educational attainment and higher household consumption levels over time. The estimated coefficients are fed into the dynamic micro-simulation model to measure the program effects over 15 years on the national level. NSNP transfers are assigned to eligible households, increasing their total consumption level. Based on this consumption, the model predicts the likelihood of school attendance, separately for primary, secondary, and tertiary school age. Next, the educational attainment is adjusted if an individual completed an additional year of schooling, which generates additional income according to the estimated returns to education. Finally, these program-induced changes are compared to a control scenario without NSNP transfers. The new income levels are calculated as the sum of the previous income level plus the direct effect (transfer) and the indirect benefit (return to education). The difference in income in a scenario with and without the programs reflects the overall benefits of the NSNP in our model.

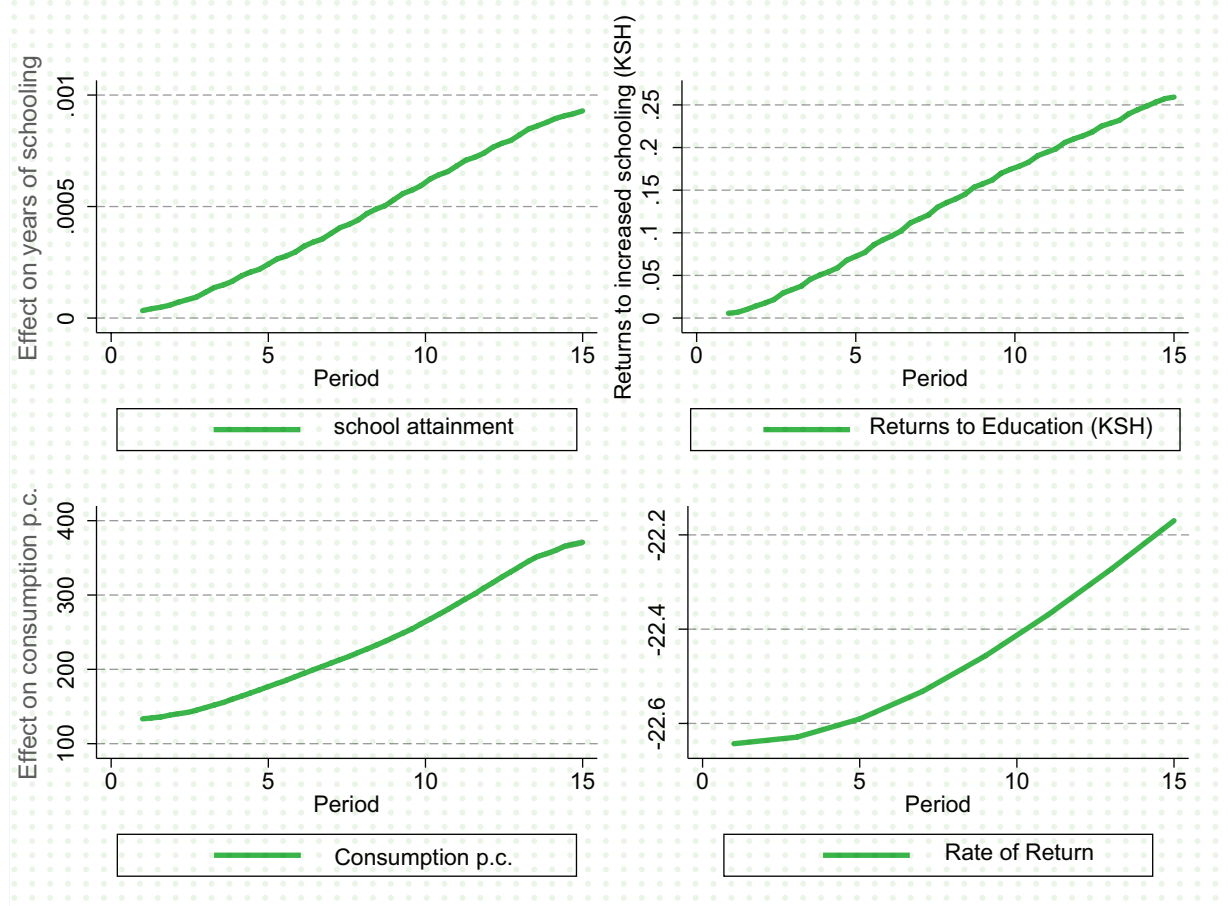
The simulation results for the returns on education over 15 years are shown in Figure 10. The first panel shows the effect of NSNP programs on school attainment in years. The second panel shows the returns to increased schooling in Kenyan Shillings over the same period. The third panel shows the effect of NSNP on consumption per capita, while the last panel provides the rate of return to NSNP programs comparing program costs and benefits.

Given the limited effects of additional household income on school attendance and the overall low returns of education on household income, we expect the overall rates of return of NSNP to be limited. School attendance in Kenya is already high due to mandatory primary schooling. As a result, there is relatively little scope to further increase the quantity of schooling through cash transfers. The first panel shows that over the 15-year period, the effect of NSNP on school attainment is marginal. After 15 years, social safety net programs increase the average years of schooling by 0.001 years per person in Kenya. This increase reflects the average effect on all adult Kenyans regardless of whether they were program beneficiaries or not. The average return of increased schooling is 0.3 KES per person in Kenya after 15 years. The program effects on household consumption per capita increase from 100 KES to 300 KES along the 15 years of the simulation period. The last panel shows, that the rate of return of investments in NSNP remains negative, but improves slowly over time.

The negative rate of return could be the result of assuming that only 80% of the cash transfers are used for consumption. Assuming that 100% of the transfer is used for consumption¹² improves the results

considerably. Even though the overall rate of return remains negative after 15 years, the graph shows that it almost reaches break-even (see Figure 16 in the Annex).

Figure 10 Simulation results



Source: Author's own calculation

Note: Calculations based on a marginal propensity to consume of 80% and a discount rate of 10%

5.5 Validation of program impacts and the relevance of context

To validate the micro-simulation results we explore existing impact evaluation data of the CT-OVC and HSNP program, i.e. we test whether the predictions of the micro-simulation model are supported by a rigorous evaluation of the HSNP and OVC program in their respective pilot regions. In addition,

the impact evaluation data allow us to include program returns to productivity and livelihood decisions that cannot be modelled using a micro-simulation approach. We perform a sub-sample analysis to test how specific circumstances and contexts influence program impacts. This will inform the debate on how to design “plus” interventions to increase program impacts. We analyze the variation in program effects with an eye to

12 Using a marginal propensity to consume equal to one.

identifying environmental factors and potential interventions influencing program returns. The considered mediating factors of program effectiveness include the infrastructural endowment of communities, household specific characteristics, and the exposure to adverse income shocks.

5.5.1 HSNP program impacts

We do not find significant program impacts on the indicators surveyed in either period (see Table 4), apart from a decrease in school attendance in follow-up period 2. We suspect this latter estimate to be a randomization issue, as a higher school attendance in treatment areas was the only significant baseline difference between treatment and control communities (see Table 4). Time trends, that is changes affecting both treatment and control areas, draw a mixed picture of increases and decreases in follow-up period 2 and are consistently insignificant in follow-up period 1. The latter result may hide changes such as unusually bad weather conditions, which affected both groups in follow-up period 1, and which our model controls for (coefficients not reported). Still, it shows that program receipt did not significantly alter households' coping and adaptation on the overall level. The results are in line with the original impact evaluation of the first follow-up period, which finds significant HSNP impacts only in isolated cases (OPM & IDS, 2012)(OPM and IDS 2012).

In period 2, both treatment and control households have increased revenues and livestock holdings and enjoy significantly higher consumption expenditures, without HSNP receipt making a significant difference. While the original impact evaluation report reaches similar conclusions with regards to livestock, it reports a significant impact on consumption expenditures (Merttens et al., 2013)(Merttens et al. 2013). We can reproduce a significant impact in a model not controlling for seasonality aspects (rainfall quality and month-of-interview dummies), similar to the main specification used in the original report.

Time trends for education indicators are mostly positive or very small, which supports the findings from the microsimulation in the previous section. There are significant increases in health expenditures and decreases in illnesses and injuries. HSNP did not make a significant difference in these trends. These results are in line with those found in the evaluation report for the second follow-up period (apart from the report finding a weakly significant positive impact on health expenditures).

Food consumption has increased in both follow-up periods, with HSNP making a positive but non-significant difference. In parallel, a negative time effect on nutrition quality is suggested by the respective indicators, with some effects being significant in follow-up period 2. Here, non-significant estimates suggest that HSNP has exerted a buffering effect for some indicators but not for others. The original evaluation report confirms these effect directions. As regards anthropometrics, HSNP is estimated to have a positive impact on wasting (weight-for-height z-scores) and a negative impact on stunting (height-for-age z-scores). However, due to difficulties in data collection noted by the original report, these estimates need to be treated cautiously.



Table 16 Overall time and treatment effects for HSNP

	Follow-up 1			Follow-up 2		
	time effect	treatment effect	N	time effect	treatment effect	N
Productivity						
Tropical livestock units	-0.29	0.53	5329	1.57	-0.48	4614
Income from livelihood activities				51.78	-111.69	4126
Income from agriculture				29.75	-8.52	4101
Income from employment				-17.79	0.43	4116
Paid primary occupation (individuals 18 and older)	0.37	0.08	14208	-0.21	0.62	12433
Consumption expenditure	103.66	103.21	5346	271.38**	203.97	4625
Present value of productive assets	7.82	1.89	5313	77.18	74.33	4596
Education						
Education expenditure per child	-0.47	-10.79	4380	-2.89	15.36	3803
School attendance (individuals 6 to 17)	0.50**	-0.31	14078	1.01***	-0.71**	12260
School days missed past year (students)	0.00	0.00	3759	1.69**	-1.38	7195
Years of schooling (individuals 6 to 17)	0.05	0.46	11518	0.41	-0.32	10013
Health						
Health expenditure	3.44	0.92	5305	10.23***	-0.23	4597
Illness/injury in the past 3 months (individuals)	-0.43	0.29	26726	-0.69*	-0.26	27186
Recovery period (ill individuals)	0.00	0.00	3571	3.48	-0.71	4817
Nutrition						
Food value per week	23.41	23.84	5157	70.44***	29.81	4484
Purchased share of food	0.11**	0.08	5156	0.18***	-0.00	4483
Food diversity score (0-10)	-0.40	0.40	5092	-0.05	0.06	4447
Household kcal need met	-0.53**	0.24	5092	-0.84**	0.14	4447
Household iron need met	-0.20	-0.09	5092	-0.76**	-0.31	4447
Height-for-age z-score (individuals 0 to 5)				0.09	-0.39	2346
Weight-for-height z-score (individuals 0 to 5)				0.48	0.16	2460

Note: *, ** and *** denote significance at 10%, 5%, and 1% level using a two-tailed distribution. Unless otherwise noted, all variables are on the household level and monetary values are normalized by household size and scaled to monthly values. Years of schooling exclude repetitions and universities. Data on income sources, children's past schooling, school and work days missed and anthropometrics was not collected in FU1. Data on land size was not collected in any follow-up period.

5.5.2 CT-OVC

Overall, we observe positive and significant impacts of the CT-OVC program on all outcome groups. Time trends were mostly positive in both follow-up periods. The CT-OVC had a significant effect on consumption expenditure in follow-up 1, with an effect size comparable to the original report¹³ (Ward et al., 2010)(Ward et al. 2010). Both treatment and control households have significantly decreased their livestock holdings, with the CT-OVC exerting a non-significant effect in the opposite direction. No significant effects on farmland holdings and paid labor are observed. Households in both treatment and control communities have considerably increased education expenditures for children over the

evaluated period. A significant CT-OVC impact on school attendance and duration is identified in both follow-up periods.

We find the CT-OVC to exert a positive impact on health and food expenditures, significantly so in follow-up 1. Indicators of nutrition quality suggest a positive and sometimes significant OVC effect, which supports our positive findings based on KIHBS 2015/2016 reported above. Anthropometric measures have not been affected by the CT-OVC program. These findings correspond to those of the original evaluation report (Ward et al., 2010)(Ward et al. 2010).

Table 17 Overall time and treatment effects for OVC

	Follow-up 1			Follow-up 2		
	time effect	treatment effect	N	time effect	treatment effect	N
Productivity						
Tropical livestock units	-0.93***	0.10	3637	-2.53**	0.03	3449
Farm land (square meters)	-768.90	121.41	3445	-1416.40	-202.34	3407
Paid primary occupation (individuals 18 and older)	-0.62	-0.13	7805			
Consumption expenditure	701.52***	303.74**	3630	930.24	172.16	3446
Yearly expenditure on productive assets					9.04	1763
Education						
Education expenditure per child	257.20***	40.20*	3604	138.79	28.85	3338
School attendance (individuals 6 to 17)	0.01	1.04**	8821	-1.40	1.45**	8261
School days missed past year (students)	-1.59***	0.41	8621	-5.04***	0.48	9022
Years of schooling (individuals 6 to 17)	-1.97***	0.24	5302	-2.97*	0.33	8917
Health						
Health expenditure	14.12*	15.74**	3637	140.20	9.80	3443
Illness/injury in the past 3 months (individuals)				0.60	0.39	18715

13 Note that no comprehensive analysis of the follow-up 2 data has been published to date.

Nutrition						
Food value per week	164.55***	28.30*	3419	216.86***	24.68	3352
Purchased share of food	0.28***	-0.03	3504	0.40*	-0.02	3429
Food diversity score (0-10)	1.91***	0.57**	3537	5.16***	0.44**	3438
Household kcal need met	-1.00	0.40	3535			
Household iron need met	-0.07	0.09	3534			
Height-for-age z-score (individuals 0 to 5)	0.63	0.05	1891	3.29***	-0.92	997
Weight-for-height z-score (individuals 0 to 5)	0.59***	0.21	1966	0.08	-0.50	957

Note: *, ** and *** denote significance at 10%, 5%, and 1% level using a two-tailed distribution. Unless otherwise noted, all variables are on the household level and monetary values are normalized by household size and scaled to monthly values. Years of schooling exclude repetitions and universities. Data on incidence of illnesses was not collected in FU1 and data on primary occupations was not collected in FU2. Data collected on food intake in FU2 is insufficient to calculate nutrient intake. Data on income sources was not collected in either follow-up period. Spending on agricultural assets was only polled in follow-up 2. Expenditure on productive assets was only collected in follow-up period 2. The reported treatment effect is the coefficient on the treatment dummy in a specification dropping the time-dummy and the time-treatment interaction (t and T*t in the formula above) and estimated using only observations for the covered period. ° The GLM estimations for the dummies for schooling of 18-year olds and for tertiary education did not converge. The reported coefficients have been estimated using ordinary OLS.

5.5.3 Differences in program effects

The average program impacts may hide differences in the effectiveness of the programs depending on regional but also household specific characteristics. To increase our understanding where and for whom the programs worked best, this section sheds light on the differences in program impacts along several lines. We focus on four outcome variables and consider how various mediating

factors affect the outcomes of the cash transfers. This is important as it shows under which circumstances impacts are largest, which can help to identify enabling factors and impediments to program effectiveness. Table 18 below summarizes the combinations of outcome variables and mediating factors studied in the analysis.

Table 18 Dependent variables and mediating factors considered in heterogeneous effects analysis

Outcome Dimension	Mediating Factor
Education (education expenditures, school attendance)	Regional returns to education, school feeding, number of children, household size
Nutrition (food expenditures)	Distance to market, exposure to drought, baseline food expenditure, household size
Productivity (productive assets)	Distance to market, education of the household head

To avoid endogeneity issues, subgroups have been constituted on baseline characteristics (except for vegetation conditions, which are not influenced by the programs). To control for outliers, the top 2.5% of observations have been ignored for all monetary variables.

Education

The subgroup analysis on education suggests that local returns to schooling¹⁴ play an important role in determining whether cash transfers are used for education purposes. Effects on education expenditure tended to increase with regional returns to schooling duration in both cash transfers. Similar tendencies, but not significant, are found when using school attendance as a dependent variable. In other words, this means that households are likelier to invest the cash transfer in education the more they observe education to pay off in higher household incomes in their region.

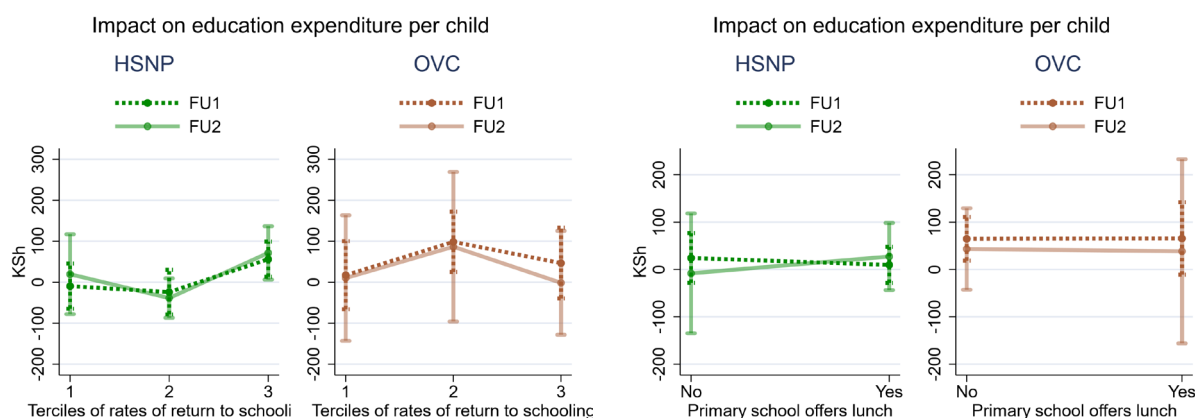
The presence of school feeding did not make a significant difference for the cash transfers' effect on either education expenditure

or school attendance (only expenditures reported). Thus, whether cash transfers lead to an increase in education expenditure and school attendance does not seem to depend on whether the school offers lunch.

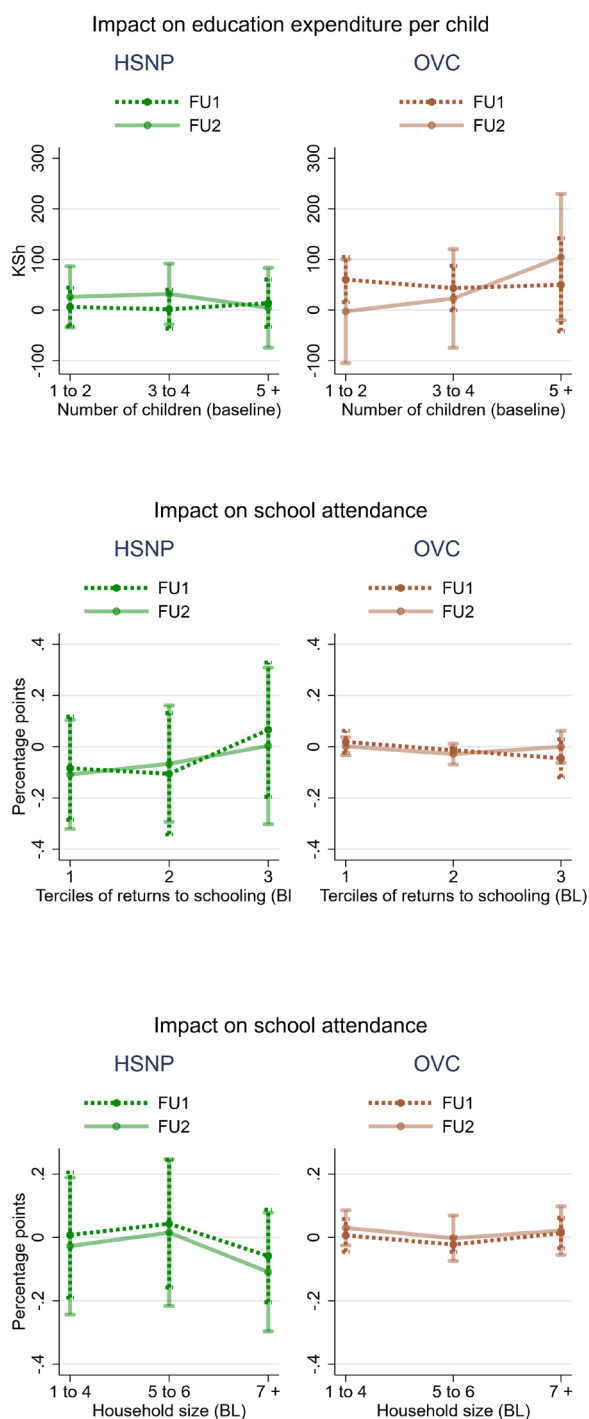
The number of children in the household had an ambiguous impact on education investments. While it did not seem to affect education investments in HSNP, a higher number of children appears to have decreased education investments in the CT-OVC follow-up 1 and to have had the opposite effect in follow-up 2. However, only in follow-up 1 do we find a significant positive effect on households with 1 to 2 children. With regards to school attendance (not reported), no significant program effects are found for any subgroup.

Whether beneficiaries increased education spending (not reported) or school attendance did not depend on the size of their households. No statistically significant treatment effects are observed for any subgroup and a common trend of effects cannot be identified.

Figure 11 Heterogeneous effects on education

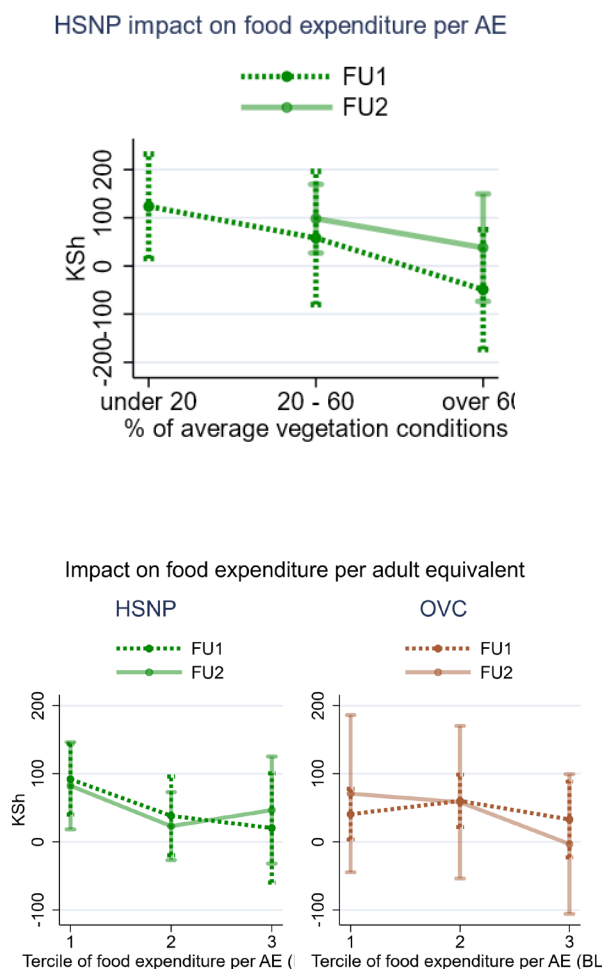


14 Returns to schooling are defined as the estimated marginal effect of an increase in mean household schooling duration (among household members over 15 years) on household income, controlling for a number of covariates. They are estimated for every one of the 48 sub-locations.



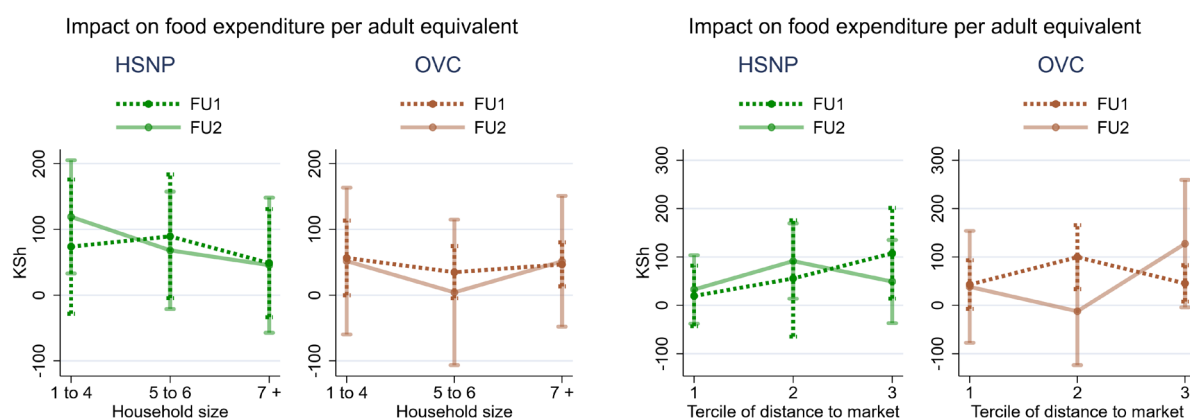
by droughts, effectively fulfilling its intended safety net function. In a similar vein, the tercile of households with the lowest food expenditures in the baseline survey was most likely to experience a significant effect on food expenditure in both surveys. These findings suggest that cash transfers' effects on nutrition are importantly mediated by perceived need: Households that already deem their nutritional standard adequate and are not hit by external shocks are likely to invest the cash transfer elsewhere. At the same time, the analysis shows that the effects of the fixed size transfers on nutrition tend to decrease with household size, suggesting that larger households might not be able to invest as they would like even if in need.

Figure 12 Heterogeneous effects on nutrition



Nutrition

The subgroup analysis of nutrition indicators confirms our hypothesis that estimates of average impacts conceal important differences among households. While HSNP did not significantly increase food expenditures overall, it did have large and significant effects on the food expenditure of households hit



HSNP had significant positive impacts on food expenditures in areas hit by droughts. In both follow-up periods, HSNP increased food expenditures of the group with the worst observed vegetation conditions¹⁵ significantly and by more than 100 KES per adult equivalent and week. The analysis could not be carried out for CT-OVC however, because sufficiently precise location data for the interviewed households were not available.

Households with lower baseline food expenditure experienced higher increases in food expenditure. Apart from the CT-OVC follow-up 1, the tercile with lowest initial food expenditure consistently experienced the highest increase. These increases were statistically significant in all periods but the CT-OVC follow-up 2. While point estimates were still positive for households of the tercile with highest baseline food expenditure, none of them was significant.

The impact on food expenditure seems to have decreased with increasing household size. Except for HSNP follow-up 1, the smallest

households experienced the highest impacts of any group, which were significant in two periods. This is not surprising given that the transfer amounts did not vary with household size.

The effect of market distance¹⁶ on the cash transfers' impact on food expenditure is less clear. In none of the periods under study were the households closest to a market estimated to experience the highest impact. All four significant effects were observed for the second and third tercile with regards to market distance. At the same time, a linear relationship between cash transfer impact and market distance seems unlikely, with the middle tercile estimated to experience the highest effect in two and the lowest effect in one of the four periods.

Productivity

The subgroup analysis weakly suggests that the education of the household head plays a role in cash transfer effects on productive assets¹⁷. However, the nature of this factor appears to be context specific. The depth

15 Following Kenya's National Drought Management Authority, vegetation conditions are measured by the vegetation condition index (VCI), which relates the greenness of the land surface in the 30 days preceding the interview as percent of the extreme values observed in the respective area. VCI data were provided by the National Drought Management Authority.

16 Market distance is defined as the time it normally takes to go to the next marketplace.

17 Productive assets are defined as various tools and assets predominantly usable in agricultural income generation. In HSNP we use the present value of these assets, which was collected in all periods. In OVC, we have to rely on yearly expenditure on productive assets, which is available for follow-up 2 only.

of the analysis is limited by data availability issues in CT-OVC¹⁸. On the overall level, no significant effects on productive assets could be detected.

Market distance does not seem to mediate the cash transfers' effects on productive assets for either transfer. With other words, beneficiaries were just as likely to invest in productive assets if they lived close to a market as they were when they lived far from one.

An interesting picture emerges when considering the role of the household head's education for investments in productive assets. The results suggest that education tended to decrease investments in the HSNP context and to increase them in the CT-OVC context, with the effect on investments by the best-educated tercile bordering statistical significance. Important differences in the contextual signification of education are also suggested by the fact that approximately 90% of household heads entitled to HSNP reported having no formal education, while education was much more widespread among household heads in the CT-OVC survey.

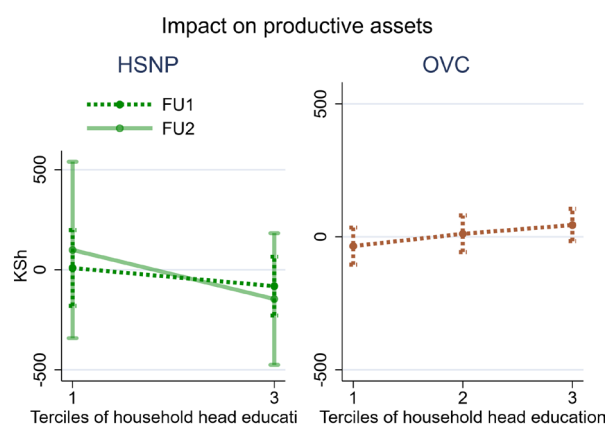
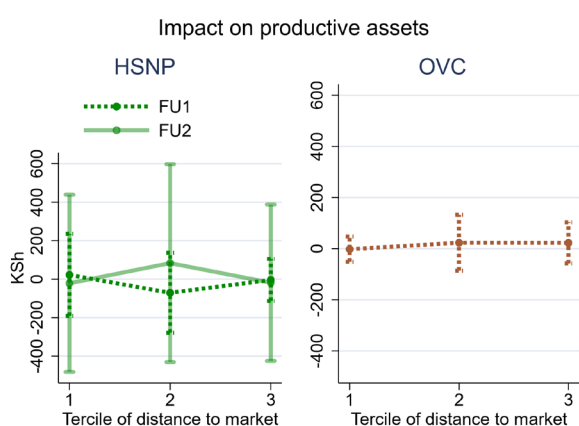


Figure 13 Heterogeneous effects on productivity



5.6 Productive investments, enablers and constrainers (qualitative findings)

5.6.1 The role and utilization of cash transfers - first-order outcomes

Direct income and consumption effects

To elicit the direct income and consumption effects of NSNP cash transfers, respondents were asked to explain how they plan with and what they spend the cash transfers on. Expenditures on everyday goods and services, such as food, housing necessities and medication were mentioned by nearly all respondents as a primary use of transfers. Further, households used the cash received to access services including education, healthcare and community-based financial services (mainly in the form of contributing to table-banking or merry-go-round groups). Education-related expenditures were prioritized in households with children, which resonates with respondents' view that education is the key to breaking the cycle of poverty. Many households use what remains of the transfers for productive investments: they purchase chicken, goats or other livestock, or spend on their businesses.

18 As data on productive assets are only available in one period in OVC, we cannot use our diff-in-diff estimator and have to rely on a similar specification dropping all time-dummies. Only observations from follow-up period 2 are used.

Varying patterns of consumption

The objectives of the various schemes under the NSNP umbrella are reflected in the variability of recipient households' spending patterns. While meeting basic needs such as food, housing, clothing and health were generally mentioned among the primary uses of cash transfers, households prioritize differently based on which cash transfer program they participate in. Budgeting for education (including books, uniforms and secondary school fees) was most important among CT-OVC recipient households because they understood the objective of the CT-OVC is to support the orphaned child's development and schooling. Many of the households receiving PWSD-CT, who view the transfer as a support to meet the specific needs of a disabled person, deemed covering health expenses or paying for rehabilitation services most important. Households with a member receiving a social pension reported using the transfer primarily to meet the basic needs of the pensioner. Pensioners also reported expenses that other groups did not, for example hiring someone from the community to help them with work in their shamba.

5.6.2 Transfer-induced changes – second-order outcomes

The direct income and consumption effects reportedly bring about various second-order outcomes among beneficiary households. During the interviews and FGDs, participants described the changes they have seen in their households related to the cash transfers. The reduction of poverty and deprivation in various dimensions, but particularly in terms of hunger, was consistently mentioned as the key benefit of the program. It was echoed by several respondents that deprivation in their communities has visibly decreased due to the program (Kt-IDI-F-180902_0934; Tu-FGD_Mix-180731_0936).

Food intake

Respondents reported very tangible changes with respect to nutrition, such as not sleeping hungry anymore or consuming more diverse

and balanced diets. The transfers are often the only means to secure nutrition – particularly in Kitui and Turkana, where failing rains and underdeveloped infrastructure present serious obstacles for farmers and livestock holders. In these ASAL counties, some respondents highlighted cash transfers as the mere reason for their survival:

..... “ “
 “If that money was not here, I would not be here. I would have been finished by hunger.”
 (Tu-IDI_M-180725_3313)

Improvements in dietary diversity and overall food security were mentioned by respondents as a result of using the cash to buy food, but also as a benefit of purchasing livestock and seedlings.

School attendance and school performance

Both interview and FGD participants repeatedly affirmed the positive link between cash transfers and schooling. Cash transfer receipt affects schooling in various ways. Paying the fees for secondary or higher education, or purchasing books and uniforms allows children to stay in education. While the transfer by itself does not cover all school-related costs, it does reduce demand-side barriers of accessing education. For example, before the introduction of cash transfers, children would be banned from school if the school fees were not paid. Having a reliable source of income from NSNP is seen as a guarantee that outstanding amounts will be met. Hence, children from beneficiary households may be allowed to continue attending school despite being late with payments (ref). Caregivers also highlighted that children are able to focus and learn better in school due to their improved nutrition. For instance, a mother in Kitui said that when she receives the cash, her kids

“at least eat something before going to school so that they understand the teacher better” (Kt-IDI_M-180830-0230).

Another interviewer purchased solar lamps enabling her children to study at home (Kt-IDI_F-180829_2235).

The utilization of healthcare services

The ability to utilize healthcare services has been a major benefit voiced primarily by respondents in rural areas. As the provision of healthcare is a devolved public function, some counties have waived basic healthcare fees in public hospitals (such as Kakamega). Throughout the country, NHIF provides health insurance cards to an increasing share of NSNP beneficiaries (with the aim to eventually cover all), which significantly reduced the costs associated with treatments. Transportation, however, is expensive for those living in rural areas with no general dispensary nearby. The high costs are illustrated by a respondent in Kitui (Kt-IDI_F-180831_0016):

“The only hospital here is in Tseikuru, and to use a motorbike from here to the hospital you have to use money. [...] That is 400 KES to and from at night.”

Beneficiaries of cash transfers, especially of CT-OVC and PWSD-CT, reported that this money enables them to access the medical services they need.

The use of financial services, saving and borrowing

Due to the timing of the data collection, the effect of different delivery modalities on the utilization of financial services could be observed. Some interviews and FGDs in Kitui were held at a later stage. In the meantime, the transfer delivery has switched from a cash-based system to the utilization of the banking system. Respondents who were interviewed after this switch indicated that they would not have become familiar with the banking system, nor would they have opened bank accounts if transfers would have been provided in cash.

NSNP transfers have an impact on the savings behavior and use of financial services of beneficiaries. The main forms of saving (and the use of credit) are purchasing livestock and joining some form of chama¹⁹ or Community Based Organization (CBO)²⁰ as highlighted by respondents. Livestock (besides its obvious role in rearing, producing and selling) is seen “like an account” (Kt-IDI_M-180830_0405): it multiplies in good times and can be sold to make ends meet in the event of shocks. In fact, selling livestock has been the most commonly mentioned strategy to cope with unexpected expenses by respondents. Cash transfers also allowed beneficiaries to participate in the financial activities of chamas and CBOs, such as “table banking” (a group savings fund from which members can borrow and return with a low interest), or “merry-go-round” (rotating savings and credit associations) and to apply for business funds and training. Moreover, the ability to utilize healthcare services has been a major benefit voiced primarily by respondents in rural areas.

Psycho-social effects

Receiving transfers brought about positive changes beyond the mere reduction of monetary poverty, including psychological and social effects. Mothers of children with

19 *Chama* is the Swahili which captures grassroots groups of various concepts, such as self-help groups, Rotating Savings and Credit Associations, table banking etc.

20 Community Based Organizations are officially registered *chamas*, the members of which can collectively start business activities or apply for various funds and trainings.

disabilities in Kakamega county reflected on the cash transfers making them feel less burdened and isolated. For example, one respondent explained how seeing other caregivers on payment day made her come to terms with having a child with disability (Ka-IDI_F-1717_02). Caregivers of orphaned children echoed that receiving the cash transfers made their child “*not feel lonely because of being left by his parents*” (Kt-IDI_M-180903_2333), or feel like “*he has not been left behind, he is taken care of*” (Ka-IDI_F-0926_03), because there were finally resources to cater for their needs. A CT-OVC beneficiary in Kakamega said that the transfer reduced the intra-household tension caused by the burden of caring for another child (Ka-IDI_F-1717_02).

5.6.3 Transformative effects and third-order outcomes

Third-order outcomes occur when direct changes induce transformative shifts to households’ overall well-being. Because they manifest over time and the NSNP has only recently been scaled up, the identification of third-order outcomes remains limited in the context of the current study. Nonetheless, respondents highlighted various program effects, which fall under the umbrella of third-order outcomes and have the potential to transform the lives of beneficiary households. These fall under the categories of resilience, the accumulation of human and social capital, and the shift or diversification of livelihood generation activities.

Household resilience and avoidance of adverse coping strategies

It was often indicated in in-depth interviews and FGDs that households’ resilience to shocks has improved as a result of participating in the cash transfer programs. Having a steady source of income, and being able to save and borrow has reduced households’ need to rely on adverse coping strategies. When asked about how they deal with sudden challenges in making ends meet, respondents most often said that they use the cash transfer to cover unexpected expenses. Alternatively, many reported selling the livestock they had

purchased from the transfer. While the selling of productive assets may be seen as adverse itself, it should be noted that beneficiaries often explained that the livestock itself was purchased to serve as a tool for saving and future consumption smoothing in the absence of access to financial services. Being able to sell this livestock to meet unexpected expenses helps households avoid coping strategies such as pulling children out of school, skipping meals, not seeking treatment for illness or engaging in the distress sale of labor. This is well illustrated by an example from an in-depth interview respondent:

..... “ “
 „If you have a goat, you sell it and pay the school fees. That young goat, the same one you bought with the cash transfer, you will sell it and get KES 2,000, and you take that to the teacher.”

(Kt-IDI_F-180831-0016)

.....

Social capital

By allowing beneficiaries to join a chama, cash transfers reportedly contributed to their social capital. These groups not only serve as community-based financial services, but are also important platforms for social capital. In fact, when asked about the major benefits of chamas, respondents often highlighted the social support they receive from these groups which helps them deal with everyday challenges and shocks alike.

Human capital

While the human capital accumulation induced by the NSNP cash transfers will only be observable in the future, some respondents gave examples of tangible changes achieved by other cash transfers. School attainment is a typical third-order outcome associated with a transfer. A household head with an orphaned child in the household said that receiving monetary assistance from an organization called World Vision has contributed to educating the child, and as

a result, she is now studying at Kenyatta University (Kt-IDI_M-180830-0230). Another respondent recalled that cash assistance from a politician in the area allowed her daughter to finish secondary education and progress to university (Kt-IDI_F-0407-01).

Livelihood strategies

The predictable income from cash transfers means that some recipients can reduce their distress sale of labor, which is often the case in low-paid, casual jobs. Increased participation in stable employment, however, was not reported, which is hardly surprising given the lack of employment opportunities – a fact which was frequently repeated in both interviews and FGDs. Yet, many respondents reported to have diversified their livelihood strategies upon receipt of NSNP transfers. Rearing and selling livestock, producing eggs and milk, and starting or scaling up small businesses were often mentioned as livelihood-sources made possible by the NSNP.

5.7 Mediating factors: enablers and barriers to productive investments

As outlined in our analytical framework, a range of mediators can influence the extent to which cash transfers achieve transformative change. These can broadly be categorized into enablers and barriers. Enablers facilitate the attainment of third order outcomes, while structural barriers hinder or prevent them. First, we revisit the enablers, such as the expected returns to human capital, and recipients’ understanding of the purpose of cash transfers.

5.7.1 Enablers of productive investments of cash transfers

Expected returns to human capital

As economic theory predicts, the expected returns to an investment will ultimately determine a household’s decision to invest. If spending on nutrition, health and education are considered as investments in human capital, it can be argued that the expected returns will influence whether and how much a household will be investing in human capital.

For example, one is more likely to pay for a child’s education if it is expected that school attainment will one day translate into secure employment and better living standards.

Respondents were asked what children in their communities need to escape poverty when they grow up. The importance of education was consistently echoed during both in-depth interviews and FGDs, signaling that Kenyan households highly value schooling and expect it to yield high returns despite the challenges of the labor market. Respondents repeatedly pointed at not having education as the key driver of their poverty and expressed their wish to educate their children in order to help them improve their situation.

..... “ “

“I pray to God that they get a favorable position so that they get their ideas on how they can manage their lives in the future. Yes, that is really why they were enrolled in school. Go and study so that your lives change instead of becoming this one of mine!”

(Tu-IDI_F-180727-1039)

.....

..... “ “

“When someone has no good health, they cannot get time to go and study. And when you are not educated, you will not be employed or you will lack knowledge of looking for money. So when someone has no knowledge, they will lack money. Lack of knowledge on what to do to get money”

(Ka-IDI_F-1717-02)

.....

During discussions held with youth in Kisumu city, participants showed a strong consensus that human capital is one of the decisive factors in determining who will be able to

make ends meet. While respondents saw university education or vocational training as immensely valuable, other key skills such as financial literacy, entrepreneurial knowledge and “life skills” were frequently mentioned as prerequisites for success. In rural Kitui, some respondents stressed that the knowledge of modern farming techniques is the skill their children need, as these communities predominantly rely on agricultural production for their livelihoods.

Chamas, self-help groups and Community Based Organizations

Most respondents participate in chamas, self-help groups or other CBOs confirming that being a member of such groups is very common, at least in our sampled communities. Respondents were invited to discuss the benefits and challenges of being part of such groups.

Chamas play a prominent role as enablers of productive investments and third-order outcomes. These groups are a platform for social capital accumulation. Female respondents echoed the notion that belonging to a chama means that they are not alone with their problems, and that fellow members provide support in times of need. A strong feeling of belonging and the ability to share were repeatedly mentioned as key benefits. These groups also facilitate the disbursement of expertise as members often share with each other their knowledge on family matters and child raising. Groups, if officially registered, can also apply for various trainings (for example on farming methods) and in-kind provision of assets (for example chicken). Chamas that work as table banking or merry-go-round organizations facilitate access to financial capital for those excluded from formal financial services. This allows members to mobilize capital for productive investments (incl. school fees, health care costs, as well as purchasing livestock or investing in business).

Male respondents also reported forming groups, albeit they referred to them as Community Based Organizations. These groups are usually formed with the intention

to start businesses, and members aim to accumulate sufficient capital to do so. Overall, by being platforms to facilitate access to various forms of capital, the role of these groups as enablers of productive investments and third-order outcomes became evident in interviews and FGDs.

5.7.2 Barriers preventing long-term productive impacts of cash transfers

The quantitative analysis of this report has revealed lower rates of return to investments in NSNP compared to Uganda and Lesotho. The in-depth interviews and FGDs revealed a range of structural barriers that may impede the long-term productive impacts of cash transfers in the Kenyan context. Following the analytical framework in Chapter 2 and guiding the Theory of Change introduced in Chapter 6, we differentiate between barriers that are a) program-specific, b) exist at the household level or c) exist in the local or national context.

Program-specific constrainers

Both Tirivayi et al. (2016) and Sabates-Wheeler and Devereux (2011) argue that certain characteristics of program design or implementation can act as enablers or constrainers in achieving third-order outcomes. To elicit such factors, respondents were asked to recall their experiences and share their perceptions of various aspects of the cash transfer programs: including the process (from application to the utilization of cash), the value, the coverage and the targeting of the program they or their communities participate in. While beneficiaries' overall appreciation for the cash transfers became very clear, some program-specific constrainers emerged from the discussions, which seem to limit the long-term positive outcomes associated with transfer receipt.

Two aspects related to the current scale of the NSNP appeared as major constrainers: transfer value and coverage. Without reliable and predictable income from employment or entrepreneurial activities, cash transfers are sometimes the only means for beneficiary households to make ends meet. Since the

needs in some households are so large, the cash transfer is often not enough to fulfill the most basic necessities, let alone be used for investments:

..... “ “
“We have not planned on investment because there has been hunger. You cannot invest when you are hungry. I can’t be given KES 2,000 and invest when the kids have no food.”
(Kt-IDI_F-180831-0209)
.....

..... “ “
“The problems become more than the money!”
(Tu-FGD_Mix-180730-1256)
.....

The fact that there can only be one recipient per household contributes to this problem and causes transfers to be spread thinly across different needs. One example is the young mother raising disabled twins and only receiving PWSD-CT for one of them. The transfer is not enough to cater for both children’s needs, and because the children require constant attention and care, the mother cannot seek employment opportunities. The cash transfer thus becomes the only source of income for the three of them. This is a general issue with the PWSD-CT, since the transfer has to support both the direct recipient and the caregiver.

In Turkana an issue emerged related to the coverage of cash transfers. According to the FGDs, the targeting of the HSNP (or “lopetun” as the local communities refer to it) is perceived as arbitrary and unfair, since all households are poor and in need of assistance. Respondents frequently voiced that they do not understand how some households are selected. The registration of all Turkana households for the occasional upscale of the HSNP seems to have created further confusion.

Some expressed their frustration and confusion not understanding why they did not receive a transfer despite being enrolled:

..... “ “
“We were just registered in plenty, but when it came to the expected coming of the assistance, it never came.”
(Tu-IDI_F-180727-1039)
.....

As a result of the overall confusion of the selection process and the notion of everybody being in need of support, beneficiary households reported sharing their transfers with others in the extended family or the wider community who themselves do not benefit.

Respondents talked about severe delays in cash transfer payments, which has adverse consequences from three main perspectives. First, it undermines households’ ability to invest transfers:

..... “ “
“I will talk of the programs for the aged and orphaned children, the money comes late and when you had planned to buy a goat, you will not be able to buy. By the time the money comes, you have already incurred so many debts that it exceeds the money and so you cannot save the money and buy a goat.”
(Kt-FGD_M-180906_2253)
.....

Even though some teachers are willing to “credit” school fees, regular school attendance is jeopardized if schools send the children away due to unpaid school fees. Medical treatment may also be stalled if the transfers do not arrive on time. Second, transfer payment arrears make it difficult to plan, since households do not know when they will receive the next payment. While these delays may seem like a mere inconvenience,

they force households to resort to adverse coping strategies: they must borrow, sell their livestock or assets, skip meals, or skip treatment. Even if households have managed to invest a part of the cash transfers, these investments can quickly deplete if transfers only arrive with a couple of months delay. Thus, many of the positive outcomes associated with cash transfers, such as resilience and avoidance of negative coping strategies, or investments in human capital and productive assets, are hampered by such delays. Respondents reported having already spent the late transfers by the time they had arrived, and once all incurred debts are repaid, nothing remains.

In rural Kitui and Turkana, and to a lesser extent in urban Kakamega, respondents mentioned the cost of accessing benefits as a major drawback of NSNP. Since most transfers are disbursed in cash, and only a few central locations are identified as pay points, those who live in more remote areas have to incur substantial transportation fees in order to travel to the disbursing agent. Depending on the distance and mode of transport, respondents quoted amounts up to 1,000 KES for travelling to the disbursement point (Kt-IDI_F-180829_0124). Such costs are a substantial burden given a monthly transfer value of 2,000 KES. In Turkana, where distances are especially vast and transportation difficult, some of the elderly have to spend the night before disbursement day at a guesthouse, adding to the overall costs (Tu-FGD_Mix-180731-0936).

A further challenge associated with the disbursement raised by respondents was the long queuing on payment days. Since there is one day appointed as payment day for all of the programs under the NSNP umbrella, all recipients have to queue up together. This not only presents substantial opportunity costs for beneficiaries, but puts great strain on the elderly, caregivers of small children, or those with illnesses or disabilities. Anecdotes of wazee²¹ fainting or even dying during the day-long queues have emerged in several

interviews and FGDs, for example in this discussion in Kakamega:

..... “ “

“I am talking on the side of wazee ... the day of going to receive those monies, so many people die in the queue; someone queues from the morning till evening. [...] I suggest that they find a way how they will be giving the money because there are so many people and staying on the queue whilst other old mothers are not able to queue.”

(Ka-FGD_F-1351-01)

.....

Respondents also frequently mentioned the imperfect working of the biometric identification based on fingerprints at the disbursement point. Fingerprints are sometimes rejected by the machine, which means that beneficiaries cannot collect the money they are entitled to.

Because some of the data in Kitui county was collected after the county had switched to payments through the banking system, a clear difference in respondents' experiences is observable between the old and the new mode of disbursement. Respondents who started receiving the transfers via bank accounts have expressed their contentment with this change and indicated that the costs associated with accessing the money have dropped dramatically. Across the four counties, respondents expressed their wish for the transfers to be distributed either via the banking system or through mobile banking such as M-Pesa.

Unintended consequences of cash transfers have also emerged from the data. Some respondents reported tension and conflict in the household or in the community as a result of how the transfers are targeted. In Turkana, the selection of beneficiaries is perceived as arbitrary and unfair, causing jealousy or

21 Swahili term for elderly people

feelings of being left out of something they deserve among non-beneficiaries. Those who do not benefit often ask NSNP recipients for loans, but these loans are not always returned because of the perception that beneficiaries get something for free that everybody should receive. Intra-household division was also reported in Kitui and Turkana as a result of disputes between husbands and wives on how to spend cash transfers:

..... “ ”

“Everyone wants the money. It brings division in the family.”

(Kt-FGD_F-1630-01)

.....

Household barriers

The literature identifies household characteristics that can influence the way cash transfers are used. Some of these characteristics may act as barriers to productive investments and the consequential third-order outcomes of cash transfers. The findings suggest that human capital and the composition and labor capacity of the household have far-reaching implications in Kenyan households’ ability to achieve lasting change with the help of cash transfers.

The way cash transfers are targeted in Kenya, it is likely that recipient households face some sort of labor constraint due to their composition. Children, people with severe disabilities, and the elderly are typically the groups constrained in their labor capacity. Their presence in the household may also limit the labor capacity of those household members taking care of them. For example, a mother of two disabled children explained that she has no time for income generating activities, because her children require constant attention (Ka-IDI_F-1245-01). Another mother of a disabled child said that she could barely leave the house, as full-time caregiving is her task (Ka-IDI_F-1717-02). Single parents may also have to juggle the time spent on income earning activities or on their children’s development to make ends meet. Household composition can also affect

educational attainment. As explained by respondents in Kisumu, many young women do not continue with their schooling because they have small children to take care of. According to interviews and FGDs conducted in this urban location, early pregnancy stands in the way of human capital accumulation and employment of much of the Kenyan youth. In Turkana, where households are typically larger, respondents indicated that the transfers get particularly diluted as they are shared among many members.

Various sub-themes related to households’ human capital and the prevailing socio-cultural norms emerged from the transcripts. Women in Kakamega town reported that some men do not to see the need for their wives to attend the clinic or give birth in a medical facility, which poses a health hazard for both expectant mothers and babies. In some communities, knowledge about recommended hygiene, health and infant feeding practices is not widespread, as explained by caregivers of young children in Kakamega and Kitui counties. Youth respondents in Kisumu also highlighted financial literacy and entrepreneurship skills, which are important in whether and how money will be invested in small businesses. Low formal education attainment further limits employability: not many stable employment opportunities are available for low-skilled workers. On the other hand, the competition for high-skilled jobs is also reported to be fierce.

Respondents in rural areas, most prominently in Kitui and Turkana counties, reported using cash transfers to invest in livestock or their own farm production. Yet, this presumes the ownership of land. Households then purchase seedlings or farming tools thereby boosting their productive capacity, or they acquire livestock. A respondent in Kakamega reported feeling disadvantaged because her household did not own land, and explained how she is either forced to pay expensive market prices for maize, or rent someone else’s shamba for money (Ka-IDI_F-1107-04). Households with no land and no business ownership prior to transfer receipt have little opportunities to

invest and thereby boost their productivity, thus remaining reliable on the distress sale of their labor.

Local and national barriers

Wider contextual factors (at the local and national level) interact with the use of cash transfers. Some examples are identified in the literature and presented in our analytical framework, many of which have also emerged during the interviews and FGDs. While some barriers surfaced across all interview locations, others present unique challenges for local communities, signaling the diverse realities of households across the various regions of Kenya.

The state of the labor market and the lack of productive and stable employment opportunities were consistently pointed out as major obstacles to escaping poverty for current and future generations alike. Respondents voiced the overall lack of jobs, particularly formal and reliable jobs, across all four sampled counties. In Kisumu, where employment opportunities were central in both in-depth interviews and FGDs, participants linked the issue of unemployment to overpopulation – simply more people living in the city than what the economy can provide jobs for. Across all sample sites, respondents characterized the labor market as immensely competitive and corrupt. Tribalism and nepotism also emerged as forms of discrimination in the labor market. Respondents felt that unless they belong to the same tribe as the employer, they have little chance when applying for a job. One FGD discussant depicted the situation as needing one of two “gate passes” to enter the labor market – either nepotism or bribing:

..... “ “
 “The issue of gate pass is either the person inside or the money you have in hand. So, it’s either you buy your chance or you have someone inside”
 (Ki-FGD_M-1133-01)

During discussions with the youth in Kisumu, some specific challenges of the urban youth in seeking employment have emerged, such as the sexual exploitation of women. A respondent in Kisumu described it as follows:

..... “ “
 “Most of them are being sexually abused. They are told, you will be my secretary, yes, but you have to give out what you have. And you can’t give out cash, so you give your body to the regime.”
 (Ki-IDI_F-1000-01)

In the absence of reliable jobs, young people in Kisumu have to resort to casual work (jua kali) such as running errands, fetching water, or cleaning. Others try running their own small businesses of selling boiled eggs, matumba, fuel or used clothing. Frequent thefts (perceived by respondents as a result of poverty) make these small businesses risky and vulnerable. As a coping strategy, young women may engage in prostitution. With no perspective for an education or formal employment, respondents said that much of the youth in Kisumu develops an addiction to drugs or alcohol, which then traps them in a vicious cycle.

The agro-ecological context and related covariate shocks are particularly challenging households in Kenya’s ASAL regions. In Kitui and Turkana, where the majority of the population relies on agriculture or livestock holding, the unproductive lands and failing rains make it very difficult to cope. In Kitui, it was reported that at times of drought households barely make ends meet and cover their food needs with casual jobs: “we suffer a lot because we depend largely on farming” (Kt-IDI_F-180902-0934). Rains, on the other hand, can be severe and accompanied by heavy floods, which makes it difficult to work on the farms or even destroys the plantation. According to participants of an FGD in Kisumu, heavy rains also make it impossible to run their small businesses such as kiosks. In Turkana, floods

are reported to be so heavy that they destroy the canals and cut communities off from roads and markets. A further challenge hindering agricultural production and the construction of infrastructure is the spread of *prosopis*²², an invasive shrub tree, which destroys plantations and even canals and roads – “*prosopis has refused to part with people*” (Tu-FGD_Mix-180730-1256).

Infrastructural issues exacerbate the agro-ecological context described above. Respondents pointed out that the lack of irrigation and water systems further undermines their agricultural and livestock production in Kitui and Turkana counties. In Kitui, some respondents mentioned an irrigation project that was started but stopped, and expressed their wish for the irrigation system to be constructed. In Turkana, participants also indicated that improving the water infrastructure of the county would help them progress with their livelihoods.

Mostly in the remote communities of Kitui and Turkana, but also in Kakamega, the bad quality of the road infrastructure was identified as a barrier to access basic services. The bad road quality combined with vast distances contribute to high transportation costs to collect cash transfers thereby diluting their value. Mothers in Kakamega indicated that the poor road infrastructure contributes to the high number of home births, as the roads are dangerous at night and drivers might refuse to take them or charge more than they can afford. An FGD participant described the situation as follows:

“Sometimes it’s in the night and you are unable to walk in the wee of the night, so what befalls you is either death or life. Your fate is fifty-fifty because when it is dark

you cannot walk.”

(Ka-FGD_F-1723-01)

Even if households want to prioritize spending on social services, supply-side issues and de facto accessibility may prevent them in doing so. Respondents were asked about the challenges they face in accessing essential social services such as education and health. With respect to education, school fees were consistently mentioned as the number one barrier. While primary education is free, secondary schools charge fees that pose a substantial burden on poor households. The amount varies depending on the location and type of school (e.g. normal or boarding school) but is reportedly much higher than what the cash transfers could cover. Some respondents mentioned children in their households receiving some form of school bursary to cover the costs, but school fees are a recurring problem for the majority.

Access to healthcare is highly unequal across Kenya, and this is well reflected in the experiences respondents shared in interviews and FGDs. First, healthcare facilities are mainly available in larger towns or county centers, which makes access for the populations in remote areas very difficult (due to the road and transportation issues discussed above). Respondents repeatedly expressed their wish for hospitals to be closer to them. Second, treatment or drugs can be prohibitively expensive, causing some households not to seek treatment or resort to inferior treatments or drugs. Third, even if treatment in the public hospital is free, stark differences in the quality of treatment between public and private institutions were mentioned. An FGD participant in Kakamega shared the story of losing three children during birth because of not being attended by doctors at the public

22 *Prosopis juliflora* is an invasive shrub tree introduced by international agricultural organizations in Kenya during the 20th century in hope that it would address drought and safeguard/restore the natural vegetation (Mwangi and Swallow, 2005). Today, the plant is understood to be detrimental to the growth of other plant species, and is demanding in water and the soil’s nutrient capacities. It is also associated with adverse health effects among livestock grazing on the plant (Mwangi and Swallow, 2005).

hospital in Butere (Kakamega) but returning home with a healthy child when she delivered the fourth in the private hospital called Mission (Ka-FGD_F-1351-01). Participants in another FGD raised similar concerns that nurses and doctors do not attend mothers in public hospitals (Ka-FGD_F-1323-01). Fourth, some respondents reported having experienced the shortage of drugs they needed and being forced to purchase inferior medication for themselves or their children.

Local markets and prices influence respondents' ability to benefit from cash transfers in various ways. In Kitui, several interviewees recalled a recent spike in sugar prices, which lowered the purchasing power of the cash transfers. Also in Kitui, some farmers complained that the local prices for their produce have dropped so much that they hardly make a living even after harvest. With little market integration of remote areas, these farmers cannot access those markets where they could make a profit with selling their crops.

5.8 Complementing cash with other types of support

While the central government manages the NSNP, county governments and development partners can implement additional social

protection interventions that complement the national cash transfer programs. Focusing on four flagship programs, we analyze whether and how additional forms of support can enhance the productive impacts of cash transfers and reduce the vulnerabilities of recipient households by interacting with household- and local-level barriers and enablers. We look at whether there are synergies among cash and complementary services; and whether Cash Plus programming has helped households translate first-order outcomes into longer-term gains. Although presumably all counties have some kind of complementary programs, the subsequent analysis focuses on four flagship programs, which resonate well with the general bottlenecks and challenges of social protection in Kenya and fit in the Government's strategic vision:

- the 'Imarisha Afya ya Mama na Mtoto' program in Kakamega county;
- the Nutrition Improvements through Cash and Education from Kitui county;
- the CAP Youth Employment Project in Kisumu city;
- and the Asset Creation program currently implemented in 16 ASAL counties (and sampled in Kitui and Turkana for this study).



5.8.1 Imarisha Afya ya Mama na Mtoto in Kakamega

Kakamega County's flagship maternal healthcare program is the Imarisha Afya ya Mama na Mtoto, a conditional cash transfer seeking to increase poor women's attendance of skilled delivery and pre- and post-natal care services. The main objective of this conditional cash transfer program is to increase poor women's attendance of skilled delivery and pre- and post-natal care services. The Imarisha program has been designed as a Cash Plus intervention to remove demand-side barriers that exist at the household and local levels. The cash transfer is conditional on attending four ante-natal health check-ups, delivering in a skilled facility, and attending four post-natal growth monitoring and immunization services. The Imarisha program also contains integral program elements of BCC and sensitization. When attending medical services, beneficiary mothers



The **cash transfer** enabled and motivated mothers to pay for transportation, which would otherwise have been a prohibiting factor

receive counseling on recommended health-, hygienic and infant feeding practices.

Benefits of the program

During FGDs, participants were asked to describe the role and benefits of the program. Mothers (both beneficiaries and non-beneficiaries of Imarisha) shared the view that the program has helped protect the lives of both infants and mothers by removing some of the barriers of utilizing health services. The increase in deliveries at medical facilities was seen as a major achievement of the program, which was perceived by participants to be a result of the cash transfer and the removal of user fees at public institutions. The cash transfer enabled and motivated mothers to pay for transportation, which would otherwise have been a prohibiting factor:



“This Oparanya Care²³ program helps us reduce these challenges. When a mother is expectant and already has this money, when labor starts, she can use that money for transport and be able to give birth at the hospital. This will have saved the life of the child.”

(Ka-FGD_F-1351-01)

As husbands sometimes do not see the need for women and children to attend medical facilities, and can actively prevent it, the conditional cash transfer strengthens the bargaining position of women. It empowers them because they do not have to rely on money from the household head to pay for transport as mentioned by an FGD participant:



“When man goes out, you can get of the house quickly and board a motorbike to the child hospital because you have money. You are able to get where the clinic is and be attended.”

(Ka-FGD_F-1351-01)

When asked about their personal experiences with pregnancy and young motherhood, in-depth interview respondents also confirmed what was reported in FGDs. Not having to pay a service fee and avoiding the transportation and opportunity costs has allowed

23 The population often refers to the program as “Oparanya Care”, named after Kakamega County’s governor who initiated the program.

them to start utilizing healthcare services. One respondent who participated in the program specifically said that she would have given birth at home if she had not been enrolled (Ka-IDI_F-1635-05). Attending health visits, giving birth in a medical facility and immunizing children was highly valued by the respondents. Throughout FGDs and in-depth interviews, participants gave concrete examples of how healthcare services can support the safe development and protect the health of mother and child. For instance, screening for HIV during the ante-natal visits can help prevent transmission to the child (Ka-FGD_F-1351-01); monitoring helps the early discover of any illness, which means it can be treated in time (Ka-IDI_F-1520-04, Ka-IDI_F-1717-02); and vaccinations improve resilience to disease among children (Ka-IDI_F-1242-03).

Respondents who participate in both the NSNP and the Imarisha program reported utilizing the two cash transfers differently, signaling that the two transfers are not fungible. While the NSNP is used to meet every day basic needs, the first Imarisha transfers are reported to be spent on transport to the hospital, and to cover the immediate costs of having a newborn in the household (e.g. nutrition, clothing, diapers etc.). The later payments are spent on acquiring livestock as a form of saving for the child, or are invested in small businesses such as selling sugar, kerosene, or bananas in kiosks. Among those who only participate in the Imarisha program, but not in the NSNP, all transfer payments were spent on feeding and clothing the newborn child, with little room for making productive investments.

Respondents said that the Behavior Change Communication (BCC) and sensitization elements of the program brought about positive change from various aspects. First, as one respondent put it, *“it has made so many mothers to know the hospitals”* (Ka-FGD_F-1351-01), where doctors and nurses explained the importance of attending monitoring and immunizing children. Second, lessons on infant feeding practices helped mothers take good care of their infants and minimize the effects of household- and local-level barriers such as low levels of human capital and some socio-cultural norms. In reflection on the communication and education elements of the program, respondents expressed their appreciation of the knowledge gained:



“Even those who have university education, and the mother who has never attended school, we have been subjected to equal knowledge through this program.”

(Ka-IDI_F-1717-02)

.....

Many respondents echoed the notion that the nutrition lessons taught them how to feed the children:



“The Oparanya Care money has dragged so many mothers out of the village to come to the hospital and get lessons on how they can take care of their kids and balanced diets. So many mothers did not know how to feed infants, but now when this money has come and they are being taught, they can buy their infants a balanced diet.”

(KA-FGD_F-1351-01)

These statements reveal a further synergy between cash (be it from NSNP or “Oparanya Care”) and BCC. The knowledge on infant feeding practices and health acquired in the education module has altered the products that are purchased with the cash transfer. Receiving the cash transfer allowed mothers to purchase the goods they have been told infants need.

Challenges of the program

Respondents were also asked about any challenges they have experienced with the program. Despite the overwhelmingly positive experiences and perceptions, some issues emerged during the discussions, mostly related to registration, targeting and payments.

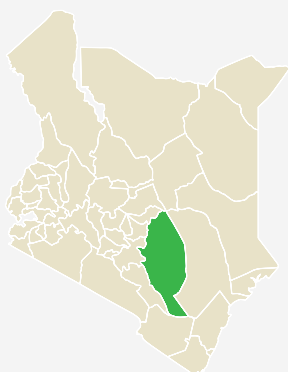
Registering with the program can be difficult, as mothers have to travel to the clinic where the registering clerk is stationed. Some explained that they had to go multiple times for the registration, because the clerk was not available at the time. This has significantly increased the costs of application. With respect to targeting, the selection criteria are deemed unclear or arbitrary, which is indeed a risk of proxy means-tests according to the literature. Some respondents felt that mothers in need of support were left out while other, better off applicants have been included into the program. Respondents also reported that rejected applicants were not informed about the rejection, and therefore kept waiting for the payments.

The challenge with payments voiced by participants was the timing. While on the one hand it is reasonable that the cash is disbursed following the health visits they are conditional on, it may be difficult for women to cover the costs of transportation upfront. Some reported the payments coming much later than anticipated, making it very challenging for mothers to meet the costs of attending clinics and the basic needs of the newborn child.



Registering with the program can be difficult, as mothers have to travel to the clinic where the registering clerk is stationed.

Respondents noted a difference between the quality of services provided at public and private hospitals. Given that the Imarisha program is implemented in public hospitals, understaffing and low quality of services presumably remains a challenge to be solved to further enhance the positive outcomes for mothers and infants.



5.8.2 Nutrition Improvements through Cash and Health Education (NICHE) in Kitui

Benefits of the program

FGD participants were asked to discuss the role and benefits of the NICHE program in the wider community, while in-depth interview respondents shared their personal experiences with benefitting from NICHE. In the community, respondents attributed an overall improvement of how mothers are able to take care of their orphaned children.

According to the discussion with women participating in the program, they have received comprehensive education on issues such as infant feeding practices, hygiene, clothing, health care and even farming, that is how to produce diverse foodstuffs for a balanced diet. Advice on budgeting helped them prioritize the needs of the child and plan better with the cash transfers.

Improved food security and more balanced diets are second-order outcomes mentioned by all interviewed beneficiaries. It was reported that the nutrition education had direct impacts on how mothers prepared food, for example by resorting to exclusive breastfeeding until the infant is six months old or cooking porridge without milk. Further, they received an understanding on what a balanced diet encompasses, an easy-to-grasp example of which is the 5 food groups (“Shika Tano”) cited by nearly all respondents. The lessons did not only provide knowledge on what and how to prepare, but also taught participants about producing some of these food groups in their homes by planting in sacks – presumably increasing the likelihood that second-order outcomes of food intake will last.



This familiarity with basic infant feeding practices (e.g. exclusive breastfeeding, the importance of dietary diversity in later stages of development), however, was also held by respondents who did not participate in NICHE. These mothers explained that local Community Health Volunteers taught them about the nutrition needs of young children.

The reduction of illness among young children was reported as a major benefit of the program. Because they are taught about

how to provide a balanced diet for their infant and what hygienic practices are necessary, mothers have observed their children falling sick less frequently and less seriously. For instance, this FGD participant described this the following way:

““

“Children have stopped being sick because we are taking care of them.”

(Kt-FGD_F-1630-01)

The top-up to the CT-OVC provided by NICHE has been primarily used to meet the specific needs of a young child, for example purchasing food, clothing and medication. Further, respondents reported buying seedlings and other farming inputs to implement the planting techniques they have been taught to ensure a balanced diet.

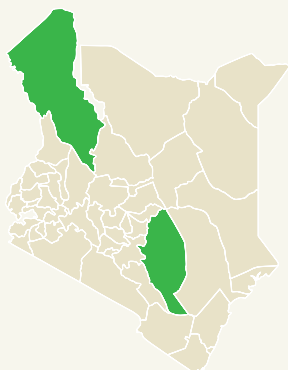
The additional cash forms an important synergy with the CT-OVC: it ensures that the basic necessities for the infant’s early development can be purchased even if the regular cash transfers have to be spread across many household needs. Similar to what was observed in the Imarisha program in Kakamega, a two-way relationship between the BCC and the cash components appeared. The knowledge acquired through the seminars and home-visits has shaped the way cash transfers are spent; and receiving the cash transfer allowed mothers to purchase the goods and services they learned about. Participants reported sharing the knowledge they gained with non-beneficiary mothers in the community or in their chamas, which signals that the positive impacts of the program may extend beyond the scope of its direct target group.

Challenges of the program

There were no major program challenges reported during interviews and FGDs. Some issues that have emerged, such as the distance travelled to disbursement points, are related to the implementation of the CT-OVC rather than NICHE itself. A few respondents expressed their wish for the cash top-up to be increased so it can meet a wider set of needs. One interviewee and participants of an FGD shared their experience of incurring transportation costs to attend the BCC seminars but not being refunded for it, despite being promised.



Image Caption style, Rum es exerian dipsaperum libus, odi dolorerum



5.8.3 Asset Creation Programs in Kitui and Turkana

Benefits of the program

In both Kitui and Turkana, respondents were asked about the most important challenges they experience in making ends meet and improving their situations. Communities in these ASAL areas depend on agriculture or livestock herding for their livelihoods, which is difficult given the unfavorable agro-ecological conditions and the low level of road and water infrastructure. Unproductive lands, droughts or floods, and no access to water systems severely limit households' productive capacity and food sources. The household assets created in both locations correspond to the local barriers identified by respondents; they aim to make the land more productive and the crops more resilient to climate. For example, in Kitui county, interviewed households were involved in the digging of zai pits and farm ponds, which capture water and are meant to offset some of the adverse consequences of unreliable rains. Others mentioned the creation of terraces, the planting of fruit trees, and the construction of roads. In Turkana, respondents recalled the establishment of potato and pepper farms, water drilling, removal of prosopis and the creation of community assets such as canals and stores.



Besides the creation of physical assets, beneficiaries gained extensive knowledge of modern farming techniques, entrepreneurship skills and financial literacy. This knowledge is suitable for countering various household-level barriers such as low levels of human capital or lack of access to financial services. Farming techniques also empower agricultural workers to reduce the challenges posed by the agro-ecological context. Communities participating in the Asset Creation programs were encouraged to form chamas and Community Based Organizations, which then received training on saving and credit schemes. A respondent from rural Kitui explained that these activities have tightened community bonds and fostered social capital among members, because even neighbors did not know each other before cooperating in the CFA program (FGD-M-180703-1340-01). These capacity-building activities form an important synergy with cash, as the human, social and financial capital acquired allows for better planning and investment of the money.

Asset Creation program participants receive a cash transfer in Kitui county and an in-kind food transfer in Turkana county. In Kitui, respondents value the cash they receive as it allows to meet their everyday needs even when their agricultural activities do not provide them with a regular source of income. A synergy between the cash and the on-farm activities was consistently mentioned

during discussions, namely, that foregone earnings of working on the farm are compensated for. A male Asset Creation participant in Kitui explained this as follows:

““

“The two work together in this aspect: these monies support us when we are working on our farms and we have nowhere else to get a source of income to sustain our lives. Those monies create hope and confidence when one is working on his shamba because they are assured at the end of the day they will receive some money.”

(Ki-IDI_M-180929-1047)



Receiving the **food rations** is essential in order to be able to work on the farms, as otherwise hunger would hamper the labor capacity

In principle, respondents in Turkana had the same perception of the food rations, with the difference that they have little opportunities to substitute income with casual labor. Receiving the food rations is essential in order to be able to work on the farms, as otherwise hunger would hamper the labor capacity:

““

“When some place gets wet with good volumes of water, you go intending to clear bushes; hunger weighs you down, it makes you unable to clear that place. You go back and leave it standing there with prosopis. Hunger chases you back.”

(Kt-FGD_M-180703-1340-01)

Spill-over effects to the wider community were reported in both Kitui in Turkana. When asked whether everyone can reap the benefits of the program, or only specific groups of the community, respondents identified three main platforms for spill-overs. First, the transfer or acquired knowledge; second, the ability to engage in casual labor on the farms of CFA participants; and third, the increase in availability of local produce to purchase at reasonable prices. In Turkana county, it was also reported that food rations are shared with the extended family or neighbors.

In Turkana, beneficiaries expressed their view that the Asset Creation program was critical for their mere survival. Stories of long-term changes or transformative impacts, however, did not emerge from the conversations – the benefits of participation were mainly seen as the reduction of hunger and suffering that food

distribution or crop yields brought about. A possible interpretation is that the many overlapping dimensions of deprivation and the compounding structural barriers in Turkana require even more comprehensive sets of policies to achieve long-term transformative change. Respondents in Kitui, a county that is less severely burdened by poverty and ecological shocks and is better integrated into the country's economy, perceived the changes brought about by these assets as truly transformative:



“This program has helped us in improving our ways of living, because it has taught us the best methods of farming, how to keep our livestock and thus improving our lives.”

(Kt-FGD_M-180703-1340-01)

”

While most third-order outcomes associated with Asset Creation will take time to materialize, it is worth highlighting farmer households' reduced vulnerability to the agro-ecological shocks in Kitui. The diversification and/or stabilization of livelihood sources are expected to facilitate gains in human capital for the next generation.

Challenges of the program

Some structural barriers existing at the local and national level limit the productive gains from the Asset Creation program. These challenges are potentially too large to be addressed by a Cash Plus intervention and require large-scale interventions and various inter-sectoral policies. An issue often mentioned by respondents was the lack of market access to sell produce. Many of the beneficiaries of Asset Creation programs depend on agriculture for their livelihoods, but the vast distances and bad roads to markets, or the low purchasing power within the communities make it difficult for them to sell what they have yielded. The lack of irrigation systems is another example of local-level barriers that are beyond the scope of such programs.



Many of the beneficiaries of Asset Creation programs depend on agriculture for their livelihoods

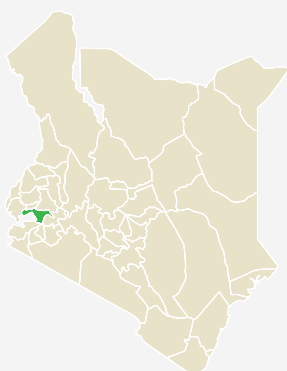
In the FGDs, respondents were also asked to explain how labor and other household tasks are distributed within the household when work on the assets is required. While the distribution of work between men and women in a household is generally equal, the labor requirement may present a challenge for women as they are still required to fulfill household tasks:



“Of course, there are other chores at home because she is the one who is supposed to prepare food, so even if she comes back at 6:00 p.m. she knows very well she is supposed to prepare food.”

(Kt-FGD_M-180703-1340-01)

According to FGD participants, in female-headed households (or households where the male head is constrained in his labor capacity), women are especially burdened by the accumulation of responsibilities.



5.8.4 CAP-YEI in Kisumu City

Benefits of the program

Interview and FGD participants were asked to reflect on the challenges of the youth in finding stable employment in Kisumu city, and the potential of training programs such as CAP-YEI in addressing them. The overall lack of jobs and widespread corruption reportedly stand in the way of formal employment, while the lack of human, physical and social capital, insecurity, and competition make entrepreneurship difficult. In such an economic context, current and former participants of CAP say that it has helped them overcome the challenges of finding stable employment or starting a business. The strength of the program is that teaching revolves around employers’ needs and trains students in fields that are in high demand. While some former students expressed a wish for broadening the courses on offer, they agreed that the current training programs are likely to facilitate access to the labor market. Besides the strictly vocational material, respondents particularly valued the so-called “life skills” such as financial literacy, communication, management and entrepreneurial trainings.

During in-depth interviews with former CAP-YEI participants, respondents were asked to reflect on how they make ends meet compared to other young people who did not attend the program. As demonstrated by the following quote from an in-depth interview, former participants see their situation as better than those who did not complete such a training:



“For someone or for that person who have not gone through CAP, I can say—and if I compare him or her with me, it is very easy for me to get

clothing, food and healthcare because CAP has helped me so far. I can easily go to a hospital and treat myself for I am doing a job and I have what is in a hospital. I can use it to treat myself like NHIF card, I can use to treat myself in hospital. But for that person who has not gone through CAP and has no job, it is difficult for that person because they must look for money to take them to hospital which is not very easy as compared to me.”

(Ki-IDI_M-1001-01)

.....

Respondents who participated in CAP-YEI also reported having changed their livelihood strategies after finishing the program. Previously, most of them were idle or relied on casual jobs that did not provide a reliable source of income. After finishing the training course, respondents reported having more stability in their livelihoods, either in employment or by starting their small businesses with the help of the business skills acquired.

Challenges of the program

An important limitation of CAP-YEI is that it hardly fits the criteria for a ‘Cash Plus’ program, since it is not linked to any form of cash transfer. Kenya has no cash transfer program that targets the vulnerable youth. Fees for attending the courses are said to be minimal by respondents, but there are undoubtedly opportunity costs related to program attendance: participants cannot earn a living during the months in school. Participation in similar training programs could potentially be increased by introducing a cash transfer that could minimize the effect of foregone earnings in this period.

A further challenge experienced by current and former students at CAP-YEI was the lack of start-up capital to launch their businesses. Even though youth funds do exist in Kenya, there seems to be no strong linkages between opportunities to acquire capital (or credit) and training institutions. The lack of such synergies can undermine the complementarity of the existing interventions, and ultimately harm the extent to which long-term productive impacts can be achieved via entrepreneurial activities.



CHAPTER SIX

A THEORY OF CHANGE

This paper had a dual objective: to quantify the relationship between non-contributory social protection transfers and productivity in the context of Kenya; and to identify when and how complementary programming can increase investments in human and productive capital. Based on our findings, this chapter introduces a Theory of Change of how cash transfers and Cash Plus can induce increases in productivity.

6.1 Summary of findings

To estimate the rates of return to expenditure on NSNP cash transfers, a dynamic microsimulation model was created using representative household survey data. The model looked at the long-term increase in per capita household income associated with cash transfer receipt. Within a period of fifteen years, the Rate of Return to investing in NSNP would remain negative but would increase gradually over time (possibly turning positive over a longer timeframe). This signals that cash transfers are indeed an investment in people, which over time accumulate returns at the micro-level. Notably, the returns measured as increased income through the channel of education is a stark underestimate. In reality, the pathways between social protection and economic growth are much more diverse and complexly intertwined. Still, the modest results highlight the decisive role of the context in which programs operate. Similar investments in Cambodia, Lesotho and Uganda showed positive RoR under a shorter timeframe. Moving away from national averages and looking at disaggregated impacts for various population groups, we find different results. This further supports the importance of external factors in mediating outcomes.

Context matters – this also became clear from analyzing qualitative data collected from recipients of cash and Cash Plus programs. While the wish to invest cash was echoed by respondents, several barriers hamper households' ability to yield long-term impacts from being covered by the programs. Some of these barriers are internal to the cash transfer

(either its design or implementation), for example low benefit adequacy and delayed or difficult access to the benefit. Others relate to the wider local or national context, such as the infrastructure, the overall labor market or the agro-ecological environment. Barriers were also identified at the household-level, predominantly as limited capital of various forms – including financial, social, human or labor capital. The four case studies have demonstrated how complementing cash with other types of support can effectively help households to tackle some of these barriers. However, it also became clear that Cash Plus itself cannot remove all constraints, and wider sectoral policies (e.g. in the domains of education, health) are required to create an environment that enables households to invest in their productivity.

6.2 A Theory of Change for complementary programming

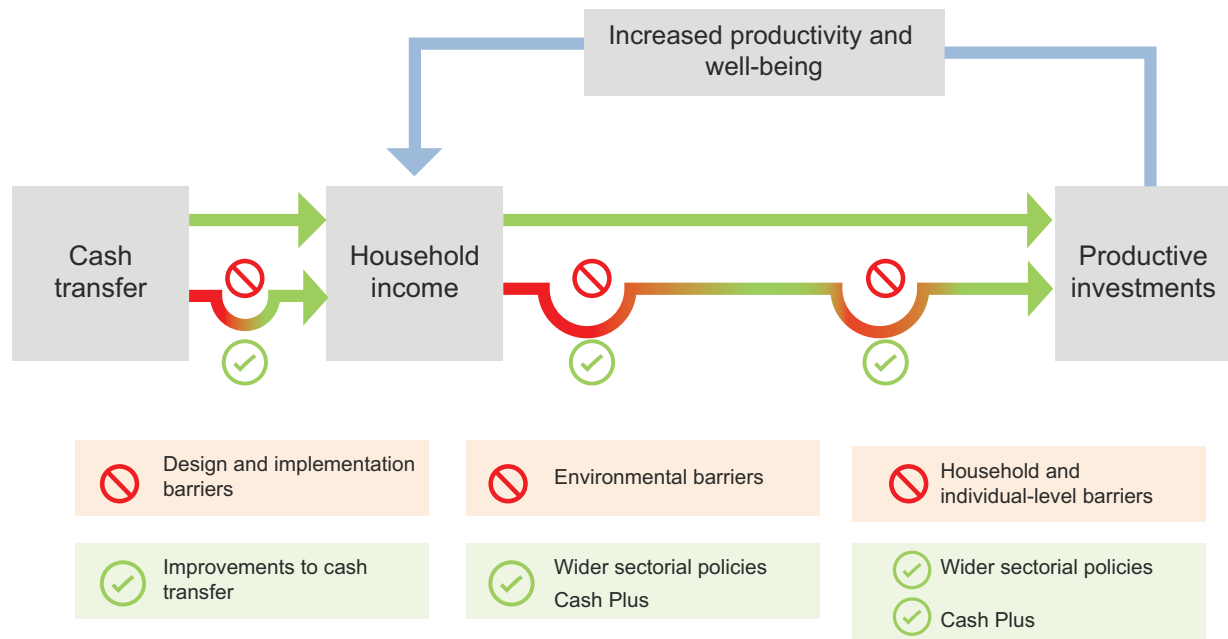
To maximize the productive impacts of social protection programs, they have to be designed and implemented in a way that interacts with the specific barriers that exist in the given context. There are a range of policy options to increase the long-term productive impacts of cash transfers – what is the most appropriate depends on the context and the barrier to be addressed.

Figure 14 summarizes the role of programming options, including Cash Plus, in facilitating the long-term productive impacts of cash transfers. The upper green arrow illustrates the “ideal” pathway without barriers. By raising household income and thus purchasing power, cash transfers enable households to make productive investments. This increases their productivity and well-being, as well as household income over the longer term. The lower red and green arrows illustrate this pathway in the presence of barriers. Due to design and implementation barriers, cash transfers may fail to raise household income enough to make productive investments. Fine-tuning the cash transfer program is the optimal answer to avoid such barriers. Even

if cash transfers reduce households' budget constraints, various barriers in either the wider context or at the household-level may hamper productive investments or their returns. In such cases, a careful analysis of the nature

of barriers is needed to determine if wider sectoral policies, Cash Plus programming or a combination of them is the most appropriate answer.

Figure 14 Theory of Change



Source: own elaboration

Designing and delivering cash transfers in a way that maximizes impact are not easy tasks. Hence, barriers to impact maximization can be internal to the cash transfer itself. These can be resolved by improving the design or the implementation of the program. In Kenya, the key challenges with NSNP transfers are the low benefit values and the frequent and lengthy delays in transfer delivery. If the objective of NSNP is not merely to reduce poverty among beneficiaries, but also to induce long-term changes in recipient households' productivity, both of these issues should be addressed.

Social protection programs do not operate in a vacuum. Thus, even the most perfectly designed and implemented cash transfer will yield limited returns if the conditions are unfavorable. Wider (inter)-sectoral policies play a critical role, because the presence and quality of various services determine how cash transfers can be spent. Infrastructure, markets,

education and health care are some of the key areas to consider when the goal is to increase the population's human capital. Functioning labor markets (including employment and entrepreneurship opportunities) are equally essential because this is where individuals will translate the accumulated human capital into livelihoods. According to our analysis, gaps in the road-, market- and water-infrastructure are key barriers that Kenyan households face. Moreover, the lack of productive employment, precarious work and corruption hamper long-term income security. Policies aimed at strengthening the labor market and creating entrepreneurship opportunities are essential in Kenya and cannot be replaced by Cash Plus programming. Yet, there is considerable room for Cash Plus to reduce environmental or local barriers. They can be a viable option to facilitate access to already developed external services, such as education and health care by waiving user fees or adding

top-ups conditional on service utilization for beneficiaries. The Government's ongoing effort to provide all NSNP beneficiaries with an NHIF card is a good example of this approach. Moreover, Cash Plus initiatives such as the Asset Creation program can reduce the negative consequences of co-variate shocks (e.g. related to climate change) by creating resilience-building community assets and local infrastructure.

If cash transfers are well designed and operated, and other sectoral policies are in place, household- and individual-level factors

will be decisive in how benefits are used. Cash Plus as a programming option has great potential to address barriers that exist at the micro-level, particularly those stemming from low levels of physical, human and social capital. Demonstrative of this potential is the NICHE program in Kitui, where Behavior Change Communication attached to the CT-OVC program increases mothers' knowledge on how to nurture their children. The conditional cash top-up ensures that selected beneficiaries would indeed attend these sessions and that they had additional money to invest in the specific needs of their children.



CHAPTER SEVEN

LESSONS LEARNT AND RECOMMENDATIONS

Kenya has made remarkable progress in expanding and improving its social protection system over the last decade. Social cash transfers are essential, but not sufficient to secure the country on the path of inclusive socio-economic development. The importance of both further investments in social protection, and strengthening other sectorial policies is recognized in the Government's development strategy. Focusing on the priority areas of the Big Four Agenda would create an enabling environment for households to invest in their future, which can be further accelerated by creating cross-sectoral synergies with social protection programs.

Cash transfers provided through the NSNP programs have positive effects on households' human capital development and livelihoods, but the magnitude of the effect depends on the context within which a household lives. The study focused on four cash-plus programs aimed at different target groups and implemented in different counties. The analysis clearly showed that the impact of cash transfers can be improved with the provision of additional services. It also showed that the provision of services alone is not as effective as in combination with cash. Hence, there are clear linkages and synergies between the provision of cash and additional services.

Context clearly matters, such as the infrastructure, the overall labor market or the agro-ecological environment. While the overall effect on education was positive but small, the analysis has shown that program impacts are considerably larger in areas where the returns to education are higher. This means that households implicitly or explicitly assess the likelihood of a child to find decent work after completing education. The investments in human capital are higher in areas with better labor market conditions. This finding implies that there is an important role for the government to create conditions conducive for the development of labor market opportunities, which goes beyond the provision of cash transfers and related services to poor households.

Similarly, the effect of cash transfers on nutrition depends on the agro-ecological context. Effects are large in areas affected by droughts. This shows that cash transfers are very important in safeguarding a minimum level of consumption in households vulnerable to climate shocks. The analysis also revealed that communication matters. Beneficiaries can be steered towards the intended use of the cash by clearly stating the program objectives. For example, the CV-OVC, which is explicitly provided for the use of children, has a larger impact on education compared to the HSNP, which has no specific child-focus.

Despite the positive effects of cash transfers either as stand-alone or in combination with additional services, the study identified several barriers that limit the effectiveness of the current programs. Barriers are related to the design and implementation of NSNP, constraints in the household and barriers related to the wider context. Cash transfers alone cannot achieve their full potential if they are treated in silo. The productive impacts can be enhanced by extending the program scope, its design and delivery, the use of additional services to address specific barriers and by combining the programs with investments in education, health, labor markets and infrastructure. The next sections discuss policy options, which are deemed critical for further enhancing the impact of cash transfers on current and future productivity in Kenya.

7.1 Invest in scaling up the National Safety Net Program

Social protection is a human right recognized in the Constitution of Kenya, and a tool for enhancing inclusive socio-economic development featured in the Vision 2030 strategic plan. These documents foresee the implementation of a life-cycle approach to social protection, ensuring that all citizens of Kenya have access to support when facing poverty-related risks throughout their lives. Although access to social protection has improved considerably over the last decade, a substantial group of poor and vulnerable

households is not covered by any scheme. Filling these gaps is essential from both human rights-based and human capital investment perspectives. Moreover, current NSNP benefits are hardly adequate and barriers to access are substantial. Hence, we propose the following measures:

7.1.1 Increase the coverage of children, moving towards a universal child grant

The lack of social protection coverage during childhood is perhaps the most pressing gap in the Kenyan social protection system. Children are among the most vulnerable groups of the population, since they depend on their environment to fulfill their needs. Children experience poverty differently from adults, and deprivations at a young age are likely to cause irreparable damages to their cognitive, social and emotional development. This is a concern from a human rights perspective, but there is also a strong economic case for reducing child poverty. There is a wide body of evidence on how social protection can effectively fight child poverty and be beneficial to child development and productivity (see the literature review in Chapter 2) through the accumulation of human capital. Indeed, our microsimulation analysis has demonstrated that these findings hold in the Kenyan context: receiving cash transfers increase children's school attainment, which eventually translates into higher household earnings. Over time, the investment in cash transfers will yield positive returns.

Hence, the NSNP should be extended to all children in need of support. The Social Protection Investment Plan, currently under finalization, envisions the gradual transformation of the CT-OVC program into a more inclusive child grant. According to this plan, the coverage of cash transfers would first be extended to cover children with disabilities, followed by a categorical child grant for all children under the age of six. At a later stage,

older children would be added to the program, with the eventual target of supporting all children up to the age of 18 by 2030. If the Government of Kenya succeeds in mobilizing the political and financial support to back this proposal, it can have great impacts on the well-being and productivity of current and future generations.

7.1.2 Improve the adequacy, design and delivery of cash transfers

The analysis has shown that the current NSNP is not as effective as it could be. Several barriers have been identified that relate to the design and implementation of the program. Based on the experiences of interviewed beneficiaries, the following steps will be critical to further enhance existing social cash transfers' impact on productivity:

- **Increase the adequacy of cash transfers** to allow households to invest after meeting their immediate basic needs. A possible solution is to move towards variable monthly benefit values based on household composition in order to increase the adequacy of transfers. For example, transfer values could be adjusted to the number of household members to provide higher transfers to families with multiple orphaned children or disabled members, or to cover not only the direct target group but also their caregivers.
- **Regularly index transfer values to account for inflation.** As consumer prices increase over time, the amount of goods and services that can be purchased with a set nominal amount (say, two thousand shillings) will gradually decrease. As a minimum, transfer values should be annually indexed to protect their purchasing power. Currently, only the HSNP takes inflation into account²⁴.

24 From the four NSNP transfers. The value of the Asset Creation remuneration also takes real prices into account.

- Move cash transfers to the recurrent budget to ensure the predictable and timely delivery of transfers.** Currently, NSNP transfers are financed through the Development Budget, which is not executed with the same regularity as the Recurrent Budget. Moving cash transfers to the Recurrent Budget would be a sensible move, as these payments are periodic expenditures just like public wages or pensions. Making cash transfers part of the Recurrent Budget would ensure that they are delivered when they are supposed to. Reducing delays would help avoid debt accumulation and allow households to plan and make investments.
- Remove barriers to accessing cash transfers by investing in (mobile) banking.** Long queues and large distances to travel are associated with current payment modalities, which bring about substantial opportunity costs and dilute the purchasing power of transfers. Good examples of reducing such costs are the mobile banking delivery system used in the Imarisha program in Kakamega, or the recent introduction of payments through the banking system in Kitui. However, it is important to ensure that the new delivery modality does not exclude any households. Introducing more service points may also increase accessibility.
- Simplify the registration process.** In some cases beneficiaries had to travel multiple times to the registration point, for example because the clerk was not available. This significantly increases the costs of application and may lead to exclusion due to non-take up of benefits.
- Invest in monitoring and evaluation.** Not all programs are evaluated. For example, the data collected in the context of the Imarisha program does not allow for a robust impact evaluation. Although our findings indicate that the program has positive effects, they cannot be quantified. Another issue concerns the program administration. Although the

government is currently investing in unified data base, it remains challenging to access the information and use it for policy monitoring and analysis. Finally, in order to facilitate the regular evaluation of the NSNP and other social protection interventions, close collaboration with the Kenya National Bureau of Statistics is recommended. The KIHBS is the key data source to analyze poverty, livelihoods and the performance of social protection programs. By ensuring that all programs are duly covered in the questionnaire, the data become even more useful for policy analysis.

7.2 Strengthen the linkages between cash transfers and complementary services to enhance outcomes

This study has shown how additional forms of support can enhance the productive impacts of cash transfers and reduce the vulnerabilities of recipient households by interacting with household- and local-level barriers and enablers.

7.2.1 Enroll all NSNP recipients in the National Health Insurance Fund.

The Government of Kenya aims to provide all citizens with access to health services. NSNP recipients are gradually enrolled in the National Health Insurance Fund. For the realization of complementarity between social protection and health care, it is important that the enrollment of NSNP beneficiaries into the NHIF system is fully implemented.

7.2.2 Offer counselling and other nutrition education to all CT-OVC recipient mothers with young children.

Both, the Imarish Afya ya Mama na Mtoto program and the NICHE program target (expecting) mothers with young children. Both programs provide (additional) cash in combination with other mother-and-child related health and nutrition services. Both programs generated positive outcomes with

respect to health and nutrition of mothers and infants. The cash transfer allows mothers to pay for transportation to health care facilities and to purchase the goods and services, which are beneficial for their children. Nutrition education, counselling and other sensitization elements have direct impacts on how mothers take care of their children or prepare food, for example by resorting to exclusive breastfeeding until the infant is six months old. The knowledge on infant feeding practices and health acquired in the education modules and home visits has also shaped the way cash transfers are spent.

7.2.3 Provide cash top-up for pregnant women and mothers with young children in CT-OVC households.

Although counselling, nutritional education and sensitization elements are very effective in promoting the health and nutrition of young children, the analysis has shown that the additional cash provided in the NICHE program, or in the case of Imarisha beneficiaries that also received NSNP transfers, is essential for the actual application of the acquired knowledge. The additional cash forms an important synergy with the CT-OVC: it ensures that the basic necessities for the infant's early development can be purchased even if the regular cash transfers have to be spread across many household needs. The top-up to the CT-OVC provided by NICHE has been primarily used to meet the specific needs of a young child, for example by purchasing food, clothing and medication. The analysis has also shown that mothers distinguish between NSNP transfers and the additional cash provided through the two Cash Plus programs. While the NSNP transfer is used to meet every day basic needs, the additional transfers are spent on transport to the health care facilities and to cover the additional costs incurred by a newborn in the household (e.g. nutrition, clothing, diapers etc.). Once the immediate needs are covered, payments are used to acquire livestock or to invest in small businesses. Among those who only participate

in the Imarisha program, but not in the NSNP, all transfer payments were spent on feeding and clothing the newborn child, with little room for making productive investments.

7.2.4 Expand the cash-for-asset creation programs in counties that are susceptible to environmental risks.

Asset Creation program participants receive a cash transfer in Kitui county and an in-kind food transfer in Turkana county. The household and community assets created in both locations address local barriers with the aim to make the land more productive and the crops more resilient to climate. Besides the creation of physical assets, beneficiaries gained extensive knowledge of modern farming techniques, entrepreneurship skills and financial literacy. This knowledge is suitable for countering various household-level barriers such as low levels of human capital or lack of access to financial services. Farming techniques also empower agricultural workers to reduce the challenges posed by the agro-ecological context. Cash-for-Asset programs create synergies between cash and (small scale) environmental risk management. The cash allows participants to meet their everyday needs even when their agricultural activities do not provide them with a regular source of income. Cash has also the advantage of compensating participants for foregone earnings of working on the farm. Food, on the other hand, has the direct benefit of addressing hunger, but it provides little opportunities to substitute for other income or engage casual workers. The benefits of participating in food-for-asset programs are primarily the reduction of hunger, while the cash-for-asset program is more effective in reducing farmer households' vulnerability to agro-ecological shocks. Expanding asset-creation programs in areas susceptible to environmental risks can reduce households' vulnerability to covariate shocks and eliminate some of the barriers for productive investments.

7.2.5 Invest in the creation and training of chamas and other community-based organization.

Communities participating in the Asset Creation programs were encouraged to form chamas and Community Based Organizations, which then received training on saving and credit schemes. These activities have tightened community bonds and fostered social capital among members. Capacity-building activities form an important synergy with cash, as the human, social and financial capital acquired allows for better planning and investment of the money in both households and the community. Moreover, spill-over effects benefit the wider community through transfer of the acquired knowledge, the ability to engage in casual labor on the farms of CFA participants, and the increase in local produce. Facilitating easy access of such groups to credit could lead to more investments by members. Chamas could potentially also serve as platforms to deliver other services, including community sensitization, behavior change communication or training to achieve specific policy objectives.

7.2.6 Provide cash transfers to participants of youth training programs and explicitly link existing youth funds to these programs.

Investing in the capacity and skills of youth is important. Appropriate training programs such as CAP-YEI help participants in finding stable employment or starting a business. The strength of the program is that teaching revolves around employers' needs and trains students in fields that are in high demand. Although attendance fees are minimal, opportunity costs can be substantial given that participants cannot earn an income during the months in school. Participation in similar training programs could be increased by offering students with a stipend, which would minimize the effect of foregone earnings in this period. A further challenge experienced by current and former program participants is the lack of start-up capital after completion of the training. Even though youth funds exist in Kenya, there are no strong linkages between

opportunities to acquire capital (or credit) and training institutions. The lack of such synergies undermines the complementarity of the existing interventions, and ultimately harm the extent to which long-term productive impacts can be achieved via entrepreneurial activities.

7.3 Increase the productive potential of social protection interventions by investing in other sectors

Even if cash transfers reduce households' budget constraints, various barriers in the wider country context limit the possibilities for productive investments of the transfers and their returns. Hence, other sector policies are needed to strengthen the impact of both cash and cash-plus programs.

For example, some structural barriers existing at the local and national level limit the productive gains from the Asset Creation program. These challenges are too large to be addressed by a Cash Plus intervention and require large-scale interventions and various inter-sectoral policies. An issue often mentioned is the lack of market access to sell produce. Many program beneficiaries depend on agriculture for their livelihoods, but the vast distances and bad roads to markets, or the low purchasing power within the communities make it difficult for them to sell what they have yielded. The lack of irrigation systems is another example of local-level barriers that are beyond the scope of such programs.

The Government of Kenya provides a range of basic services other than social protection, which play important roles in enhancing citizens' well-being and productivity. Vision 2030 and the Big Five Agenda emphasize health care, education and employment as key strategic issues to bring Kenya on the path of inclusive growth. Managing the increasingly frequent and severe environmental risks – such as drought and floods – is another priority area for reducing the population's vulnerability and the threats to further development. Both the international evidence and our findings highlight these areas as decisive in long-

term positive change through human capital investments. Cross-sectoral complementarities between social protection and other services can magnify their combined impacts. It goes beyond the scope of this study to identify all possible policy areas that could contribute to further strengthening the outcomes for the population of Kenya in general and of the NSNP and other social protection interventions. Some ideas, which directly derive from our findings are mentioned below.

Provide universal basic health services for mothers and infants, such as ante- and postnatal visits, delivery in health facilities, vaccinations and infant health visits free of charge. The removal of the hospital fees is an essential component of the increase in attended deliveries in the Imarisha program. **Invest in the quality of health facilities and staff in public health care facilities.**

Respondents noted a difference between the quality of services provided at public and private hospitals. Understaffing and low quality of services in public hospitals remains a challenge to be solved to further enhance the positive outcomes for mothers and infants. Infrastructural investments should be made to ensure that everyone can access hospitals, that care in public facilities is of adequate quality, and that basic drugs are available in even the more remote parts of the country. **Train local Community Health Volunteers** to teach (expecting) mothers about the nutrition needs of young children across the country.

Remove tuition fees for secondary or vocational schools. School-related expenses remain one of the major challenges in households with children. Policy reforms in the education sector can reduce some of the costs and barriers that prevent vulnerable

households from accessing education. For instance, removing tuition fees at the secondary or vocation school level could facilitate access to education beyond the primary level. Additional forms of support, for example school-meals, have been implemented in Kenyan schools over the last years. The planned **expansion of home-grown school feeding** is highly recommended, since it can contribute to pupil's food security, reduce the pressure on household budgets (including on cash transfers), reduce the opportunity cost of attending school, and even boost local food production.

Invest in active labor market policies meeting the needs of the local economic context (such as the CAP-YEI training program). These programs have potential to increase youth employability and entrepreneurship. The lack of productive employment opportunities for those of working age, especially the youth, is an important threat to the sustained economic development of the country. Youth unemployment and precarious work, including in urban areas, is high across Kenya. Yet, the availability of programs for people of working age is limited. Although some programs in support of the employment of the youth exist (CAP-YEI is one of many), they operate in silo, and there is no apparent link between them and, for example, NSNP.

Creating complementarities for specific outcomes using Cash Plus. The Government and its development partners should consider Cash Plus options to address specific local challenges. Following the devolution of many Government functions, and the need for context-specific complementary programming, it would be sensible to operate Cash Plus programming at the sub-county level.

REFERENCES

- Ahmed, A. U., & Shams, Y. (1994). Demand Elasticities in Rural Bangladesh: An Application of the AIDS Model. *The Bangladesh Development Studies*, 22(1), 1-25.
- Ahmed, A., Hoddinott, J., Roy, S., Sraboni, E., Quabili, W. and Margolies, A. (2016). Which kinds of social safety net transfers work best for the ultra-poor in Bangladesh? Operation and impacts of the Transfer Modality Research Initiative. Dhaka: IFPRI and WFP.
- Alderman, H. & Yemtsov, R. (2012). Productive Role of Safety Nets, Background Paper for the World Bank 2012-2022 Social Protection and Labor Strategy. Social Protection and Labor Discussion Paper No. 1203. Washington, D.C.: The World Bank.
- Anríquez, G., Daidone, S., & Mane, E. (2013). Rising food prices and undernourishment: A cross-country inquiry: A Methodological Note on the Micro-Analysis of Undernourishment. *Food Policy*, 38, 190-202. <https://doi.org/10.1016/j.foodpol.2012.02.010>
- Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parmenté, J., Shapiro, J., Thuysbaert, B. & Udry, C. (2015). A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science* 348(6236).
- Barrientos, A. (2012). Social protection and growth: What do we know? What do we need to find out? *World Development* 40(1) p.11-20.
- Barrientos, A. (2013). *Social assistance in developing countries*: Cambridge University Press.
- Barrientos, A., and Scott, J., 2008. *Social Transfers and Growth: A Review*. BWPI Working Paper 52. Manchester: Brooks World Poverty Institute.
- Bastagli, F., Hagen-Zanker, J., Harman, L., Barca, V., Sturge, G., Schmidt, T. & Pellerano, L. (2016). Cash transfers: what does the evidence say? A rigorous review of programme impact and the role of design and implementation features. London: ODI.
- Baulch, B. (2011). The medium-term impact of the primary education stipend in rural Bangladesh. *Journal of Development Effectiveness*, 3(2), 243-262. <https://doi.org/10.1080/19439342.2011.570449>
- Berhane, G., & Hirvonen, K. (2018). Designing social protection programs. IFPRI book chapters, 154-160.
- Berti, Peter R. 2012. "Intrahousehold Distribution of Food: A Review of the Literature and Discussion of the Implications for Food Fortification Programs." *Food and Nutrition Bulletin* 33 (3_suppl2): S163-S169.
- Blattman, C., Green, E. P., Jamison, J., Lehmann, M. C. & Annan, J. (2016). The returns to microenterprise support among the ultra-poor: A field experiment in post-war Uganda. *American Economic Journal: Applied Economics* 8(2), p. 35-64.
- Blattman, C., Jamison, J. C. & Sheridan, M. (2017). Reducing Crime and Violence: Experimental Evidence from Cognitive Behavioral Therapy in Liberia. *American Economic Review*, 107(4), p.1165-1206.
- Cecchini, S., Robles, C. and Vargas, L. H. (2012). *The Expansion of Cash Transfers in Chile*
- Chakravarty, S., Lundberg, M., Nikolov, P., & Zenker, J. (2017). Vocational training programs and youth labor market outcomes: Evidence from Nepal (No. 2017-056).
- Cherrier, C., Gassmann, F., Mideros Mora, A., Mohnen, P. (2013). Making the investment case for social protection. Office of Research Working Paper WP-2013-06. Florence: UNICEF.
- Dary, O., & Imhoff-Kunsch, B. (2011). Guide to Estimating Per Capita Consumption of Staple Foods Using Household Income and

-
- Expenditure Survey (HIES) Data. Retrieved from https://www.spring-nutrition.org/sites/default/files/a2z_materials/508_guide_estimating_per_capita_consumption.pdf
- Davis, B., Daidone, S., Handa, S., Park, M., Osei Darko, R., & Osei-Akoto, I. (2014). The Impact of the Ghana's LEAP Programme. IPC-IG One Pager No. 271. Brasilia: IPC-IG.
- De Groot, R., Palermo, T., Handa, S., Ragno, L. P. & Peterman, A. (2017). Cash Transfers and Child Nutrition: Pathways and Impacts. *Development Policy Review* 35(5), p. 621-643.
- Deaton, Angus, and John Muellbauer. 1980. "An Almost Ideal Demand System." *The American Economic Review* 70 (3): 312-326.
- Deaton, Angus. 1997. *The Analysis of Household Surveys: A Microeconomic Approach to Development Policy*. Baltimore, MD: Published for the World Bank [by] Johns Hopkins University Press.
- Devereux, S., & Sabates-Wheeler, R. (2015). Graduating from social protection? Editorial introduction. *ids Bulletin*, 46(2), 1-12.
- Devereux, S., Sabates-Wheeler, R., Slater, R., Tefera, M., Brown, T., & Teshome, A. (2008). *Ethiopia's Productive Safety Net Programme (PSNP): 2008 Assessment Report*. IDS, Sussex.
- Dietrich, S. & Schmerzeck, G. (forthcoming). Cash Transfers and Nutrient Intake in Africa: Missing the Link. Manuscript.
- Dietrich, S., Gassmann, F., Röth, H., Tirivayi, N. (2016). Estimation of rates of return (RoR) on social protection investments in Lesotho. Maastricht: Maastricht Graduate School of Governance & UNU-Merit.
- Dietrich, S.; Malerba, D.; Barrientos, A. & Gassmann, F. (2017a). Welfare weights and the evaluation of antipoverty transfer programmes. Maastricht: UNU-Merit & MGSOG.
- Dietrich, S.; Malerba, D.; Barrientos, A.; Gassmann, F.; Mohnen, P.; Tirivayi, N.; Kayuma, S. & Matovu, F. (2017b). Social protection investments, human capital, and income growth: Simulating the returns to social cash transfers in Uganda. UNU-Merit Working Paper 2017-029. Maastricht: UNU-Merit & MGSOG.
- Eberwein, Julia Dayton, Jakub Kakietek, Davide de Beni, Grainne Moloney, Audrey Pereira, Jonathan Kweku Akuoku, Marjorie Volege, Sicily Matu, and Meera Shekar. 2016. "An Investment Framework for Nutrition in Kenya."
- FAO/INFOODS. (2012). *Guidelines for Food Matching* Version 1.2.
- FAO/WHO/UNU. (2002). *Human Energy Requirements*.
- Fiedler, John L., Keith Lividini, Odilia I. Bermudez, and Marc-Francois Smitz. 2012. "Household Consumption and Expenditures Surveys (HCES): A Primer for Food and Nutrition Analysts in Low-and Middle-Income Countries." *Food and Nutrition Bulletin* 33 (3_ suppl2): S170-S184.
- Gachigi, J. (2018). Status of Social Protection in Kenya. Presentation held in Nairobi on the 5th of February 2018.
- Gakidou, Emmanuela, Ashkan Afshin, Amanuel Alemu Abajobir, Kalkidan Hassen Abate, Cristiana Abbafati, Kaja M. Abbas, Foad Abd-Allah, Abdishakur M. Abdulle, Semaw Ferede Abera, and Victor Aboyans. 2017. "Global, Regional, and National Comparative Risk Assessment of 84 Behavioural, Environmental and Occupational, and Metabolic Risks or Clusters of Risks, 1990-2016: A Systematic Analysis for the Global Burden of Disease Study 2016." *Lancet* 390 (10100): 1345-1422.
- Galasso, Emanuela, Adam Wagstaff, Sophie Naudeau, and Meera Shekar. 2016. "The Economic Costs of Stunting and How to Reduce Them." Policy Research Note World Bank, Washington, DC.
- Government of Kenya (2016). *Vision 2030*. Nairobi: Government of Kenya.

-
- Government of Kenya (2017a). Social Protection Sector Review. 3rd Draft. Nairobi: GoK.
- Government of Kenya (2017b). Budget Statement for the Fiscal Year 2017/18. Nairobi: GoK.
- Gupta, A., Taylor, E., Davis, B., Pellerano, L., & Niang, O. (2016). Long-term impacts of poverty programs: a local economy cost-benefit analysis of Lesotho's Child Grants Programme. Selected Paper prepared for presentation at the 2016 Agricultural & Applied Economics Association Annual Meeting, Boston, MA July 31-August 2.
- Handa, S., Natali, L., Seidenfeld, D., Tembo, G., Davis, B., & Zambia Cash Transfer Evaluation Study Team. (2018). Can unconditional cash transfers raise long-term living standards? Evidence from Zambia. *Journal of Development Economics*, 133, 42-65.
- Handa, S., Peterman, A., Seidenfeld, D. & Tembo, G. (2016). Income transfers and maternal health: Evidence from a national randomized social cash transfer program in Zambia. *Health Economics* 25(2), p.225-236.
- Haushofer, J. & Shapiro, J. (2018). The Long-Term Impact of Unconditional Cash Transfers: Experimental Evidence from Kenya. Working Paper. Retrieved from: http://jeremypshapiro.com/papers/Haushofer_Shapiro_UCT2_2018-01-30_paper_only.pdf
- Hoces de la Guardia, F., Hojman, A., & Larrañaga, O. (2011). Evaluating the Chile Solidario program: results using the Chile Solidario panel and the administrative databases.
- IFPRI (2015). Statistics of Public Expenditure for Economic Development (SPEED) dataset. Available at: <http://www.ifpri.org/publication/statistics-public-expenditures-economic-development-speed>
- Imarisha Afya ya Mama na Mtoto Program (2017). Documentation of Lessons Learned. Final Report. Kakamega: Imarisha Afya ya Mama na Mtoto Program Office.
- IFPRI and Kenya Medical Research Institute. 2011. "The Kenya National Micronutrient Survey 2011." <http://www.nutritionhealth.or.ke/wp-content/uploads/Downloads/The%20Kenya%20National%20Micronutrient%20Survey%202011.pdf>.
- Kenya National Bureau of Statistics, Ministry of Health, National AIDS Control Council, Kenya Medical Research Institute, National Council for Population and Development, & The DHS Program ICF International (2015). Kenya Demographic and Health survey 2014. Nairobi: Kenya National Bureau of Statistics. Available at: <https://dhsprogram.com/pubs/pdf/fr308/fr308.pdf>
- Khandker, S., Gayatri, B. K. & Samad, H. 2009. Handbook on Impact Evaluation: Quantitative Methods and Practices. The World Bank. <http://elibrary.worldbank.org/doi/book/10.1596/978-0-8213-8028-4>.
- Kilburn, K., Handa, S., Angeles, G., Tsoka, M., & Mvula, P. (2018). Paying for Happiness: Experimental Results from a Large Cash Transfer Program in Malawi. *Journal of Policy Analysis and Management*, 37(2), 331-356.
- Kimetrica (2017). Kenya Social Protection Mapping, Coordination and Capacity Assessment. Nairobi: UNICEF Kenya.
- Kitui County Government (2017). Service Charter for the NICHE Pilot Project. Kitui: Kitui County Government & Maghakos County Government.
- Kugler, A. & Rojas, I. (2018). Do CCTs improve employment and earnings in the very long-term? Evidence from Mexico. Working Paper 24248. Cambridge: National Bureau of Economic Research.
- Kuss, M. K., Llewellyn, P. and Gassmann, F. (2018). The economic impacts of a social pension on recipient households with unequal access to markets in Uganda. UNU-Merit

Working Paper No. 2018-006. Maastricht: UNU-Merit & Maastricht Graduate School of Governance.

Leroy, J. L., Gadsden, P., Rodríguez-Ramírez, S., & Cossío, T. G. de. (2010). Cash and In-Kind Transfers in Poor Rural Communities in Mexico Increase Household Fruit, Vegetable, and Micronutrient Consumption but Also Lead to Excess Energy Consumption. *The Journal of Nutrition*, 140(3), 612–617. <https://doi.org/10.3945/jn.109.116285>

Lukmanji, Z., Hertzmark, E., Mlingi, N., Assey, V., Ndossi, G., & Fawzi, W. (2008). Tanzania food composition tables. MUHAS-TFNC, HSPH, Dar Es Salaam Tanzania. Retrieved from https://www.researchgate.net/profile/Godwin_Ndossi/publication/265627809_Tanzania_Food_Composition_Tables_Compiled_by_links/5419a5080cf2218008bf990d.pdf

Maitra, Rammohan, A., Ray, R., & Robitaille, M.-C. (2013). Food consumption patterns and malnourished Indian children: Is there a link? *Food Policy*, 38, 70–81. <https://doi.org/10.1016/j.foodpol.2012.10.004>

Manley, J. & Slavchevska, V. (2017). Are Cash Transfers the answer for child nutrition in Sub-Saharan Africa? A Literature Review. Manuscript. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/dpr.12346/full>

Merttens, F., Hurrell, A., Marzi, M., Attah, R., Farhat, M., Kardan, A., & MacAuslan, I. (2013). Kenya Hunger Safety Net Programme Monitoring and Evaluation Component. Impact Evaluation Final Report. Oxford Policy Management.

Mideros, A., Gassmann, F., & Mohnen, P. (2016). Estimation of rates of return on social protection: ex ante microsimulation of social transfers in Cambodia. *Journal of Development Effectiveness*, 8(1), 67–86.

MoLSP (2018). Website of the Ministry of Labour and Social Protection: <http://www.labour.go.ke/>

Moltedo, A., Troubat, N., LoKESin, & Sajaia, Z. (Eds.). (2014). *Analyzing Food Security Using Household Survey Data: Streamlined Analysis with ADePT Software*. The World Bank. Retrieved from <http://elibrary.worldbank.org/doi/book/10.1596/978-1-4648-0133-4>

Molyneux, M. (2016). Can cash transfers have ‘transformative’ effects? *The Journal of Development Studies* 52(8), p.1087-1098.

Morgan, D. L. (1988). Focus groups as qualitative research. *Qualitative Research Methods Series Vol.16*. Thousand Oaks: SAGE Publishing.

Murray, Christopher JL, Majid Ezzati, Alan D. Lopez, Anthony Rodgers, and Stephen Vander Hoorn. 2003. “Comparative Quantification of Health Risks: Conceptual Framework and Methodological Issues.” *Population Health Metrics* 1 (1): 1.

Mwasijaji, W. (2015). Scaling up Cash Transfer Programmes in Kenya. IPC-IG One Pager No. 286. Brasilia: IPC-IG.

National Academy of Sciences. (2017). DRI Values Summary. Retrieved from <http://nationalacademies.org/HMD/Activities/Nutrition/SummaryDRIs/DRI-Tables.aspx>

OPM, (Oxford Policy Management), & IDS, (Institute of Development Studies). (2012). Kenya Hunger Safety Net Programme Monitoring and Evaluation Component: Quantitative Impact Evaluation Report 2009/10 to 2010/11.

Pace, N., Daidone, S., Davis, B., Handa, S. Knowles, M. & Pickmans, R. (2017). One plus one can be greater than two: Evaluating synergies of development programmes in Malawi. *The Journal of Development Studies Online*, DOI: 10.1080/00220388.2017.1380794

Parker, S. & Vogl, T. (2018). Do Conditional Cash Transfers improve economic outcomes in the next generation? Evidence from Mexico. Working Paper 24303. Cambridge: National Bureau of Economic Research.

-
- Phadera, L., Michelson, H., Winter-Nelson, A., & Goldsmith, P. (2019). Do asset transfers build household resilience?. *Journal of Development Economics*.
- Roelen, K., & Devereux, S. (2018). Money and the Message: The Role of Training and Coaching in Graduation Programming. *The Journal of Development Studies*, 1-19.
- Roelen, K., Devereux, S., Abdulai, A., Martorano, B., Palermo, T. & Ragno, L. P. (2017). How to Make 'Cash Plus' Work: Linking Cash Transfers to Services and Sectors, Innocenti Working Paper 2017-10, UNICEF Office of Research, Florence.
- Roelen, K., Devereux, S., & Kebede, D. (2017). Evaluation of the UNICEF Social Cash Transfer Pilot Programme in SNNPR, Ethiopia. Midline Report Final.
- Roelen, K., Devereux, S., Kebede, D., & Ulrichs, M. (2017). Cash'plus'-Integrated Nutrition and Social Cash Transfer (IN-SCT) Pilot in Ethiopia: perceptions and feedback from clients and service providers.
- Sabates, R., Bhutoria, A., Sabates-Wheeler, R., & Devereux, S. (2018). Schooling responses to income changes: Evidence from unconditional cash transfers in Rwanda. *International Journal of Educational Research*, 93, 177-187.
- Sabates-Wheeler, R. & Devereux, S. (2011). Transforming livelihoods for resilient futures: how to facilitate graduation insocial protection programmes. IDS Working Paper No.23. Brighton: IDS.
- Sandford, J., Merttens, F., Pearson, R., Riungu, C. & Sabates-Wheeler, R. (2018). Hunger Safety Net Programme. Evaluation of the Kenya Hunger Safety Net Programme 2. Strategic Policy Review. Nairobi: NDMA, UKAID, AUSAID & OPM.
- Saville, N. M., Claro, R. M., Levy, R. B., Bandoni, D. H., & Mondini, L. (2010). Per capita versus adult-equivalent estimates of calorie availability in household budget surveys. *Cadernos de Saúde Pública*, 26(11), 2188-2195.
- Saville, N. M., Shrestha, B. P., Style, S., Harris-Fry, H., Beard, B. J., Sen, A., ... & Paudel, P. (2018). Impact on birth weight and child growth of Participatory Learning and Action women's groups with and without transfers of food or cash during pregnancy: Findings of the low birth weight South Asia cluster-randomised controlled trial (LBWSAT) in Nepal. *PloS one*, 13(5), e0194064.
- Seidenfeld, D., Handa, S., Tembo, S., Michelo, S., Harland Scott, C. and Prencipe, L. (2014). The Impact of an Unconditional Cash Transfer on Food Security and Nutrition: The Zambia Child Grant Programme. Brighton: IDS.
- Shrestha, B. P., Style, S., Harris-Fry, H., Beard, B. J., Sen, A., & Paudel, P. (2018). Impact on birth weight and child growth of Participatory Learning and Action women's groups with and without transfers of food or cash during pregnancy: Findings of the low birth weight South Asia cluster-randomised controlled trial (LBWSAT) in Nepal. *PloS one*, 13(5), e0194064.
- Shuka, Z., Strupat, C., Burchi, F. & Alemu, G., Bedi, A. S. (2017). The Joint Effects of a Health Insurance and a Public Works Scheme in Rural Ethiopia. IZA Discussion Paper No. 10939. Bonn: IZA.
- Slater, R., Wiggins, S., Harman, L., Ulrichs, M., Scott, L., Knowles, M., Pozarny, P. & Calcagnini, G. (2016). Strengthening coherence between agriculture and social protection. Synthesis of seven country case studies. PtoP report. Rome: FAO.
- Slater, Rachel, and Elvin Nyukuri. 2016. "Strengthening Coherence between Agriculture and Social Protection. Kenya Country Case Study Report." <http://www.fao.org/3/a-i5295e.pdf>.
- Social Protection Secretariat (2017). Social Protection Investment Plan. Nairobi: SPS.
- Social Protection Secretariat (n.d.). National Safety Net Program Website. <http://www>.

socialprotection.or.ke/national-safety-net-program

Taylor, J. E., Thome, K., Filipinski, M. & Davis, B. (2014). Productive Spillovers of Social Cash Transfers. A Local Economy-wide Impact Evaluation (LEWIE) Approach. Rome: International Policy Centre for Inclusive Growth.

Taylor, J. Edward, Justin Kagin, Mateusz Filipinski, Karen Thome, and S. Handa. 2013. "Evaluating General Equilibrium Impacts of Kenya's Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC)." Department of Agricultural and Resource Economics, University of California, Davis.

Taylor, J.E. & Filipinski, M. (2014). Beyond Experiments in Development Economics: Local Economy-wide Impact Evaluation. Oxford: Oxford University Press.

Thome, K., Taylor, J. E., Davis, B., Handa, S., Seidenfeld, D. & Tembo, G. (2014). Local economy-wide Impact Evaluation (LEWIE) of Zambia's Child Grant Programme. PtoP Report. Rome: FAO & World Bank.

Thome, K., Taylor, J. E., Tsoka, M., Mvula, P., Davis, B. & Handa, S. (2015). Local Economy-wide impact evaluation (LEWIE) of Malawi's Social Cash Transfer (SCT) Programme. PtoP Report. Rome: FAO.

Tirivayi, N., Knowles, M. & Davis, B. (2016). The interaction between social protection and agriculture: a review of the evidence. Global Food Security Vol. 10., p.52-62.

Touré, L. and Escot, F. (2018). Analyse des dynamiques sociales et des pouvoirs des parties prenantes pour la mise en place de Transferts Monétaires à Usage Multiple (TMUMP) pluriannuels au Nord Mali. Préparé pour le Cadre Commun des Transferts Sociaux (CCTs) au Mali. Bamako : Miseli.

Treasury (2018). Medium-Term Budget Policy Statement. Nairobi: Treasury.

UNDP (2013). Kenya's Youth Employment Challenge. UNDP Discussion Paper Series. New York: UNDP. Available at: [http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Kenya_YEC_web\(jan13\).pdf](http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Inclusive%20development/Kenya_YEC_web(jan13).pdf)

UNDP (2016). Human Development Report 2016. Briefing note for countries on the 2016 Human Development Report - Kenya. New York: UNDP. Available at: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/KEN.pdf

Unicef (2017). Cash Plus in Practice: Integrating nutrition and access to services in the PSNP in Ethiopia. Retrieved from: <https://transfer.cpc.unc.edu/wp-content/uploads/2017/11/Cash-Plus.pdf>

UNICEF (2017). Nutrition Improvements through Cash and Health Education (NICHE) in Kitui county and selected borders of Kitui in Machakos county. Implementation design and communication plan. Nairobi: UNICEF.

Unicef. (2018a). A Cash Plus Model for Safe Transitions to a Healthy and Productive Adulthood: Baseline Report. Retrieved from https://www.unicef.org/tanzania/Tanzania_Adolescent_Cash_Plus_-_Baseline_Report_-_April_2018.pdf

Unicef. (2018b). Tanzania Youth Study of the Productive Social Safety Net (PSSN) Impact Evaluation: Endline Report. Retrieved from https://www.unicef-irc.org/publications/pdf/Endline_report_final_for_web.pdf

USDAUSDA Food Composition Databases. Retrieved October 10, 2017, from <https://ndb.nal.usda.gov/ndb/search/list>

Van Kesteren, F., Gassmann, F., Dekker, M., Obadia, M., Timar, E. (2018). The Business Case for Social Protection in Africa. INCLUDE.

Ward, P., Hurrell, A., Visram, A., Riemenschneider, N., Pellerano, L., O'Brien, C., ... Willis, J. (2010). Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC),

Kenya. Oxford: Oxford Policy Management.

Watson, C. & Palermo, T. (2016). Options for a 'Cash Plus' interventions to enhance adolescent well-being in Tanzania. An introduction and review of the evidence from different programme models in Eastern and Southern Africa. Background Paper for a Stakeholder WorkESop in Dar es Salaam, Tanzania, 11-12 February 2016

WFP (2014). Country Programme Kenya 200680 2014-2018. Nairobi: WFP Kenya.

WFP (2016a). Country Programme Kenya 2014-2018. Standard Project Report. Nairobi: WFP Kenya.

WFP (2016b). World Food Programme Factsheet. Asset Creation. September 2016. Nairobi: WFP Kenya.

WFP (2016c). Supporting the National School Meals Program. WFP Kenya Infobrief #5. Nairobi: WFP Kenya.

WFP (2016d). Decentralized Evaluation of the Asset Creation Programme. Nairobi: WFP Kenya.

WHO (Ed.). (2006). WHO child growth standards: length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age ; methods and development. Geneva: WHO Press.

World Bank (2014). The state of social safety nets 2014. Washington, D.C.: The World Bank.

World Bank (2017). World Development Indicators. Available at: <http://www.worldbank.org/data>

ANNEX

7.4 Methodology

Evaluation of program impacts (ex-post) (4)

The CT-OVC and the HSNP were evaluated based on a randomized controlled trial (RCT) approach facilitating a clear identification of program impacts. In the following, we briefly outline the applied methodology to estimate the average treatment effects of the programs on households in the program regions. In addition, we discuss why average effects may be hiding strong difference in impact across treated households and how we explore these differences in the analysis.

The main problem of causal inference is that a household cannot be observed at the same time in a treatment and control region. That is, a counterfactual needs to be identified

that allows the researcher to compare treated with control group households. Randomly assigning clusters of eligible households into control and treatment areas is an increasingly used approach to identify program impacts. The main identification assumption is that the area of residence is independent of unobserved changes in the outcomes of interest. The assumption implies that changes in outcomes would have been the same for eligible households in control and treatment areas in the absence of the program. Both, CT-OVC and HSNP, were evaluated using such a cluster randomized design, which is why we use the same methodological approach for both programs. The technical details of the estimations are summarized in Box 4.

BOX 4: IMPACT EVALUATION METHODOLOGY

For the estimations, a difference-in-differences estimation strategy is used to identify the impacts of the programs on various outcome variables. It compares pre- and post-intervention outcomes (and) of the participants () and non-participants () to estimate average program effects ():

As it relies on differences between baseline and follow-up data only, this approach controls for time-invariant differences between treatment and control clusters. In combination with the randomization that was carried out in both programs, this allows for a highly robust impact identification strategy. Shocks that could have affected treatment and control clusters differently were pooled in extensive survey instruments and can be controlled for. The model takes the following functional form:

Where y_{it} is the outcome of interest, D_{it} is the treatment status of a household, and X_{it} denotes time-variant control variables, t is the survey period, and α_i household specific fixed effects. The estimated average program impact is given by coefficient β .

To test for heterogeneous program impacts, we add an additional coefficient to estimate whether the coefficient β changed depending on certain characteristics. This results in the following estimation model:

Where H describes the suspected source for heterogeneity in impacts.

To account for sample attrition, we use inverse probability weights as supplied with the data for HSNP and calculated based on household characteristics and treatment eligibility for OVC-CT. We control for outliers by excluding the highest 2.5% of values for

monetary variables, livestock units and farm land and following WHO recommendations for anthropometric scores (WHO, 2006)(WHO 2006). Following established standards in the literature, we cluster standard errors at the level of randomization.

For the estimation we use a generalized linear model approach, with a logit link function for binary outcome variables, a logarithmic link function for consumption expenditure variables.

Figure 15 Outline of simulation procedures

7.5 More tables from quantitative analysis

Table 19: HSNP2 County allocation of households

County	25% Equalization	45% Population	30% Poverty	Total allocation
Turkana	6,250	14,391	19,277.08231	39,918
Mandera	6,250	12,120	3,860.62010	22,231
Wajir	6,250	11,847	1,104.06135	19,201
Marsabit	6,250	6,641	5,758.23624	18,649

Source: HSNP2 Targeting Information

Table 20 Descriptive statistics of the control variables in the microeconomic simulations

	count	mean	sd
rural	92846	0.64	0.48
number of persons in household	92846	5.44	2.56
female	92846	0.51	0.50
age	92789	23.18	18.70
completed level of schooling of household head	92846	2.66	1.70
age household head	92739	44.61	14.50
household owns dwelling	92846	0.71	0.45
household has a member with one or more disabilities	92846	0.03	0.17
household has a single orphan	92846	0.21	0.76
household has a double orphan	92846	0.03	0.24
Mombasa	92846	0.03	0.16
Kwale	92846	0.02	0.13
Kilifi	92846	0.03	0.17
Tana River	92846	0.01	0.08
Lamu	92846	0.00	0.05
Taita Taveta	92846	0.01	0.09
Garissa	92846	0.01	0.10
Wajir	92846	0.01	0.10
Mandera	92846	0.02	0.12
Marsabit	92846	0.01	0.08
Isiolo	92846	0.00	0.06
Meru	92846	0.03	0.18
Tharaka Nithi	92846	0.01	0.09
Embu	92846	0.01	0.11
Kitui	92846	0.02	0.15
Machakos	92846	0.03	0.16
Makueni	92846	0.02	0.14
Nyandarua	92846	0.02	0.12

Nyeri	92846	0.02	0.13
Kirinyaga	92846	0.01	0.11
Muranga	92846	0.02	0.15
Kiambu	92846	0.04	0.20
Turkana	92846	0.02	0.15
West Pokot	92846	0.01	0.12
Samburu	92846	0.01	0.08
Trans Nzoia	92846	0.02	0.15
Uasin Gishu	92846	0.02	0.16
Elgeyo Marakwet	92846	0.01	0.10
Nandi	92846	0.02	0.14
Baringo	92846	0.02	0.12
Laikipia	92846	0.01	0.11
Nakuru	92846	0.04	0.21
Narok	92846	0.02	0.15
Kajiado	92846	0.02	0.14
Kericho	92846	0.02	0.14
Bomet	92846	0.02	0.14
Kakamega	92846	0.04	0.20
Vihiga	92846	0.01	0.12
Bungoma	92846	0.03	0.18
Busia	92846	0.02	0.13
Siaya	92846	0.02	0.15
Kisumu	92846	0.02	0.16
Homa Bay	92846	0.02	0.15
Migori	92846	0.02	0.16
Kisii	92846	0.03	0.17
Nyamira	92846	0.02	0.12
Nairobi	92846	0.10	0.30

Table 21 OLS and 2SLS specifications of the consumption effect on school attendance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	School attainment (6-12)	School attainment (13-16)	School attainment (17-23)	Completed Years of Schooling	School attainment (6-12)	School attainment (13-16)	School attainment (17-22)	Completed Years of Schooling
Ln Consumption	0.01*** (4.46)	0.02*** (3.80)	0.09*** (9.81)	1.10*** (21.52)	0.00 (1.38)	0.02 (1.77)	0.05* (2.56)	0.05* (2.56)
Rural	-0.00 (-0.53)	0.01 (1.67)	0.04*** (3.45)	-0.56*** (-8.70)	-0.00 (-1.02)	0.01 (1.60)	0.03* (2.42)	0.03* (2.42)
Household Size	-0.00 (-1.76)	-0.00 (-0.60)	-0.00 (-1.96)	-0.13*** (-10.49)	-0.00 (-1.00)	-0.00 (-0.61)	-0.00 (-0.31)	-0.00 (-0.31)
Female	0.00 (1.28)	0.01 (1.59)	-0.07*** (-7.41)	-0.05 (-1.02)	0.00 (1.12)	0.01 (1.53)	-0.07*** (-7.34)	-0.07*** (-7.34)
Education Household Head	0.00 (1.53)	0.00** (2.85)	0.02*** (5.77)	0.48*** (26.64)	0.00 (1.47)	0.00* (2.40)	0.02*** (5.88)	0.02*** (5.88)
Age Household Head	0.00 (0.32)	-0.00 (-0.36)	-0.01 (-0.99)	0.01 (0.27)	0.00 (0.35)	-0.00 (-0.36)	-0.00 (-0.87)	-0.00 (-0.87)
Own Dwelling	0.00 (0.56)	0.01 (1.41)	0.02 (1.67)	-0.52*** (-6.35)	0.00 (0.63)	0.01 (1.43)	0.02 (1.59)	0.02 (1.59)
Disabled	-0.04*** (-7.47)	-0.09*** (-5.21)	-0.04 (-1.42)	-1.77*** (-10.44)	-0.04*** (-7.63)	-0.09*** (-5.34)	-0.04 (-1.52)	-0.04 (-1.52)
Single Orphan	-0.00***	-0.01**	0.00	0.07*	-0.00***	-0.01**	0.00	0.00

	(-3.60)	(-2.84)	(0.33)	(2.20)	(-3.77)	(-2.84)	(0.20)	(0.20)
Double Orphan	0.00	-0.01	0.02	0.21*	0.00	-0.01	0.02	0.02
	(0.60)	(-1.43)	(0.93)	(2.05)	(0.64)	(-1.46)	(1.06)	(1.06)
Constant	0.93***	0.68***	-0.01	0.45	0.94***	0.67***	0.26	0.26
	(18.34)	(4.21)	(-0.02)	(0.14)	(16.76)	(3.68)	(0.49)	(0.49)
OLS-County Fixed Effects	17834.00	9353.00	10043.00	10607.00	17662.00	9294.00	9982.00	9982.00
r ²	0.03	0.07	0.25	0.38	0.03	0.07	0.25	0.25
Durbin Wu Hausman Test p-value					0.68	0.94	0.04	0.04
Sargan Score p-value					0.05	0.13	0.00	0.00
p-value of Wald test of exogeneity			0.04		0.00	0.00		
regression	OLS	OLS	OLS	OLS	2SLS	2SLS	2SLS	2SLS

t statistics in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Table 22 Calorie intake elasticity with respect to household consumption per capita

	(2)	(3)	(4)
	log Kcal	log Kcal	log Kcal
Log Consumption (p.c.)	0.27***	0.47***	0.30***
	(33.60)	(44.33)	(5.17)
Education head		-0.03***	-0.01
		(-9.42)	(-1.08)
Household size		-0.02***	-0.03***
		(-3.48)	(-3.67)
Share of HH ember >65		0.32***	0.24***
		(7.60)	(4.05)
Share of children in HH		0.15***	0.09**
		(6.65)	(3.15)
Sex HH head		0.12***	0.14***
		(11.44)	(10.97)
Mean age		-0.00***	-0.00*
		(-4.58)	(-2.31)
Age HH head		0.00***	0.00***
		(4.23)	(3.59)
rural		0.19***	0.14***
		(15.68)	(6.45)
HH owns dwelling		0.19***	0.18***
		(13.53)	(11.87)
Disabled HH member		0.01	-0.00
		(0.62)	(-0.09)
N	21333	21314	18449
Regression	OLS	OLS	2SLS
p-value of Wald Test of endogeneity			0.00

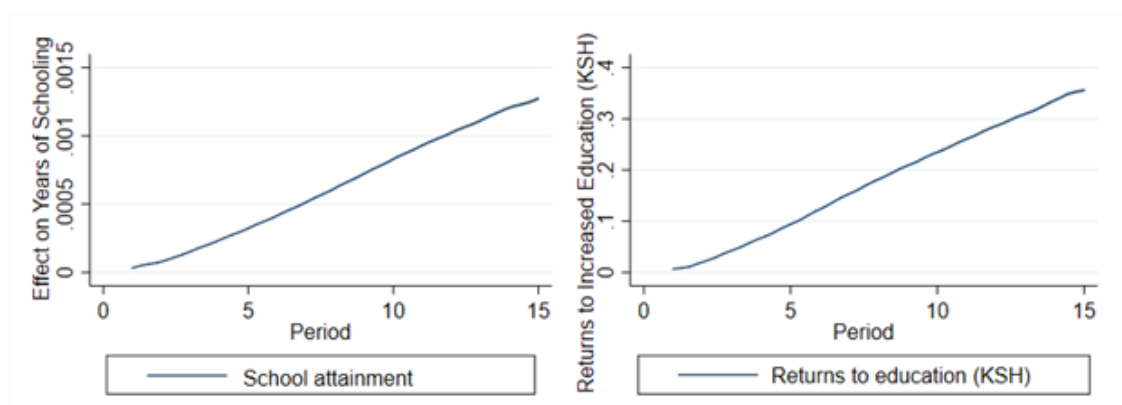
t statistics in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

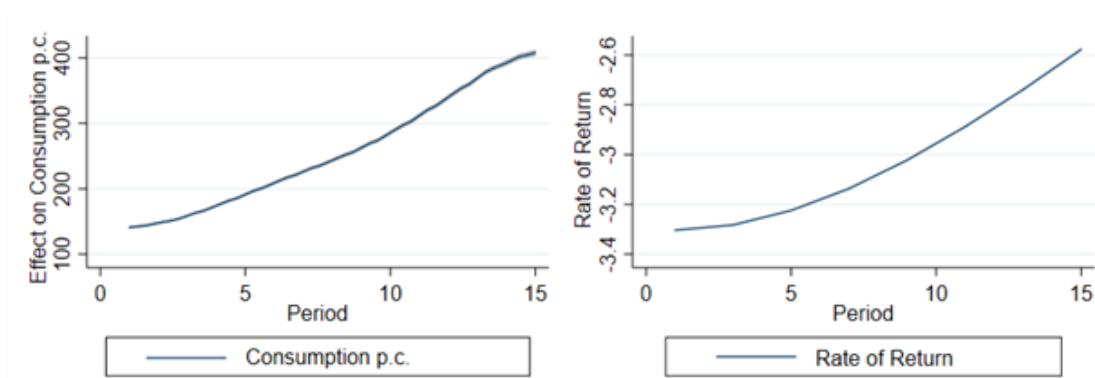
Table 23 The effect of school attainment on consumption – full model

	(1)	(2)
	Ln Consumption	Ln Consumption
Maximum school attainment	0.05***	
	(36.67)	
Mean School attainment		0.05***
		(30.34)
Education Household head	0.05***	0.05***
	(15.14)	(16.53)
Household size	0.11***	0.13***
	(45.90)	(57.30)
Share of member 65+	-0.17***	-0.20***

	(-5.83)	(-6.94)
Share of females 0 to 16	0.07**	0.12***
	(2.79)	(5.05)
Share of males 0 to 16	0.03	0.09***
	(1.35)	(3.51)
female	-0.02*	-0.00
	(-2.05)	(-0.43)
age	0.00***	0.00***
	(6.56)	(11.55)
rural	-0.23***	-0.24***
	(-25.64)	(-26.81)
Own dwelling	0.02*	0.03**
	(2.09)	(3.21)
Has a disabled member	-0.09***	-0.10***
	(-4.81)	(-4.94)
Has a single orphan -0.02***		-0.02***
	(-3.68)	(-3.70)
Has a double orphan	0.02	0.02
	(0.87)	(0.93)
N	21666.00	21666.00
	0.45	0.44
County fixed effects	yes	yes
controls	yes	yes
regression	OLS	OLS
t statistics in parentheses, * p<0.05 ** p<0.01 *** p<0.001		

Figure 16 Simulation of the rates of return (marginal propensity to consume of 100%)





Source: Author's own calculation

Note: Calculations based on a marginal propensity to consume of 100%

Table 24 Summary of household characteristics at baseline and difference between treatment (T) and control households

	HSNP Mean	HSNP Difference T-C	OVC Mean	OVC Difference T-C
Household size	5.74	0.34	5.59	-0.31
Number of children (under 18)	3.24	0.39	3.37	-0.3
Male household head	0.67	-0.01	0.38	-0.07***
Consumption expenditure (incl. rent), per capita and month	1407.38	-2.53	1221.38	-2.1
Household has livestock	0.70	-0.19*	0.78	0.01
Household has agricultural land	0.09	0.00	0.81	-0.06
Tropical livestock units	3.57	-0.80	0.80	-0.11
Household has wage worker	0.25	0.06	0.46	0.10
Number of rooms in the main building	1.57	0.16	2.24	0.08
Minutes to the next market	87.04	-14.11	43.93	0.64
Household had to go entire days without food in the past year	0.67	-0.09		

Note: *, ** and *** denote significance at 10%, 5%, and 1% level using a two-tailed distribution. N = 3107 for HSNP (3062 for consumption expenditure, 3050 for tropical livestock units and 3024 for minutes to next market), N = 2294 for OVC (2246 for consumption expenditure and tropical livestock units).

Table 25 Summary of household characteristics at baseline and difference between treatment (T) and control households

	HSNP Mean	HSNP Difference T-C	OVC Mean	OVC Difference T-C
Household size	5.74	0.34	5.59	-0.31
Number of children (under 18)	3.24	0.39	3.37	-0.3
Male household head	0.67	-0.01	0.38	-0.07***
Consumption expenditure (incl. rent), per capita and month	1407.38	-2.53	1221.38	-2.1
Household has livestock	0.70	-0.19*	0.78	0.01

Household has agricultural land	0.09	0.00	0.81	-0.06
Tropical livestock units	3.57	-0.80	0.80	-0.11
Household has wage worker	0.25	0.06	0.46	0.10
Number of rooms in the main building	1.57	0.16	2.24	0.08
Minutes to the next market	87.04	-14.11	43.93	0.64
Household had to go entire days without food in the past year	0.67	-0.09		
Note: *, ** and *** denote significance at 10%, 5%, and 1% level using a two-tailed distribution. N = 3107 for HSNP (3062 for consumption expenditure, 3050 for tropical livestock units and 3024 for minutes to next market), N = 2294 for OVC (2246 for consumption expenditure and tropical livestock units).				

7.6 Explanation on tags used to identify respondents in the qualitative analysis

All data sources were assigned a unique identifier which consists of codes denoting the location, respondents' sex, the type of the data

source (in-depth interview or Focus Group Discussion), and a numeric code generated by the research assistants collecting data.

Codes denoting location	
Kitui	Kt
Kisumu	Ki
Kakamega	Ka
Turkana	Tu
Codes denoting respondents' sex	
Female	F
Male	M
Mixed	Mix
Codes denoting type of data source	
In-depth interview	IDI
Focus Group Discussion	FGD
Example identification tag	
Kt-IDI_M-1234	Male in-depth interview respondent from Kitui

7.7 Qualitative data collection: respondents' socio-demographic characteristics

Table 26 Kitui County

FOCUS GROUP DISCUSSIONS*			IN-DEPTH INTERVIEWS		
Variable	Males	Females	Variable	Males	Females
	N	N		N	N
Age-group			Age-group		
18-40	0	15	18-75	8	21
>41	10	1			
Missing	12		Missing	0	0

Highest level of education attained			Highest level of education attained		
Primary	8	11	Primary	5	15
Post-primary/Vocational	0	0	Post-primary/Vocational	1	2
Secondary/A' level	2	1	Secondary/A' level	2	4
College (Middle level)	0	2	College (Middle level)	0	0
University	0	2	University	0	0
Missing	12		Missing	0	0
Marital status			Marital status		
Never Married /Single in a relationship	10	0	Never Married /Single in a relationship	0	1
Never married /Single Not in a relationship	0	1	Never married /Single Not in a relationship	0	2
Married _Currently living with spouse	0	8	Married _Currently living with spouse	8	12
Married _Not living with spouse currently	0	0	Married _Not living with spouse currently	0	0
Divorced/separated	0	3	Divorced/separated	0	1
Widowed	0	4	Widowed	0	5
Don't know	0	0	Don't know	0	0
No response	0	0	No response	0	0
Missing	12		Missing	0	0
Currently living with the spouse/partner			Currently living with the spouse/partner		
Yes	10	8	Yes	8	12
No	0	7	No	0	8
Other	0	1	Other	0	1
Missing	12		Missing	0	0
Current employment status			Current employment status		
Formal employment	0	0	Formal employment	0	0
Casual	2	1	Casual	7	1
Farmer	19	14	Farmer	0	19
Business	1	1	Business	0	1
Student	0	0	Student	1	0
Other(specify)	0	0	Other(specify)	0	0
Does not know	0	0	Does not know	0	0
No response	0	0	No response	0	0
Ethnicity			Ethnicity		
Kamba	22	17	Kamba	8	21
Others	0	0	Others	0	0

*Information for some variables missing for 12 FGD respondents among males.

Table 27 Kakamega County

FOCUS GROUP DISCUSSIONS (All respondents females)		IN-DEPTH INTERVIEWS (All respondents females)	
Variable	N	Variable	N
Age-group		Age-group	
18-40	12	18-40	8
>41: (41-45)	5	>41: (41-45)	2
Highest level of education attained		Highest level of education attained	
Primary	10	Primary	7
Post-primary/Vocational	0	Post-primary/Vocational	0
Secondary/A' level	6	Secondary/A' level	3
College (Middle level)	1	College (Middle level)	0
University	0	University	0
Marital status		Marital status	
Never Married /Single in a relationship	0	Never Married /Single in a relationship	1
Never married /Single Not in a relationship	0	Never married /Single Not in a relationship	2
Married _Currently living with spouse	17	Married _Currently living with spouse	4
Married _Not living with spouse currently	0	Married _Not living with spouse currently	3
Divorced/separated	0	Divorced/separated	0
Widowed	0	Widowed	0
Don't know	0	Don't know	0
No response	0	No response	0
Currently living with the spouse/partner		Currently living with the spouse/partner	
Yes	17	Yes	4
No	0	No	4
Other	0	Other	2
Current employment status		Current employment status	
Formal employment	0	Formal employment	0
Casual	0	Casual	2
Farmer	15	Farmer	4
Business	2	Business	3
Student	0	Student	0
Other(specify)	0	Other(specify)	1 (housewife)
Does not know	0	Does not know	
No response	0	No response	0
Ethnicity		Ethnicity	
Luhya	17	Luhya	10
Others	0	Others	0

Table 28 Kisumu County

FOCUS GROUP DISCUSSIONS			IN-DEPTH INTERVIEWS		
Variable	Males	Females	Variable	Males	Females
	N	N		N	N
Age-group			Age-group		
18-25	9	11	18-25	6	4
>26: (26-30)	1	0	>26: (26-30)	0	0
Missing			Missing		
Highest level of education attained			Highest level of education attained		
Primary	0	0	Primary	0	0
Post-primary/Vocational	0	0	Post-primary/Vocational	0	0
Secondary/A' level	7	9	Secondary/A' level	3	4
College (Middle level)	2	2	College (Middle level)	1	0
University	1	0	University	2	0
Missing	0	0	Missing	0	0
Marital status			Marital status		
Never Married /Single in a relationship	8	9	Never Married /Single in a relationship	4	3
Never married /Single Not in a relationship	2	1	Never married /Single Not in a relationship	1	1
Married _Currently living with spouse	0	1	Married _Currently living with spouse	1	0
Married _Not living with spouse currently	0	0	Married _Not living with spouse currently	0	0
Divorced/separated	0	0	Divorced/separated	0	0
Widowed	0	0	Widowed	0	0
Don't know	0	0	Don't know	0	0
No response	0	0	No response	0	0
Missing	0	0	Missing	0	0
Currently living with the spouse/partner			Currently living with the spouse/partner		
Yes	0	1	Yes	1	0
No	8	9	No	4	3
Other	2	1	Other	1	1
Missing	0	0	Missing	0	0
Current employment status			Current employment status		
Formal employment	1	0	Formal employment	0	0
Casual	4	1	Casual	5	2
Farmer	0	0	Farmer	0	0
Business	3	7	Business	1	2
Student	0	2	Student	0	0
Other(specify)	2*	1	Other(specify)	0	0
Does not know	0	0	Does not know	0	0
No response	0	0	No response	0	0
Ethnicity			Ethnicity		
Luo	10	9	Luo	6	4
Others	0	2**	Others	0	0

* Footballers

** Kikuyu and Nubian

Table 29 Turkana County

FOCUS GROUP DISCUSSIONS*			IN-DEPTH INTERVIEWS		
Variable	Males	Females	Variable	Males	Females
	N	N		N	N
Age-group			Age-group		
18-75	10	10	18-755	4	6
Missing			Missing		
Highest level of education attained			Highest level of education attained		
Primary			Primary	2	1
Post-primary/Vocational			Post-primary/Vocational	0	0
Secondary/A' level			Secondary/A' level	0	0
College (Middle level)			College (Middle level)	0	0
University			University	0	0
Missing			No education	2	5
Marital status			Marital status		
Never Married /Single in a relationship			Never Married /Single in a relationship	1	0
Never married /Single Not in a relationship			Never married /Single Not in a relationship	1	0
Married _Currently living with spouse			Married _Currently living with spouse	2	4
Married _Not living with spouse currently			Married _Not living with spouse currently	0	2
Divorced/separated			Divorced/separated	0	0
Widowed			Widowed	0	0
Don't know			Don't know	0	0
No response			No response	0	0
Missing			Missing	0	0
Currently living with the spouse/partner			Currently living with the spouse/partner		
Yes			Yes	2	4
No			No	2	2
Other			Other	0	0
Missing			Missing	0	0
Current employment status			Current employment status		
Formal employment	**	**	Formal employment	0	0
Casual			Casual	0	0
Farmer			Farmer	4	3
Business			Business	0	3
Student			Student	0	0
Other(specify)			Other(specify)	0	0
Does not know			Does not know	0	0
No response			No response	0	0
Ethnicity			Ethnicity		
Turkana	10	10	Turkana	4	6
Others			Others	0	0
	0	0			

* Missing detailed sociodemographic data from Turkana for the FGDs

** All unemployed

7.8 Qualitative data collection tools

TURKANA FOCUS GROUP DISCUSSION GUIDE – Asset Creation (FFA)

(Guide for groups F1A, F1B, F1C, F1D)

FGD code:

Participant demographics:

Sex: Male/Female

Location			
	Age (Years)	Sex	Occupation
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Define social protection:

(Explain about social protection) I want us to discuss about social protection programs that people in this community, including you, benefit from. By social protection programs, we mean programs that provide cash to the poor and vulnerable to improve and sustain their livelihoods and welfare. Besides cash programs, we would like to talk about other types of support that help people access health care, or education, or find decent employment, or start their own businesses. - ulinzi wa kijamii

Types of social protection programs people benefit from in the community

1. What are the social protection programs that people in this community, including each of you, benefit from? *List each program mentioned and probe immediately for the objective of the program.*

Name social protection program	What is the objective of the program?

Benefits and challenges

2. In what ways has this community been affected by social protection programs? Give me concrete examples. *Probe: for example how useful cash transfers have been, how programs facilitated access to employment for young people, asset creation such as water conservation, land rehabilitation, agricultural production, how programs facilitate access to health, nutrition and education.*
3. Tell me about the challenges (generally) related to social protection programs members of this community, including you, face. Give me concrete examples. *Probe: application process, accessing benefits, late distribution of benefits, components not sufficient, programs poorly coordinated, etc.*
4. Now I would like to talk about the everyday challenges people face here in Turkana county. In your opinions, what are the common difficulties of people in making ends meet? What are the challenges of people in getting reliable and predictable incomes, such as finding waged employment or running their businesses? *Probe: for example, if some of you wanted to start a business (or find a regular job), would it be easy or difficult for them? Why?*

Linkages between social protection programs

A) For the cash transfer only group

5. In your opinions, what kind of support would people need to overcome these challenges and find decent work opportunities?
6. In your opinions, what would be a good way of reaching out to people and ensuring that such support would reach everyone who needs it?
7. I would like to discuss a little about a different type of support: chamas (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members or not.*
8. How do you think these groups can be supported by the government or other organizations, to better help their members?

B) For the cash transfer + Asset Creation group

9. I understand that on top of the monthly cash transfer you all in this group also participate in the Asset Creation (FFA) program. If you think about the challenges we identified before, how does this program help you overcome them? What is the value added of the assets that you and your communities have built? Give me concrete examples. *Probe: is this a result of the additional food transfer of the asset creation, or the assets themselves, or the combination of the two?*
10. In your opinions, can everybody benefit the same way from the assets created? *Probe: How would the poorest households in your communities use these assets? And how would those somewhat better off use them? Do you need to own lands, or live in a certain part of the village to benefit from the assets?*

11. In your experience, how do household members usually share the responsibilities of working on the asset creation sites? What does the typical day of a man and a woman look like when they are working on the site? *Probe: Think about a married woman with children who has to work on the site. What does her day look like? (Repeat with single woman, or man.)*
12. In terms of predictable and sustainable livelihoods, what are some of the challenges that you still face despite the cash transfers and the assets? What other support would you need to overcome some of those challenges? Give me concrete examples and how they would help you.
13. I would like discuss a little about a different type of support: the chamas (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
14. How do you think these groups can be supported by the government or other organizations, to better help their members?

KAKAMEGA FOCUS GROUP DISCUSSION GUIDE: Imarisha Afya ya Mama na Mtoto

(Guide for groups F2A & F2B)

FGD Code:

Participant demographics:

Sex: Male/Female

	Age (Years)	Sex	Occupation
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Define social protection:

(Explain about social protection) I want us to discuss about social protection programs that people in this community, including you, benefit from. By social protection programs, we mean programs that provide cash to the poor and vulnerable to improve and sustain their livelihoods and welfare. Besides cash programs, we would like to talk about other types of support that help people access health care, or education, or find decent employment, or start their own businesses. - ulinzi wa kijamii

Types of social protection programs people benefit from in the community

1. What are the social protection programs that people in this community, including each of you, benefit from? *List each program mentioned and probe immediately for the objective of the program.*

Name social protection program	What is the objective of the program?

Benefits and challenges

2. In what ways has this community been affected by social protection programs? Give me concrete examples. *Probe: for example, how useful cash transfers have been, how programs facilitated access to employment for young people, asset creation such as water*

conservation, land rehabilitation, agricultural production, how programs facilitate access to health, nutrition and education.

3. Tell me about the challenges (generally) related to social protection programs members of this community, including you, face. Give me concrete examples. *Probe: application process, accessing benefits, late distribution of benefits, program components not sufficient, programs poorly coordinated, etc.*
4. Now I would like to talk about the specific challenges of mothers. In Kakamega county, many mothers during or after child birth, and many children die at a very young age. In your opinions, what is the reason for these things? *Probe: What kind of challenges and barriers do pregnant and lactating mothers in this community face in terms of accessing healthcare, safe delivery and taking care of their children?*

Linkages between social protection programs

A) For the cash transfer only group

5. In your opinions, what kind of support would be needed for pregnant and lactating mothers so that they can access medical care, give birth in a safe medical facility, and take good care of their small children?
6. In your opinions, what would be a good way of reaching out to mothers and ensuring that such support would reach everyone who needs it?
7. I would like discuss a little about a different type of support: chamas (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
8. How do you think these groups can be supported by the government or other organizations, to better help their members?

B) For the cash transfer + maternal program group

9. I understand that on top of the monthly cash transfer you all in this group also benefit from a complementary support through the *Imarisha Afya ya Mama na Mtoto program*? If you think about the challenges of mothers we identified before, how does this program help mothers overcome them? What is the value added of the *Imarisha program*? Give me concrete examples.
10. In terms of raising a small child, what are some of the challenges that you still face despite the cash transfer and the complementary support? What other interventions would you like to also benefit from to overcome some of those challenges? Give me concrete examples.
11. How do you think these challenges could be solved?

12. I would like us to discuss a different type of support: *chamas* (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
13. How do you think these groups can be supported by the government or other organizations, to better help their members?

KITUI FOCUS GROUP DISCUSSION GUIDE: NICHE program

(Guide for groups F3A & F3B)

FGD Code:

Participant demographics:

Sex: Male/Female

	Age (Years)	Sex	Occupation
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Define social protection:

(Explain about social protection) I want us to discuss about social protection programs that people in this community, including you, benefit from. By social protection programs, we mean programs that provide cash to the poor and vulnerable to improve and sustain their livelihoods and welfare. Besides cash programs, we would like to talk about other types of support that help people access health care, or education, or find decent employment, or start their own businesses. - ulinzi wa kijamii

Types of social protection programs people benefit from in the community

1. What are the social protection programs that people in this community, including each of you, benefit from? *List each program mentioned and probe immediately for the objective of the program.*

Name social protection program	What is the objective of the program?

Benefits and challenges

2. In what ways has this community been affected by social protection programs? Give me concrete examples. *Probe: for example how useful cash transfers have been, how programs facilitated access to employment for young people, asset creation such as water conservation, land rehabilitation, agricultural production, how programs facilitate access to health, nutrition and education.*
3. Tell me about the challenges (generally) related to social protection programs members of this community, including you, face. Give me concrete examples. *Probe: application process, accessing benefits, late distribution of benefits, components not sufficient, programs poorly coordinated, etc.*

4. Now I would like to talk about the specific challenges of mothers in Kitui. In this county, many women struggle to feed their children the amount and quality of food they need to be healthy. This can hinder their growth and development. In your opinions, what can be the cause of this? *Probe: What challenges and barriers do mothers in your communities face in terms of feeding their children?*

Linkages between social protection programs

A) For the cash transfer only group

5. In your opinions, what kind of support would be needed for mothers with small children to help them feed and take care of their children?
6. In your opinions, what would be a good way of reaching out to mothers and ensuring that such support would reach everyone who needs it?
7. I would like to discuss a little about a different type of support: *chamas* (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
8. How do you think these groups can be supported by the government or other organizations, to better help their members?

B) For the cash transfer + maternal program group

9. I understand that on top of the monthly cash transfer you all in this group also benefit from a complementary support through the NICHE program? If you think about the challenges of mothers we identified before, how does this program help mothers overcome them? What is the value added of the NICHE program? Give me concrete examples. *Probe: is this a result of the cash top-up (KES 500/month), or the nutrition and health training, or the combination of the two?*
10. In terms of raising a small child, what are some of the challenges that you still face despite the cash transfer and the complementary support? What other support would you need to overcome some of those challenges? Give me concrete examples and how they would help you.
11. I would like us to discuss a different type of support: the *chamas* (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
12. How do you think these groups can be supported by the government or other organizations, to better help their members?

KITUI FOCUS GROUP DISCUSSION GUIDE: Asset Creation (CFA) program

(Guide for groups F4A & F4B)

FGD code:

Participant demographics:

Sex: Male/Female

	Age (Years)	Sex	Occupation
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Define social protection:

(Explain about social protection) I want us to discuss about social protection programs that people in this community, including you, benefit from. By social protection programs, we mean programs that provide cash to the poor and vulnerable to improve and sustain their livelihoods and welfare. Besides cash programs, we would like to talk about other types of support that help people access health care, or education, or find decent employment, or start their own businesses. - ulinzi wa kijamii

Types of social protection programs people benefit from in the community

1. What are the social protection programs that people in this community, including each of you, benefit from? *List each program mentioned and probe immediately for the objective of the program.*

Name social protection program	What is the objective of the program?

Benefits & challenges

2. In what ways has this community been affected by social protection programs? Give me concrete examples. *Probe: for example how useful cash transfers have been, how programs facilitated access to employment for young people, asset creation such as water conservation, land rehabilitation, agricultural production, how programs facilitate access to health, nutrition and education.*

3. Tell me about the challenges (generally) related to social protection programs members of this community, including you, face. Give me concrete examples. *Probe: application process, accessing benefits, late distribution of benefits, program components not sufficient, programs poorly coordinated, etc.*
4. Now I would like to talk about the everyday challenges people face here in Kitui county. In your opinions, what are the common difficulties of people in making ends meet? What are the challenges of people in getting reliable and predictable incomes, such as finding waged employment or running their businesses? *Probe: for example, if some of you wanted to start a business (or find a regular job), would it be easy or difficult for them? Why?*

Linkages between social protection programs

A) For the cash transfer only group

5. In your opinions, what kind of support would people need to overcome these challenges and find decent work opportunities?
6. In your opinions, what would be a good way of reaching out to people and ensuring that such support would reach everyone who needs it?
7. I would like discuss a little about a different type of support: chamas (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members or not.*
8. How do you think these groups can be supported by the government or other organizations, to better help their members?

B) For the cash transfer + Asset Creation group

9. I understand that on top of the monthly cash transfer you all in this group also participate in the Asset Creation (CFA) program. If you think about the challenges we identified before, how does this program help you overcome them? What is the value added of the assets that you and your communities have built? Give me concrete examples. *Probe: make sure all challenges identified in Q. are addressed. is this a result of the additional cash transfer of the asset creation, or the assets themselves, or the combination of the two?*
10. In your opinions, can everybody benefit the same way from the assets created? *Probe: How would the poorest households in your communities use these assets? And how would those somewhat better off use them? Do you need to own lands, or live in a certain part of the village to benefit from the assets?*
11. In your experience, how do household members usually share the responsibilities of working on the asset creation sites? What does the typical day of a man and a woman look like when they are working on the site? *Probe: Think about a married woman with children who has to work on the site. What does her day look like? (Repeat with single woman, or man.)*

12. In terms of predictable and sustainable livelihoods, what are some of the challenges that you still face despite the cash transfers and the assets? What other support would you need to overcome some of those challenges? Give me concrete examples and how they would help you.
13. I would like discuss a little about a different type of support: the *chamas* (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members of not.*
14. How do you think these groups can be supported by the government or other organizations, to better help their members?

KISUMU FOCUS GROUP DISCUSSION GUIDE – CAP Youth Employment Program

(Guide for groups F5A & F5B)

FGD code:

Participant demographics:

Sex: Male/Female

	Age (Years)	Sex	Occupation
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Define social protection:

(Explain about social protection) I want us to discuss about social protection programs that people in this community, including you, benefit from. By social protection programs, we mean programs that provide cash to the poor and vulnerable to improve and sustain their livelihoods and welfare. Besides cash programs, we would like to talk about other types of support that help people access health care, or education, or find decent employment, or start their own businesses. You were invited to do this interview because we would like to learn about the experiences and challenges of young people in finding employment and making ends meet in Kisumu.

Types of social protection programs people benefit from in the community

1. What are the social protection programs that people in this community, including some of your household members, benefit from? *List each program mentioned and probe immediately for the objective of the program and if anyone in respondents' households receives them.*

Name social protection program	What is the objective of the program?	Number of recipient participants

2. What are the social protection programs that particularly target young people in this community? Are there any specific programs for young men or young women? *List each program mentioned and probe immediately for the objective of the program.*

Name social protection programm	What is the objective of the program?	Number of recipient participants

Challenges of the youth in Kisumu

3. Could you tell me about the main activities that young people depend on for their livelihoods in Kisumu city? *Probe: many people depend on small businesses? What kind of businesses? Is waged employment common? If yes, what kind of employment? (List activities in order of importance/frequency.)*
4. Young people find it very difficult to find long-term and reliable employment in Kenya. In your opinions, what are the main reasons for this? What are the challenges of young people in getting reliable and predictable incomes, such as finding waged employment or running their businesses? *Probe: for example, if some of you wanted to start a business (or find a regular job), would it be easy or difficult for them? Why?*

Benefits of the CAP Youth Employment program

5. Some of you have participated in training programs at the CAP Youth Empowerment Institute in Kisumu, but some of you have not. If you think about the challenges that we have talked about, how can such a program help overcome them? *Probe: ask if respondent has participated in the program. Make sure that non-participants also give their opinions.*
6. Do you think that all young people have a fair opportunity to participate in this program? What do you think should be done to ensure that all young people in this community can benefit from support to make a living? Give me concrete examples. *Probe: why do you think that it is fair/unfair? How would that help everyone participate?*
7. In your opinions, what other types of support is needed for young people to make a living (other than the employment project)? Think about the challenges we spoke about, and how they could be overcome. Give me concrete examples.
8. I would like us to discuss a different type of support: the chamas (or self-help groups, table banking groups, merry-go-round groups etc.). In your communities, is it common for women to be members of such groups? In your opinions, how can these groups help mothers overcome the challenges that we talked about? *Probe: for each respondent who gives their opinion on this question, ask if they personally are members or not.*
9. How do you think these groups can be supported by the government or other organizations, to better help their members?

TURKANA IN-DEPTH INTERVIEW GUIDE (#i1A, #i1B, #i1C, #i1D): Asset Creation (FFA)

Recorder number: _____ Date: _____

Socio-Demographic information

Location	
Age (Years)	
Sex: Male/ Female	
Highest level of education attained	1 Primary 2 Post-Primary/Vocational 3 Secondary/'A' Level 4 College (Middle Level) 5 University
Marital status	1 Never married/Single_in a relationship 2 Never married/Single_Not in a relationship 3 Married_Currently living with spouse 4 Married_Not living with spouse currently 5 Divorced/separated 6 Widowed 8 Don't know 9 No response
Currently living with the spouse/partner	0 No 1 Yes
Number of children in the household	
Household size	
Current employment status	1 Formal employment 2 Casual/Jua Kali 3 Farmer 4 Own Business (informal sector) 5 Own Business (formal sector) 5 Student 6 Unemployed
Which cash transfer program do you benefit from	1 CT-OVC 2 PWSD-CT 3 OP-CT 4 Inua Jamii Senior Citizen's Pension 5 HSNP
What complementary program do you benefit from	0 None of these 1 Asset Creation (Cash for Assets) 2 Asset Creation (Food for Assets) 3 Imarisha afya ya mama na mtoto 4 NICHE 5 Youth Employment Project

(Introduction) I would like us to discuss about social protection programmes that people in this community, including you, benefit from. By social protection programmes, we mean programmes which target the poor and vulnerable to help them make ends meet. This includes cash transfers, and also of other programs that help people access better nutrition, health care, education, and improving their livelihoods. - ulinzi wa kijamii

A For beneficiaries of cash transfer only

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
4. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.) Probe for application process, accessing/receiving the transfers, being able to spend the transfers.*
5. Based on your experiences, is there anything you would change about the cash transfer program? *Probe: give examples if needed, e.g. changes in benefit value, the way it is distributed, the application process, eligibility criteria etc.*
6. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *First, ask generally and let them list challenges. Itemize these challenges and probe for why there arise. Make sure that challenges related to nutrition, education, health care and employment are covered as listed in the sub-questions.*
7. When you face the challenges you mentioned, what do you do? How do you deal with them?
8. Besides the cash transfers, are you aware of any other types of support people in this area receive? *Probe: what are these and who benefits from them?*
9. Have you ever participated in any of these? *Probe for each program listed in Question 7.*
If yes: What were your experiences with them?
If no: Why not?
10. Are you a member of a *chama* (or table banking group, or self-help group, or merry-go-round)?
If yes: Please tell us about your experiences about joining the group, paying your contribution, and being a member.
If no: why not?
11. Besides the cash transfer, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up? Probe for how they would want to receive the additional support (instead of CT or in combination with it etc.)*

B) For beneficiaries of (cash transfer +) Asset creation

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.). Probe for application process, accessing/receiving the transfers, being able to spend the transfers.*
4. How do you and your household use the cash transfer(s) and the food you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
5. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *Itemise the challenges and probe for why there arise.*
6. When you face the challenges you mentioned, what do you do? How do you deal with them?
7. You participate in the Asset Creation (FFA) program. How did you hear about this program, and why did you decide to participate?
8. I would like to learn about the assets you and your community have created in the Asset Creation program. Please tell me about what these assets are, how you personally use them and what they mean for your ability to make ends meet.
9. Based on your own experience, how do cash transfers and the Asset Creation complement each other?
10. Based on your own experience, is there anything you would change about the Asset Creation program to better support people with their livelihoods?
11. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
If yes: Please tell us about your experiences and how being a member of this group has helped you.
If no: why not?
12. Besides the cash transfer and the asset creation, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

KAKAMEGA IN-DEPTH INTERVIEW GUIDE (#i2A, #i2B): Imarisha Afya ya Mama na Mtoto

Recorder number: _____ Date:

Socio-Demographic information

Age (Years)			
Sex: Male/ Female	0 Male 1 Female		
Highest level of education attained	1 Primary 2 Post-Primary/Vocational 3 Secondary/'A' Level 4 College (Middle Level) 5 University		
Marital status	1 Never married/Single_in a relationship 2 Never married/Single_Not in a relationship 3 Married_Currently living with spouse 4 Married_Not living with spouse currently 5 Divorced/separated 6 Widowed 8 Don't know 9 No response		
Currently living with the spouse/ partner	0 No 1 Yes		
Household size			
Children (children in the household that the interviewee gave birth to)	First name of child	Age of child	Participated in Imarisha during pregnancy/infancy
			0 No 1 Yes
			0 No 1 Yes
			0 No 1 Yes
			0 No 1 Yes
Current employment status	1 Formal employment 2 Casual 3 Farmer 4 Business 5 Student 6 Other (specify): _____ 8 Does not know 9 No response		

(Introduction) I want us to discuss about social protection programmes that people in this community, including you, benefit from. By social protection programmes, we mean programmes which target the poor and vulnerable to help them make ends meet. This includes cash transfers, and also of other programs that help people access better nutrition, health care, education, and improving their livelihoods. - ulinzi wa kijamii

A) For beneficiaries of cash transfer only

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
4. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *Itemise the challenges and probe for why there arise.*
5. When you face the challenges you mentioned, what do you do? How do you deal with them?
6. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.)*

Probe for application process, accessing/receiving the transfers, being able to spend the transfers.

7. Based on your experiences, is there anything you would change about the cash transfer program? *Probe: give examples if needed, e.g. changes in benefit value, the way it is distributed, the application process, eligibility criteria etc.*
8. Now I would like to learn a little about your pregnancies and the health care that you and your children received. How many medical check-ups have you attended during your pregnancies? Did you give birth in a medical facility? Have your children received vaccinations? *Ask for every child identified (including older children).*

(If answer to any sub-question of Question 4 is YES). How did you cover the cost of this? Probe for indirect costs: transportation, time away from income generating activities etc.
9. Why did you (not) to attend health check-ups during and/or after pregnancy? Why did you (not) give birth in a medical facility? Why have your children (not) received vaccinations? *Ask for every identified child.*
10. Besides the cash transfer you receive, which types of support do you know are available in the community for vulnerable people like you?
11. Do you receive any of the programs that you mentioned? If not, why not? *If not mentioned by the respondent: ask specifically about why she does not receive Imarisha Afya ya Mama na Mtoto.*
12. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?

If yes: Please tell us about your experiences and how being a member of this group has helped you.

If no: why not?

13. Besides the cash transfer you receive, what other type of support would be important for you and the members of your household? Why? *Ask for concrete examples and reasons for them. Probe specifically for children: how about your children? What would they need to escape poverty when they grow up?*

B) For beneficiaries of cash transfer + maternal health programme

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.)*

Probe for application process, accessing/receiving the transfers, being able to spend the transfers.
4. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
5. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *Itemise the challenges and probe for why there arise.*
6. When you face the challenges you mentioned, what do you do? How do you deal with them?
7. Now, I would like to learn about your experiences with the Imarisha Afya ya Mama na Mtoto (Oparanya Care) program. How did you hear about this program, and why did you decide to apply for it?
8. Did you experience any challenges/difficulties in applying for the Imarisha program? What were these challenges, and how did you deal with them?
9. Did you experience any challenges in accessing and using the money provided in the Imarisha program? What were these challenges, and how did you deal with them?
10. How did you and your household spend the 2,000 shillings you received after each medical visit? What did you prioritize, and who took part in making the decision? *Probe for specific program objectives (seeking health care and transport) and common expenses (food, clothing, education, investment in assets etc.)*

-
11. From your own experience, what are the benefits of participating in the Imarisha program in addition to the regular cash transfers?
 - What has the 2,000 KES (paid out after the medical visits) meant for your household?
 - What have the medical visits, delivering in a medical facility, and getting vaccinations for your child meant for you and your child's health?
 - What have the nutrition and health consultations meant for your child rearing practices?
 12. Based on your personal experience, is there anything about the program that should be changed to better help mothers?
 13. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
 14. Besides the programs you benefit from, what other type of support would be important for you and the members of your household? Why? *Ask for concrete examples and reasons for them. Probe specifically for children: how about your children? What would they need to escape poverty when they grow up?*

KITUI IN-DEPTH INTERVIEW GUIDE (#i3A, i3B): Nutrition Improvements through Health Education

Recorder number: _____ **Date:** _____

Socio-Demographic information

Age (Years)				
Sex: Male/ Female	0 Male 1 Female			
Highest level of education attained	1 Primary 2 Post-Primary/Vocational 3 Secondary/'A' Level 4 College (Middle Level) 5 University			
Marital status	1 Never married/Single_in a relationship 2 Never married/Single_Not in a relationship 3 Married_Currently living with spouse 4 Married_Not living with spouse currently 5 Divorced/separated 6 Widowed 8 Don't know 9 No response			
Currently living with the spouse/ partner	0 No 1 Yes Other			
Household size				
Children (children in the household)	First name of child	Age of child	Received CT-OVC	Received NICHE
			0 No 1 Yes	0 No 1 Yes
			0 No 1 Yes	0 No 1 Yes
			0 No 1 Yes	0 No 1 Yes
			0 No 1 Yes	0 No 1 Yes
Current employment status	1 Formal employment 2 Casual 3 Farmer 4 Business 5 Student 6 Other (specify): _____ 8 Does not know 9 No response			

(Introduction) I would like us to discuss about social protection programmes that people in this community, including you, benefit from. By social protection programmes, we mean programmes which target the poor and vulnerable to help them make ends meet. This includes cash transfers, and also of other programs that help people access better nutrition, health care, education, and improving their livelihoods. - *ulinzi wa kijamii*

A) For beneficiaries of cash transfer only

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
4. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.)*

Probe for application process, accessing/receiving the transfers, being able to spend the transfers.
5. Based on your experiences, is there anything you would change about the cash transfer program? *Probe: give examples if needed, e.g. changes in benefit value, the way it is distributed, the application process, eligibility criteria etc.*
6. I understand you are the primary caregiver of a baby younger than one year old. I would like to learn about your personal challenges and experiences with taking care of a baby when means are scarce. How did you manage to provide for the infant in your care? *Probe for feeding, clothing, hygiene, health care.*
7. Do you or did you face challenges in meeting the needs of the baby you care for? What are these challenges and how do you deal with them? *Probe: how about feeding your child? Did you ever have difficulties with that? How about managing illnesses of your child?*
8. How do you feed the baby in your care? Did you feed him/her different when he/she was smaller? Do you feed him/her different when he/she is sick? *Probe for types and amount of food, frequency of feeding.*
9. Where/from whom did you learn these feeding practices?
10. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
11. Besides the cash transfer you receive, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? And how would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

B) For beneficiaries of cash transfer + NICHE

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
4. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.)*

Probe for application process, accessing/receiving the transfers, being able to spend the transfers.
5. Based on your experiences, is there anything you would change about the cash transfer program? *Probe: give examples if needed, e.g. changes in benefit value, the way it is distributed, the application process, eligibility criteria etc.*
6. I understand you are the primary caregiver of a baby younger than one year old. I would like to learn about your personal challenges and experiences with taking care of a baby when means are scarce. How did you manage to provide for the infant in your care? *Probe for feeding, clothing, hygiene, health care.*
7. Do you or did you face challenges in meeting the needs of the baby you care for? What are these challenges and how do you deal with them? *Probe: how about feeding your child? Did you ever have difficulties with that? How about managing illnesses of your child?*
8. How do you feed the baby in your care? Did you feed him/her different when he/she was smaller? Do you feed him/her different when he/she is sick? *Probe for types and amount of food, frequency of feeding.*
9. Where/from whom did you learn these feeding practices?
10. You participate in the NICHE program. Could you tell me what this program has meant for your ability to take care of [name of infant(s)]?
 - What has the 500 KES top-up meant for your household? *Probe: what was it spent on? Did it allow you to purchase/do something you were not able to purchase/do before?*
 - What has the nutrition and hygiene counselling meant for you as a mother/caretaker?
11. Did you face any challenges in accessing the cash top-up of the program? Did you face any challenges in accessing the nutrition counselling of the program? If yes: what were these challenged and how did you deal with them?

-
12. Based on your personal experience, is there anything you would change about the NICHE program to better support mothers/caregivers of young children?
 13. Are you a member of a *chama* (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
 14. Besides the programs cash transfer and the NICHE program, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

KISUMU IN-DEPTH INTERVIEW GUIDE (#i5A, #i5B, #i5C, #i5D): Youth Employment

Recorder number: _____ Date:

Socio-Demographic information

Age (Years)	
Sex: Male/ Female	0 Male 1 Female
Highest level of education attained	1 Primary 2 Post-Primary/Vocational 3 Secondary/'A' Level 4 College (Middle Level) 5 University
Marital status	1 Never married/Single_in a relationship 2 Never married/Single_Not in a relationship 3 Married_Currently living with spouse 4 Married_Not living with spouse currently 5 Divorced/separated 6 Widowed 8 Don't know 9 No response
Currently living with the spouse/partner	0 No 1 Yes
Currently living with parents/family	0 No 1 Yes
Household size	
Current employment status	1 Formal employment 2 Casual 3 Farmer 4 Business 5 Student 6 Other (specify): _____ 8 Does not know 9 No response

(Introduction) You were invited to do this interview because we would like to learn about the experiences and challenges of young people in finding employment and making ends meet in Kisumu. I would like to discuss your personal experiences and the types of support that you think could help you and other young people to find secure and predictable livelihoods.

A) For non-beneficiaries of the CAP Youth Employment program

1. First, I would like to learn about how you and your household make ends meet. Please tell me about the sources of income and the types of work that you do to meet your needs. *Probe: how regularly and predictably do these sources provide you with a source of income?*
2. Compared to other people in your age group, how challenging is it for you to make ends meet? What are common challenges you face in accessing what you need? *Probe: try to think about the common things people need in their lives, like food, clothing, transportation, health care, education, or whatever else is important for you to feel secure.*

3. As I mentioned before, I would like to learn about your experiences with the labour market and livelihoods. From your personal experience, what are the main challenges young people face when trying to find a job or start a business here in Kisumu? *List challenges and probe if the respondent has ever personally experienced that challenge.*
4. In your opinion, what are the reasons for these challenges? *Probe specifically for every challenge listed in Question 3.*
5. What type of support would you need to overcome these challenges? *Probe specifically for every challenge listed in Question 3.*
6. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
7. Are you aware of any programs in Kisumu that support young people's livelihoods, for example to find decent employment or to start a profitable business? *Ask to list programs.*
8. Have you ever participated in any of these programs?
 - If yes: Please tell me about your experiences with the programs you participated in.
 - If no: Why not?
9. In your opinion, what type of support would you (and young people like you) need to overcome the challenges of making a living?

B) For beneficiaries of the CAP Youth Employment program

1. First, I would like to learn about how you and your household make ends meet. Please tell me about the sources of income and the types of work that you do to meet your needs. *Probe: how regularly and predictably do these sources provide you with a source of income?*
2. As I mentioned before, I would like to learn about your experiences with the labour market and livelihoods. From your personal experience, what are the main challenges young people face when trying to find a job or start a business here in Kisumu? *List challenges and probe if the respondent has ever personally experienced that challenge.*
3. In your opinion, what are the reasons for these challenges? *Probe specifically for every challenge listed in Question 3.*
4. You participated in the CAP Youth Employment Program. How did you hear about this program, and why did you decide to participate?
5. Please tell me about the types of support the CAP Youth Employment Program gave you. *List program elements received such as training, internship placement etc.*
6. What was the impact of participating in the CAP on your life and your livelihoods? *Probe: has it changed the kinds of labour you do to earn an income? In what way? Has it changed your sense of security? How?*

7. Compared to other people in your age group who did not participate in such a program, how challenging is it for you to make ends meet? *Probe: try to think about the common things people need in their lives, like food, clothing, transportation, health care, education, or whatever else is important for you to feel secure.*
8. Based on your personal experiences, is there anything you would change about the CAP program to better support young people?
9. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
10. Besides the CAP program you participated in, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

KITUI IN-DEPTH INTERVIEW GUIDE (#i4A, #i4B, #i4C, #i4D): Asset Creation (FFA)

Recorder number: _____ Date:

Socio-Demographic information

Age (Years)	
Sex: Male/ Female	
Highest level of education attained	1 Primary 2 Post-Primary/Vocational 3 Secondary/'A' Level 4 College (Middle Level) 5 University
Marital status	1 Never married/Single_in a relationship 2 Never married/Single_Not in a relationship 3 Married_Currently living with spouse 4 Married_Not living with spouse currently 5 Divorced/separated 6 Widowed 8 Don't know 9 No response
Currently living with the spouse/partner	0 No 1 Yes Other
Number of children in the household	
Household size	
Current employment status	1 Formal employment 2 Casual 3 Farmer 4 Business 5 Student 6 Other (specify): _____ 8 Does not know 9 No response

(Introduction) I would like us to discuss about social protection programmes that people in this community, including you, benefit from. By social protection programmes, we mean programmes which target the poor and vulnerable to help them make ends meet. We are thinking of cash transfers, and also of other programs that help people access better nutrition, health care, education, and improving their livelihoods. - ulinzi wa kijamii

A) For beneficiaries of cash transfer only

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education,*

medical expenses, transport, investing in productive assets etc.

4. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *Itemise the challenges and probe for why there arise.*
5. When you face the challenges you mentioned, what do you do? How do you deal with them?
6. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.) Probe for application process, accessing/receiving the transfers, being able to spend the transfers.*
7. Based on your experiences, is there anything you would change about the cash transfer program? *Probe: give examples if needed, e.g. changes in benefit value, the way it is distributed, the application process, eligibility criteria etc.*
8. Besides the cash transfers, are you aware of any other types of support people in this area receive? *Probe: what are these and who benefits from them?*
9. Have you ever participated in any of these? Probe for each program listed in Question 7.
 - If yes: What were your experiences with them?
 - If no: Why not?
10. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
11. Besides the cash transfers you receive, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

B) For beneficiaries of cash transfer + Asset creation

1. First, I would like to learn about the cash transfers your household receives from the government. Which member(s) of your household receive cash transfers? What is the purpose of these cash transfers?
2. In your personal experience, what are the main benefits of these cash transfers? *Probe for each benefit: how does it bring about this positive effect?*
3. Please tell me about your experiences accessing/using cash transfer from the government. I am interested in both your good and bad experiences. *(Start with good experience, down the rows, then go to bad experiences.)*

Probe for application process, accessing/receiving the transfers, being able to spend the transfers.

-
4. How do you and your household use the cash transfer(s) you receive? What do you prioritize, and who takes part in making the decision? *Probe for common expenses like food, education, medical expenses, transport, investing in productive assets etc.*
 5. What are the challenges you and your household face in making ends meet? What are the reasons for these challenges? *Itemise the challenges and probe for why there arise.*
 6. When you face the challenges you mentioned, what do you do? How do you deal with them?
 7. You participate in the Asset Creation (CFA) program. How did you hear about this program, and why did you decide to participate?
 8. I would like to learn about the assets you and your community have created in the Asset Creation program. Please tell me about what these assets are, how you personally use them and what they mean for your ability to make ends meet.
 9. Based on your own experience, how do the cash transfers and the asset creation complement each other?
 10. Based on your own experience, is there anything you would change about the Asset Creation program to better support people with their livelihoods?
 11. Are you a member of a chama (or table banking group, or self-help group, or merry-go-round)?
 - If yes: Please tell us about your experiences and how being a member of this group has helped you.
 - If no: why not?
 12. Besides the cash transfer and the asset creation, is there any other kind of support you and your household would need to make ends meet and feel secure? What are they? How would they help you? *Ask for concrete examples and reasons for them. Probe specifically for children: how about children in your household? What would they need to escape poverty when they grow up?*

