



Assessment of the Zambia Social Protection Expansion Programme Targeting Mechanisms

Rodolfo Beazley and Ludovico Carraro

September 2013

Table of contents

Ackno	wledgements	4
Abbre	viations	5
Execu	tive summary	7
1	Introduction	13
2	Overview on poverty and social cash transfers in Zambia	14
3	Targeting beneficiaries of social transfers	25
4	Analysis of SCT targeting methods	30
5	A harmonised methodology for targeting SCT beneficiaries	64
6	A brief analysis of the targeting methods used by other social programmes	79
7	Conclusion	86
Bibliograp	hy	90
Annex A	LCMS data	92
A.1	Discrepancies between LCMS and census estimates	92
A.2	Consumption aggregates and poverty estimates	96
Annex B	Inclusion and exclusion errors by province	104
Annex C	Qualitative research methodology	106
C.1	Qualitative approach to assessing targeting performance	106
C.2	Field work approach	107
Annex D	Comprehensive community survey methodology	110
D.1	Objective	110
D.2	Methodology	110
Annex E	MIS and Form 01	120
Annex F	Number of eligible households according to census data	121

List of tables and figures

Figure 1 Figure 2 Figure 3	Percentage of households in each consumption decile, by urban and rural areas Household distribution across consumption deciles (%), by urban and rural areas Distribution of households belonging to the poorest 10 and 20 percent (%), by province	15 15 æ
		~ 1
Figure 4	SCT targeting process at district level	21
Figure 5	Disentangling targeting errors into design and implementation failures	26
Figure 6	Distribution of incapacitated households across deciles (%)	33
Figure 7	Distribution of incapacitated households across decile, rural areas (%)	34
Figure 8	Distribution of incapacitated nousenoids across decile, urban areas (%)	34
Figure 9	Distribution of incapacitated nouseholds across deciles, by category of eligibility (%).	30
Figure 10	Distribution of MC eligible households across deciles (%)	41
Figure 11	Distribution of MC eligible households across deciles, rural areas (%)	4Z
Figure 12	Distribution of MC eligible households across deciles, updit dieds (%)	43
Figure 13	Distribution of CC aligible households across deciles (%)	43 51
Figure 15	Distribution of CC eligible households across deciles (78)	52
Figure 16	Distribution of CG eligible households across deciles, Juran areas (%)	52
Figure 17	Distribution of CG eligible households across deciles, by category of eligibility (%)	53
Figure 18	Perceived wellbeing categories of SCT beneficiaries	58
Figure 19	Perceived wellbeing categories	58
Figure 20	Eligible households per scheme (%)	61
Figure 21	Distribution of eligible households across consumption deciles (%), proposed	• ·
approach	72	
Figure 22	Harmonised targeting mechanism	76
Figure 23	Age distribution in rural areas (%), LCMS and census	95
Figure 24	Age distribution in urban areas (%), LCMS and census	95
Table 1	Percentage of households in rural and urban locations, by province	16
Table 2	Targeting methods used in developing countries	28
Table 3	Perceptions of wellbeing in Nyamanda and Chinsobwe, Serenje (%)	32
Table 4	Design leakage and under-coverage (%), incapacitated households	37
Table 5	Design leakage and under-coverage (%), MC scheme	44
Table 6	SCT beneficiaries in Nyamanda and Chinsobwe (%)	48
Table 7	Design leakage and under-coverage (%), CG scheme	54
Table 8	CGH index	60
Table 9	Perceptions of extreme poverty in Nyamanda and Chinsobwe (%)	65
	Enumerators perceptions of poverty in Nyamanda and Uninsobwe, by labour capacity	/
(%) Toble 11	00	67
	Correlation with per adult equivalent consumption expanditure	70
	Correlation between asset ewnership and subjective poverty	70
	Dependency and asset based eligibility and subjective poverty in Chinsobwe and	11
Nyamanda	71	
Table 15	Design leakage and under-coverage (%) and CGH index barmonised methodology	73
Table 16	PWAS beneficiaries and funds in 2012 by type of assistance	79
Table 17	FSP selection criteria	82
Table 18	Orphans of either parent (% of corresponding population), by gender, residence, age	
group, and	I consumption guintile, LCMS and census	92
Table 19	Disabled population (%), by residence and province, LCMS and census	93
Table 20	Poverty estimates (%) by residence, World Bank and CSO	96

Table 21	2006 and 2010 poverty estimates by district (% of population)	
Table 22	Poverty estimates by district (% of population)	
Table 23	Distribution of the poorest 10% across districts	
Table 24	Inclusion and exclusion errors per model and by province	
Table 25	Summary of SCT targeting implementation process	
Table 26	Selected study sites	
Table 27	Sample size by community and beneficiary status	

Acknowledgements

We would like to express our gratitude to Paul Van Ufford (UNICEF), Kelley Toole (DFID) and Stella Nkhoma (Irish Aid) for their support and guidance, as well as to the Ministry of Community Development, Mother and Child Health, and in particular to the Cash Transfer Unit, for their interest in our research and for providing us with all the relevant material.

This report was also the fruit of collaboration with other colleagues from OPM: Ramlatu Attah, who led the qualitative research, Marta Marzi, who analysed the Living Conditions Monitoring Survey data and led the comprehensive community survey, Lucy Brady who took care of the administration of the project, and Luca Pellerano and Andrew Kardan, who peer-reviewed the reports and research methodologies.

We are also grateful to all the work done by Rural Net Associates, in particular to Jacob S. Chisha who supervised the quantitative fieldwork, conducted qualitative research and provided many technical inputs, as well as to Dr. Dennis Chiwele, John Kunda, Destine Malumani, Kampamba Mulenga, Justine Chanda, Peter Chishimba, Mr Kafwamba, Changu Chuma Mwape, Rhoda Chiwele, Mofya Phiri, Ole Sikazwe, Lameck Zulu, Martha Mwale, Peter Ndalameta, Moseni Matimba, Rebecca Chola, and Chunda Chunda.

Our special thanks to the District Social Welfare Offices and the District Community Development Officers in Serenje, Kalomo and Kaputa and to the people who agreed to be interviewed and provided information on their experiences and views.

We hope that this research will contribute to improving the targeting of the programmes studied.

Abbreviations

ACC	Area Coordinating Committee
AFSC	Area Food Security Committee
СВТ	Community-Based Targeting
CDO	Community Development Officer
CG	Child Grant
CGH	Coady-Grosh-Hoddinott
CSO	Central Statistical Office
CWAC	Community Welfare Assistance Committee
DACO	District Agriculture Coordinator
DHS	Demographic and Health Survey
DCDOs	District Community Development Officers
DSWO	District Social Welfare Office
DWAC	District Welfare Assistance Committee
FGD	Focus Group Discussions
FSP	Food Security Pack
GoZ	Government of Zambia
IM	Inclusive Model
KII	Key Informant Interview
LCMS	Living Conditions Monitoring Survey
MC	Multiple Categorical
MCDMCH	Ministry of Community Development, Mother and Child Health
MIS	Management Information System
MMD	Movement for Multi-party Democracy
MPI	Multidimensional Poverty Index
NGOs	Non-Governmental Organisations
NRC	National Registration Card

- OPM Oxford Policy Management
- PMT Proxy Means Test
- PWAS Public Welfare Assistance Scheme
- SCT Social Cash Transfer
- WEF Women's Empowerment Fund

Executive summary

The Social Protection Expansion Programme

The Government of the Republic of Zambia (GoZ) considers Social Protection as a key strategy to support economic growth, reduce poverty, and promote equity and human rights. Towards these objectives the Ministry of Community Development, Mother and Child Health (MCDMCH) is implementing important social protection schemes: the Public Welfare Assistance Scheme (PWAS) and the Social Cash Transfer Scheme (SCT), implemented by the Department of Social Welfare, and the Food Security Pack (FSP) and the Women's Empowerment Fund (WEF) implemented by the Department of Community Development. Some of these programmes have a relatively long tradition, and essentially rely on voluntary community structures to identify beneficiaries.

The GoZ is currently scaling up the SCT, which has piloted four different targeting methods over the past decade, with the potential of rolling it out nationally in the near future. The GoZ has signed a Memorandum of Understanding with three donors (UNICEF, DFID and Irish Aid) under which for 10 years donors commit to provide support for the development of SCTs, although the support should gradually reduce over time.

SCT pilot targeting methods are:

- 1. The 10% Inclusive Model (IM), which targets the poorest 10% among incapacitated and destitute households;
- 2. The Social Pension scheme, which targets all people aged 60 and above;
- 3. The Child Grant scheme (CG), which targets all households with at least one child younger than 5 or disabled person under 14; and
- 4. The Multiple Categorical scheme (MC), which targets households satisfying one of the following conditions: households headed by women with at least one orphan, households headed by an elderly person with at least one orphan and households with at least one disabled member.

As the programme expands, the GoZ and other stakeholders believe that the SCT should rely on a harmonised method for selecting beneficiaries. Although the SCT has been scrutinised by several independent impact evaluations which have shown positive results, these targeting methods have not been evaluated in depth yet.

The Ministry of Community Development, Mother and Child Health (MCDMCH) recognises that, within the types of SCTs, the Social Pension Scheme is no longer a priority and instead should be passed to the authority of the Ministry of Labour. Therefore, we excluded this scheme from our analysis.

The assessment

UNICEF hired Oxford Policy Management, who conducted this research in collaboration with Rural-Net Associates Limited, to assess the three relevant targeting mechanisms used by the SCT, but also by other programmes such as the PWAS, the WEF and the FSP. The targeting assessment lasted six months and was based both on primary and secondary data sources.

In relation to primary sources, we conducted qualitative research in three districts: Kalomo, Kaputa, and Serenje, where the 10% IM, the CG and the MC are operating respectively. We also

conducted a comprehensive community survey in Chinsobwe and Nyamanda (Serenje) and key informant interviews were held with government officers at national and subnational level, SCT implementers and stakeholders. Regarding the secondary sources, we did a critical review of previous studies and also rely extensively on national household survey data.

SCT targeting methods: design issues and implementation issues

There are a number of design issues and implementation issues that undermine the effectiveness and acceptability of the targeting procedures summarised above.

Design issues

In relation to the design issues, one of the central problems of SCT targeting methodology is that **in some cases the method for selecting beneficiaries deviates from the programme's objective**. Both the MC and the CG have been designed to target vulnerable households in poor areas; however, the SCT manual of operations indicates clearly that the goal of the programme is to "to reduce extreme poverty and intergenerational transfer of poverty", not vulnerability. Methods that do not target the poor are not effective.

In this vein, the design of the IM stands on a fundamental flaw: aiming at targeting 10% of the national population does not mean that in each district and each community the poorest 10% should be targeted. In poorer areas this threshold should be higher, while in richer ones lower, so that on average the 10% is reached. Since the very beginning, this is not the way the IM has been implemented, which reduces the effectiveness and fairness of the scheme.

The designs of these three methodologies make them ineffective in targeting the extreme poor. The contribution of the three criteria to identifying the poorest is negligible. The criteria used in the three schemes are only slightly correlated with extreme poverty and hence do not represent an important contribution to the selection of beneficiaries. Therefore, theoretical design leakage (errors of inclusion) and under-coverage (errors of exclusion) are very high in all the schemes. Although only slightly correlated with extreme poverty, the IM criterion (incapacitated households) is much more progressive than the MC and CG.

Having said this, the IM and the MC criteria are in line with people's perceptions about who the poorest are and therefore these schemes are more accepted by the communities. We found that communities tend to believe that the extreme poor are those with no or reduced labour capacity, typically the elderly, the disabled, orphans, etc. In other words, labour constraints in most contexts referred to the absence of a 'fit man' in a household. Therefore, the criteria used by the IM and the MC are widely accepted in the communities. In the case of the CG, however, the findings are more negative; the CG scheme does not correspond to the perception of poverty and hence its acceptability is much lower.

We find that there is no single method that can effectively identify the poorest households and hence the methodology selected must be combined with another targeting tool in order to be effective (see our recommendation below). Design leakages are very high for all the schemes and the reason behind this expected result is that, even though correlated with rural poverty, the MC and the IM criteria capture households in the first four or five deciles but not necessarily the poorest. This, of course, increases the inclusion errors. From this view point, the current methods function more as ways of excluding better-off households than reaching the poorest; for that reason, these methodologies must be complemented with other mechanisms in order to be effective. Rightly, for this reason the IM intends to complement its criteria with community-based targeting while the MC and the CG employ geographical targeting. However, due to the implementation failures explained further below, it seems that communities are not really involved in the IM selection. Moreover, as a result of various data constraints poverty estimates at district level cannot be robustly produced from the Living Conditions Monitoring Survey data, which raises doubts about the current geographical targeting.

Implementation issues

Regarding implementation issues, the three schemes have been adapted to local circumstances and the way the selection works in practice differs substantially from the manual of operations. In practice, the three schemes essentially operate as targeted programmes rather than as universal ones.

Our fieldwork uncovered that some of the **key features of the IM have not been operationalised in Kalomo**. CWACs did not rank all eligible households but just selected the number indicated by the quota. Moreover, there was no validation of the selection done by CWACs in community meetings; such meetings had very few attendees and in general consisted of CWACs and headmen displaying the names chosen. Communities never rejected candidates. Furthermore, headmen played an important role in the identification of candidates. In the communities visited we found that headmen influenced or even led the selection done by CWACs.

Even though the MC is by design a universal scheme, in Serenje there was a ceiling of 150 candidates per community. Such quotas were allocated irrespectively of the extent of poverty or population and CWACs have carried out the selection in a rather chaotic and unfair way. We found that eligible households who live near the community centre were selected over those in other areas and in some communities a *first come first served* process took place until the 150 forms ran out. Moreover, enumerators' role in the MC appeared to be much stronger in comparison to the other schemes and in some cases they seem to be the ones leading the identification of candidates instead of the CWACs. Furthermore, neither self-registration nor continuous targeting are in operation in the MC in Serenje. Although an uptake exercise took place periodically to help capture some of the households who had been excluded, households cannot themselves simply apply at any point in time when they become eligible; they have to wait for the next targeting round.

The CG was also adapted to local circumstances in Kaputa. CWAC members seem to register only children who were being cared for by their biological mothers, and orphans were excluded. Moreover, as in the MC in Kalomo, in Kaputa quotas were established and CWACs had to develop different strategies for prioritising eligible candidates, again typically a *first come first served* approach, which is seen as unfair by the communities. Furthermore, requiring candidates to present under-five cards and national registration cards seem to be an important source of exclusion. Finally, the process of continuous selection is not in operation, although the frequency of uptake exercises appears to be high in this particular case and the process of self-registration whereby households could go to health centres to register had been instituted in all communities since the beginning of the year. However, there appeared to be a number of challenges with this process which have implications for targeting effectiveness.

In sum, the quota system seems to have left room for favouritism in the selection of beneficiaries in the three schemes. Generally speaking, respondents had the perception that when CWACs had to identify only some of the poorest (in the IM by design and in the MC and the CG due to implementation constraints), they prioritised relatives and neighbours. This undermined the acceptability of the programme.

Our recommendation for a harmonised targeting methodology

The above targeting analysis of current SCT schemes provided a number of important findings that can orient the search of a national targeting strategy. The key findings are the following:

- Given the extent of poverty in Zambia, it is difficult to find a targeting mechanism that can effectively reach only the poorest 10 or 20%. It seems that in the end the methodologies piloted as well as others studied in this research can only screen out the better-off, but their ability to differentiate among the poor is limited;
- Simple categorical criteria, like the ones piloted, are not very effective at identifying the poorest of the poor;
- Perceptions of groups deserving support are very strongly identified with households with low or absent working capacity;
- A system that somehow can be used to control the number of beneficiaries (quota) seems to be preferred by Government officials; however, quotas increase the favouritism in the selection and reduce the acceptability of the programme; and
- Even relatively simple categorical schemes pose a number of implementation challenges.

Our proposal for a harmonised targeting methodology is therefore based on the assessment of the current methods, the objectives of the SCT and the context and constraints that the programme faces. Since there is no single criterion or targeting methodology that can effectively reach the poorest, we propose **a double-screening strategy**.

The first filter would consist of a simple categorical eligibility criterion: intra-household dependency. This means that households without able members and households with dependency ratios of at least three dependents per able body would be eligible. Since the pilots showed that when ceilings were imposed the selection was perceived as unfair and not transparent, and the acceptability of the programme was undermined, we believe that no quota should be set. Hence, CWACs would play the important role of informing the community about the eligibility criteria and help in identifying all the households that meet the dependency ratio criterion. Then, enumerators would be in charge of listing the households identified by CWACs.

Regarding the second screening, we recommend combining the identification done by CWACs with an objective poverty assessment. Such a screening would allow the programme to: 1) exclude candidates that are somewhat better off; 2) set quotas according to the budget available (to a certain extent); and 3) do geographical targeting. Therefore, the poverty screening would be a powerful tool not only for reducing errors of inclusion but also for prioritising as well as controlling the expenses of the programme.

It has been suggested by the MCDMCH that a community validation could be incorporated to the process as a third and final screening. Even though this extra screening could increase the acceptability of the programme, we think that the costs might outweigh the benefits and that there are clear risks to indirectly introduce some form of quota. The MCDMCH should evaluate to what extent the targeting improvement would be significant enough in order to justify the endeavour. One possibility could be to introduce a third step involving primarily informing the community about the selected household and using this opportunity as a possibility to lodge complaints.

Conducting the proposed targeting exercise once every three years seems feasible and frequent enough to guarantee the effectiveness and efficiency of the programme. In every targeting round all beneficiaries would be interviewed by the enumerators as well as other households identified by the CWACs. In order to be effective and accepted, however, this methodology will need to be complemented with other important improvements to the system, particularly in relation to its implementation.

The results of the simulations conducted indicate that even though design leakage and undercoverage are still high for the proposed methodology (although lower than for the current schemes), the harmonised method is much more progressive than the IM, the MC and the CG.

Other programmes

We briefly studied the targeting of three other social programmes: PWAS, FSP, and WEF. This analysis relied largely on secondary sources and therefore it is recommended that a comprehensive analysis of the targeting of these programmes is conducted.

Although the **PWAS** seems to be fairly effective at targeting the poorest, the selection done by CWACs seems to be arbitrary and not transparent and therefore leaves room for unfairness and questionings. In practice, PWAS has two different schemes: 1) in-kind support is provided to households selected by CWAC members; and 2) support is provided for the education of pupils selected by schoolteachers. The in-kind support scheme pursues the same objectives and uses the same local structures for selecting beneficiaries as the SCT. However, the erratic funding, the discretionary targeting and indeed the type of support seem to undermine its impact and acceptability. As a consequence, we recommend transferring the funds used for PWAS/in-kind transfers to SCT. The education scheme, however, provides different support to that intended by the SCT and also relies on other targeting mechanisms. We recommend redefining the PWAS objectives in terms of education outcomes and improving the targeting method. The selection of beneficiaries could be improved by supporting the schoolteachers with clear guidelines and training for the identification.

In relation to the **FSP**, there are three aspects of the targeting strategy that might undermine the effectiveness of the programme: 1) FSP relies almost exclusively on community-based assessment: since data is not collected, the MCDMCH cannot assess either the viability or the vulnerability of the households identified; 2) FSP assumes, in a similar way as the SCT, that 'secondary level criteria' are highly correlated with vulnerability (i.e. female-headed households, households keeping orphans, etc.). However, using only demographic criteria might not be effective due to the low correlation with extreme poverty; and 3) FSP coverage is very low, leading to high exclusion.

WEF targeting suffers from a fundamental problem. Although the programme aims at reducing poverty and hunger, it is not clear how these two variables are assessed. The application form does not collect any information for assessing poverty and vulnerability and therefore the core of the selection is not based on indicators of individual members' wellbeing. Although the programme might be operating in poor communities, not every community member is equally poor. It is difficult to assess to what extent the programme is effective if there is such a discrepancy between the objectives and the targeting process. If WEF's true objective is to reduce poverty, then the programme needs to develop a mechanism to reach the poor. However, it might be better just to acknowledge that this programme does not aim at reducing extreme poverty.

The effectiveness of WEF targeting seems to be undermined by a range of implementation factors, the most important ones being: 1) the length of the application process seems to be very long. It has been reported by the community development officers interviewed that the assessment of the application form never takes less than five months and often takes up to a year; and 2) although the effectiveness of the self-targeting mechanism depends on adequate information dissemination, it seems that the most dominant mode of information sharing is word of mouth and there are no systematic strategies for dissemination.

1 Introduction

UNICEF hired Oxford Policy Management (OPM), who conducted this research in collaboration with Rural-Net Associates Limited, to assess the targeting mechanisms used mainly by the Zambian Social Cash Transfer programme (SCT), but also by other programmes such as the Public Welfare Assistance Scheme (PWAS), the Women's Empowerment Fund (WEF) and the Food Security Pack (FSP).

The study of the SCT is particularly timely because the Government of Zambia (GoZ) is currently scaling up the programme, with an eye on its potential for a national roll-out in the near future. For the last decade the SCT has piloted four different targeting methods; however, as the programme expands the GoZ and other stakeholders believe that the SCT should rely on a harmonised method for selecting beneficiaries. Although the SCT has been scrutinised by several independent impact evaluations which have shown positive results, these targeting methods have not been evaluated in depth yet.

The Ministry of Community Development, Mother and Child Health (MCDMCH) recognises that, within the types of SCTs, the Social Pension Scheme is no longer a priority and instead should be passed to the authority of the Ministry of Labour. Therefore, we excluded this scheme from our analysis.

The main objectives of this assessment are to study the effectiveness and acceptability of the SCT targeting schemes as well as proving a recommendation for a harmonised methodology. The assessment lasted six months and was based both on primary and secondary data sources. In relation to primary sources, we conducted qualitative research in three districts where different SCT targeting schemes are operating (Kalomo, Kaputa, Serenje - see Annex C) and we also conducted a comprehensive community survey in two communities in Serenje (see Annex D). Moreover, key informant interviews (KIIs) were held with people such as government officers at national and subnational level, SCT implementers and stakeholders. Regarding the secondary sources, we did a critical review of previous studies and also relied extensively on national household survey data. However, the study nevertheless faced important data constraints. We did not have access to census data and the Central Statistical Office (CSO) was not able to produce key estimates such as the number of eligible households per district, among others. Moreover, the 2010 Living Conditions Monitoring Survey (LCMS) at our disposal did not have the official consumption aggregates and instead we used the aggregates computed by the World Bank. Furthermore, we did not have access to the data collected by previous and current impact evaluations. Finally, since the Management Information System (MIS) of SCT is still being developed and operationalised, we found that the data saved in the system was partial and not very useful for our purposes.

In this report we present the main findings of the assessment and we propose a harmonised targeting method for the SCT. In relation to the other programmes, the analysis of their targeting mechanisms relies heavily on secondary sources and, even though we do provide some recommendations, we believe that further research is needed.

The report starts by providing an overview of poverty and SCTs in Zambia. We then define key concepts and describe our approach to studying the targeting of cash transfers. In chapter 4, we present the main findings on the targeting of the schemes. Chapter 5 provides recommendations for a harmonised national targeting approach. Before offering some conclusions (chapter 7), we also study other transfers and their interrelation with SCTs in chapter 6. In various annexes we provide more technical details on the instruments used for the analysis.

2 Overview on poverty and social cash transfers in Zambia

In this section we present some important data and trends in relation to poverty and social protection in Zambia. Moreover, we describe the main features of the SCT programme.

2.1 **Poverty in Zambia**

Zambia has experienced sustained economic growth in the last decade but poverty has only marginally fallen. From 2000 to 2010, Zambia's GDP increased by an annual average of 5.7%, driven primarily by the mining, construction, financial services and tourism industries, all of which are strongly associated with the urban economy. However, 2010 LCMS data indicate a headcount poverty rate of around 60% – only 6% lower than the same figure in 1996 – and an extreme poverty rate of 39%.^{1 2} Persistence of poverty in face of growth points to the existence of inequality in the distribution of the resources generated from economic growth (World Bank, 2012 and 2013).

Poverty is predominatly a rural phenomenon. The analysis of 2010 LCMS data suggests that residence in rural areas is strongly associated with being poor, as illustrated in Figure 1, which shows the composition of each consumption decile distinguishing between rural and urban population. 94% of the households in the poorest decile lives in rural areas,³ while the overall rural population is 64%.

¹ Data analysis in the report is based on the 2010 LCMS. We used World Bank consumption aggregates and poverty estimates since the GoZ ones were not available. This implies that some of our estimates are slightly different than the ones calculated by the GoZ (i.e. the headcount ratio computed by the government is 57% overall, while the one based on the World Bank estimates is 61%). In order to see the differences between GoZ and World Bank aggregates and estimates please refer to World Bank (2012).

² Poverty and extreme poverty in this report are defined as the percentage of the reference population living in households whose per adult equivalent consumption is below the basic needs poverty line and the food poverty line respectively. The food poverty line is fixed at ZMK 98,505 per month, while the basic needs poverty line is ZMK 146,054 for rural areas and ZMK 180,551 for urban areas.

³ The Central Statistical Office defines an urban area mainly by two criteria: population size and economic activity. An urban area is one with a minimum population size of 5,000 people. In addition, the main economic activity of the population must be non-agricultural, such as wage employment. Finally, the area must have basic modern facilities, such as piped water, tarred roads, post office, police post/station, health centre, etc.

Figure 1 Percentage of households in each consumption decile, by urban and rural areas



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Moreover, rural households are more equally spread across consumption deciles than the urban population, which is concentrated in the three richest deciles (see Figure 2). This distribution reinforces the notion that urban areas enjoy the benefits of growth and therefore are, to a great extent, better off.

Figure 2 Household distribution across consumption deciles (%), by urban and rural areas



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

The distribution of poverty unfolds substantial regional differences which follow the urbanrural divide. In the most urbanised provinces, like Lusaka and Copperbelt, poverty rates are substantially lower than in provinces with a greater concentration of rural areas. Eastern, Luapula, Northern and Western provinces have the highest poverty rates.

Table 1Percentage of households in rural and urban locations, by province

	Province								
Location	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North- Western	Southern	Western
Urban	24.9	79.1	9.9	11.0	82.2	14.3	20.0	25.5	13.4
Rural	75.1	20.9	90.1	89	17.8	85.7	80.0	74.5	86.6

Source: Own calculations using LCMS (2010).

The poorest 10% of Zambian households are mostly concentrated in six provinces: Eastern, Luapula, Northern, North-Western, Southern and Western. Moreover, only a few of the poorest Zambian households are in the Lusaka, Copperbelt and Central provinces. As expected, the provincial variation in poverty is mainly driven by whether a province is predominantly rural or urban.

Figure 3 Distribution of households belonging to the poorest 10 and 20 percent (%), by province



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

2.2 Social protection policy in Zambia

The GoZ considers Social Protection as a key strategy to support economic growth, reduce poverty, and promote equity and fulfilment of human rights. Towards these objectives, the MCDMCH is implementing important social protection schemes: the PWAS and the SCT implemented by the Department of Social Welfare and the FSP and the WEF implemented by the Department of Community Development. Some of these programmes have a relatively long tradition, and essentially rely on voluntary community structures to identify beneficiaries.

On paper the PWAS aims at targeting the poorest 10% of the population with various forms of inkind support, but resources are channelled to the communities who then identify the beneficiaries.⁴

The FSP and WEF are targeted at relatively poor households/communities who have land and the labour to work on it, and for WEF again the target is supporting small activities at the community level and providing resources to established women's groups who apply for funds.

The SCT schemes started in 2003 as a pilot in one district, but now covers 11 districts and they will be rolled out in another four by the end of 2015, to cover 15 districts in total.⁵ These schemes developed different approaches of targeting and implementation arrangements, and currently there are four different methods used to identify the beneficiaries:

1. The 10% Inclusive Model (IM), which targets the poorest 10% among incapacitated and destitute households;

⁴ The target of 10% is stated in the PWAS Guidelines (MCDMCH, 2008) and was also confirmed in meetings with representatives of the Ministry.

⁵ Within the districts overall coverage is about 22%, although it varies greatly between districts. Overall, the population of these 15 districts makes up 18% of the Zambian population.

- 2. The Social Pension scheme, which targets all people aged 60 and above;
- 3. The Child Grant scheme (CG), which targets all households with at least one child younger than 5 or disabled person under 14; and
- 4. The Multiple Categorical scheme (MC), which targets households satisfying one of the following conditions: households headed by women with at least one orphan, households headed by an elderly person with at least one orphan and households with at least one disabled member.

These methods are described in detail in Section 2.3.

Importantly the GoZ signed a Memorandum of Understanding with three donors (UNICEF, DFID and Irish Aid) under which, for 10 years, donors commit to provide support for the development of SCTs, although the support should gradually reduce over time.

In the meantime, in 2012 the GoZ started a process for the development of the National Social Protection Policy through a technical working group, which comprises all the line ministries and especially those involved in social protection activities, civil society organisations and cooperating partners (CP). Furthermore, there is the intention to plan for national coverage of the SCT and to identify a harmonised approach to targeting and implementing SCTs.

Although this study focuses on the programmes mentioned above, the GoZ is implementing other policies that are part of the Zambian safety net. According to the World Bank (2013), there are currently thirteen ongoing government programmes in Zambia which directly provide transfers either in-kind or cash to households.

The prospects for an expansion of the Social Protection System are based on an apparent **agreement on the possibility of increasing spending on social protection.** On the one hand, as already mentioned, the GoZ is expanding the SCT and is working towards the creation of a National Social Protection Policy, showing its willingness to strengthen the social protection system. On the other hand, donors like UNICEF, DFID, Irish Aid and the World Bank also believe that there is room in the budget for higher expenditures.

The issue is to determine what an affordable, effective and efficient social expenditure would be. It seems that reaching between the poorest 10% and 20% of Zambian households is both affordable and could have a substantial impact on extreme poverty. According to the World Bank (2013), government expenditure on safety nets for the poor currently represents only about 0.2% of GDP, which is very low compared to other countries in Africa (where spending ranges from about 0.5% to 3.5%). Moreover, the same report indicates that scaling the SCT up to cover the poorest 10% of Zambian households would cost US\$ 41 million per year (at the current transfer value) which corresponds to 0.23% of GDP. Reaching the poorest 20% would cost about 0.45% of GDP.

However, it is not only a matter of increasing the expenditure but also of making it more effective and efficient. On the one hand, some programmes seem not to be as effective as they should be due to both design and implementation problems. On the other hand, some interventions seem not to be efficient in the sense that alternative policies could achieve the same or better results at lower costs.

Box 1 Previous studies on SCT targeting

In the last 10 years of piloting SCTs in Zambia there has been a lot of discussions on targeting; however, the selection of beneficiaries have been somehow put in a secondary light by the need to show the impact and effects of such programmes through some rigorous impact evaluations and due to budget limitations affecting the scale-up.

An impact evaluation of both the CG and the MC is currently underway and in 2011 a report which analyses the baseline results was published (Seidenfeld and Handa, 2011). In the same line, Tembo and Freeland (2008) analysed the baseline survey in Monze where the SCT programme has some additional soft conditions and then Seidenfeld and Handa (2011) reported the results of the three-year impact evaluation.

More specifically on targeting, the initial studies of the Kalomo Pilot have argued that at that time 10% was a good estimate of the national percentage of incapacitated extremely poor households in need of support – they found that such a quota being applied to every community resulted in a good targeting within the community, but had limitations when comparing across communities (Schubert and Goldberg 2004).

The most thorough study on targeting was produced by Watkins (2008), who provided evidence of how community-based targeting (CBT) can be affected by the different context in which it operates, with differences in the targeting accuracy depending on urban/rural settings, levels and characteristics of extreme poverty, and intensity in which community selection is monitored.

The study at that time was also supposed to provide guidance for an expansion of the SCT schemes, but the recommendations of that study were only partly followed. Instead, in 2010 the CG started in the three most deprived districts (Kalabo, Kaputa and Shang'ombo), selected essentially based on the degree of poverty and child mortality rates. Another consultation on targeting approaches was held in 2011, resulting in the selection of the MC targeting scheme.

However, and despite of all the information available, there are no complete and satisfactory assessments of SCTs' targeting effectiveness. In particular, targeting analysis of SCTs has been somehow affected by studies that, wanting to measure impact, collected information only for beneficiaries and control groups. From a targeting perspective, such a strategy only provided partial results. Indeed, very importantly, with such data it is not possible to analyse errors of exclusion.

Moreover, all the studies undertaken tend to focus on the districts where the programmes were operating, with little research looking at the issue of targeting from a national perspective (the only exception is the study conducted by Watkins (2008), but even in such a case the use of national-level information has been relatively limited). This means that all their findings and recommendations are certainly in terms of rigour applicable to those districts, but are not necessarily valid in other parts of the country. This is particularly important to a plan aimed at expanding SCTs.

2.3 The SCT programme

This section is based on SCT manual of operations (MCDMCH; 2013a) and describes in detail each targeting scheme. Not only the criteria are presented but also the processes and the implementers involved as indicated in the manual. As already mentioned, in this research we do not study the Social Pension Scheme and therefore it is not included in this section.

Given the objectives of this study it is particularly important to describe in detail the targeting criteria and processes. Then, in the following sections, we analyse how effective the design of those criteria and processes are, as well as how effective their implementation are, meaning to what extent the processes are actually operated as stated in the manual.

According to the manual of operations, the main implementers of SCT targeting processes are:

- The **Community Welfare Assistance Committees** (CWACs) are integrated by 10 members elected by the communities and are in office for a period of three years. In relation to targeting, their main responsibilities are: 1) To identify households and work in collaboration with the enumerators in conducting the interviews and filling in application/registration forms; 2) To undertake awareness campaigns about the programme; 3) To verify the correctness of the information on Form 01; and 4) To monitor if there are any inclusion or exclusion errors in regard to households and report to the Area Coordinating Committee (ACC).
- The **enumerators** are identified and selected by the District Social Welfare Office (DSWO) in collaboration with other local stakeholders. The minimum requirement for the enumerators is a Grade 12 Certificate with ability to read and write. This ensures that all Form 01s can be filled in correctly. CWAC members can also be enumerators, provided they meet the requirements. Under the CG health workers can enumerate newly born babies. The main responsibilities of enumerators in the selection of beneficiaries are: 1) To work in collaboration with the CWACs after they have identified the beneficiaries; 2) To conduct interviews and register any qualifying beneficiaries for the Scheme on Form 01; and 3) To submit the Form to the DSWO.
- The **ACCs** are comprised of CWAC members and their term of office is a period of three years. The ACC verifies the information contained in Form 01.
- The District Welfare Assistance Committees (DWAC) are the highest authority within the PWAS district structures and serve for a period of three years. The DSWO is the DWAC Secretariat and other members are representatives of government institutions, church representatives, members of NGOs in the districts. The DWAC is the last level of control in the approval of applications: 1) One DWAC member assists the DSWO in reviewing all application forms; and 2) the DWAC discusses critical cases and approves or rejects critical applications.
- The DSWO includes the District Social Welfare Officer and at least two Assistant Social Welfare Officers. The DSWO is mainly responsible for: 1) Ensuring that all grassroots structures are functioning; 2) Facilitating and organising training for the ACC, CWAC and enumerators in the district; 3) Verifying application forms with DWAC to check whether the basic entry criteria have been correctly fulfilled; 4) Approving application forms with DWAC; and 5) Serving as a secretariat to the DWAC.
- **Village headmen** must keep the village register up to date, support the CWACs in the identification of beneficiaries and approve the application forms.

It is worth noting that all the actors above have similar roles across the different targeting schemes, representing a common platform for a harmonised method. Moreover, the application form (Form 01) is also common to all the schemes and the processes described below apply across the board as well, although with adaptations to the different models as explained further below.

The figure below is extracted from the manual and summarises the targeting process at district level. In summary: 1) candidates are identified by CWACs; 2) enumerators fill in the application forms; 3) CWACs, headmen and ACCs approve the forms, which are then submitted to the DSWO; 4) The DWAC and the DSWO approve or reject the applications.





Source: MCDMCH (2013a). Note: Numbers in bracktes indicate the phases mentioned above.

2.3.1 The 10% IM

In this scheme households are selected once every five years and the SCT targets households considered by the communities to be: (1) destitute and (2) incapacitated. 'Destitute' means that the household struggles to survive, adopts negative coping mechanisms, has fewer than three meals a day, insufficient shelter and clothing, limited access to education and health and only irregular and insufficient support. 'Incapacitated' means that the household has either no household members who are fit for work and of working age or that there is a very high dependency ratio (at least three unfit members for every fit member).⁶

Among all eligible households in each community, only 10% is selected. According to the manual, "the rationale behind the cut-off point is based on research conducted by the GTZ Social Safety Net Project as well as MCDMCH and is used as a ceiling for the scheme. The research revealed that on average 10% of all households urgently require social assistance interventions. They are critically poor (surviving often on just one meal per day) and at the same time labour-constrained."

⁶ Dependency ratio is measured here as the ratio of unfit members in the household divided by the number of fit household members. Unfit are those less than 19 or more than 64 or those aged 19–64 but chronically ill, disabled or still attending school.

Box 2 Summary of the IM process

- A three-day training session is organised by the DSWO for the enumerators, the CWACs, and the headperson/section chairperson. ACC members join the training in their respective CWAC. The community (including any civil society organisations) are invited to this session. Posters for schools, health posts and other central places and flyers on the cash transfer scheme are distributed for sensitisation purposes;
- > The CWAC identifies and interviews all destitute and incapacitated households in the community;
- Enumerators are engaged to fill in information on the application form;
- The village headperson/section chairperson/community leaders verify that all information on the application forms is correct;
- > The CWAC comes up with a ranking of all applicants;
- > The ranking of candidates is discussed and approved by the community in a meeting;
- The ACC verifies that all application forms are complete, correct and consistently filled in and manually checks for 10% of all application forms received whether the information on the application form is true;
- The DWAC with the assistance of CWAC representatives then scrutinise all application forms once more and ensure that all beneficiary households fulfil the eligibility criteria;
- DSWO informs the CWACs and ACCs of the final beneficiary list and CWACs inform the approved and disapproved households.

Source: MCDMCH (2013a)

2.3.2 The MC scheme

The MC mechanism is universal for certain categories of people. It targets households which fulfil the following criteria: 1) Female-headed household keeping orphans; 2) Elderly-headed household (60 years and above) keeping orphans; and 3) Household with at least one disabled member. Moreover, applications to the MC can be submitted at any point in time, since there is an open window for applications.

Box 3 Summary of the MC process

- A two-day training session is organised by the DSWO for the enumerators and a one-day orientation for the CWAC and the headperson/section chairperson. ACC members join the orientation in their respective CWAC. The orientation starts with a general information session about the cash transfer scheme on the rationale, the objectives and the entire set-up of the scheme. The community (including any civil society organisations) are invited to this session;
- The CWAC with the help of the village headperson/section chairpersons identify all eligible households in the community;
- > The enumerators fill in the application form;
- The village headperson/section chairperson/community leaders verify that all information on the application forms is correct;
- > The ACC verifies that all application forms are complete, correct and consistently filled in;
- DSWO informs the CWACs and ACCs of the final beneficiary list and CWACs inform the approved and disapproved households.

Source: MCDMCH (2013a)

2.3.3 The CG scheme

The CG has a two-stage targeting procedure. First, the districts where the scheme is implemented are selected due to high poverty and high under-five mortality rates (geographical targeting). The second stage involves the selection of households.

According to the manual, "because poverty rates are extremely high in these districts – averaging 88%, and peaking at 96% – universal categorical targeting is preferred to poverty targeting, as the number of non-poor households on the scheme will be small and probably less than the costs of targeting to exclude a small minority of households. The non-poor might also be vulnerable to falling into poverty in these areas since poverty levels are very high and they might give considerable household resources to other poor families."

The criteria for the second stage of the targeting are: 1) The applicant must be a mother and where the mother is dead the applicant should be the primary caregiver. A primary caregiver is any person (i.e. parent, relative or friend) who is looking after the child and directly responsible for the child's welfare; 2) The child must be 36 months or younger at point of application and registration. The entry age was set to ensure every household would spend a minimum of two years on the scheme; and 3) Households with physically disabled children are eligible for entry onto the scheme at any age below the age of 14 years.

It is worth noting that applications to the CG can be submitted at any point in time, since there is an open window for applications.

Box 4 Summary of the CG process

- After informing the local authorities as well as the community about the scheme, the CWACs are trained in cash transfer management;
- The CWACs and local health centres/clinics identify potential beneficiaries and the enumerators register all potential household beneficiaries in the community;
- The village headperson/section chairperson verifies that all information on the application forms is correct;
- > The CWAC submits the list of all registered qualifying households;
- The ACC verifies that all application forms are complete, correct and consistently filled in and, for all application forms received, checks whether the information on the application form is correct;
- The DSWO/DWAC with the assistance of CWAC representatives then scrutinise all application forms once more and ensure that all beneficiary households fulfil the eligibility criteria;
- The DSWO informs the CWACs and ACCs of the final beneficiary list and CWACs inform approved and disapproved households.

Source: MCDMCH (2013a)

In the CG not all the candidates have to go through this process. Newborn babies can be enumerated at the health centres by health workers. Then, the forms have to be collected on a monthly basis by the CWACs for verification. Once the CWACs have completed the verifications the forms are submitted to the ACCs and the process continues as in Box 4.

3 Targeting beneficiaries of social transfers

In this section we briefly present the key targeting principles as well as the methods frequently used for selecting beneficiaries of cash transfer programmes in developing countries.

3.1 **Principles and criteria**

Although often taken for granted it is important to briefly refer to the main guiding principles that should be in place when a targeting approach becomes part of a national programme and it is legalised. **These principles are justice, fairness and transparency.** The targeting approach should treat everyone in a just way and with procedures that are and appear to be fair and transparent.

3.1.1 Who is the target?

This is a fundamental question for which clarity is of paramount importance. These are the issues we must be aware of in answering such a question:

- 1. The target must be defined for the whole country to ensure justice and fairness (although in different locations it is possible to use different methods to reach the target);
- 2. The target needs to be defined as precisely as possible; and
- 3. The target of a certain programme needs to be coordinated with other interventions in social protection and social policy.

3.1.2 How to target?

Although how to target depends on who we want to target, there are specific elements that are useful to assess in order to compare different targeting methods.

More specifically, targeting must be assessed against three main criteria:

- 1. Effectiveness: the ability to reach the target group;
- 2. Efficiency: the cost of targeting; and
- 3. Acceptability: whether the targeting approach is accepted and considered to be fair by the communities.

3.1.2.1 Effectiveness

Problems in targeting effectiveness can arise from two different fronts: design or implementation. Design failures and inconsistencies can lead to high errors of exclusion or inclusion. For instance, sometimes programmes have eligibility rules that unintentionally promote under-coverage or leave room for leakages (errors of inclusion). On the other hand, even perfectly well designed programmes can be ineffective due to challenges in implementing the programme. These challenges may arise from poor communication and sensitisation campaigns, missing of important design steps, inadequate training of field staff and general administrative capacity. As an, , if a certain social programme does not conduct proper communication campaigns it is possible that many "eligible" households would never be aware of the existence of the benefit or of

their eligibility and therefore not apply. In this case, the programme will be highly inefficient since it will have low take-up regardless of its design.

Figure 5 captures these distinctions showing how design errors appear from the mismatch between the target group (the poor in the figure) and the eligible population (the way in which the targeting mechanism identifies the eligible) and implementation errors from the mismatch between eligible and actual recipients of the programme. This disentangles the combined errors whereby we look at the extent to which the recipients are poor. Therefore, exclusion errors (poor not receiving cash) are the results of under-coverage and non-take-up and inclusion errors (non-poor receiving cash) are the result of both design and administrative leakage.

Figure 5 Disentangling targeting errors into design and implementation failures



Source: Carraro (2007).

Following these distinctions, in these report we use the following terminology:

- 1) Inclusion error:
 - a. *Design leakage* refers to the households that, due to design failures, are eligible for the programme but are not poor (i.e. are not the ultimate target of the programme);
 - b. *Administrative leakage* identifies the households that, due to operational failures, are benefiting from a programme although they are not eligible;
- 2) Exclusion error:
 - a. Under-coverage refers to the households that are not eligible for a certain programme but are in the target population (poor) due to problems with the design of such programme; and
 - b. *Non-take-up* indicates the households that although eligible are not benefiting due to implementation shortcomings.

Leakage and under-coverage depend on the size of the eligible population, the size of the target population and the relationship between eligibility and target population. Therefore, if the size of the eligible population is higher than the target population we would have by default at least a leakage equal to the difference between the eligible and target population. Similarly, if the size of the eligible population is lower than the target population by default we would have an under-coverage equal at least to the difference between the two. It is only when the two populations are the same that theoretically we could have zero leakage and under-coverage.

For example, if the target is 10% of the households and there are 20% of eligible households at least 10% of the households will be considered as design leakage, which when expressed as a percentage of the eligible population makes a minimum of a 50% leakage. However, leakage will then be even higher depending on the correlation between target and eligible population.

3.1.2.2 Efficiency

Another important dimension when comparing different targeting methods is that of the cost of targeting. If a method is very effective but is far too expensive, thus exceeding the available budget, it might be more appropriate to use a less effective but cheaper targeting method.

Moreover, it is important to notice that reducing design and implementation errors is expensive and burdensome, hence a situation where there are zero errors is not ideal since it is not affordable

3.1.2.3 Acceptability

Another key dimension of social protection programmes' targeting is acceptability. Acceptability refers to how recipients and non-recipients view the targeting criteria and its implementation. A targeting mechanism is acceptable when it receives the support to make programme delivery sustainable. The level of support is determined by different stakeholders' perceptions of **fairness** as well as the level of **transparency** of the targeting protocol. In particular, transparency increases the level of trust that the programme is not being manipulated by particular groups to capture benefits at the expense of others. Moreover, unacceptability can come from two different sources. On the one hand, misinformation is usually an important source of rejection of a programme's targeting. People believe that the criterion is X while in fact it is Y, and therefore they make their judgement according to that misconception. On the other hand, well-informed people might simply disagree with the targeting, considering it unfair or unjustified. Again, this judgement could come from a discontent with the design of the programme (i.e. it should not target only poor households) or with its implementation (i.e. Z beneficiary is not eligible).

3.2 Alternative targeting methodologies

International experiences in developing targeting mechanisms for social programmes reveal several different methods, including proxy means tests (PMT), CBT, geographical targeting, demographic/categorical targeting and self-targeting. African countries have successfully and unsuccessfully drawn on these different mechanisms and also on mixed methods. Evidence shows that there are no good or bad methods per se but that they depend on the context, the way they are implemented and the policy objectives:

"The gold standard of targeting is a verified means test that collects (nearly) complete information on a household's income and/or wealth and verifies the information collected against independent sources such as pay stubs, or income and property tax records. This requires the existence of such verifiable records in the target population, as well as the administrative capacity to process this information, and to continually update it, in a timely fashion. For these reasons verified means tests are extremely rare in developing countries where the poorest households receive income from a myriad of diverse sources and formal record keeping is non-existent. Absent the capacity for a verified means test, other individual assessment mechanisms are used" (Coady et al, 2004). Such targeting methods are reported and summarised in Table 2.

Method	Concept	Pros	Cons
PMT	Uses a complex set of quantitative household characteristics to calculate a score that statistically correlates with household poverty (normally measured via consumption expenditure)	The selection process can be undertaken in an automated way Is the method that better correlates to the poverty objective function (in statistical terms at least) (depending on the quality of the household-level data that the model is built on) Common standards and an absolute definition of poverty are used across the country	The collection and verification of information involves substantial costs, as well as defining the ways this can be done Does require that the PMT model is appropriately calibrated using up-to-date household budget survey data (depends on the quality of the household-level data that the model is built on) Needs to include periodic recertification of beneficiaries It is difficult to understand how eligibility is determined, not only for beneficiaries but also for programme implementers Difficult in a context of very high poverty dynamics
CBT	A group of community members (community representatives) decide who in the community should benefit and who should not (on the basis of some pre-determined agreement on a broad definition of poverty)	Local actors have more information available to them or at lower costs than would officials from an external agency Allows communities to define need as they think most appropriate Low administrative costs	Community leaders may have incentives other than providing the best targeting outcome Can perpetuate local power structures Presumes that the community agrees with the broad poverty definition established The very notion of community is problematic

Table 2 Targeting methods used in developing countries

			The definition of poverty tends to be of a relative nature
Geographical targeting	Involves allocating resources to geographic areas using information that is thought to be a good indicator of the extent of poverty in these areas	Requires few administrative resources. There is a correlation between geographic location and poverty	Depends very much on being able to identify and measure geographical-level variables that are correlated with welfare There are some administrative issues (i.e. it may be difficult to justify that some geographical units are selected with universal coverage and some neighbouring units are completely excluded) Tends to have low political acceptability Needs to include periodic re-allocation of the programme if geographical poverty varies over time (i.e. due to climate shocks)
Demographic/Categorical targeting	To select groups defined by easily observed characteristics (the old, the young, female-headed households, etc.) or simple demographic criteria (dependency ratio, household size, number of children)	Has high political acceptability Simple, low implementation cost and relatively few problems with "measurement error"	The effectiveness depends on whether it is possible to select clearly identifiable demographic groups that are poorer on average than groups that are excluded
Self-targeting	Programmes are open to all, but designed in such a way that they are used mainly by the poor	Political costs are usually low People choose to participate or not	Administering the programme as a whole is complex Aside from workfare, it can be hard to find a self-targeting tool that allows both good targeting and provides a substantial benefit

Source: Own

4 Analysis of SCT targeting methods

In this section we study the effectiveness, acceptability and efficiency of the IM, the MC and the CG. We start the analysis by identifying SCT target groups in Section 4.1, and then we study the effectiveness and acceptability of each scheme. Finally, we present a brief analysis of SCT targeting efficiency.

In the analysis of effectiveness we distinguish between design and implementation effectiveness. For the first we use the LCMS and replicate, to the extent possible, the eligibility criteria. The MC and CG criteria can be easily replicated since the survey captures all the demographics required (age, gender, orphanhood, disability, etc.). However, as indicated in Annex A, there are some methodological constraints to these calculations. In relation to the IM, naturally, it is not possible to simulate the selection done by CWACs. Therefore, when studying the design of the IM, we focus exclusively on the eligibility criteria (incapacitated households). There are also methodological constraints in relation to measuring disability and chronic illnesses (see Annex A).

The analysis of implementation effectiveness is based on qualitative research conducted in Kalomo, Serenje and Kaputa and on the comprehensive community survey conducted in Serenje (see Annex C for a description of the research methodologies).

Before starting the analysis it is important to define a key concept used in this report: *Decile* is a descriptive statistical grouping obtained by ranking households from the poorest to the richest and calculating 10 groups of equal number of households.⁷ In the first decile we would find the 1/10 poorest households, while in the tenth the 1/10 richest.

4.1 SCT target group

As already highlighted in Section 3.1.1, in order to develop a coherent selection mechanism it is important first to define the target group and the potential outreach at national level.

However, it seems that the SCT target group is not clearly defined and that it is not the same one for all schemes. This problem seems to arise from the lack of clarity in relation to key concepts like poverty and vulnerability and the way the different schemes were designed.

To begin with, the SCT manual of operations (MCDMCH; 2013a) and other relevant documents use concepts like poverty and vulnerability without defining them. Moreover, in some cases they seem to be considered synonyms while in others they are meant as very different concepts.

Nevertheless, the manual of operations does state very clearly that the main objective of the SCT is "to reduce extreme poverty and intergenerational transfer of poverty" (MCDMCH; 2013a: 4). There is no mention of vulnerability at all in the main objectives, and it is reasonable to interpret that the target group is the extreme poor.

Moreover, according to the same manual the IM "targets households who are destitute and incapacitated and households with members living with disability. Priority should also be

⁷ An alternative would be to define population deciles, but since the common target is the household and benefits are per household rather than people within the households, we believe that it is more appropriate to work with household deciles.

considered for female-headed households as they are more vulnerable to extreme poverty and hunger" (MCDMCH; 2013a: 23). It further states that "the CWAC will conduct the identification of the vulnerable households to be considered during the targeting" (MCDMCH; 2013a: 25). It seems that some population groups are more likely to be vulnerable, but then the CWACs need to verify that they are actually in need. Once again, it seems that the concepts of extreme poverty and vulnerability are mixed.

In relation to CG and MC, some stakeholders point out that poverty is targeted with the geographical selection of districts and that the categories aim at reaching vulnerable households. While the manual describes this two-stage process for CG (MCDMCH; 2013a: 31), the same is not indicated for MC.

The report that summarises the Targeting Workshop conducted by the MCDMCH in 2011 (MCDSS; 2011) seems to agree with the notion that categorical targeting is intended to reach vulnerable groups. However, it also suggests that community-based methods like the IM should target the most vulnerable: "The workshop concluded with a consensus recommendation to implement a combination of geographical and categorical targeting in the poorest districts in Zambia, and to use a community-based mechanism to identify the most vulnerable households in less poor districts." This shows that different reports express dissimilar views of what the target groups are.

As a consequence, although the main objective of the programme is explicitly stated in the manual, it seems that in practice there is no unique and clear target group that is based on well-defined concepts. This makes the challenge of assessing the performance of the different targeting mechanisms much more difficult and undermines the performance of the programme as a whole.

In this study we consider that the target group is extreme poor households, as indicated in the manual of operations. We base this approach on two main considerations: why should vulnerable households be targeted when the objective of the programme is to reduce extreme poverty? Why should the same programme have different target groups in different districts? One thing is to pilot different targeting methods and a different one is to test how to reach different target groups. If categorical schemes target vulnerable households in poor districts and the IM targets extreme poor households in not so poor districts, it is not clear how these methods could be compared and could achieve the same objective.

Regarding the potential outreach, it is important first to define what number of households could be realistically reached by the programme. From this perspective, the cut-off of the IM is not only a way of reaching the poorest but also of defining a realistic outreach at national level: supporting 10% of households seems to be manageable from a budgetary perspective (World Bank, 2013). This is probably one of the main reasons why the GoZ finds this scheme very attractive. However, the categorical schemes imply a potential national outreach that is not affordable.

As a result, we understand that the main target group is the poorest, and we work primarily with two scenarios: an outreach of 10% and an outreach with 20% of all households. This is the main assumption in our study, although we also employ the coverage implied indirectly in some of the schemes, in particular with regard to the CG.

39% of Zambian households are in extreme poverty; thus, even a 20% ceiling would not be enough to cover all of them. Moreover, according to the data on subjective poverty collected in two rural communities in Serenje (see Annex D), community members perceived that 34% of the households were very poor while enumerators assessed subjectively that only 27% were in that condition. Although subjective and representative only of two communities where the SCT is operating, the data seem to indicate that there are more extreme poor households than the 20% ceiling that seems reachable.

	0,	
Category	Communities' perception	Enumerators' perception
Very poor	34.1	26.6
Poor	54.3	53.9
Neither poor nor better off	10.3	17.8
Better off	1.2	1.6

Table 3Perceptions of wellbeing in Nyamanda and Chinsobwe, Serenje (%)

Source: Own calculations.

We also assume that the target is defined at a national level, which is likely to mean covering different percentages of the population across the country. This differs from the IM as well as from other programmes (such as PWAS) which aim at covering the same percentage in every community.

From this point of view, there seems to be an important misunderstanding regarding coverage at national and at subnational level. Aiming at targeting the poorest 20% of the national population does not mean that in each district and each community 20% of the population should be targeted. In poorer areas this threshold should be higher, while in richer ones lower, so that on average the 20% is reached.

In summary, our assumption is that the SCT target group is the poorest of the poor, and that a national level outreach of between 10% and 20% of all households is feasible. On the basis of these metric and parameters, we develop the analysis of targeting effectiveness of each method in the following sections. Such analysis consists mainly of disentangling design and implementation issues, hence looking at design leakage, under coverage, administrative leakage and take-up. We consider that the extreme poor, the target group, are households either in the lowest or in the lowest two deciles, and we disaggregate the analysis by location (urban or rural) and eligibility category within each eligibility criteria.

4.2 The 10% IM

4.2.1 Effectiveness of the design

Since the targeting of beneficiaries in the IM is done primarily by community based committees (i.e. the CWACs), it is not possible to reproduce perfectly the eligibility criteria based on the LCMS data. However, it is possible to identify households that are potentially eligible for the programme because they are incapacitated (i.e. all household members are unfit or with dependency ratio

equal or greater than 3).⁸ This is an important limitation because central to the way the 10% IM works is the role of CWACs in the selection process and, for this reason, we say that we assess the eligibility criterion of 'incapacitated households' rather than the IM eligibility.

Overall, we find that 19.5% of households are incapacitated (23.3% of rural households and 12.8% of urban). This would be within the reference target population of 10% or 20%.

Figure 6 shows that there is a slight negative correlation between incapacitated households and consumption deciles: when we move from low to high deciles the percentage of incapacitated households decreases. Overall, we find that around 16% of the incapacitated households belong to the poorest consumption decile, and a third is in the poorest quintile (first and second decile) of the consumption distribution.





Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The bars report the percentage of households for which the dependency ratio is greater than or equal to 3 or for which all the members are unfit. The sum of bars for each category equals 100%.

The theoretical performance of the 'incapacitated criterion' can also be disaggregated by urban and rural areas. Figure 7 shows the results, where we can see that the combination of focusing in rural areas and on incapacitated households would produce a higher negative correlation between deciles and eligibility criteria. The pattern in Figure 7 is largely driven by welfare differences between the population distribution in urban and rural, and only marginally by the selection of incapacitated households. For instance, only 19.4% of rural households that are incapacitated are in the poorest decile. This is a small gain taking into account that 14.7% of rural households are in the lowest decile anyway⁹.

⁸ We identified unfit members between 19 and 64 using the limited information on disability and chronic illness in the 2010 LCMS data. It is likely that in this way we are underestimating the actual percentage of incapacitated individuals between 19 and 64. For more details see Annex A.

⁹ The same happens with households in the second decile; the incapacitated criterion increases the proportion of rural household in that decile only from 14.0% to 16.2%. Similar results emerge from analysing urban locations: the proportion of urban households in the first decile goes from 1.7% to 4.2% and from 2.8% to 6.0%.

Figure 7 Distribution of incapacitated households across decile, rural areas (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

Figure 8 Distribution of incapacitated households across decile, urban areas (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

We also disaggregated the incapacitated households into cases where all members are unfit and households are incapacitated due to high dependency. The two groups represent respectively 15.1% and 84.9% of the incapacitated households and we find that dependency is more correlated

with extreme poverty than the criterion *all members unfit.* 16.7% of the households selected by the former criterion are in the first decile while that percentage decreases to 11.1% for the latter.¹⁰

The fact that having no able bodies in the household is not very correlated with poverty is counterintuitive. However, we investigated this issue and found that this can be explained as being because unfit households rely significantly more on remittances and in-kind transfers than households with high dependency ratios. According to the 2010 LCMS, 48.1% of unfit households received remittances and/or in-kind transfers, while only 28.4% of high-dependency households did.¹¹ Moreover, such transfers represented 70.3% of the household income of the former group, but only 33.4% of the latter. As expected, 94.4% of unfit households that received transfers are not among the SCT target group, the poorest 10%. As a consequence, when using consumption measurements many unfit households are considered somewhat better off despite of their lack of capacity to work because they rely heavily on transfers.

Household sizes, compositions and the equivalence scales¹² used might also be driving this result. Households with all unfit members are very small (2.6 members on average), while households with high dependency ratios are much bigger (6.9 members). Moreover, unfit households are inhabited mainly by elder members and in some cases disabled as well: 58.6% of members in unfit households are older than 60 years, whereas that ratio goes down to 4.4% in the case of households with high dependency, while 10.2% of members in the former group are disabled and only 1.8% in the second group. The equivalence scale used by the CSO does not give a special weight to disabled members and elderly members have the same weight as adults.¹³

¹⁰ These results seem to be fairly robust. In order to assess the performance of the criteria we tested different ways of defining both indicators (unfit members and dependency ratio), and the results are consistent. In the case of unfit members, we tried a more restrictive definition of unfit and fit households, which considers as unfit members those below 15 years old or above 64 and disabled, going to school, or chronically ill members. The conclusion is the same one: having all unfit members is not negatively correlated with consumption. In relation to the dependency ratio, we tested the effect of increasing the threshold from 3 to 4. The resulting distribution across deciles is similar to the one with the original definition.

¹¹ 25.2% of all Zambian households who do not have all the members unfit receive received remittances and/or in-kind transfers. Such transfers represented 37.9% of the income of households who did receive the transfer and had at least one fit member.

¹² The needs of a household do not grow proportionally with each additional member due to economies of scale in consumption. Needs for housing, electricity, etc. will not be three times as high for a household with three members than for a single person. Equivalence scales assign to each household type in the population a value in proportion to its needs, frequently based on the size of the household and the age of its members.

¹³ The equivalence scale used by the CSO gives a value of 1 to each member older than 13 years and a value of 0.36 to children up to 3 years old, 0.62 for those between 4 and 6, 0.76 for those between 7 and 9, and 0.78 for those between 10 and 12.
Figure 9 Distribution of incapacitated households across deciles, by category of eligibility (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%. *Unfit members* reports the percentage of households in which all household members are unfit; *Dependecy ratio* reports the percentage of household for which the dependency ratio is greater than or equal to 3

We also calculated the design leakage (inclusion error) and the under-coverage (exclusion error) that would result from applying at national level the eligibility based on incapacitated households considering as target population households belonging to the poorest 10% and to the poorest 20%. Given that there are only 15.8% of eligible households in the first decile, leakage is 84.2%. In the same scenario there are 30.9% households in the first decile that are eligible and therefore under-coverage expressed as a percentage of the target group is 69.1%. In the same way we computed such errors for the different scenarios and for urban and rural areas. Given the overall slight correlation between such eligibility criteria and deciles both errors are very high (see Table 4).

Naturally, if the target group was the poor rather than the extreme poor, then design leakage would be much lower (32.2%) while under-coverage would be slightly higher (75.7%).

	National		Rı	ıral	Urban		
	Design Leakage	Under- coverage	Design Leakage	Under- coverage	Design Leakage	Under- coverage	
Poorest 10%	84.2	69.1	80.6	69.2	95.8	67.8	
Poorest 20%	70.3	71.0	64.4	71.0	89.8	70.9	
Poor	32.2	75.7	24.5	74.0	57.4	81.6	

Table 4	Design leakage and under-coverage (%), incapacitated households ¹⁴
---------	-------------------------------------	--

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

From this analysis it is clear that the incapacitated-household criterion performs better when it is combined with basic geographical targeting, i.e. in rural areas, but even in such a case the errors would still be very high. The combined criteria can only perform well if they are combined with another targeting method that contributes to reducing such errors. In practice, the IM relies on communities themselves to do such screenings in an attempt to reduce leakages and under-coverage.

4.2.2 Effectiveness of the implementation

The qualitative research that we conducted in Kalomo provided valuable findings in relation to the effectiveness of SCT implementation. In this section we compare those findings with what the manual of operations states. It is important to keep in mind that the last round of targeting in Kalomo took place more than five years ago, and therefore interviewees might not recall important aspects of the process.

To begin with, information sessions seem to have taken place although participation was low. Many respondents could not recall an information session taking place, although this might be affected by the very long recall period. However, the DSWO and CWAC members were adamant that such meetings had taken place, although they admitted that attendance was low. Moreover, the DSWO indicated that there was an officer present at almost every meeting.

Most of the respondents did not know how CWACs had been selected. Although CWAC members mentioned that they had been selected in community meetings, community members were not always able to recall this. This is perhaps a likely effect of the low level of participation at community meetings where CWAC members were chosen. But it is also likely that this is because the selection process was done many years ago, and community members may have simply forgotten. However, in Mangrimond, it appears that CWAC selection was done by the DSWO. For example a respondent in a non-beneficiaries focus group discussion (FGD) noted: "these people sit down and choose themselves. A teacher in Mulwazi also remarked: "From what I have observed the CWAC members first include all their relatives on the programme."

Even though the manual indicates that CWAC members should be in office for a period of three years, we found that in practice the position is permanent. There are no mechanisms in place for re-selecting CWAC members and almost all the members interviewed in Kalomo had been appointed more than three years ago.

¹⁴ Inclusion and exclusion errors by province are presented in Annex B. Due to the limitations of LCMS data explained in Annex A, this analysis cannot be disaggregated by district.

Most CWACs in the communities visited received the full three-day training stipulated in the manual (in three out of four communities).

Enumerators do not play the role that they are supposed to. According to the manual of operations they should visit the households identified by the CWACs and fill in Form 01. However, the enumerators were not part of the selection process when the last targeting round took place (2006/2007) and they were only appointed recently in order to collect data for the new MIS. The CWACs interviewed did not know about the role of the enumerators or claimed to be in charge of managing the enumerators.

Moreover, the profile of the enumerators seems to be different in Kalomo compared to those recruited in Serenje and Kaputa where the MC and CG models are operating. In Kalomo, enumerators are school-leavers that do not live in the communities where the programme operates. The DSWO highlighted two problems in relation to their profile: 1) since they are young and educated they are likely to move to other districts or find other jobs, hence the DSWO needs to recruit and train new enumerators frequently; and 2) also because they are young, CWAC members might find it easier to influence them. However, the district officer did emphasise that he is expecting the data collected in Form 01 to be of a much better quality.

Headmen play an important role in the identification of candidates. In the communities visited in Kalomo, we found that headmen influence or even lead the selection done by CWACs. Hence, their role in validating the application forms seems to have been reduced to a rubber-stamping exercise. None of the headmen interviewed had ever rejected a form presented to them by CWACs. The main interpretation of this is that headmen had been overly influential in the selection of the beneficiaries in the first place, so that there had been little cause for concern when forms were presented to them. In one community in Kalomo, it was reported that the wife of headman was on the CWAC.

In the 10% model, following the validation by the head man, CWAC members must meet to rank households according to the level of destitution and degree of labour constraint. This ranking process then forms the basis for choosing the 10% most destitute and labour constrained in the community. However, in practice this ranking process did not always take place. As CWACs initially listed potential beneficiaries up to or within the quota given, there was very little point of actually ranking households.

In Mawaya, the CWAC described a process of 'sieving out' households rather than ranking in the strict sense of the word, and it was not clear exactly what considerations were taken in this sieving out process. In Nazilongo, the CWAC seemed to imply that the prior listing of the household within the quota had followed an implicit ranking process, whereby priority was given to the elderly.

CWAC members seem to acknowledge that the ranking process would have been difficult as there were many equally qualified people, and it would have been difficult to make a clear distinction between households. This is hardly surprising: evidence from the cash transfer programme in Malawi, which uses a similar selection methodology, suggests that the implementation committee found the ranking process to be quite cumbersome and time consuming, often taking many hours to complete (Miller, 2008). The DSWO in Kalomo also reiterated this, and mentioned that in the second round of targeting no ranking was required and CWACs were only required to produce a list within the ceiling imposed by the quota.

Our findings indicate that community validation meetings took place, however attendance was in general very low. On the one hand, most beneficiaries and non-beneficiaries could not recall being at such meetings. Interestingly, and in contrast to beneficiary and non-beneficiaries

perceptions, DSWO, CWACs and headmen reported that community validation had taken place. Verifying this information with other key informants in the community who were not directly involved in the selection process, it appears that these validation meetings did take place, but the degree of attendance was low. At the community validation sessions, it appears that the process of validation merely involved CWAC or headmen showing attendees the list of eligible beneficiaries. In these meetings the community never rejected candidates; therefore this did not seem to be a way for reducing errors.

In relation to the DWAC's assessment of the application forms, it seems that the DSWO in Kalomo did check the forms, although such scrutiny was done without following any formal rules or guidelines. As a consequence, in some cases the DSWO recommended the DWAC to reject candidates based on its understanding of the data contained in the forms (i.e. assets).

It seems that the fact that the targeting rounds take place every five years might lead to exclusion, since sometimes people that become eligible have to wait for years in order to be selected. For example, a headman in Nazilongo, Kalomo noted how people had become more vulnerable over the lifetime of the programme: "some people became more vulnerable when the programme had already started."

In summary, the process for selecting beneficiaries in Kalomo differed substantially from what the manual of operations indicates. The most concerning adaptations are: 1) headmen seem to have influenced and sometimes led the identification done by CWACs; 2) CWACs did not list all eligible households and rank them; instead, they only identified the number required by the quota; 3) the community is not involved in the process, at least not to the extent indicated in the manual: it is not clear if the community has appointed the CWAC members; attendance in community meetings was low; in the validation meetings CWACs displayed the list of names but there was no real community validation; and 4) the role of the enumerators is still incipient.

Even though it is not clear how all these implementation issues have affected the effectiveness of the programme, it is very likely that they have undermined it. The IM was carefully designed with the idea that a selection done by the community would maximise the effectiveness. However, in practice, some key aspects of the targeting method have not been implemented as intended, reducing the involvement of the community and leaving room for unfairness.

4.2.3 Acceptability

In this section we study the acceptability of the IM based on the qualitative research conducted in Kalomo. In order to do so, we study issues that are intimately related to acceptability, like fairness and transparency.

In relation to the fairness of the IM, we have found two opposite results. On the one hand, the perception in the four communities visited was that the SCT does reach the poorest. Most respondents identified the poorest of the poor as those households who are labour constrained (in most contexts, this referred to the absence of a 'fit man' in a household). Moreover, interviewees perceived that 96% of the SCT beneficiaries are among the poorest. Hence, from this view point, there seems to be a high degree of acceptability.

On the other hand, we found many complaints about the fairness of the selection done by CWACs. The 10% ceiling called for selecting only some of the extreme poor eligible households. Many respondents mentioned that although beneficiaries were among the

poorest, the selection had been unfair due to perceptions of nepotism and favouritism by CWAC members. We also found evidence of elite capture. Even the District Social Welfare Officer also implied that there was nepotism. Hence, although it seems that CWACs have effectively identified the poorest, their selection within the group of poorest households is perceived as unfair.

The sense of unfairness and lack of transparency is exacerbated by the limited participation of the community in the selection and the almost non-existent grievance mechanisms. As already indicated above, it seems that at the community meetings there is no real validation of candidates and that CWAC members do not rank all eligible households but rather select only the number required by the quota. Moreover, during FGDs respondents were asked whether they had any complaints and if so where they would take these. The majority of respondent stated that they did not know who they would go to and for this reason many people had actually never made any official complaints. Some respondents identified the chair of the CWAC and the enumerators. The DSWO noted the limitation of the existing method of channelling complaints through stakeholders who had been very closely involved in the selection process. In response to this, a confidentiality form had been designed for community members to complete. However, none of the community members interviewed had actually ever heard of this form.

The limited involvement of the community is paradoxical in a scheme which relies exclusively on 'community targeting' and this is one of the main factors which jeopardises the acceptability of the programme. As a consequence, the general perception is that while the IM does reach the poorest, the selection within the poorest is seen as unfair and not transparent.

However, the findings show there was very little social disruption or lasting negative effects from the targeting process, pointing to some degree to tolerance or acceptability of the targeting outcomes. Beneficiaries and non-beneficiaries most commonly seem to present a rosy picture of community relationships. They seemed rather reluctant to portray the idea that the targeting process, which to some extent creates divisiveness in the community in terms of including and excluding households, could have led to any tensions.

In some cases, the dual functions played by some programme implementers were perceived to undermine transparency. The use of CWAC members in the enumeration process, which essentially puts CWAC members in a situation where they have to somewhat defend their choices in the household listing, does not bode well in terms of accountability and therefore targeting acceptability. Quite rightly then, in some cases the involvement of a range of stakeholders was perceived to minimise administrative leakage. Respondents perceived the involvement of a wide range of stakeholders as leading to transparency in the selection process.

Different stakeholders mentioned that the selection of replacement beneficiaries is seen as very unfair. When there is a vacancy in one community the DSWO asks the corresponding CWAC to choose a replacement. Key informants and the district officer highlighted that this process is frequently seen as unfair since there are no community meetings involved. In practice, the selection is left to the CWAC's discretion.

Finally, is it important to highlight that the IM seems to be the scheme most accepted and valued among national officers. The political acceptability of such a scheme is based mainly on the fact that the caseload is controlled by design and hence the budget is predictable and manageable.

4.3 The MC scheme

4.3.1 Effectiveness of the design

We study the effectiveness of the MC method using three different sources of data: the LCMS, qualitative data collected for this study, and data from a comprehensive community survey conducted in two communities where the MC scheme operates.

According to our simulations done with LCMS data, the population that meets the MC criteria is 15.8% and it is very similar in rural and urban areas (respectively 15.9% and 15.5%). This percentage would be exactly between the overall target of 10/20% of the population. Moreover, there is a relatively slight negative correlation at national level between MC criteria and consumption deciles (see Figure 10). Only 13.8% of eligible households are in the first decile, while 11.8% are in the second one.

However, it is possible that – especially for some of the MC categories – the slight correlation might be affected by a measurement bias, whereby the actual needs of disabled members are underestimated and therefore their living standards are overestimated. Indeed, true correlation between poverty and disability in traditional statistical analysis tends to be under-reported (see Braithwaite and Mont 2008).¹⁵ Moreover, as in the case of the IM, households eligible for MC rely significantly more on remittances and in-kind transfers than ineligible households. According to the 2010 LCMS, 34.8% of eligible households received remittances and/or in-kind transfers while only 24.2% of ineligible households did. Furthermore, such transfers represented 59% of the household income of the former group, whereas only 35.3% of the latter. As a consequence, the slight negative correlation between MC criteria and consumption might be biased, to a certain extent, by an underestimation of the needs of the disabled and by the importance of transfers.



Figure 10 Distribution of MC eligible households across deciles (%)

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

¹⁵ There are no substantial differences in relation to household sizes between eligible and non-eligible households (5.1 and 5.8 members respectively). However, 31.1% of households eligible for MC have at least one disabled member and therefore the underestimation of their needs could be a serious problem.

As in the case of the IM, the contribution of the MC criteria to the identification of the poorest seems to be negligible. Figure 11 shows the distribution of eligible households across deciles in rural and urban areas. Only 19.2% of rural households that meet MC criteria are in the poorest decile. This is a small gain compared to the 14.7% of rural households are in the lowest decileFigure 2^{16} .



Figure 11 Distribution of MC eligible households across deciles, rural areas (%)

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

¹⁶ In the case of households in the second decile, the contribution is even smaller: from 14.0% to 15.5%. Similar results emerge from analysing urban locations: the proportion of urban households in the first decile goes from 1.7% to 3.8% and from 2.8% to 5.0%.

Figure 12 Distribution of MC eligible households across deciles, urban areas (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

Figure 13 Distribution of MC eligible households across deciles, by category of eligibility (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%; *Disability* reports the percentage of households in which at least one of the household members is disabled across deciles; *Female head with orphans* reports the percentage of female-headed households that keep one or more orphans across deciles; *Elderly head with orphans* reports the percentage of households headed by someone older than 59 that keeps one or more orphans across deciles.

Even though the MC criteria is somewhat correlated with rural poverty, it does not seem to be a good method to identify the poorest of the poor. Apart from the poorest decile, which accounts for the greatest proportion of eligible households, deciles 2 to 4 have similar shares. This, of course, allows for very high design leakage.

As in the IM, we calculated the design leakage and the under-coverage that would result from applying at national level the MC scheme considering as target population households those belonging to the poorest 10% and to the poorest 20% of the population. Table 5 shows the results. **Once again errors are very high and in general higher than for the incapacitated households. The criteria works significantly better in rural than in urban areas.** Again, if the target group was the poor rather than the extreme poor, then design leakage would be much lower while under-coverage would be slightly higher.

	• •		•	、			
	Natio	nal	R	ural	Urban		
	Design leakage	Under- coverage	Design leakage	Under- coverage	Design leakage	Under- coverage	
Poorest 10%	86.2	78.2	80.8	79.1	96.2	64.6	
Poorest 20%	74.4	79.8	65.4	80.7	91.1	69.3	
Poor	37.4	81.7	25.3	82.4	59.9	79.0	

Table 5 Design leakage and under-coverage (%), MC scheme¹⁷

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Even when figures are similar to the ones resulting from the IM, the case of MC is concerning because there is no other robust screening. The geographical targeting relies, to certain extent, on district level estimates conducted with LCMS data which are not robust enough (see Annex A).

We come to a similar conclusion as we did with the IM: MC can only perform well if the criterion is combined with another targeting method that contributes to reducing the errors.

4.3.2 Effectiveness of the implementation

We conducted qualitative research in four communities and a comprehensive community survey in two communities in Serenje in order to assess the implementation of the MC scheme (see Annex C). In this section, we compare the findings of the research with the targeting process indicated in the manual of operations.

As in Kalomo in relation to IM, in Serenje information dissemination sessions do seem to have taken place but participation levels were low. The most common mode of communication about this awareness-raising session across all communities was word of mouth. In some cases, announcements were made through local churches and school children. In many of the communities in Serenje (MC), headmen used the *Icambukila* system, whereby a note informing households to attend a meeting at a central place, at a particular time is passed around the village.

¹⁷ Inclusion and exclusion errors by province are presented in Annex B. Due to the limitations of LCMS data explained in Annex A, this analysis cannot be disaggregated by district.

Such a communication mode seems to have undermined the attendance to the information sessions. Typically the information was given to households at a very short notice. In Makabi (Serenje), for example, households were given less than 24 hours' notice to assemble and this posed a problem, particularly for households living in faraway communities. Even where a relatively longer time (such as a week) was given, the dispersed settlement patterns in most communities meant that the *lcambukila* system never really got round. In addition, households who did not have school-going children or did not attend church regularly tended to miss information sent through such mechanisms.

In contrast with what we found in the other schemes, the participation of the Serenje DSWO in the community information sessions was confined to communities which were near to the district office. In more distant communities, trainers (typically enumerators) carried out these community information sessions, which apparently did not always convey the same degree of authenticity and transparency as the sessions run by the DSWO.

Despite the low attendance at the information sessions, however, it seems that families are aware of the programme. In Chinsobwe, 95% of households know about SCT (94% if we exclude beneficiaries and households with CWAC members or headmen). In Nyamanda the awareness level is much lower, which is expected given the fact that households are very scattered and much more dispersed than in Chinsobwe, but awareness is still fairly high: 68% and 62% respectively.

The MC eligibility criteria seem to be quite complex. People tend to know some of the categories, but never the entire criteria. In Nyamanda only 4% of the households knew the three eligibility categories, whereas in Chinsobwe the percentage went up but only to 11%. People seemed to be aware of some of the categories at best.

Most CWACs seem to have been selected at the community information sessions. Households who attended these meetings were asked to nominate individuals from their sections based on a set of criteria: "we were asked to choose people who are kind hearted, those who are prepared to serve the community". A head teacher in Sote also remarked: "they were selected considering gender and they were also considering the religious point of view, like a clergyman ... and then those people who can at least represent the community."

However, attendance at the community meeting was low and dominated by households who lived in sections closer to the community centre. In Kachinda, a group of non-beneficiaries attributed exclusion of households in more distant areas to the fact that these villages did not have representatives on the CWAC.

Most of the CWACs interviewed received training for only one day instead of three days as indicated in the manual. Moreover, many of the training sessions (especially those taking place in communities far from the district centre) were conducted by enumerators instead of social welfare officers. Although CWACs felt that the training equipped them with the necessary information to undertake their functions, the amount of time dedicated to the training was perceived to be too short: "The information we received at the training is OK, however, the time is not enough to absorb all the information" [FGD with CWAC, Kachinda, Serenje]. Furthermore, not all CWAC members had been trained. Typically the notice given before the training was short; this meant that some could not attend. In such instances, CWAC members had to learn on the job or were briefed by other committee members.

Even though the MC is by design a scheme with universal coverage within the established categories, the DSWO in Serenje established a ceiling of 150 candidates per community. Such quotas were allocated to all communities irrespective of the extent of poverty or population. A discussion with the DSWO noted that such an approach was 'appropriate and preferable' because

it was perceived to be easier to manage, preventing accusations of favouritism towards some communities. Naturally, due to the imposition of those quotas a large number of eligible households were excluded from the programme.

Moreover, since the MC scheme is supposed to be universal there is no methodology for prioritising and selecting eligible households; as a result, CWACs have done the prioritisation in a rather chaotic and unfair way. We found that eligible households who live near the community centre were selected over those in other areas. Moreover, in some communities a first come first served process took place until the 150 forms ran out.

Enumerators' role in the MC scheme selection process appeared to be much stronger in comparison to the other schemes, and enumerators themselves seem to recognise this; as the enumerator in Kachinda put it when asked about his role: *"I am the boss of the CWAC"*. Enumerators in Serenje are in general schoolteachers and are in charge of training CWACs, enumerating households and also act as pay point managers. Moreover, in some cases they seem to be the ones leading the identification of candidates instead of the CWACs. Although, enumerators themselves did not consider such multiple roles to be a burden, the DSWO acknowledged that these multiple roles could potentially lead to situations of abuse.

In Nyamanda, for example, 66% of the beneficiaries said that the enumerator (i.e. a schoolteacher) was involved in the selection, a proportion very similar to the 63% who said that the CWAC participated in the identification. This shows that, in some cases in the MC scheme, communities see enumerators as leading the selection process rather than or with CWACs.

Door-to-door enumeration of selected households did not always take place. In Serenje, enumerators were all paid ZMK 50 irrespective of how dispersed households in the communities they worked in were. An enumerator in Makabi lamented: "*How can you give me the same amount as you would give an enumerator in Zambia Compound and expect that we will do the same job?*" The above situation was compounded by the fact enumerators were given very little time to undertake the exercise, which made the possibility of undertaking door-to-door enumeration even more difficult. As a result, door-to-door enumeration was not always possible. Where CWACs and enumerators failed to go door to door, they organised for the process to take place at a central location. This undermined effective verification and therefore led to potential administrative leakage and low take-up.

Beneficiaries do not seem to be aware of the rules of the programme. In the comprehensive community survey, we found that 67% did not know when and why they will exit the programme. Moreover, 13% indicated that they would exit if they misuse the funds. This seems to respond to the role of CWACs in monitoring, which in practice involves them advising the families on how to spend the transfers.

Neither self-registration nor continuous targeting are in operation in Serenje. Although an uptake exercise periodically took place to help in capturing some of the households who had been excluded, households cannot apply under their own initiative at a point in time when they become eligible. They have to wait for the following targeting round.

Heavy workloads meant that it was not always possible for the DSWO/DWAC to verify every single form. For example, the DSWO in Serenje mentioned that the SCT takes up over half of her time, and acknowledged that other responsibilities of the social worker were sometimes compromised. As a result of this, the verification by the DSWO/DWAC process was mostly random, with a few follow-ups where needed.

In summary, the MC scheme in Serenje has been adapted to local circumstances and budget constraints. The most important adaptations are: 1) The DSWO established a ceiling of 150

candidates per community, irrespective of the extent of poverty or population; 2) Enumerators play an strong role: in general they are schoolteachers and are in charge of training CWACs, enumerating households and also act as pay point managers. Moreover, in some cases they seem to be the ones leading the identification of candidates instead of the CWACs; and 3) **Neither self-registration nor continuous targeting are in operation in Serenje**.

These adaptations have certainly undermined the effectiveness of the programme. MC is not a universal scheme as intended, and the quota established has led to significant exclusion. Moreover, since there are no self-registrations or open windows for applications, a household that becomes eligible will have to wait until the next uptake in order to be selected.

4.3.2.1 Inclusion and exclusion in Nyamanda and Chinsobwe

In Nyamanda and Chinsobwe we found that the MC is experiencing very high administrative leakage as well as low take-up. The potential coverage of the MC scheme is 30% of the households in these two communities. In Chinsobwe, the ratio goes up to 38% while in Nyamanda it is 28%. Among the three MC categories, 42% are eligible because there is at least one disabled member in the household who has a certificate of disability, 32% are female-headed households keeping orphans while 26% are elderly-headed households with orphans.

However, in practice, only 18% of all households are receiving cash transfers (see Table 6). Surprisingly, none of the communities has reached the 150 ceiling imposed by the DSWO. Even though there are many eligible households who are not benefiting and there is room in the quota (68% non-take-up), there seem to be serious implementation constraints undermining the effectiveness of the programme.

Interestingly, when disaggregating the number of beneficiaries per eligibility category we see that more than 40% do not correspond to any of the groups stipulated in the manual. These are potential errors of inclusion (administrative leakage). Although it is not possible to know why those who are not eligible were selected and many of the implementation flaws above highlighted might drive these errors, we try and deconstruct the characteristics of those households.

	•		
	Nyamanda	Chinsobwe	Total
Beneficiaries	18.3	17.0	17.8
Of which:			
Female-headed households with orphans	23.8	21.2	22.9
Elderly-headed households with orphans	15.9	15.1	15.6
Households with disabled members	19.0	15.1	17.7
• Other	41.3	48.5	43.8
Total beneficiaries	100	100	100

Table 6	SCT beneficiaries in N	Iyamanda and Chinsobwe	(%)
Table 6	SCT beneficiaries in N	lyamanda and Chinsobwe ((%

Source: Own calculations.

There seem to be two predominant implementation flaws behind the leakage. On the one hand, the distinction between orphans and abandoned children seems to be blurry. In our visits to Serenje we found that sometimes abandoned children were considered orphans. In fact, 45% of the beneficiaries who are not eligible have at least one abandoned child. This does not mean that this was a mistake in the selection but it is very likely that some households were selected by confusing orphans with abandoned children.

On the other hand, 56% of the households that should not have been selected have at least one disabled member who does not have a certificate. Hence, it might be the case that some households have managed to become beneficiaries without presenting their certificate.

If we change artificially the criteria and allow abandoned children to be considered orphans and do not require a certificate of disability, then the error rate falls from 44% to 11%. However, although it seems likely, we do not know to what extent these are the implementation problems driving the administrative leakage.

The fact that in practice the distinction between orphans and abandoned children seems to be blurry and that disability certificates are not always required would certainly affect the caseload, but would be beneficial from a targeting and an impact view point. According to the perceptions of poverty in Chinsobwe and Nyamanda, households with abandoned children seem to be as poor as those with orphans: 35.4% of the first group was categorised as very poor while 32.9% in the second group. Moreover, households with disabled members that do not possess disability certificates are perceived as worse off than those with certificates: 37.5% of the first group was considered very poor while that ratio goes down to 26.5% in the second group. As a result, it seems that including those ineligible households is beneficial.

Take-up is very low: 68% of eligible households are not receiving cash transfers. As already highlighted, it seems that in the case of Chinsobwe and Nyamanda the quota was in fact not binding and therefore some other implementation flaws should be driving the low take-up.

It seems that location is one of the factors contributing to exclusion. Beneficiaries live, on average, 60 minutes from the community gathering place, while non-beneficiaries live 82 minutes away. In the case of Nyamanda, non-beneficiaries need 61 minutes to get to the community gathering location whereas beneficiaries need 55. In Chinsobwe, non-beneficiaries require 116 minutes while recipients 69.

4.3.2.2 Caseload

Government officers at national level as well as other stakeholders highlighted that there is an important problem with MC caseload in that it is much higher than expected. There are two possible forces that could be driving this mismatch: unreliable projections or implementation failures.

In relation to the projections, it is not possible to produce robust and reliable projections of beneficiaries at district level using the LCMS 2010 (see Annex A.2.2). If the official projections were calculated using the LCMS, then those numbers would not be reliable.

Unfortunately, we did not have access to census data and the CSO could not produce the estimates required for projecting the number of beneficiaries at district level. As a consequence, it was not possible for us to assess the reliability of the projections.

Regarding the implementation failures, as already mentioned the MC scheme in Serenje has been adapted and is not applied as indicated in the manuals. This might affect the number of applications. Moreover, the high administrative leakage found in Nyamanda and Chinsobwe might be the reason behind the excessive caseload.

If in practice, for example, abandoned children are considered orphans then the potential caseload will certainly increase substantially. The same could happen with issues related to the way disability is assessed. Moreover, the geographic limits of communities in Serenje are in many cases blurry and village registers are almost never up to date, which can also affect the caseloads.

We found no evidence of recipients that have been registered twice.

4.3.3 Acceptability

In relation to the acceptability of the MC scheme in the communities visited, we found similar results as in the IM. Overall, communities believe that the programme targets the poorest ones. However, some community members also believe that the selection within the poorest was not transparent and somewhat unfair.

As in the IM, in Serenje people characterised the 'poorest' as the elderly, people with a disability, orphans, etc. In particular, the poorest category seems to exhibit a large degree of heterogeneity. Interviewees tended to distinguish between the poor and the poorest, indicating that the former could '*at least manage*' to engage in livelihood activities, typically piece work, whereas the latter are unable to work. These results were confirmed by the comprehensive community survey conducted in Nyamanda and Chinsobwe.

As a consequence, the targeting criteria seem to be widely accepted and people tend to believe that it is fair to support those populations. Interviewees argued that 92% of SCT beneficiaries belong to the poorest group in the community, showing a very positive assessment of the targeting.

Although overall very positive, however, we found some complaints in relation to the MC criteria. For example, several interviewees referred to the case of child-headed households, who despite being considered a vulnerable social group could not be included under the programme going strictly by the eligibility criteria.

As already presented, the MC scheme suffers from some local adaptations in Serenje and has not been implemented as a universal programme; instead, communities could identify a maximum of 150 beneficiaries. Due to this improvised quota system, CWACs and enumerators had to select and prioritise among all eligible households. Such selection is sometimes seen as unfair and not transparent: "The problem that is when they go round to register they end up putting their friends and relatives leaving out the people who rightly need the help" [FGD with non-beneficiaries, Kachinda, Serenje].

It is important to highlight that what seems to be the main source of unfairness – i.e. the quota – is not actually a design feature of the MC. Hence, it is likely that if the scheme had been implemented as indicated in the manual perceptions of unfairness would have been minimised.

It seems that in more dispersed areas the programme faces operational challenges that reduce the level of acceptability. In Nyamanda, a rural community where households are very dispersed, 59% think that the selection process has been fair and transparent; in Chinsobwe, however, which is rural but more concentrated and closer to the main road, the proportion goes up to 85%.

The level of accountability and transparency may also be weakened by the absence of an effective grievance system as discussed above. Where there is no clear and transparent process in dealing with complaints and to provide feedback on perceptions of biases, this is likely to lead to a feeling of unfairness which undermines the level of acceptability.

Finally, it once again should be noted that it seems that the targeting process has not created social disruptions or lasting negative effects.

4.4 The CG scheme

4.4.1 Effectiveness of the design

As expected, CG criteria are not correlated with poverty (see Figure 14). This is because, on the one hand, children under 3 and under 5 years old are fairly equally distributed across deciles and, on the other hand, richer households are more likely to have a disabled member under 14 years old.¹⁸ Overall, the percentage of households eligible for the CG¹⁹ is around 10% in the bottom seven deciles.

¹⁸ See Annex A.1.2 for a note of caution on the interpretation of disability estimates.

¹⁹ In the graph, eligible households are those with a child under the age of 14 and disabled or/and with one or more children under the age of 5.





Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

The contribution of the CG criteria to the identification of the poorest seems to be negligible. Figure 15 shows the distribution of eligible households across deciles in rural and urban areas. The CG does not help at identifying the poorest rural households: the proportion of rural households in the first decile changes from 14.7% to 15.3% when incorporating the CG criteria (see Figure 15). There is a marginal gain as well when it comes to the second decile (from 14.0% to 15.5%)²⁰.

²⁰ Similar results emerge from analysing urban locations: the proportion of urban households in the first decile changes from 1.7% to 2.5% and from 2.8% to 3.6% in the second.

Figure 15 Distribution of CG eligible households across deciles, rural areas (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.



Figure 16 Distribution of CG eligible households across deciles, urban areas (%)

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%.

Figure 17 Distribution of CG eligible households across deciles, by category of eligibility (%)



Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%; *Under 3* reports the percentage of households in which at least one of the household member is under 3 years old or 3 years old across deciles; *Under 5* reports the percentage of households in which at least one of the household member is under 5 years old across deciles; *Disabled* reports the percentage of households in which at least one of the household member is disabled and below 14 years old across deciles.

Overall, the percentage of households meeting the CG criteria is 41% (44.9% in rural areas and 34.0% in urban areas). If scaled up nationally this would result in a much higher coverage level than is believed to be affordable. We also calculated the design leakage and the undercoverage that would result from applying at national level the CG scheme, considering as the target population those households belonging to the poorest 10% and to the poorest 20% of the population.

Table 7 shows the results. Given the very high coverage of the population it is normal to expect very high leakage, but a lower under-coverage. Once again the criteria has lower errors in rural than in urban areas. As in the other schemes, if the target group was the poor rather than the extreme poor, then design leakage would be much lower while under-coverage would be slightly higher.

	Nat	ional	Rı	ıral	Urban		
	Design leakage	Under- coverage	Design leakage	Under- coverage	Design leakage	Under- coverage	
Poorest 10%	88.8	44.9	84.7	45.4	97.5	36.4	
Poorest 20%	77.0	43.6	69.2	43.8	93.9	41.4	
Poor	40.0	45.6	28.6	44.8	64.9	48.8	

Table 7 Design leakage and under-coverage (%), CG scheme²¹

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Design leakage is the highest of all the three models analysed, but under-coverage is reduced thanks to the high percentage of the population that would be eligible. However, as touched on above expenditure for this model at the national level would clearly be much higher than previously considered schemes. The assumption is that CG should be combined with geographical targeting, but district-level estimates currently available are not adequate for such a purpose (see Box 5).

²¹ Inclusion and exclusion errors by province are presented in Annex B. Due to the limitations of LCMS data explained in Annex A, this analysis cannot be disaggregated by district.

Box 5 Geographical targeting

The CG is implemented in districts that are considered to be the most deprived ones. The selection of those districts was based essentially on the degree of poverty and child mortality rates. Poverty estimates were calculated using the LCMS 2006 data, whereas child mortality rates came from calculations done by the CSO.

In relation to poverty estimates, we find that there are two sources of problems that might have biased the estimates at district level. First, the LCMS 2010 consumption aggregates calculated by the World Bank differ from the ones computed by the GoZ and, therefore, the poverty rates differ as well. Since we did not have access to the aggregates calculated by the GoZ we could not compare both sources. Moreover, it was not the intention of this study to do an assessment of poverty measurements. However, the fact that there are substantial differences in both estimations suggests some underlying problems with the measurements. Please refer to Annex A.2 and World Bank (2012) for further information.

Another problem with district-level estimates, and a significant one, is that the estimates are not precise. The sample size for some of the districts is fairly small, which leads to inadequate levels of precision. In Annex A.2 we present the confidence intervals (the range within which the average estimate falls) for estimations at district level and we show that those intervals are very large, diminishing the precision of the results.

As a consequence, it seems that the district poverty ranking used to select the areas to implement the programme was not based on robust estimates. Such a ranking can identify the poorest and the richest districts; however, given the large confidence intervals, those in the middle – i.e. the vast majority – cannot be ranked. For example, the poverty rate in Kaputa changed from 90% to 58% from the survey conducted in 2006 to the one in 2010. Even though part of this variation could be explained by the use of different consumption aggregates (official ones in 2006 and World Bank aggregates in 2010), in Annex A we show that estimates with these different aggregates provide similar results, hence the huge variation is due to the imprecise estimates used.

It is important to highlight that the impossibility of calculating district-level estimates with LCMS data undermines direct geographical targeting using only LCMS data; such targeting can only be done with precise estimates at district or lower levels. One alternative could be to generate poverty maps combining LCMS and Census data, but again LCMS accuracy could be an issue and, since Census data is collected only once every 10 years, it might not be suitable for a programme that should take into account the dynamics of poverty.

Even though other data could be used for conducting geographical targeting, the main problem with this method is that it is not compatible with a fully scaled up social protection system. It is likely that as the programme expands, there will be pressure to extend it to the whole country. Moreover, from a rights view point, it could be questionable to claim that households with the same characteristics should be treated differently.

However, as the programme gradually expands, there will be a need for selecting districts and it is the intention of the MCDMCH to base such selection on some sort of poverty ranking. The programme does not seem to have the capacity to produce tools like poverty maps and therefore it seems that will base the selection on simpler methods.

4.4.2 Effectiveness of the implementation

In order to assess the effectiveness of the CG we conducted qualitative research in Kaputa, where we interviewed beneficiaries, non-beneficiaries and key stakeholders (see Annex C). In this section we present the results of this study.

As with the other schemes, information sessions seem to have taken place in Kaputa, although attendance levels were low. The reasons for this are the long distances involved, the ineffectiveness of some dissemination mechanisms, and a lack of faith in community meetings and the programme. For example a beneficiary in Mukonkoto remarked: "we were called for a meeting, but people refused to go saying that we [community members] are troubled all the time to attend such meetings and nothing comes of it". Moreover, the DSWO reported that they consistently a district officer participated in these initial community information sessions.

We found that in Kaputa households perceived the eligibility criteria slightly differently to what is stipulated in the operational manual. For example, very few CWAC members appeared to be aware of the fact that eligibility criteria qualified households with disabled children who were under 14 years of age. These CWAC members failed to understand the difference in age requirements between able bodied and households including a person with a disability.

In addition, most of the criteria seem to have been adapted. Community members stated that only one under-five child per household was eligible to be on the programme. Similarly, CWAC members seem to only register children who were being cared for by their biological mothers. It seems that this was a way of coping with widespread suspicions of households artificially splitting and others that allegedly 'borrowed' children. However, these adaptations often led to exclusions of some potentially eligible households, such as those grandmothers who were looking after their orphaned grandchildren: "there is a problem because orphans within the age brackets who are being cared for by their grandparents cannot be registered. These grandparents are asking why they cannot be on the programme but we tell them that those are the rules" [FGD with CWAC, Matobwe, Kaputa].

Interviewees had the perception that the selection of the CWAC members had been highly politicised. In Chintateba and Matobwe, for example, CWAC members had changed following the recent change in government.

Most CWACs received one-day training sessions instead of three days as indicated in the manual. Moreover, not all CWAC members had been trained.

Typically in communities in Kaputa, headmen played a central role in identifying households. It was assumed that leaders were better placed to list households because they knew the communities well (this was also evident from our discussions with headmen). It was further assumed that they kept village registers (in reality these were rarely up to date), which are seen as an important resource in the beneficiaries listing process. In addition, headmen appeared to be well respected, sometimes even being seen as the "owners of the village".

As in the MC in Serenje, the DSWO in Kaputa established quotas and hence the CG is not universal as intended. The DSWO was not able to explain how these quotas were set.

Since the CG is supposed to be a universal scheme, CWACs did not receive any training in relation to how to prioritise among eligible households. However, in practice, they had to do so and hence they developed different strategies. For example, a CWAC member in Chintateba described this procedure as first come first served: "the headman passed information requesting those who wanted to be registered to go to a central place... he listed those who came

first. The listing was done on a first come first served basis. Those that came later were left out... they were told the forms had run out, and they would complain."

Requiring candidates to present under-five and National Registration Cards (NRCs) seem to be an important source of exclusion. The submission of under-five cards seems to exclude mothers who do not give birth in health centres and therefore do not have cards. Moreover, although not stated in the manual, it appears that three different NRCs are required in Kaputa: one for the mother, another for a deputy and then a next of kin. This also seems to exclude some households.

The DSWO perceived there to be a number of situations where households were 'borrowing' children. Although CWACs seem to portray such incidences as rare and overcome by monitoring, very few beneficiaries had actually ever been visited by the CWAC.

In Kaputa, the process of continuous selection was not found to be in operation, although the frequency of uptake exercises appears to be high. The process of self-registration whereby households could go to health centres to register had been instituted in all communities since the beginning of the year.

However, there appeared to be a number of challenges in regard to this process in Kaputa which have implications for targeting effectiveness. Firstly, it seems that the self-registration process was not always very well known within communities. Secondly, by design, it is possible for any community member deeming themselves to be eligible to approach health centres directly. This design feature has the benefit of removing any potential accusations of nepotism, which can lead to implementation errors. However, this was undermined since in most cases, registration at the health centre still required them to have been selected by headmen and CWACs.

As in the other schemes, the analysis of the application forms done by headmen and the DSWO seems to have been minimal. On the one hand, headmen were so involved in the identification of beneficiaries that they almost never rejected forms. On the other hand, the DSWO only did a casual check of the application forms, assuming that the lower structures had carried out a good selection procedure. The checking consisted mainly of making sure that forms had been completed in full.

In summary, as with the MC in Serenje, the DSWO in Kaputa established ceilings on the number of beneficiaries per community. This goes against the design of the scheme, which is supposed to be universal, and of course reduces its effectiveness. Moreover, some features of the CG design seem to have been adapted to local circumstances; for instance, in practice orphans were not eligible for the SCT. Moreover, requirements such as NRCs and under-five cards seem to exclude some households with children under five years old.

4.4.3 Acceptability

In the qualitative research conducted in Kaputa we found that people are not satisfied with CG criteria; they believe that the programme has excluded many of the poorest households and included many better-off families.

As in Kalomo and Serenje, people interviewed in Kaputa identified the poorest ones as those unable to work. Once again, labour constraints referred to the absence of a 'fit man' in a household; therefore, the CG target group does not correspond to the population considered to be the poorest. According to the interviewees, only 13% of CG beneficiaries belong to the poorest group in their communities. Compared to the IM and the MC, this result is striking. Figure 18 shows the results for each scheme.





Source: Own calculations based on data collected in the qualitative research.

However, it is also important to interpret the above results with caution since people's perception of poverty levels varied significantly across the three districts, and because they are based on a small subset of individuals. In particular, in Serenje 81% of households were considered to be among the poorest, while this was 69% in Kalomo and around 40% in Kaputa.



Figure 19 Perceived wellbeing categories

Source: Own calculations based on data collected in the qualitative research.

The fact that the CG is not perceived by the community to be targeting the poorest has led to some feelings of unfairness. In many cases respondents lamented and appeared puzzled and sometimes upset about why a government programme which claimed to help poor households also benefited community members like teachers and other civil servants who were perceived to be better off, when there were other vulnerable households to be helped.

In particular, elderly non-beneficiaries found it particularly unfair that the programme only captured those with their own biological children, leaving out those who cared for their orphaned grandchildren:

"Those who are aged and those that do not have children do complain and see it as unfair because they feel they need the support as well" [FGD with CWAC, Chintateba, Kaputa].

"I am grateful to whoever brought the programme, but there are those that have been left out such as the aged ... they have to struggle to find something to eat ... if they can consider helping those people and us the aged it would be good" [KII with headmen, Chintateba Kaputa].

As in the MC, the fact that the DSWO in Kaputa established ceilings on the number of beneficiaries per community increased the perception of unfairness. However, the effects of the quota system were mitigated, to some extent, by the frequent uptake rounds, which were much more frequent than in the MC in Serenje.

The findings on community relations and grievance mechanisms are the same as in the other schemes. It was generally reported that the programme did not create social disruptions in the communities visited but that people were not aware of the processes for making complaints, which is likely to reduce the acceptability of the programme.

4.5 Comparing the effectiveness of the schemes

It is important to be cautious when comparing the effectiveness outcomes (design leakage and under-coverage) since some of the difference are driven simply by different coverage rather than by the effectiveness of methods. For example, since the CG has a potential national coverage of 49% and the MC of only 16%, then under-coverage for the former is much lower.

The Coady-Grosh-Hoddinott (CGH) index is a measure of the effectiveness with which programmes are targeted. It is defined as the ratio of the value of transfers going to the poor to the (relative) size of the poor in the population. A neutral targeting outcome means that each decile accounts for 10% of programme beneficiaries. Such neutral outcomes can arise from either the random allocation of benefits across the population or a universal intervention in which all individuals received identical benefits. The CGH indicator is constructed by dividing the actual outcome by the appropriate neutral outcome. A value greater than one indicates progressive targeting (the higher the score the more accurate); and a value less than one indicates a regressive outcome, with unity denoting neutral targeting.

For example, 29.7% of the incapacitated households are among the poorest 20%; hence the CGH ratio is 1.5. This means that the poorest 20% of households are 50% more likely to be selected by this criterion than by a random selection. The table below shows that the incapacitated criterion is more progressive than the MC and the CG, and that CG is the least progressive.

	Incapacitated	MC	CG
Poorest 10%	1.6	1.4	1.1
Poorest 20%	1.5	1.3	1.2
Poor	1.3	1.2	1.1

Table 8 CGH index

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

4.6 Efficiency

Efficiency adds another dimension in assessing the different SCTs, looking specifically at the implementation costs. While effectiveness indirectly also considers the costs related to the overall disbursement of cash transfers, with efficiency the focus is on the administrative cost of implementing the different targeting mechanisms. It is important to consider such administrative costs because the theoretically better targeting effectiveness of one method could be counterbalanced by very costly administrative procedures.

It is not the intention of this research to calculate the real costs of each targeting scheme. If that was the purpose, lots of data in relation to administrative and opportunity costs would have to be collected. Such analysis has already been conducted, to a good extent, by Watkins (2008). Moreover, since pilots have not been implemented as indicated in the manual of operations and suffered substantial local adaptations, a thorough efficiency analysis would need to collect data at subnational level and also be based on a number of assumptions.

Watkins (2008) provides a very detailed assessment of SCT targeting efficiency and many of the considerations made in that report are still valid. In particular, analysis of cost efficiency should not only focus on financial costs but also on the economic costs. The economic costs take into consideration the opportunity costs of CWAC members and community members not undertaking alternative activities. Therefore even though the programme is not providing them with wages, it is in essence stopping them from undertaking other activities and potential income. Watkins' analysis showed how CBT is only cost efficient from a financial perspective and that once the opportunity costs are taken into account they appear to be more costly. Under these circumstances he argues for the implementation of the programme through formal administrative structures. Administrative selection more closely mirrors the way in which the MC and CG targeting mechanism are supposed to work.

In practice, based on the way the different schemes are working there does not seem to be large differences in the costs of administering the three models. On the one hand, if true ranking were performed in the 10% IM and a proper community consultation was taking place, such costs would make such an approach less cost effective than MC and CG. On the other hand, continuous registration and case management of MC and CG would clearly be extra costs.

Overall, given that there are no substantial differences in the implementation of the three schemes, the costs are likely to be relatively similar; however, CG and MC are more cost effective, although more costly due to the outreach.

Given all the implementation failures described above, another general point is that there could be significant advantages in remunerating some of the staff at the community level.

4.7 Summary assessment of SCT targeting methods

In this section we compare the design and operation effectiveness and acceptability of the three targeting methods.

4.7.1 Design

The designs of these three methodologies make them ineffective in targeting the extreme **poor.** The contribution of the three criteria to identifying the poorest is negligible both in rural and urban areas, although they do perform slightly better in rural areas.

We must recognise the possible limitations of assessing living standards among some of the subgroups of interest. Living standards might be biased if the needs of the disabled are underestimated, which seems to be the case given the equivalence scale used by the CSO and is frequently the case in other countries (see Braithwaite and Mont 2008) and because eligible households depend more on gifts and private transfers from relatives and friends, as already shown. Some eligible households might appear to be better off due to their consumption levels; however, such levels could be overestimated due to problems with the measurement of the needs of the disabled and would not take into account that an important share of such consumption is subsidised by transfers.

When we simulate the three approaches reproducing eligibility at a national scale, we find that the percentages of the eligible population differ substantially: 49% for CG, 20% for IM and 16% for MC. In all cases the extreme poor remain a small percentage of the overall eligible beneficiaries.

As already highlighted, the estimations done with LCMS data face a number of limitations that affect the results (see Annex A). In particular, the number of children under five years old seems to be underestimated and the same seems to happen with the disabled. According to the estimations done by the CSO with census data (see Annex F) 59% of households would be eligible for the CG, 29% for the MC and there are 24% of incapacitated households in Zambia. This shows that the LCMS produces lower estimates than the Census (particularly so for MC and CG).



Figure 20 Eligible households per scheme (%)

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Nevertheless, we also find that households that are labour constrained are considered to be among the poorest (this is coming from the qualitative research) and that both in the IM and MC the categories are accepted by the communities as poor and most in need. In the comprehensive survey there is also a good correspondence between these groups and interviewees' subjective poverty assessments.

Therefore it seems that the targeting criteria used in the IM and the MC appear to be largely appropriate and relevant in identifying extremely poor households. Most respondents tended to describe poverty and therefore households in need of assistance in terms of categories such as orphanhood, disability, old age, widowhood or in terms of general destitution. These assertions tallied well with the eligibility criteria in the 10% IM and the MC, but are more in contrast with the CG targeting approach.

Respondents in the IM and the MC areas were more likely to perceive the targeting as fair than those in the CG area. Respondents felt that most of the SCT beneficiaries in these two areas deserved to receive the cash transfer. Most respondents in these areas understood that the programme was meant for extremely poor households and they perceived most beneficiaries to be in this category.

Since SCT's overall objective is "to reduce extreme poverty and intergenerational transfer of poverty" (MCDMCH; 2013a), methods like the CG are not effective do not target the poor (they are not coherent with the programme design). The CG targets all the children living in areas with high child mortality rates. Children in these areas are considered vulnerable and are a priority for policymakers; however, when it comes to meeting the SCT's goals, this scheme is ineffective since it reaches the vulnerable but misses out the poorest.

Another important finding of the analysis done with LCMS data is that there is no single categorical method that can effectively identify households in the lowest decile. The MC and the IM, or any other methodology, must be combined with other targeting tools in order to be effective. This other mechanism could take the form of community targeting, poverty validation based on objective indicators, or something else. Design leakages are very high for all the schemes and the reason behind this expected result is that, even though correlated with rural poverty, the MC and the IM criteria capture households in the first four or five deciles but not necessarily the poorest. This, of course, increases the inclusion errors. From this view point, such methods perform better in excluding better-off households than reaching the poorest. For that reason, these methodologies need to be complemented with other mechanisms.

4.7.2 Implementation

The quota system seems to have left room for favouritism in the selection of beneficiaries in the three schemes. In general, respondents had the perception that when CWACs had to identify only some of the poorest (in the IM by design and in the MC and the CG due to implementation constraints), they prioritised relatives and neighbours. This undermined the acceptability of the programme.

In relation to implementation effectiveness, the three schemes have suffered important adaptations to local circumstances, deviating from the manual of operations. In practice, the three schemes operate as targeted programmes rather than as universal ones. The IM, which should be community based, is actually not engaging the communities as intended and hence its

effectiveness, transparency and fairness are likely to be undermined. The MC and the CG, which should be universal, only target a certain number of beneficiaries per community. Quotas are set regardless of the size of communities or the extent of poverty.

Moreover, regardless of what the manual of operation indicates, the three schemes rely on discretionary uptake exercises and there are no continuous registrations of candidates. It seems that having an open window for applications, although perhaps preferable, is not likely to be implementable.

5 A harmonised methodology for targeting SCT beneficiaries

In this section we show the results of different analyses undertaken in order to find the best targeting and most feasible method for SCT and present our proposal for a harmonised national methodology.

5.1 Key directions from the targeting analysis of SCTs

The targeting analysis of current SCT schemes provided a number of important findings that can orient the search of a national targeting strategy. The key findings are the following:

- It is very difficult to find relatively categorical criteria that alone can identify the poorest of the poor;
- Perceptions of groups deserving support are very strongly identified with households with low or absent working capacity;
- Other criteria need to complement relatively simple demographic indicators;
- A system that somehow can be used to control the number of beneficiaries (quota) seems to be preferred by Government officials; however, quotas increase the favouritism in the selection and reduce the acceptability of the programme; and
- Even relatively simple categorical schemes pose a number of implementation challenges given the Zambian conditions and the current level of resources available for implementation.

We review and expand each of these points before introducing our proposal.

5.1.1 Minor quantitative correlations

The analysis conducted for SCTs showed how all different and relatively simple demographic indicators had some minor correlation with poverty (such findings are also confirmed by the World Bank poverty assessment). Probably the criterion that provides the highest correlation is a high dependency ratios (unfit vs. fit members) in rural areas. However, all criteria present high under-coverage and design leakages and seem unable to distinguish between the very poor and the moderately poor.

5.1.2 Strong perceptions on groups deserving support

Most respondents in the areas visited for the qualitative research (see Annex C) tended to describe poverty and therefore households in need of assistance in terms of categories such as orphanhood, disability, old age, widowhood, etc. We found a clear relation between the perception of poverty and the lack of ability to work. Labour constraints in most contexts referred to the absence of a 'fit man' in a household. This was also found in the comprehensive community survey (see Annex D), as the results below show.

Table 9	Perceptions of ex	xtreme poverty in	n Nyamanda	and Chinsobwe ((%)
---------	-------------------	-------------------	------------	-----------------	-----

Categories	Which is the poorest category of households in the community?
Households with disabled members	23.2
Elderly-headed household	30.1
Widow-headed households	25.2
Households with Orphans	16.1
Households with children under 5	0.8
Other	4.6
Total	100

Source: Own calculations.

In the comprehensive community survey we also asked the enumerators to do a subjective assessment of the poverty of the households interviewed. The results of such assessment are very similar to the ones done by the interviewees (the correlation between them is 0.56). The enumerators believed that almost 90% of the households with at least one disabled member where either very poor or poor. None of those households was considered better off (the remaining 10% was perceived as middle class). Moreover, all household without able bodies were considered either poor or very poor (see Table 10).

Table 10Enumerators' perceptions of poverty in Nyamanda and Chinsobwe, by
labour capacity (%)

Category	At least one fit member	No fit members
Very poor	25.4	44.7
Poor	53.8	55.3
Middle class	19.0	0.0
Better off	1.8	0.0
Total	100.0	100.0

Source: Own calculations.

However, although both the qualitative research and the comprehensive survey indicate that people believe that households with reduced labour capacity are the poorest ones, there is only a small negative correlation between such households' characteristics and consumption. It has already been indicated that issues related to the equivalence scales and the transfers received by households that are labour constrained might be driving this small correlation. Nevertheless, even if these factors explain why there is weak correlation, it remains the case that no single criterion can capture only the poorest households.

As a consequence, according to people's perceptions the poorest of the poor can be characterised as rural households with high dependency ratios. Of course, this is not true for all households and not every family with high dependency is equally poor. Given the slight negative correlation with consumption found in the LCMS analysis, such a criterion should thus be complemented with another targeting method.

5.1.3 Setting a quota or having a system to control number of beneficiaries

An important finding of the KIIs that we conducted with GoZ officials is that setting ceilings on the number of beneficiaries is appealing to them. This is mainly due to the advantages of having a foreseeable and manageable budget. In general, officials seemed to favour the IM rather than universal scheme.

Besides the desire for setting a quota, according to the SCT manual of operations (MCDMCH; 2013a) there was a more fundamental argument that supported the selection of the 10% for the IM: "the rationale behind the cut-off point is based on research conducted by the GTZ Social Safety Net Project as well as MCDMCH and is used as a ceiling for the scheme. The research revealed that on average 10% of all households urgently require social assistance interventions. They are critically poor (surviving often on just one meal per day) and at the same time labour-constrained."

However, as we have already stated in Section 4.1, imposing a national quota does not mean that the same ceiling has to prevail in every catchment area. This is, from our view point, one of the main flaws of the IM. As clearly indicated in the quote above, the 10% is only an average estimate; therefore, some areas have more households that require urgent assistance, while others less. As the table below shows, this 10% is quite unevenly distributed across provinces.

		Province								
Location	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North- Western	Southern	Western	Overall
Urban	0.4	1.1	0.2	0.8	0.7	0.6	0.2	0.5	0.6	0.6
Rural	4.8	1.7	14.0	16.4	1.8	12.7	17.2	10.4	16.6	9.4
Overall	5.2	2.8	14.2	17.2	2.5	13.3	17.4	10.9	17.2	10

Table 11Households belonging to the poorest 10% by province (%)

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

As a consequence, in order to reach the poorest 10% of Zambian households it is necessary to allow for different coverage at the subnational level.

Finally, and importantly, the results of the qualitative research already presented show that setting ceilings on the number of beneficiaries negatively affects the fairness and acceptability of the process. Although not indicated in the manual of operations, in practice the MC in Serenje and CG in Kaputa adopted quotas in a similar fashion to the IM. In the three cases, the quota system implied that CWACs had to select and prioritise among eligible households – this process was perceived as unfair by many community members, who argued that there was nepotism and favouritism in the selection or that households living in remote areas were excluded.

5.1.4 Complementary criteria: Asset-based index

Other criteria to complement the dependency ratio could be based on community-based screening or welfare estimations. On the one hand, and as already shown in the analysis of the IM, CBT is not working as expected. Even though this methodology was implemented more than a decade ago, has been exposed to many evaluations and, in cases like Kalomo, has been substantially improved ("the enhanced IM"), in reality communities seem not to be involved in the selection. Key processes like the ranking of households and the community validation seem not to have taken place or, if they did, they only involved a few community members. It seems that this method is reinforcing local structures of power and the elite capture and, as a consequence, this method might not be the most effective and accepted one.

On the other hand, conducting welfare estimations can increase the effectiveness and acceptability of the programme. Such calculations could be based on systems that are already in place or are being developed. Lots of the data needed for the estimation is currently being collected in Form 01 and the programme has recently incorporated the role of the enumerators, expecting to increase the quality of the data collected. Moreover, the SCT is currently operationalizing an MIS. Although we are aware of the many problems that the programme is currently facing with some of these tools, it is expected that in the near future such shortcomings will be overcome and will be possible to collect and enter good quality data.

Given the extent of poverty in Zambia, the data constraints and the limitation of welfare estimations, such methods perform better at screening out well-off households than differentiating among the poorest. This is not the case in other countries and programmes which apply different types of welfare estimations in order to target their households. However, in the Zambian context, such methodologies would perform better as complementary tools.

This complementary methodology would increase the effectiveness and acceptability of the programme since it would reduce the design leakage. As it has already been shown, categorical criteria are only slightly correlated with extreme poverty and hence large errors should be expected. There could be many eligible households that are better off, and those errors tend to undermine the acceptability of any programme. Therefore a methodology that could identify those better-off households would increase the effectiveness and acceptability of the targeting mechanism.

Box 6 Indirect welfare estimations

Different methodologies have been used worldwide by cash transfer programmes in order to estimate indirectly the welfare of applicants. Direct welfare estimates are those based on income measurement, whereas by indirect measures we refer to attempts of calculating indirectly income and consumption. All of them are based on certain assumptions, provide different outcomes and have different data requirements, which should be considered when selecting the most suitable method. Below we describe briefly three methodologies:

Asset-based index:

This method tends to be based on a principal component analysis (or similar) and uses ownership of assets and dwelling conditions as proxies of welfare and wealth. Where possible the first step is to identify assets that are correlated with consumption expenditure (or other measures of welfare such as income). Then, the estimation generates a score for each household, which allows creating an asset ranking. It is important to notice that this methodology does not estimate the level of income or consumption. A threshold is established to the index and those above or below would be selected or rejected. Both assets and cut-off points are usually established separately in different regions (i.e. urban and rural areas).

Proxy Means Test:

Typically PMTs use not only assets and dwelling conditions as proxies of welfare but also demographic characterises, human resources (education levels), productive assets and other variables. Nowadays PMTs tend to be estimated using regression analysis where income or consumption expenditure is the benchmark welfare indicator and the dependent variable. Proxies should not only be highly correlated with welfare, but also to the extent possible easily verifiable and difficult to manipulate. The model predicts the consumption-income level of each household at the time of estimation and produces a score that can be used to rank households. Even if separate models are used in different regions, scores can be put on the same scale and a unique threshold is usually established for the country to determine people's eligibility to cash transfers.

Multi-dimensional Poverty index

Multi-dimensional poverty indexes are constructed putting together in one index measures of living standards in different dimensions, such as health, education, and living conditions (based on assets and housing

characteristics). Within each dimension thresholds are set to define whether people are poor or not in that dimension and then are put together to measure the overall level of deprivation and people are considered multi-dimensionally poor if their combined level of deprivation goes above a certain limit. This index can be used to set thresholds and determine people's eligibility to cash transfers.

As we show in the Box above, there are a number of different methodologies that could be used as complementary method. However, in our key informant interviews we found that the Government is inclined to simple tools that minimise the data collection effort and better conform to the human resources available to implement it. Moreover, the tool's objective should be simply to identify the better-off, rather than distinguishing between extreme poor and poor households. For all the above reasons, we developed and tested an asset based method, which requires gathering information about only a few assets.

Using the LCMS data we selected household assets that are strongly correlated with per adult equivalent consumption expenditure. Moreover, in order to find out which of these represent a better proxy, a principal component analysis was done. This analysis consisted of: (1) identifying which assets are correlated with consumption expenditure; (2) reducing the number of such variables in order to maximise their variance and obtain a set of uncorrelated principal components; (3) estimating an overall score from these assets and dwelling characteristics; and (4) comparing the correlation of the prediction with the actual values of consumption aggregates.

This process resulted in the selection of eight variables related to household assets, whose correlation with per adult equivalent consumption expenditure is reported in table below. We see that the ownership of each asset in the table is significant and positively correlated with consumption expenditure. Correlation between the actual per adult equivalent consumption households and the one predicted using only the eight variables is 0.47, which indicates that the variables selected are reasonably correlated with consumption.

Table 12 Correlation with per adult equivalent consumption expenditure

Assets owned	Significance		
Good quality roof	0.33*		
Good quality cooking stove	0.34*		
Good quality toilet	0.26*		
Lounge suit/sofa	0.31*		
Television	0.35*		
Clock	0.25*		
Refrigerator	0.29*		
Electric Iron	0.31*		

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Notes: The variable good quality roof takes the value 1 if the roof of the househould is not made of straw/grass/thatch; the variable good quality cooking stove takes the value 1 if the energy used for cooking is not firewood; the variable good quality toilet takes the value 1 if the household's toilet is an own flushed one or if it has a slab and value 0 if it does not have a slab.

In order to verify whether the variables listed in the table below are indeed useful to screen out richer households even in poor contexts, we included asset ownership and dwelling characteristics questions in the comprehensive community survey (see Annex D). The table shows asset ownership and dwelling conditions across groups according to subjective poverty.

We see that in Chinsobwe and Nyamanda, with the exception of refrigerators and electric irons, ownership of the assets selected in the principal component analysis is progressively related to a subjective poverty assessment.²²

²² A subjective poverty assessment is constructed by asking to the respondent to rank the poverty status of his or her household with respect to all the other households in the community.
	Subjective Poverty					
Proportion of households owning	Very poor	Poor	Middle	Better off	Total	N owning
Good quality roof	4.7%	19.8%	26.1%	66.9%	15.9%	46
Good quality cooking stove	1.3%	1.6%	6.0%	66.9%	2.8%	8
Good quality toilet	5.6%	13.1%	4.1%	66.9%	10.3%	30
Lounge suit/sofa	1.8%	10.2%	11.9%	66.9%	8.2%	24
Television	0.0%	4.4%	4.2%	66.9%	3.7%	11
Clock	0.0%	5.0%	16.7%	66.9%	5.3%	15
Refrigerator	0.0%	0.8%	0.0%	0.0%	0.4%	1
Electric iron	2.3%	5.6%	0.0%	0.0%	3.8%	11

Table 13Correlation between asset ownership and subjective poverty

Source: Own calculations.

Notes: Subjective poverty columns report the percentage of each poverty category reporting asset ownership (e.g. 4.7% of the very poor have a roof of good quality); % *total* reports the percentage of households in the overall sample that own each asset; *N owning* reports the actual number of households owning each assets.

Moreover, Table 14 presents the results from complementing the dependency criterion with the asset-based index in Chinsobwe and Nyamanda. We see that since in both communities there are not incapacitated households that are considered better off, the asset index contributed excluding only few of the households in the middle class. As expected, in poor communities such as Chinsobwe and Nyamanda, where there are no better-off incapacitated households (according to people's perceptions), the assets screening only marginally improves the targeting. The threshold in the asset index would need to be set at the national level, allowing for geographical targeting: in poorer communities the asset filter would exclude a low number of households while in richer ones a higher number will be excluded.

Table 14Dependency and asset-based eligibility and subjective poverty inChinsobwe and Nyamanda

Subjective poverty	Incapacitated	Incapacitated and low asset	
Subjective poverty	incapacitated	score	
Very poor	37.5%	39.4%	
Poor	56.1%	54.9%	
Middle class	6.4%	5.8%	
Better off	0.0%	0.0%	
Total	100.0%	100.0%	
Ν	107	96	

Source: Own calculations. Note: *N* refers to the number of cases; the threshold for screening out incapacitated households was set at national level using the LCMS 2010.

We simulated the effect of targeting only incapacitated households in rural areas after screening out the households in the highest quintile of the asset-based index. Figure 21 shows the results. Although, as expected, the new criteria are still not strongly correlated with extreme poverty, the results are more encouraging. When complementing a basic geographical

targeting (rural areas) with a simple criterion (households with high dependency) and a method to screen out evident design leakages (asset-based index), we find that 23.0% of eligible households are in the lowest decile, while that ratio in the case of the IM is 15.8%, 13.8% in the MC and 11.3% in the CG.





Source: Own calculations using LCMS (2010) and World Bank consumption aggregates. Note: The sum of bars for each category equals 100%. *Proposed method* shows the distribution of households that meet the new criteria: are rural, incapacitated (high dependency ratio) and have a asset score that is not among the top 20%.

Using the LCMS data we simulated this proposed methodology. Only 11.6% of Zambian households meet the relevant three criteria: are rural (basic geographical targeting), have high dependency ratios and pass the asset filter. This is within the target group of 10 to 20% and therefore seems reachable. Table 15 shows the design leakage and the under-coverage of this harmonised methodology. The results indicate a substantial improvement in terms of leakage although, as expected, errors are still very high. With a target group of the poorest 10% of households, the design leakage is 77.0%, while this ratio is 84.2% in the IM, 86.2% in the MC and 88.8% in the CG. Under-coverage in the proposed method is higher simply because the number of households reached is much lower.²³ The harmonised methodology is effective at reaching the poor. If the poor were the target instead of the extreme poor, then leakage would be of only 18.3%. As already highlighted, the extent of poverty in Zambia makes difficult to reach only the poorest ones.

We calculated the CGH index for the proposed methodology and results are very encouraging. The CGH ratio is 2.3 when the target group is the poorest 10% and 2.1 when it is the poorest 20%. This means that the poorest 10% of households are 150% more likely to be selected by this criterion than by a random selection. These results show that the harmonised method is much more progressive than the current schemes (Table 8).

²³ Coverage is 49% of households in the CG, 20% in the IM, 16% in the MC and 12% in the harmonised method.

Table 15Design leakage and under-coverage (%) and CGH index, harmonisedmethodology

	National			
	Design leakage	Under-coverage	CGH	
Poorest 10%	77.0	73.3	2.3	
Poorest 20%	58.3	75.8	2.1	
Poor	18.3	82.5	1.5	

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

5.2 Our proposal

Based on the analysis of SCT targeting schemes presented in Chapter 4 and the study of other relevant aspects presented in Section 5.1, below we describe our proposal for a harmonised method. Such a proposal is tailored to SCT objectives, the context and the capacity of the GoZ.

It is important to acknowledge that given the extent of poverty in Zambia, it is difficult to find a targeting mechanism that can effectively reach only the poorest 10 or 20%. The effectiveness of SCT mechanisms can certainly be improved; however it is important to manage the expectations about what can really be achieved. It seems that in the end the methodologies piloted as well as others studied in this research can only screen out the better-off, but their ability to differentiate among the poor is limited.

Some of the targeting methodologies often used by cash transfer programmes and presented in Table 2 are not adequate for the SCT. As already highlighted, there are serious data constraints that limit the use of geographical targeting based on LCMS data (see Box 5). Even though other data could be used for such purpose, the main problem with geographical targeting is that it is not compatible with a fully scaled up social protection system. It is likely that as the programme expands, there will be pressure to extend it to the whole country.

CBT in the IM has proved to be effective in reaching the poorest, but the selections done by CWACs tend to lack transparency, controls and the involvement of the communities (see sections 2.3.1 and 4.2). Instead, there are reasons to believe that such method might have reinforced local structures. As a consequence, CBT cannot be discarded as an invalid methodology for SCT but since the aim is to build not only an effective but also a transparent and fair targeting strategy such a methodology should not stand alone.

The analysis presented above shows that categorical targeting is not effective in identifying the poorest of the poor. Categories are not very correlated with extreme poverty; therefore, applying a categorical method on its own is likely to suffer important errors of inclusion and exclusion.

In the qualitative research that we conducted in Serenje and Kaputa, we found that continuous targeting, although indicated in the manual, is in practice not operating. From a theoretical view point, continuous targeting is preferable to discontinuous targeting since households could become beneficiaries at the same moment they become eligible. In the context of volatile livelihoods this is an important feature. However, continuous selection of beneficiaries requires a lot of capacity, resources and budget, which seems not to be the case in the SCT. For this reason, the MC in

Serenje as well as the CG in Kaputa have adapted their design and replace the continuous method with discontinuous uptake exercises.

As a consequence, a harmonised method for targeting the poorest of the poor would need to find the right combination among CBT, welfare estimations and categorical selection. Moreover, it seems that for the time being the method would need to use discontinuous targeting rounds for selecting candidates.

Since poverty in Zambia is mostly rural, below we propose a methodology for capturing the poorest of the rural poor. Moreover, since there is no single criterion or targeting methodology that can effectively reach the poorest, we propose a double-screening strategy. The first filter would consist of a simple categorical eligibility criterion that could be easily implemented in the field. The second method would screen out the errors of inclusion of the first one and would allow prioritising among eligible candidates.

- 1. In relation to the first screening, the best eligibility criterion for reaching the poorest of the poor in rural areas is intra-household dependency. This means that households without able members and households with dependency ratios of at least three dependents per able body would be eligible. Such an eligibility criterion is in line with the perception of poverty that the communities have and therefore could increase the acceptability of the targeting method. Communities tend to consider that the poorest ones are those with no or reduced labour capacity, which is exactly what the dependency ratio captures.
- 2. CWACs will have to play a key role in relation to the identification of candidates in the first screening. Even though a few stakeholders mentioned that the programme could manage to identify eligible households without the support of local structures, given the limited resources and the lack of capacity at local level the first identification will have to be done by CWACs, who should inform the communities about the eligibility criteria and then support the identification of households that should be interviewed. If such identification was done, for example, by the enumerators without the support of CWACs, all households would have to be listed since the enumerators are not aware of who are incapacitated and who are not. This would imply a massive effort in terms of data collection and entering, which is beyond the current possibilities. Therefore, for the time being, there does not seem to be an alternative to relying, to some extent, on local structures.
- 3. The evidence presented above shows that whenever quotas were set, either at design (IM) or at implementation (MC and CG), the selection done by CWACs was to a large extent unfair and not transparent. Selected households were to a good extent eligible, but there were also many complaints in relation to nepotism, favouritism, and unfairness. As a consequence, setting quotas that are lower than the number of eligible households encouraged unfair behaviours and reduced the transparency of the process.

Since the pilots showed that when ceilings were imposed the selection was perceived as unfair and not transparent, and the acceptability of the programme was undermined, we believe that no quota should be set at this stage. Hence, CWACs would help identifying all the households that meet the dependency ratio criterion.

4. Following this, enumerators would be in charge of listing the households identified by CWACs. They would have to go door by door and fill in the application forms. It is very important for the performance of the system that enumerators collect the data rather than CWAC members or headmen. To begin with, the quality of the data gathered should be

better when collected by enumerators, since they are chosen because they have the right skills for such a task. Moreover, in order to avoid creating perverse incentives, those responsible for identifying candidates (i.e. the CWACs) should not collect data that will be used for assessing eligibility in the second screening.

5. Regarding the second screening, we recommend combining the identification done by CWACs with an objective poverty assessment. Currently, a lot of data useful for estimating poverty is being collected with Form 01; however, such information is only used subjectively by the DWACs to approve or reject candidates without any guidelines or formal criteria. We propose instead that these data are used to estimate the poverty levels of candidates.

There are a number of different methodologies that can be used to estimate poverty. PMT, principal component analysis and multidimensional poverty indexes are the most common methods used for such purposes. A methodology suitable to the objectives of the programme, the way the GoZ wants to define poverty and the data available would have to be developed. In Section **Error! Reference source not found.** we presented the results of a principal component nalysis using LCMS data. Moreover, we also compared the assets indicated as proxies by such a methodology with the data gathered in the comprehensive community survey and found that those assets would perform well at screening out the better off. Still, such a methodology would need to be fine-tuned before being implemented.

Data collected in the application form would be entered into the MIS. In our view, the MIS will have to play an important role in the selection of beneficiaries. Indeed, the he system should check that all the mandatory data is entered and that candidate households do meet the eligibility criteria. Then, the MIS would estimate the poverty levels and rank candidates accordingly.

The poverty screening would be a powerful tool not only for reducing errors of inclusion but also for prioritising as well as controlling the expenses of the programme. Given the results of our study of the IM, we see relying on community structures for the second screening as not being as positive as applying the proposed poverty estimation.

Such a screening would allow the programme to: 1) exclude candidates that are somewhat better off; the selection of candidates would not rely exclusively on CWACs or demographic characteristics; 2) set quotas according to the budget available (although this would have to be done with caution due to the low explanatory power of the model); 3) do geographical targeting; since the threshold would be set nationally, poorer areas would find that more of their candidates are below the threshold and hence that they are more eligible than richer areas.



Figure 22 Harmonised targeting mechanism

It has been suggested by the MCDMCH that a third screening could take place. In order to increase the acceptability of the programme, the Ministry indicates that a validation done by the communities could be the last screening. From this viewpoint, the lists of potential beneficiaries would be shared with the CWACs, who would call for community meetings, and they would be entitled to proposing few changes. Even though this extra screening could increase the acceptability of the programme, we think that the costs might outweigh the benefits and that this idea carries some risks. This third filter would extend the length and complexity of the process. Moreover, it has already been shown that community validations have not performed as expected in the IM and this third screening could be exposed to the very same problems. We also fear that in practice this screening might conduct to establishing quotas. Furthermore, it is important to keep in mind that since the CWACs will be in charge of identifying households in the first stage, they will be involved in the targeting of the programme and will in fact play a crucial role. This final screening could improve the targeting, however the MCDMCH should evaluate to what extent such improvement would be significant enough in order to justify the endeavour. One possibility would be to introduce such final step simply as a way to inform the community of the outcome of the process and as a platform to present possible grievances.

Conducting the proposed targeting exercise once every three years seems feasible and frequent enough to guarantee the effectiveness and efficiency of the programme. In every targeting round, all beneficiaries would be interviewed by the enumerators as well as other households identified by the CWACs.

Selected households would need to be aware that the condition of beneficiaries lasts three years, and that after that period their situation would be reassessed. Beneficiaries would graduate from the programme if the recertification finds that they do not meet one or the two

criteria (dependency ratio; poverty). Moreover, graduated households could re-apply in the next uptake and if eligible could become beneficiaries again.

This harmonised method should be complemented with a tool for selecting the areas of intervention during the expansion phase, until the programme reaches the desired national coverage. The LCMS should not be used to select districts, or lower levels, since it produces imprecise estimates.

Finally, in relation to the coverage, according to the LCMS the proposed method should reach 11.6% of Zambian households. This is within the target group. However, as LCMS calculations might be underestimated, it is important to compare these results with estimations done with census data. The CSO indicates that there are 24% of incapacitated households in Zambia. Since we do not have access to such data we are not able to select only rural households and it is not possible to simulate the second screening either. As a result, we know that coverage would be lower than 24%, although it is not possible to produce a precise estimate. Moreover, the percentage of incapacitated households in the 15 districts where the programme is currently operating is 27.5%. Since these are expected to be poorer districts, there is a higher presence of households without able bodies than at national level. However, after applying the second filter, coverage could go down to 20%, which is the target indicated by the programme in the expansion plan.

5.2.1 Implementation challenges for the harmonised methodology

In order to be effective and accepted, this methodology should be complemented with other important improvements to the system, particularly in relation to its implementation. As we presented above, all SCT schemes have been adapted to local circumstances, deviating from what the manual of operations indicates and hence undermining the performance of the programme. The dissemination of the programme should thus be more systematic and comprehensive. The SCT cannot rely exclusively on local structures to call community members to information sessions nor to disseminate the rules and procedures of the programme. Even when local actors play an important role in this vein, the DSWO needs to complement their efforts with other strategies. DSWOs should use other channels of information like schoolteachers, health workers, churches and implementers of other social programmes. Moreover, programme information could be disseminated over the radio, through leaflets and other strategies relevant to the local context. It is important that a representative of the DSWO always attends the information meetings.

Enumerators should be schoolteachers, health workers or similar, rather than school-leavers as in the IM. Priority should be given to enumerators that have been working in the community for at least a couple of years so that, given their knowledge of the community, they could also select candidates.

CWAC members should be appointed in community meetings in the presence of the DSWO. Moreover, after three years communities must appoint new members – the DSWO must ensure that CWAC members are not perpetuated in their positions. From a targeting view point, if the selection of beneficiaries is done every three years as proposed, then CWAC members would participate only in one uptake exercise. However, they have other activities and responsibilities to perform within those three years (i.e. monitoring).

Training of CWACs should be conducted by the DSWO and not by enumerators. Since CWACs would not fill in the application forms and would not have to rank the candidates or conduct community validation meetings, their role in the selection would be more limited and therefore so

would the training needed. Nevertheless, such training needs to provide them with the right skills and information in order to perform their duties. Moreover, all CWAC members must attend the training and other relevant local actors like village headmen should be encouraged to attend as well.

The DSWO should also train the enumerators. The content of their training would be substantially different from the CWACs', since they would be in charge of filling in the forms. It is important that they are properly trained since the data collected would be used in the second screening.

The DSWO should not put a cap on the number of applications to be submitted by giving out fewer forms than the needed ones. CWACs should be provided with as many forms as they need.

The DSWO should support and incentivise village headmen to keep village registers up to date. In fact, the DSWO should lead this process by indicating to the village headmen what information should be collected and when. Village headmen should receive some incentives for this effort. Moreover, the district office should keep a digitalised version of each register.

Enumerators could list households that have not been selected by CWAC but meet the criteria. In those cases, the application forms will still need to be approved by village headmen who would confirm that the candidate households live in the catchment areas.

A system of case management, where communities can present their grievances, should be implemented. Any method for selecting beneficiaries is exposed to errors and, consequently, needs clear and accessible mechanisms for channelling and resolving complaints. Such a system cannot rely on the same implementers who participate in the targeting. In the same vein, it is important to set up mechanisms for monitoring and evaluating the programme.

Recommendations in relation to the MIS and Form 01 have already been presented (Annex E).

Finally, is it important to highlight that this proposal is complementary to other interventions that instead target households with more labour capacity. Programmes like the WEF or even the FSP could target such populations. There are other types of programmes that target households with reduced labour capacity and that have been implemented in different countries with different degrees of success which could be explored: these include public works, vocational training, etc.

6 A brief analysis of the targeting methods used by other social programmes

In this section we study briefly the targeting of three other social programmes: PWAS, FSP, and WEF. It is important to highlight that even when some information and insights were captured in the KIIs conducted for this research; this section relies largely on secondary sources. It is therefore recommended that a comprehensive analysis of the targeting of these programmes is conducted.

6.1 PWAS

The PWAS is implemented by the DSWOs and it has two main objectives: 1) To assist the most vulnerable in society to fulfil their basic needs such as health, education, food, and shelter and to facilitate the movement of stranded personas; and b) to promote community capacity to develop local and externally supported initiatives to overcome the problems of extreme poverty and vulnerability (MCDMCH, 2008).

Although PWAS targets the poorest 10% of the population and is supposed to be a nationwide programme, in practice coverage is very limited. In 2012, there were 86,144 beneficiaries nationwide (0.7% of the Zambian population).

Support is in the form of in-kind support such as food, educational materials, shelter, clothing, etc. and also in the form of education subsidies. In 2012, the majority of PWAS beneficiaries received food support, but the support for secondary school attendance accounts for the highest proportion of the PWAS budget, showing that the cost of education is still high in Zambia. By design, the PWAS should be on demand and continuous, although in practice this does not happen because of infrequent and erratic funding. For example, funding for May, October and December of 2012 was not released (Social Assistance Technical Working Group, 2013).

Type of assistance	Number of beneficiaries	ZMK (old currency)
Primary Education	1,835	222,782,866
Secondary Education	6,211	1,854,769,010
Food	57,173	1,646,515,409
Clothing and bedding	14,845	830,493,943
Repatriation	3,074	635,004,934
Others	2,976	596,918,275
Total	86,114	5,786,484,437

Table 16PWAS beneficiaries and funds in 2012, by type of assistance

Source: Social Assistance Technical Working Group (2013).

Like the SCT, PWAS relies on CWACs for the identification of beneficiaries. In theory, CWAC members should identify beneficiaries and then undertake a means testing assessment using the PWAS qualifying matrixes. PWAS uses a range of social and economic qualifiers: social qualifiers refer to people with a disability, child- and female-headed households, disaster victims, people who

are chronically ill, etc., while economic qualifiers refer to the lack of productive assets, degree of labour constraints and sole reliance on external support.

In practice, our findings show that targeting is not a continuous or an on-demand process as intended. In the districts visited we found that households could not simply apply when they needed support. The targeting process started when the support was available and ended when it ran out. Hence, once the DSWO was informed that they would receive X number of Y in-kind supports, the office contacted some CWACs and they found the beneficiaries. There were only a few cases where support was driven exclusively by the needs at local level.

Moreover, it seems that in practice in the areas where both the PWAS and the SCT operate the former is given to those who are very poor but they were left out of the latter. In the fieldwork conducted for this research, we found that CWACs tend to exclude from PWAS those households who are receiving cash transfers. Therefore, there is a sort of 'equitable' allocation of resources: "We only select people that were not beneficiaries on the Social Cash Transfer Programme. That way it is fair" [FGD with CWAC, Nazilongo, Kalomo].

Where the support given to a DSWO relates to specific target groups such as school children, the DSWO approached head teachers directly and they targeted the beneficiaries. A teacher in Sote (Serenje) described his involvement in the identification of beneficiaries for the PWAS as follows: "what they used to do is write to us and say that the Department of Social Welfare has money for people like this and that. Then we will try and identify them. We have a committee that is responsible for vulnerable children in the school. That committee would sit and identify. Thereafter, the names are taken to the district so they can respond. They may start paying for their school fees and even uniforms."

In relation to the identification of PWAS beneficiaries, we found that there are several important aspects to be revised. First, the selection done by CWACs seems to be arbitrary and not transparent, and therefore leaves room for unfairness. In practice, CWACs do not follow specific rules for identifying candidates, are not monitored by the DSWOs, and there are no complaint mechanisms where members of the communities could raise their grievances. Moreover, there are no meetings where community members can approve or reject the candidates selected by CWACs (like in the IM). As a result, it seems that PWAS gives resources to CWACs to be used discretionally:

"Sometimes you find that Mr Mwanza is on the list and not the most vulnerable and you wonder why, but it is because Mr Mwanza is close to the secretary and they will put him there" [KII with the District Agriculture Coordinator (DACO), Kaputa].

"No one really knows the way these households are picked. But on this programme, one had a lot of problems because not all the people benefited. Because the people who were involved in the giving were somehow political. You find that most of the beneficiaries who benefited are those who belong to the Movement for Multi-party Democracy (MMD)... There is no transparency" [KII with church leader, Fisonge, Serenje].

Second, the way the DSWOs select the communities in which to implement the programme seems also to be arbitrary and not based on robust information. There are no clear processes or controls in relation to the selection of the areas of intervention. Moreover, the District Social Welfare Officers that we interviewed in this research highlighted that they make those decisions

without reliable data. DSWOs do not know the number of households living in each community and neither their needs nor poverty.

Third, training of CWACs seems scarce or non-existent. CWACs are more active and better trained in the areas where the SCT is operating than where it is not.

Fourth, although the PWAS and the SCT have the same objectives and targeted populations, they have different criteria and processes for selecting beneficiaries. SCT categorical schemes (MC, CG and Social Pensions) have criteria and processes that differ from PWAS. In both cases, CWACs play an important role in the identification of beneficiaries, but in the SCT the enumerators are also engaged (and in some cases have more responsibilities than the CWACs) and the DSWO and the DWAC receive information about the socio-economic characteristics of applicants in order to approve or reject the applications. Moreover, since the criteria are based on demographic categories, the CWAC's role is not that predominant and therefore there is less room for unfairness and arbitrary selection. Furthermore, in areas where the IM form of the SCT coexists with PWAS, although they both rely on the identification done by CWACs, in theory SCT candidates have to be approved by the communities and, again, the DSWO and DWAC must assess the applications in light of the information contained in Form 01, whereas the PWAS process is very arbitrary.

The above challenges in the selection process seem to have affected the level of acceptability. The arbitrary and non-transparent nature of selection leaves a lot of room for questioning and also instigated some feelings of unfairness. However, besides all these problems, PWAS seems to be fairly effective at targeting the poorest people. There seems to be consensus about this among implementers and stakeholders.

Nonetheless, given the overall findings we believe that PWAS targeting needs to be improved. In practice, PWAS has two different schemes: on the one hand, in-kind support is provided to households selected by CWAC members; on the other hand, the programme supports the education of pupils selected by schoolteachers.

The in-kind support scheme pursues the same objectives and uses the same local structures for selecting beneficiaries as the SCT. However, the erratic funding, the discretionary targeting as well as the type of support seem to undermine its impact and acceptability. International evidence shows that cash transfers have a much higher impact on poverty than one-off in-kind transfers (Currie and Gahvari, 2008; Tabor, 2002). Poor families know how to make good use of cash in order to improve their wellbeing, while in-kind transfers only tackle specific needs at best. As a consequence, we recommend transferring the funds used for PWAS/in-kind transfers to the SCT.

The education scheme, however, provides a different support to the SCT and also relies on other targeting mechanisms. For these reasons it is not advisable to merge both programmes. Instead, we recommend redefining the PWAS objectives in terms of education outcomes and improving the targeting method. The selection of beneficiaries could be improved by supporting the schoolteachers with clear guidelines and training for the identification.

6.2 FSP

The FSP aims to address poverty and food insecurity, providing small packs of seeds and fertiliser to smallholder farmers. In doing this, it is hoped that farm productivity will increase, making them food secure and reducing poverty (MCDMCH, 2012a). Since the FSP wants to

promote self-sustaining activities which can graduate into commercially viable businesses, beneficiaries have to give back a certain proportion of seeds.

Its specific objectives are: 1) to increase food and nutritional security at household level; 2) to increase agriculture output and productivity; 3) to conserve scarce agricultural and land resources for future generations; and 4) to increase households income (MCDMCH, 2012a).

Beneficiaries receive enough inputs for 0.5 ha of land and are expected to pay back some of the cost (10–20%) after harvest. Most of the beneficiaries are female-headed households and do not own livestock, equipment or machinery. In general, they produce for self-subsistence rather than for the market.

The FSP is targeted at 'vulnerable but viable' agricultural households that face food insecurity as a result of chronic poverty and insufficient rainfall. Small-scale farmers are considered vulnerable if they have "low physical level of activity, resulting in reduced labour for food production" and do not have adequate resources to subsist. Vulnerability groups are also predefined referring to female-headed households, households keeping orphans, etc. (see Table 17). Beneficiaries should also be 'viable', meaning that they must have the ability to pay back.

Criteria level	Criteria	Specification
Primary/Entry	 Have access to land and cultivating less than 1 hectare Have adequate labour Not in gainful employment 	All primary criteria must be met
Secondary/ Qualifier	 Female-headed household Household keeping orphans or abandoned children Child-headed household Terminally ill-headed household Disabled household Unemployed youth The Aged but with labour 	One or more of the secondary criteria must be met. Priority is given to households meeting the highest number

Table 17FSP selection criteria

Source: MCDMCH (2012a)

Only those who meet the criteria in Table 17 and have prepared their fields according to the conservation farming practices detailed in the manual of operations could become beneficiaries.

The selection of beneficiaries is done by the Area Food Security Committees (AFSCs). Such committees are composed of government officers, NGOs, churches and community members. Moreover, there are no application forms which support the targeting process.

Based exclusively on secondary data sources, we find that there are three aspects of the FSP targeting strategy that might undermine the effectiveness of the programme. First, the FSP relies almost exclusively on the assessment of the AFSCs. Since data is not collected, the MCDMCH cannot assess either the viability or the vulnerability of the households identified by the AFSCs. This approach is therefore subject to administrative leakage as well as non-take-up due to elite capture, and again the absence of adequate monitoring and complaints systems for a social assistance programme perpetuates this.

Second, the FSP assumes, in a similar way to the MC in the SCT, that the categories of the 'secondary level criteria' are highly correlated with vulnerability. Since the concept of vulnerability is not defined in the manual it is difficult to assess to what extent this is valid. However, as already shown in the analysis of the SCT, using only demographic criteria might not be effective. Since the programme operates nationwide and communities have different levels of vulnerability, it does not seem right to assume that every household that meets the criteria is vulnerable. Moreover, given the nature of the programme and its emphasis on adequate ability to engage in agriculture, it would be very important to define criteria that are complementary to the SCTs.

Third, FSP coverage is very low, leading to high exclusion. According to the manual, FSP aims at targeting 20% of smallholder households (about 200,000 households or 1 million people). However, only 37,400 received packs in 2012 (MCDMCH, 2013b). Even assuming that vulnerable households have access to land as is required, the declining coverage of the programme because of unpredictable funding has led to significant under-coverage, and this was widely acknowledge by CDOs in all districts visited. CDOs also mentioned that this was a major source of complaints about the programme.

6.3 WEF

The WEF provides micro-credits to groups of poor and vulnerable entrepreneur women. The main objective of the programme is to "reduce poverty and hunger among women" and it targets women living in both peri-urban and rural areas. Clubs are self-formed; however, leaders cannot be "in gainful employment or hold political positions in the communities" (MCDMCH, 2012b).

The size of the clubs can range between 10 to 20 members and they operate with their own rules and regulations. To be eligible under the WEF, these clubs need to present proof of a: 1) business proposal; 2) bank account; and 3) certificate of registration with Registrar of Societies. The application form contains several simple questions about the business proposed.

In 2012 only 731 clubs received funding. Moreover, less than ZMK 7 million (rebased) was disbursed in 2012 (MCDMCH, 2013b).

The WEF is a self-targeted programme, meaning that the programme does not actively look for candidates but disseminates the criteria and services offered and those who are interested apply. In order to do so, the clubs must submit their application forms to the CDO or to an officer in the community, if available. The CDO assesses the viability of the business proposed and checks that all the required information has been submitted, and then sends the paperwork to the MCDMCH in Lusaka recommending approval or not.

The WEF target group is clearly different from the SCT and PWAS. In this case, women who are not only able to work but also to run their own businesses are targeted. While WEF criteria might succeed in capturing poor households, however, these may not necessarily be the poorest. Instead, such interventions aim at reducing credit access constraints but also put some

restrictive conditions in place that would affect the eligibility of poor and isolated communities (proposal, bank account, registration process, etc.).

WEF targeting suffers from a fundamental problem. Although the programme aims at reducing poverty and hunger, it is not clear how these two variables are assessed. The application form does not collect any information for assessing poverty and vulnerability and therefore the core of the selection is not based on indicators of individual members' wellbeing. This is potentially very worrying. Though the programme might be operating in poor communities, not every community member is equally poor. It is difficult to assess to what extent the programme is effective with such a discrepancy between the objectives and the targeting process. If WEF's true objective is to reduce poverty, then the programme needs to develop a mechanism to reach the poor.

The effectiveness of WEF targeting seems to be undermined by a range of implementation factors. First, the continuous targeting is not functioning as it is supposed to. In theory, CDOs should be able to receive application forms throughout the year. However, the CDOs visited said that did not receive forms throughout the year and could not always predict the timings of the application windows. Some potential beneficiaries therefore made countless journeys to the district, and it is likely that after a while such women simply decided to forget about the process altogether.

Second, the length of the application process seems to be very long. The final verdict as to whether to approve or reject an application is done at the national level. The CDO in Serenje seemed almost relieved because this independence gets rid of accusations of nepotism. Yet there were still such accusations from community members because when an application was rejected there was no clear communication as to why this could be, which led to perceptions of unfairness. Moreover, it has been reported by the CDOs interviewed that the assessment of the application form never takes less than five months and often takes up to a year. There were cases where no response from the central office was given. Hence, the length of the application process represents a big disincentive for those who want to apply and the chances are that after one year of applying the situation of a club and its members might have changed.

Third, we also found that CDOs received little or no training in relation to how to assess the viability of the projects and there are no guidelines that support such assessment.

Fourth, the effectiveness of the self-targeting mechanism depends on adequate information dissemination for the programme. However, it seems that the most dominant mode of information sharing was word of mouth and typically respondents perceived that information about programmes such as this tended not to reach households who were further away from the district centre.

From our perspective, if WEF's true objective is to reduce poverty, then the programme needs to develop a mechanism to reach the poor. On the other hand the type of intervention and the way in which it operates seems to suggest that the real objective is in fact to address some credit constraints and promote some economic activities at a different level. Nevertheless, it would be important to improve some implementation aspects that could make the programme more accessible. However, it might be better just to acknowledge that this programme does not aim at reducing extreme poverty.

In order to increase WEF's effectiveness all the implementation problems highlighted above should be addressed. The approval process needs to be timely and predictable and for that purpose it may be better to let the CDO assess the applications. If that was the case, then they would need to be trained accordingly. Moreover, information must be adequately disseminated in

the communities. Furthermore, if WEF funds tend to fluctuate and it is not always possible to accept applications, then it might be better to establish a fixed period for applications rather than an open window. If the programme receives applications only, for example, once a year, and this schedule is well disseminated in the communities, then the caseload could be properly managed and candidates would not bear the cost of trying to apply many times.

7 Conclusion

7.1 Assessment of SCT targeting methods

In this research we studied three SCT targeting mechanisms: the IM, the MC, and the CG. There are a number of design and implementation issues that undermine the effectiveness and acceptability of the programme.

In relation to the design issues, one of the central problems of SCT targeting methodology is that in some cases the method for selecting beneficiaries deviates from the programme's objective. Both the MC and the CG have been designed to target vulnerable households in poor areas; however, the SCT manual of operations indicates clearly that the goal of the programme is to "to reduce extreme poverty and intergenerational transfer of poverty", not vulnerability. **Methods that do not target the poor are not effective.**

The design of the IM stands on a fundamental flaw: aiming at targeting 10% of the national population does not mean that in each district and each community the poorest 10% should be targeted. In poorer areas this threshold should be higher, while in richer ones lower, so that on average the 10% is reached. Since the very beginning, this is not the way the IM has been implemented, which reduces the effectiveness and fairness of the scheme.

The designs of these three methodologies make them ineffective in targeting the extreme poor. The contribution of the three criteria to identifying the poorest is negligible. The criteria used in the three schemes are only slightly correlated with extreme poverty and hence do not represent an important contribution to the selection of beneficiaries. Therefore, theoretical design leakage (errors of inclusion) and under-coverage (errors of exclusion) are very high in all the schemes. Naturally, if the target was the poor rather than the extreme poor design leakages would be much lower.

The IM and the MC criteria go in line with people's perceptions about who the poorest are and therefore these schemes are more accepted by the communities. We found that communities tend to believe that the extreme poor are those with no or reduced labour capacity, typically the elderly, the disabled, orphans, etc. Therefore, the criteria used by the IM and the MC are widely accepted in the communities. The case of the CG is different, however, and this scheme does not correspond to the perception of poverty and hence its acceptability is much lower.

We find that there is no single method that can effectively identify the poorest households and hence the methodology selected must be combined with another targeting tool in order to be effective. Design leakages are very high for all the schemes and the reason behind this expected result is that, even though correlated with rural poverty, the MC and the IM criteria capture households in the first four or five deciles but not necessarily the poorest. This, of course, increases the inclusion errors. From this view point, such methods perform better in excluding better-off households than reaching the poorest. For that reason, these methodologies need to be complemented with other mechanisms.

Rightly, for this reason the IM intends to complement its criteria with CBT while the MC and the CG with geographical targeting. However, due to the implementation failures explained below, it seems that communities are not really involved in the IM selection. Moreover, poverty estimates at district level cannot be robustly produced from the LCMS data, which raises doubts about the current geographical targeting.

Regarding implementation issues, the three schemes have been adapted to local circumstances and the way the selection works in practice differs substantially from the manual of operations. In practice, the three schemes operate as targeted programmes rather than as universal ones.

Some of the key features of the IM have not been operationalised in Kalomo. CWACs did not rank all eligible households but just selected the number indicated by the quota. Moreover, there was no validation of the selection done by CWACs in community meetings; such meetings had very few attendees and in general consisted of CWACs and headmen displaying the names chosen. Communities never rejected candidates. Furthermore, headmen played an important role in the identification of candidates. In the communities visited we found that headmen influenced or even led the selection done by CWACs.

Even though the MC is by design a universal scheme, the DSWO in Serenje established a ceiling of 150 candidates per community. Such quotas were allocated irrespectively of the extent of poverty or population and CWACs have carried out the selection in a rather chaotic and unfair way. We found that eligible households who live near the community centre were selected over those in other areas and in some communities a *first come first served* process took place until the 150 forms run out. Moreover, enumerators' role in the MC appeared to be much stronger in comparison to the other schemes and in some cases they seem to be the ones leading the identification of candidates instead of the CWACs. Furthermore, neither self-registration nor continuous targeting are in operation in the MC in Serenje. Although an uptake exercise took place periodically to help capture some of the households who had been excluded, households cannot apply at any point in time when they become eligible; they have to wait for the next targeting round.

The CG was also adapted to local circumstances in Kaputa. CWAC members seem to register only children who were being cared for by their biological mothers, and orphans were excluded. Moreover, as in the MC in Serenje, the DSWO in Kaputa established quotas and CWACs had to develop different strategies for prioritising eligible candidates, again typically a *first come first served* approach, which is seen as unfair by the communities. Furthermore, requiring candidates to present under-five cards and NRCs seem to be an important source of exclusion. Finally, the process of continuous selection is not in operation, although the frequency of uptake exercises appears to be high in this particular case and the process of self-registration whereby households could go to health centres to register had been instituted in all communities since the beginning of the year. However, there appeared to be a number of challenges with this process which have implications for targeting effectiveness.

The quota system seems to have left room for favouritism in the selection of beneficiaries in the three schemes. In general, respondents had the perception that when CWACs had to identify only some of the poorest (in the IM by design and in the MC and the CG due to implementation constraints), they prioritised relatives and neighbours. This undermined the acceptability of the programme.

7.2 A harmonised targeting methodology

Our proposal for a harmonised targeting methodology is based on the assessment of the current methods, the objectives of the SCT and the context and constraints that the programme faces.

It is important to acknowledge that given the extent of poverty in Zambia, it is difficult to find a targeting mechanism that can effectively reach only the poorest 10 or 20%. The effectiveness of SCT mechanisms can certainly be improved; however it is important to manage

the expectations about what can really be achieved. It seems that in the end the methodologies piloted as well as others studied in this research can only screen out the better-off, but their ability to differentiate among the poor is limited.

Since there is no single criterion or targeting methodology that can effectively reach the poorest, we propose a **double-screening strategy. The first filter would consist of a simple categorical eligibility criterion: intra-household dependency.** This means that households without able members and households with dependency ratios of at least three dependents per able body would be eligible. Since the pilots showed that when ceilings were imposed the selection was perceived as unfair and not transparent, and the acceptability of the programme was undermined, we believe that no quota should be set. Hence, CWACs would identify all the households that meet the dependency ratio criterion. Then, enumerators would be in charge of listing the households identified by CWACs.

Regarding the second screening, we recommend to combine the identification done by CWACs with an objective poverty assessment. Such a screening would allow the programme to: 1) exclude candidates that are somewhat better off; 2) set quotas according to the budget available (to a certain extent); and 3) do geographical targeting. Therefore, the poverty screening would be a powerful tool not only for reducing errors of inclusion but also for prioritising as well as controlling the expenses of the programme.

Conducting the proposed targeting exercise once every three years seems feasible and frequent enough to guarantee the effectiveness and efficiency of the programme. In every targeting round all beneficiaries would be interviewed by the enumerators as well as other households identified by the CWACs.

In order to be effective and accepted, this methodology should be complemented with other important improvements to the system, particularly in relation to its implementation. Moreover, this proposal is complementary to other interventions that instead target households with more labour capacity (i.e. the WEF and FSP).

7.3 Other programmes

We studied briefly the targeting of three social programmes: PWAS, FSP, and WEF. Such analysis relied largely on secondary sources and therefore it is recommended that a comprehensive analysis of the targeting of these programmes is conducted.

Although the PWAS seems to be fairly effective at targeting the poorest, the selection done by CWACs seems to be arbitrary and not transparent and therefore leaves room for unfairness and questionings.

In practice, PWAS has two different schemes: 1) in-kind support is provided to households selected by CWAC members; and 2) support is provided for the education of pupils selected by schoolteachers. The in-kind support scheme pursues the same objectives and uses the same local structures for selecting beneficiaries as the SCT. However, the erratic funding, the discretionary targeting and indeed the type of support seem to undermine its impact and acceptability. As a consequence, we recommend transferring the funds used for PWAS/in-kind transfers to SCT. The education scheme, however, provides different support to that intended by the SCT and also relies on other targeting mechanisms. We recommend redefining PWAS objectives in terms of education outcomes and improving the targeting method. The selection of beneficiaries could be improved by supporting the schoolteachers with clear guidelines and training for the identification.

In relation to the FSP, there are three aspects of the targeting strategy that might undermine the effectiveness of the programme: 1) FSP relies almost exclusively on the assessment of the AFSCs. Since data is not collected, the MCDMCH cannot assess either the viability or the vulnerability of the households identified by the AFSCs; 2) FSP assumes, in a similar way as the SCT, that 'secondary level criteria' are highly correlated with vulnerability (i.e. female-headed households, households keeping orphans, etc.). However, using only demographic criteria might not be effective due to the low correlation with extreme poverty; and 3) FSP coverage is very low, leading to high exclusion.

WEF targeting suffers from a fundamental problem. Although the programme aims at reducing poverty and hunger, it is not clear how these two variables are assessed. The application form does not collect any information for assessing poverty and vulnerability and therefore the core of the selection is not based on indicators of individual members' wellbeing. Although the programme might be operating in poor communities, not every community member is equally poor. It is difficult to assess to what extent the programme is effective if there is such a discrepancy between the objectives and the targeting process. If WEF's true objective is to reduce poverty, then the programme needs to develop a mechanism to reach the poor. However, it might be better just to acknowledge that this programme does not aim at reducing extreme poverty.

The effectiveness of WEF targeting seems to be undermined by a range of implementation factors, the most important ones being: 1) the length of the application process seems to be very long. It has been reported by the CDOs interviewed that the assessment of the application form never takes less than five months and often takes up to a year; and 2) although the effectiveness of the self-targeting mechanism depends on adequate information dissemination, it seems that the most dominant mode of information sharing is word of mouth and there are no systematic strategies for dissemination.

Bibliography

Braithwaite, J and Month, D (2008). "Disability and Poverty: A Survey of World Bank Poverty Assessments and Implications", Social Protection Discussion Papers, No. 805, The World Bank.

Brewin, M and Watkins, B (2008). "Zambia Cash Transfer Programme: Baseline Survey Report for Katete District", Kimetrica International Limited.

Carraro, L (2007). "Reforming cash-based social assistance in Serbia"; OPM briefing notes.

Carraro, L (2012). "Step by step approach to design and implement a proxy means test model"; OPM project report.

Central Statistical Office (2012). "2010 Census of Population and Housing: Population Summary Report", Lusaka, Zambia

Chiwele D. (2010). "Assessing administrative capacity and cost of social cash transfer schemes in Zambia: Implications for roll out" Centre for Inclusive Growth.

Coady, D, Grosh, M and Hoddinott, J (2004). "Targeting of Transfers in Developing Countries. Review of Lessons and Experience". Washington DC: World Bank.

Currie, J and F. Gahvari (2008). "Transfers in Cash and In-Kind: Theory Meets the Data," Journal of Economic Literature, 46(2):333–383.

Grosh M. and Baker J. (1995). "Proxy Means Tests for Targeting Social Programs: Simulations and speculation"; LSMS Working Papers, NO. 118, The World Bank, Washington D.C.

Grosh, M, Del Ninno, C. Tesliuc, E. and Ouerghi (2008). "For Protection and Promotion: The Design and Implementation of Effective Safety Nets", Washington DC: World Bank.

MCDMCH (2013a). "Harmonised Manual of Operations, Social Cash Transfer Scheme." Department of Social Welfare, Lusaka, Zambia.

MCDMCH (2013b). "Social Protection Social Report", Lusaka, Zambia

MCDMCH (2012a). "Implementation Manual for Food Security Pack." Department of Community Development, Lusaka, Zambia.

MCDMCH (2012b). "Women Empowerment Programme Guidelines." Department of Community Development, Lusaka, Zambia.

MCDMCH (2008). "Public Welfare Assistance Scheme Guidelines." Department of Social Welfare, Lusaka, Zambia.

MCDSS (2011). "Targeting Social Cash Transfers in Zambia. A report on the workshop organised by the Ministry of Community Development and Social Services (MCDSS)." Government of Zambia"

Miller, C., Tsoka M., Reichert K. (2008). "Targeting Report, External Evaluation of the Mchinji Social Cash Transfer Pilot" Centre for International Health and Development Boston University School of Public Health and The Centre for Social Research University of Malawi.

Oxford Policy Management (2009). "Effective targeting of poverty-focussed programmes. How to reach the poorest households", Oxford: UK.

Schubert, B & Goldberg, J (2004). "Test Phase Results of the Pilot Social Cash Transfer Scheme, Kalomo District", 4th Report. German Technical Cooperation, Lusaka.

Seidenfeld, D and Handa, S (2011a). "Zambia's Child Grant Programme: Baseline Report", American Institute for Research.

Seidenfeld, D and Handa, S (2011b). "Results of the Three Year Impact Evaluation of Zambia's Cash Transfer Program in Monze District", American Institute for Research.

Seidenfeld, D and Prencipe, L (2012). "Zambia's Multiple Categorical Cash Transfer Programme: Baseline Report", American Institute for Research.

Social Assistance Technical Working Group (2013). "Social Assistance (Incapacitated Households) TWG 1st of January 2012 to 31st of December 2012 Report", Government of Zambia.

Tabor, S (2002). "Assisting the poor with cash"; World Bank, Social Protection Discussion Paper Series No. 223.

Tembo, G (unknown). "Multi-Category Targeting of Social Cash Transfers in Zambia"

Tembo G. and Freeland N (2008). "Baseline Survey Report for the Monze Social Cash Transfer Programme", UNICEF.

Watkins, B (2008). "Alternative Methods for Targeting Social Assistance to Highly Vulnerable Groups", Kimetrica International Limited.

World Bank (2012). "Zambia Poverty Assessment: Stagnant Poverty and Inequality in a Natural Resource-Based Economy", Washington DC: USA; draft report.

World Bank (2013). "Using Safety Nets to Accelerate Poverty Reduction and Share Prosperity in Zambia", Washington DC: USA

Annex A LCMS data

A.1 Discrepancies between LCMS and census estimates

As part of our work with LCMS data we checked whether the statistics on demographic characteristics used to assess eligibility for different schemes were consistent with the 2010 census. In this section we highlight some discrepancies found which might affect our estimates.

A.1.1 Orphanhood

Eligibility for the MC model requires households to be female or elderly-headed and keeping orphans. Since orphanhood is an important variable in our analysis, we compare LCMS figures with the census. Table 18 compares statistics from the two data sources on orphans of either parent between 0 and 17 years old.

We see that overall prevalence of orphans of either parents is 13.9% in 2010 LCMS data, which is fairly similar to the 13% in the census data. If we focus on rural areas only, we find a difference of roughly one percentage point: according to LCMS data 12.3% of individual younger than 18 in rural areas are orphans, while in the census the same figure is only 11.4%. Notable differences between the two data source exist as far as orphanhood prevalence in urban areas and orphanhood among 0 to 4 year old individuals is concerned.

As outlined above, the discrepancy between LCMS and the census in the prevalence of orphanhood overall and in rural areas is limited. As a consequence, the estimated percentage of MC eligible households using the LCMS data is likely to be only marginally higher than the one we would get using the census data.

	LCMS	Census
Sex		
Male	13.9	12.9
Female	13.8	13.0
Residence		
Rural	12.3	11.4
Urban	17.4	15.6
Age group		
0 to 4	3.7	5.6
5 to 9	11.0	10.7
10 to 14	19.6	18.5
15 to 17	26.8	25.9
Consumption quintile		

Table 18Orphans of either parent (% of corresponding population), by gender,
residence, age group, and consumption quintile, LCMS and census

1	21.9	n/a
2	20.1	n/a
3	19.6	n/a
4	20.6	n/a
5	17.9	n/a
Overall	13.9	13.0

Source: Own calculations using LCMS (2010) and CSO (2012)

A.1.2 Disability and chronic illness

The presence of one or more disabled or chronically ill members in the household is one of the criteria used in SCT targeting schemes. It follows that correctly capturing disability prevalence is important in assessing the potential number of beneficiaries. However, disability data is hard to capture without the use of a specialised survey given that disability covers a wide range of conditions, which cannot all be listed in the survey question.

According to the 2010 census, 2% of the Zambian population has some form of disability, while we find that only 1% of the LCMS sample has any disability. Underrepresentation is higher in rural areas, where we find that only 1.1% of the population is reported to be disabled in LCMS data versus 2.4% in the census. When comparing the list of disability categories used in the two surveys, we find that the census used a longer list with more non-physical disability categories, which can in part explain the higher prevalence in the census data.²⁴

	LCMS	Census
Residence		
Rural	1.1	2.4
Urban	0.8	1.4
Province		
Central	0.6	2.1
Copperbelt	0.8	1.6
Eastern	1.1	2.1
Luapula	1.6	2.8
Lusaka	0.9	1.3

Table 19 Disabled population (%), by residence and province, LCMS and census

²⁴ The list of disability categories used in the 2010 census includes the following conditions: blind, partially sighted, deaf and dumb, deaf, hard of hearing, mentally ill, intellectual disability, speech impairment, physically disabled, mentally retarded, and other. On the other hand the list used in the LCMS 2010 includes: blind, partially sighted, deaf, dumb, physically disabled, mentally retarded, mentally ill, and ex-mental.

Overall	1.0	2
Western	1.4	2.9
Southern	1.1	1.8
North Western	0.7	2.7
Northern	1.1	2.4
Muchinga	0.9	2.2

Source: Own calculations using LCMS (2010) and CSO (2012)

As far as chronic illness is concerned, the reliability of our estimates is quite limited since the 2010 LCMS data did not collect specific information on this health aspect. We could only use information on illness in the past three months and count as chronic illness the ones included in the WHO definition of chronic illness (i.e. diabetes, asthma, and cancer).

A.1.3 Under representation of children under 5 years old

Having a correct estimation of the number of children under 5 in each household is relevant for each of three eligibility criteria we are replicating. For the CG the relationship is explicit since only households with children under 5 are eligible. However, children under 5 are also dependent individuals in the household and therefore increase the dependency ratio and thus a household's likelihood of being incapacitated; they may also be orphans or disabled and therefore determining whether the MC eligibility criterion is met.

Population distribution across age groups in the LCMS data shows a pattern that is not consistent with the comparable distribution in census data for individuals belonging to the first age group (0 to 4 years old). In Figure 23 Age distribution in rural areas (%), LCMS and and Figure 24, we see that there is a greater percentage of children between 5 and 9 than of children between 0 and 4 in both rural and urban areas according to LCMS data, while for census data we have a higher percentage in the age group 0–4 (2007 DHS data provide an age distribution very similar to that of the census).





Source: Own calculations using LCMS (2010) and CSO (2012)

Figure 24 Age distribution in urban areas (%), LCMS and census



Source: Own calculations using LCMS (2010) and CSO (2012)

If the underrepresentation of children under 5 is due to the fact that a considerable number of children 0 to 4 years old has been missed in the LCMS survey, our estimates of the percentage of MC, CG, and IM eligible households would underestimate the actual number of eligible households. However, the analysis of average household size in LCMS and in census data suggests that it is not likely that household members have been dropped entirely from the household roster. Therefore, we believe that it is more likely that the under 5 underrepresentation is due to pushing children under 5 into higher age groups. If our hypothesis is true our analysis

should still be substantially correct for the MC and the IM but would underestimate the number of CG eligible households.

A.2 Consumption aggregates and poverty estimates

A.2.1 Poverty estimates

Our poverty estimates are based on the consumption aggregates constructed by the World Bank and on the poverty line used by the World Bank to compute poverty and extreme poverty in Zambia. We consider a household poor if its monthly per adult equivalent consumption is less than the basic needs poverty line (ZMK 146,054 in rural areas and ZMK 180,551 in urban area); a household is extreme poor if its monthly per adult equivalent consumption is less than the food poverty line (ZMK 98,505). Table 20 compares the World Bank estimates with equivalent figures from the CSO.

We see that the poverty rate overall is the same according to the two sources, while extreme poverty is slightly higher according to CSO estimates. If we focus on rural areas, poverty rates based on World Bank computations are lower than the ones based on CSO computations.

	W	В		CSO
	Poor	Extreme poor	Poor	Extreme poor
Residence				
Rural	73.9	53.3	77.9	57.7
Urban	35.3	12.8	27.5	13.1
Overall	60.5	39.3	60.5	42.3

Table 20 Poverty estimates (%) by residence, World Bank and CSO

Source: World Bank (2012) and own calculations using LCMS (2010) and World Bank consumption aggregates.

A.2.2 District-level estimates' reliability

Table 21 compares poverty and extreme poverty estimates at district level using 2006 and 2010 LCMS data. We notice that for some districts the variation in poverty and extreme poverty level between 2006 and 2010 is very high; for example, the district of Kaputa moves from a poverty prevalence of 90% in 2006 to one of 58% in 2010. This suggests that the precision of estimates might not be very high at least for some of the districts.

Table 21 2006 and 2010 poverty estimates by district (% of population)

	LCMS 2006		LCMS	2010
	Poor	Extreme poor	Poor	Extreme poor
Chadiza	79	65	76	46
Chama	85	67	65	34

	LCMS 2006		LCMS 2010	
	Poor	Extreme poor	Poor	Extreme poor
Chavuma	75	61	96	70
Chibombo	72	59	59	33
Chiengi	89	76	69	49
Chililabombwe	26	10	28	7
Chilubi	87	71	87	56
Chingola	32	19	30	12
Chinsali	81	69	88	64
Chipata	74	61	70	49
Choma	82	67	61	35
Chongwe	63	50	72	48
Gwembe	83	78	70	43
Isoka	85	73	82	69
Itezhi-tezhi	86	68	65	39
Kabompo	79	61	83	68
Kabwe	44	33	33	14
Kafue	40	25	39	22
Kalabo	96	89	71	49
Kalomo	79	63	70	52
Kalulushi	34	22	28	7
Kaoma	83	68	73	59
Kapiri Mposhi	79	69	61	26
Kaputa	90	77	58	49
Kasama	71	52	49	28
Kasempa	75	50	78	67
Katete	80	69	84	62
Kawambwa	48	36	86	73
Kazungula	82	69	65	39
Kitwe	31	19	31	12
Livingstone	40	24	34	13
Luangwa	85	69	70	52
Luanshya	51	33	61	36
Lufwanyama	79	70	88	75
Lukulu	77	70	77	66
Lundazi	79	65	73	54
Lusaka	22	10	28	10
Luwingu	91	77	83	61

	LCN	1S 2006	LCMS 2010		
	Poor	Extreme poor	Poor	Extreme poor	
Mambwe	72	56	85	62	
Mansa	77	67	73	52	
Masaiti	48	37	51	28	
Mazabuka	64	47	67	41	
Mbala	85	74	76	63	
Milengi	84	64	87	73	
Mkushi	58	33	51	29	
Mongu	74	65	66	52	
Monze	74	55	81	64	
Mpika	62	52	63	37	
Mpongwe	87	57	49	38	
Mporokoso	73	55	80	57	
Mpulungu	61	40	68	48	
Mufulira	40	25	30	17	
Mufumbwe	70	53	86	63	
Mumbwa	83	71	54	20	
Mungwi	86	68	88	67	
Mwense	71	63	73	55	
Mwinilunga	67	52	52	31	
Nakonde	80	65	60	44	
Namwala	83	71	74	45	
Nchelenge	85	65	83	58	
Ndola	41	25	38	13	
Nyimba	80	63	74	60	
Petauke	86	72	78	58	
Samfya	65	55	92	73	
Senanga	91	85	82	56	
Serenje	92	84	66	45	
Sesheke	81	66	71	53	
Shangombo	87	75	88	66	
Siavonga	79	61	55	39	
Sinazongwe	69	56	81	62	
Solwezi	71	56	57	35	
Zambezi	76	69	76	58	

Source: CSO estimates (2006) and own calculations using LCMS (2010) and World Bank consumption aggregates.

Note: We have poverty estimates calculated by the CSO using LCMS data only for 2006, while for 2010 we used the World Bank consumption aggregates. Therefore, the comparison between the two figures is only indicative.

In the table below we report district-level poverty estimates for *basic needs poverty* and *food poverty/extreme poverty* based on World Bank consumption aggregates. By looking at the 95% confidence interval for the poverty estimates we notice that in some case the band is quite wide, which confirms our assumptions on the lack of precision of the district-level estimates. Indeed, the sample size for some of the districts is fairly small, which leads to inadequate levels of precision. When we take into account confidence intervals around poverty estimates we are unable to establish a certain poverty ranking.

	WB 2010								
District	Poor	se	lower bound	upper bound	Extreme poor	se	lower bound	upper bound	N
Chavuma	95.7	0.03	0.91	1.01	69.5	0.08	0.54	0.85	120
Samfya	92.1	0.02	0.87	0.97	72.7	0.05	0.64	0.82	220
Chinsali	87.9	0.02	0.84	0.92	63.7	0.04	0.56	0.71	250
Lufwanyama	87.9	0.03	0.81	0.94	74.7	0.06	0.54	0.78	90
Mungwi	87.7	0.06	0.77	0.99	67.5	0.06	0.62	0.87	140
Shangombo	87.5	0.03	0.82	0.94	65.9	0.05	0.58	0.77	129
Chilubi	87.4	0.04	0.80	0.95	56.4	0.07	0.42	0.70	110
Milengi	87.3	0.04	0.80	0.95	73.2	0.06	0.62	0.84	99
Kawambwa	86.1	0.03	0.80	0.92	73.5	0.04	0.66	0.81	300
Mufumbwe	85.6	0.03	0.80	0.91	62.9	0.04	0.54	0.71	238
Mambwe	84.6	0.04	0.77	0.93	61.8	0.07	0.49	0.75	110
Katete	83.6	0.03	0.78	0.89	61.8	0.04	0.53	0.70	280
Kabompo	82.8	0.03	0.76	0.90	68.0	0.05	0.59	0.77	219
Luwingu	82.8	0.04	0.75	0.91	60.9	0.06	0.46	0.70	150
Nchelenge	82.7	0.03	0.76	0.90	58.4	0.05	0.51	0.71	180
Isoka	81.7	0.04	0.74	0.89	68.6	0.05	0.46	0.66	180
Senanga	81.6	0.04	0.73	0.90	56.0	0.06	0.57	0.80	149
Monze	81.2	0.03	0.75	0.87	63.9	0.04	0.56	0.72	292
Sinazongwe	81.1	0.03	0.75	0.87	62.3	0.04	0.54	0.71	219
Mporokoso	80.3	0.03	0.74	0.87	56.8	0.04	0.48	0.66	229
Kasempa	78.1	0.04	0.70	0.86	67.1	0.05	0.57	0.77	159
Petauke	77.6	0.03	0.72	0.84	58.2	0.04	0.51	0.66	302
Lukulu	77.5	0.05	0.68	0.87	66.0	0.06	0.54	0.78	149
Chadiza	76.5	0.06	0.64	0.88	46.2	0.07	0.50	0.76	109
Mbala	75.8	0.04	0.69	0.84	63.0	0.05	0.36	0.57	229
Zambezi	75.7	0.05	0.67	0.85	57.6	0.05	0.48	0.67	290
Namwala	74.3	0.04	0.66	0.82	44.6	0.05	0.34	0.55	211
Nyimba	74.3	0.06	0.63	0.86	60.5	0.07	0.48	0.73	100
Kaoma	73.2	0.04	0.66	0.80	58.5	0.05	0.45	0.64	210
Lundazi	73.0	0.04	0.66	0.80	54.3	0.04	0.46	0.63	300
Mansa	72.9	0.03	0.66	0.80	51.8	0.04	0.43	0.60	309
Mwense	72.7	0.05	0.64	0.82	54.7	0.05	0.49	0.68	170
Chongwe	72.2	0.03	0.65	0.79	48.2	0.04	0.40	0.57	271
Kalabo	71.3	0.04	0.63	0.79	49.4	0.05	0.43	0.63	130
Sesheke	71.1	0.05	0.62	0.80	53.2	0.06	0.38	0.61	150
Chipata	70.5	0.03	0.65	0.76	48.9	0.03	0.42	0.55	449

Table 22 Poverty estimates by district (% of population)

	WB 2010								
District	Poor	se	lower bound	upper bound	Extreme poor	se	lower bound	upper bound	N
Gwembe	70.3	0.05	0.61	0.79	42.9	0.05	0.42	0.62	200
Kalomo	70.0	0.04	0.62	0.79	51.8	0.05	0.33	0.53	285
Luangwa	69.6	0.05	0.59	0.80	52.2	0.06	0.41	0.63	170
Chiengi	69.2	0.06	0.58	0.80	49.0	0.06	0.37	0.62	90
Mpulungu	68.1	0.04	0.60	0.77	47.9	0.05	0.39	0.57	250
Mazabuka	67.1	0.04	0.59	0.75	40.9	0.05	0.31	0.51	320
Mongu	66.3	0.04	0.59	0.73	52.4	0.04	0.37	0.53	351
Serenje	66.0	0.05	0.57	0.75	44.8	0.05	0.42	0.63	180
Chama	65.4	0.06	0.52	0.77	33.6	0.06	0.26	0.51	100
ltezhi-tezhi	64.8	0.06	0.53	0.77	39.3	0.06	0.27	0.51	150
Kazungula	64.5	0.05	0.55	0.76	38.7	0.05	0.23	0.44	150
Mpika	62.7	0.04	0.56	0.70	37.5	0.04	0.30	0.45	329
Choma	61.3	0.04	0.54	0.69	34.8	0.04	0.27	0.43	300
Kapiri Mposhi	61.2	0.04	0.53	0.69	26.3	0.04	0.27	0.44	252
Luanshya	61.0	0.04	0.54	0.68	35.6	0.04	0.18	0.34	340
Nakonde	59.9	0.05	0.51	0.69	44.2	0.05	0.35	0.53	234
Chibombo	59.1	0.04	0.51	0.67	32.6	0.04	0.25	0.41	340
Kaputa	58.2	0.08	0.42	0.74	49.2	0.08	0.33	0.66	100
Solwezi	57.0	0.03	0.51	0.63	34.7	0.03	0.28	0.41	460
Siavonga	54.7	0.07	0.41	0.69	38.8	0.06	0.27	0.51	190
Mumbwa	54.1	0.05	0.43	0.65	20.4	0.05	0.11	0.30	232
Mwinilunga	52.0	0.08	0.37	0.67	30.9	0.07	0.16	0.46	155
Masaiti	51.3	0.05	0.42	0.60	28.2	0.04	0.20	0.37	230
Mkushi	50.7	0.05	0.41	0.61	28.7	0.04	0.20	0.37	296
Kasama	49.2	0.04	0.41	0.57	28.3	0.04	0.21	0.36	418
Mpongwe	48.9	0.06	0.37	0.61	37.5	0.06	0.26	0.49	159
Kafue	39.4	0.03	0.33	0.46	21.7	0.03	0.16	0.27	401
Ndola	37.7	0.03	0.33	0.43	13.2	0.02	0.09	0.17	670
Livingstone	33.5	0.03	0.28	0.39	13.0	0.02	0.08	0.18	431
Kabwe	33.4	0.03	0.28	0.39	14.0	0.02	0.10	0.18	562
Kitwe	31.3	0.03	0.26	0.37	12.2	0.02	0.08	0.16	699
Chingola	30.4	0.04	0.23	0.38	12.1	0.03	0.10	0.23	363
Mufulira	30.3	0.03	0.24	0.37	16.6	0.03	0.07	0.17	318
Chililabombwe	28.1	0.03	0.21	0.34	7.4	0.02	0.06	0.15	359
Kalulushi	27.7	0.04	0.20	0.36	7.2	0.02	0.03	0.11	311
Lusaka	27.6	0.01	0.25	0.30	10.4	0.01	0.05	0.09	1747

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Note: *Poor* reports the % of individuals below the basic needs poverty line; *Extreme poor* reports that percentage of individuals below the food poverty line; *se, lower bound, upper bound* report the standard error for the poverty estimates, the lower bound of the confidence interval, and the upper bound of the confidence interval respectively; *N* reports the number of unweighted observations for each district.

The same consideration regarding the lack of precision of district-level estimates is reflected in the large confidence intervals in Table 23, which reports the distribution of the poorest 10% of the population across districts.

District	%	lower bound	upper bound	District	%	lower bound	upper bound
Samfya	5.0	0.03	0.07	Mbala	1.1	0.01	0.02
Chipata	4.0	0.03	0.06	Mazabuka	1.1	0.01	0.02
Lundazi	3.7	0.02	0.06	Mporokoso	1.1	0.01	0.02
Petauke	3.7	0.03	0.05	Chama	1.1	0.01	0.02
Mungwi	3.4	0.02	0.05	Isoka	1.0	0.01	0.02
Mongu	3.2	0.02	0.04	Mufumbwe	1.0	0.01	0.01
Katete	3.2	0.02	0.05	Chibombo	0.9	0.00	0.02
Monze	3.1	0.02	0.04	Lusaka	0.8	0.00	0.02
Senanga	3.0	0.02	0.05	Mkushi	0.8	0.00	0.01
Kalomo	3.0	0.02	0.05	Chienge	0.8	0.00	0.02
Kaoma	2.6	0.02	0.04	Gwembe	0.7	0.00	0.01
Kasempa	2.6	0.02	0.04	Kafue	0.7	0.00	0.01
Chadiza	2.2	0.01	0.04	Ndola	0.7	0.00	0.01
Solwezi	2.2	0.01	0.03	ltezhi-tezhi	0.7	0.00	0.01
Chinsali	2.2	0.01	0.03	Mpulungu	0.6	0.00	0.01
Shang'ombo	2.1	0.01	0.03	Chilubi	0.6	0.00	0.01
Serenje	2.0	0.01	0.03	Milenge	0.6	0.00	0.01
Choma	2.0	0.01	0.03	Chavuma	0.6	0.00	0.01
Kalabo	2.0	0.01	0.03	Luanshya	0.6	0.00	0.01
Nchelenge	1.8	0.01	0.03	Kazungula	0.5	0.00	0.01
Mwense	1.8	0.01	0.03	Chingola	0.5	0.00	0.01
Kasama	1.7	0.01	0.03	Siavonga	0.5	0.00	0.01
Chongwe	1.7	0.01	0.03	Namwala	0.5	0.00	0.01
Zambezi	1.7	0.01	0.02	Luangwa	0.4	0.00	0.01
Mansa	1.6	0.01	0.03	Kitwe	0.4	0.00	0.01
Kabompo	1.6	0.01	0.03	Masaiti	0.3	0.00	0.01
Kawambwa	1.6	0.01	0.02	Kabwe	0.3	0.00	0.01
Nakonde	1.5	0.01	0.02	Mambwe	0.3	0.00	0.01
Nyimba	1.4	0.01	0.03	Mpongwe	0.2	0.00	0.01

Table 23Distribution of the poorest 10% across districts

District	%	lower bound	upper bound	District	%	lower bound	upper bound
Kaputa	1.4	0.01	0.03	Livingstone	0.2	0.00	0.00
Sinazongwe	1.3	0.01	0.02	Chililabombwe	0.1	0.00	0.00
Lufwanyama	1.3	0.01	0.02	Mufulira	0.1	0.00	0.01
Luwingu	1.2	0.01	0.02	Sesheke	0.1	0.00	0.00
Lukulu	1.2	0.01	0.02	Mumbwa	0.1	0.00	0.00
Mpika	1.2	0.01	0.02	Kalulushi	0.0	0.00	0.00
Kapiri-mposhi	1.1	0.01	0.02	Mwinilunga	0.0	0.00	0.00

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Note: % reports the percentage of individuals in the poorest consumption decile nationwide in each district (e.g. 5.0% of the individuals in the poorest consumption decile are in Samfya); *lower bound* and *upper bound* report the lower bound of the confidence interval and the upper bound of the confidence interval respectively.

Annex B Inclusion and exclusion errors by province

		IM		Ν	ЛС	CG	
		Design leakage	Under- coverage	Design leakage	Under- coverage	Design leakage	Under- coverage
Control	Poorest 10%	94.0	80.6	93.3	80.9	93.3	46.7
Central	Poorest 20%	88.0	82.6	82.8	78.1	85.5	48.7
Connerhelt	Poorest 10%	94.3	75.4	95.2	72.0	94.7	29.7
copperbeit	Poorest 20%	88.3	77.6	89.3	72.6	89.4	38.1
Fastern	Poorest 10%	77.1	71.2	82.5	83.1	85.8	50.7
Eastern Poores 20%	Poorest 20%	61.7	77.3	64.9	84.0	70.9	52.4
Luapula Poorest 20%	Poorest 10%	85.9	84.7	85.6	86.3	83.2	50.1
	Poorest 20%	62.5	80.0	62.8	82.6	63.6	46.7
Lusaka 20% Poorest 20%	93.9	76.4	95.4	75.0	97.1	61.1	
	Poorest 20%	85.4	75.1	90.5	77.0	92.6	56.3
Northorn	Poorest 10%	78.6	70.1	77.4	74.5	86.3	53.9
Northern	Poorest 20%	65.4	76.1	65.1	80.6	69.7	49.5
North	Poorest 10%	77.0	74.3	76.4	83.0	81.6	57.6
Western	Poorest 20%	59.9	72.7	63.1	83.9	71.6	60.2
Southern	Poorest 10%	84.7	75.7	86.1	76.1	87.7	48.5
Southern	Poorest 20%	68.3	74.8	76.5	79.8	75.8	49.6
Western	Poorest 10%	74.4	73.4	75.7	69.2	82.7	62.7

Table 24 Inclusion and exclusion errors per model and by province

	IM		N	ЛС	CG	
	Design leakage	Under- coverage	Design leakage	Under- coverage	Design leakage	Under- coverage
Poorest 20%	61.5	77.3	59.3	70.7	64.2	56.2

Source: Own calculations using LCMS (2010) and World Bank consumption aggregates.

Annex C Qualitative research methodology

This section provides a summary of the assessment approach and field work methodology.

C.1 Qualitative approach to assessing targeting performance

The qualitative research assesses the targeting performance of the above programmes by looking at both the effectiveness and acceptability of each targeting method. In practice, targeting acceptability and effectiveness are interlinked. For example, where households perceive the targeting implementation process to be ineffective, they are more likely to raise suspicions and therefore less likely to accept the targeting outcomes.

Step	Activity	Summary description of activities				
1	Community information meeting	DSWO pays a courtesy visit to inform community leaders and community members about the rationale and objectives of the SCT. CWAC members are selected where there is one not functioning. CWAC members are oriented and trained about the SCT process and management.				
2	Household listing	CWACs with the help of village headmen identify households that qualify for the scheme.				
3	Household enumeration	CWACs accompany an enumerator to each listed household and fill in an application form. This information is used to select the final list of beneficiaries.				
4	Headman/woman validation	Headman/woman checks that the information in application form is correct and counter signs the application form. The information is checked against a village register.				
5	Ranking and community validation (10% inclusive areas only)	CWAC meets to rank the households based on the information in the application form and selects the 10% most incapacitated. A community validation is held, to enable the community to reach consensus on whether the CWAC ranking should be accepted or needs to be adjusted.				
6	ACC validation	ACC verifies that all application forms are complete, correct and consistently filled in.				
7	DSWO approval	The DSWO/DWAC with the assistance of CWAC representatives then scrutinise all application forms once more and ensure that all beneficiary households fulfil the eligibility criteria and that they are accurately filled in Forms are returned if inaccurate. In case of approval he/she also indicates on the application form the value of transfer that households should receive, when the payments will start and at which pay point the cash will be received.				
8	Self and continuous targeting	Both the MC and the CG allow for continuous registrations and self-selection through health centres.				

Table 25 Summary of SCT targeting implementation process
C.1.1 Assessing targeting acceptability

From a pragmatic perspective a targeting mechanism is acceptable when it receives the support that is required to make programme delivery sustainable. Support is in turn a function of perceptions of fairness and transparency. To this end, we assess acceptability by undertaking an analysis of stakeholders' perceptions of poverty and vulnerability, and assess the extent to which these are compatible with targeting criteria. This will then enable us to establish the level of fairness by looking at the perceived level of inclusion and exclusion errors. Transparency increases the level of trust that the programme is not being manipulated by particular groups to capture benefits at the expense of others. We will also assess targeting acceptability by looking at the extent to which particular targeting mechanisms lead to changes in social relations. It is likely that mechanisms which have negative impacts on social relations may gain less support.

C.2 Field work approach

This assessment is based on field work undertaken over a period of three weeks between 22 April and 15 May 2013. The research team comprised of two OPM consultants and four national researchers. The national researchers were native speakers of the language in the respective study sites and had experience in undertaking qualitative research.

A two-day training session was held prior to the start of the field work from 19 to 20 April. A pilot day was held in two districts – Serenje and Kalomo – in order to practice and further reflect on the research process and methodology, including FGD facilitation and the use of participatory tools. The pilot days were reviewed and discussed with lessons learnt feeding into the study design.

C.2.1 Sampling study locations

The assessment was undertaken in three districts: Kalomo, Kaputa, and Serenje, where the 10% IM, the CG and the MC are operating respectively. These districts were chosen because they have similar levels of poverty and under-five mortality rates. More specifically in the case of the IM, where the programme has been in operation since 2003, Kalomo was selected as this is the only district where the IM has been re-applied most recently and so people should have a comparatively fresher memory of the targeting process compared to other districts.

Within each district, two wards were selected based on varying distances to district capital: one ward close to the district capital and another further away (more remote). This is an important distinction because distance to district centre is expected to be correlated with the capacity of the implementation agents and also poverty levels.

In turn, two communities were selected in each ward in consultation with the relevant DSWO. The communities were purposively selected to reflect differences in: (i) beneficiary numbers; (ii) levels of complaints and grievance; and (iii) average household size. The table below shows a summary of study sites with beneficiary numbers.

District	ACC/Ward	Community	Beneficiaries	Location to district centre
	Chonga	Magrimonde	47	Near
Kaloma (INA)	Chonga	Mawaya2	22	Near
	Simayakwe	Nazilongo	45	Far
	Simayakwe	Mulwazi	27	Far
	Mowa	Sababa	475	Near
Kaputa (CC)	Mowa	Chitateba	231	Near
Kaputa (CG)	Kasepa	Mukonkoto	170	Far
	Kasepa	Matobwe	69	Far
	Ibolelo	Kachinda	126	Near
Serenia (MC)	Ibolelo	Makabi	74	Near
Serenje (MC)	Chitambo	Sote	166	Far
	Chitambo	Fisonge	79	Far

Table 26Selected study sites

C.2.2 Sampling study participants

In each community a minimum of two FGDs was held with beneficiaries and non-beneficiaries. KIIs were held with headmen/headwomen, enumerators and CWAC and ACC members. Additional study respondents were identified while in the field based on prior discussions with the District Social Welfare Officer and by snowball sampling based on referrals from FGDs and KIIs. The numbers for the FGDs were between five and eight participants.

Participants for beneficiary FGDs were randomly chosen from an administrative list of beneficiaries from the District Social Welfare Officer in order to avoid biases. Participants for the non-beneficiaries FGDs were selected as randomly as possible using a local key informant to identify a total population and then randomly selecting from that group as well as using a system of snowball sampling. Some non-beneficiaries were also selected from waiting lists where these were made to the research team.

C.2.3 Data collection tools

The main data collection method used was FGDs and KIIs. Discussion guides were developed to guide field researchers based on the research objectives with insights from the inception mission. The guides were piloted in Serenje and Kalomo.

The research also used participatory tools, in particular wellbeing ranking exercises during FGDs with beneficiaries and non-beneficiaries. Using participatory tools in research engages study participants in active processes of reflection about their experiences. Specifically, the wellbeing ranking exercise helped to understand the characteristics of poverty and perception of differences in poverty among communities. Comparing the programme eligibility criteria to community members' perception of poverty shed light on the effectiveness and acceptability of the targeting approach. The wellbeing exercises also helped to shed light on study respondents' perceptions of programme coverage in the entire community and by different wellbeing categories.

C.2.4 Data analysis

All discussions were taped and subsequently translated and transcribed into English and used in the analysis. Moreover, researchers also took handwritten notes which fed into the analysis process. The contents of the transcripts have been analysed to identify salient themes and patterns of ideas related to study topics and that answer the research questions (Annex A). The transcripts were coded using the software NVIVO.

C.2.5 Study limitations

Qualitative assessments are not statistically representative of the respective programmes and therefore findings cannot be generalised, but should provide insights on relevant issues that can be subsequently further analysed in quantitative studies.

The qualitative work draws on the subjective views and perceptions of community members. While these views are highly informative in understanding their experiences of the programme and therefore enabling a discussion of targeting effectiveness and acceptability, they cannot be aggregated into one single narrative representing the views of all beneficiaries of the different programmes.

The findings of this study have thus been complemented by KIIs undertaken at the inception phase of this research as well as a review of secondary literature. Information gathered from these sources was used to enrich the understanding of the programme and to triangulate findings from the field.

Therefore, although not representative, the findings are to some extent robust and useful in informing programme officials of how the programme was implemented, the likely direction of impact on inclusion and exclusion errors and the overall level of acceptability.

Annex D Comprehensive community survey methodology

D.1 Objective

The aim of this small and comprehensive community survey was to follow up on some of the findings of the qualitative research, the LCMS analysis and the interviews with stakeholders. According to the first ideas that we had at the moment of designing this survey for the proposed harmonised methodology, we wanted to study in further depth the MC model. For that reason we conducted the survey in Serenje.

The main goal of the survey was to measure the SCT's errors of inclusion and exclusion in two communities. This would allow for an assessment of the effectiveness of the scheme.

Moreover, other secondary objectives were to investigate further the perceptions of poverty and of the selection process and to assess if certain assets and dwelling characteristics identified in the LCMS as correlated with rural poverty could potentially be used as proxies of poverty.

D.2 Methodology

The survey was designed in order to represent the population living in two communities in the Serenje district. Hence, it cannot be claimed that the findings are applicable to the entire district, although they can give an indication of some issues.

The criteria for selecting the two communities, Chinsobwe and Nyamanda, were: 1) they are both rural. Since in this report we are proposing to create a harmonised targeting method only for rural areas, the comprehensive community survey could only provide useful data if conducted in rural communities; 2) Chinsobwe is close to the main road while households in Nyamanda are far away from the road. Distance to the main road influences the livelihoods that prevail in the communities and hence might affect the levels of poverty; 3) households in Chinsobwe are quite concentrated while in Nyamanda they are scattered. The dispersion of households can be of paramount importance for the implementation of the programme; and 4) sizes and number of beneficiaries in each community differ, what could also affect SCT implementation.

Since there were no reliable village registers we had to develop our own register. Therefore, we listed all the households living in both communities and found that Nyamanda has 386 households while Chinsobwe 221. Moreover, according to DSWO data, there are 69 beneficiaries in the former while 38 in the latter.

D.2.1 The sample

Using our registers, we drew a random sample of 40% of the total number of non-beneficiaries in each community. This large representative sample allows for the obtaining of robust results. In relation to the beneficiaries, we aimed at interviewing all of them.

The resulting selected sample was therefore composed as follows:

- For Nyamanda: 69 beneficiary households and 127 non-beneficiary households for a total of 212 households.
- For Chinsobwe: 38 beneficiary households and 74 non-beneficiary households for a total of 112 households.

D.2.2 The survey tool

We developed a simple survey tool that included the following sections. The questionnaire is attached at the end of this annex.

Coversheet

This section collected information on the village to which each household belonged, on the length of time of residence in the same village, and the distance between household's dwelling and the centre of each of the two communities. This section was used to identify each household; to assess whether the household had been in the same area for a sufficient period of time to be informed and eligible for the programme; and to understand whether geographical proximity to the centre of the community affected the likelihood of being aware of the programme.

Roster

This section collected information on each household member focusing on gender, age, employment and disability statuses. For children, such information was based on the identification of their parents. We mainly used information collected in this section to ascertain the eligibility status of each household.

Poverty perception

This section collected information on subjective assessment of poverty in the community. It asked households to identify the poorest categories of households in the community. Moreover, it also asked the households to subjectively assess their poverty status.

Knowledge of the SCT programme

Information collected in this section was used to assess the degree of awareness of the programme and its functioning (selection, main actors involved). This section asked whether the programme's presence had generated any tensions in the community and asked for a subjective judgement on the fairness of the selection process.

Beneficiaries

In this section, we collected information from beneficiaries about their experience of the selection process and knowledge of the graduation mechanisms from the programme. Moreover, we took note of the identity and number of beneficiaries in each household.

Household assets and amenities

In this section, we collected information on ownership of a number of assets as well as dwelling characteristics.²⁵ The 2010 LCMS data was used to identify assets correlated with rural poverty, and thus identify which assets were to be included in the survey.

²⁵ Information on roof type was collected is section 7 because, when the interview took place around the household's dwelling, this question could be skipped and filled in autonomously by the enumerator.

End

The concluding section asked the enumerator to make a subjective judgement of the household's poverty status. This would be used to triangulate the judgement made by the household itself in the poverty section. Finally, we recorded whether the headman of the village or a CWAC member is a member of the household in order to assess whether this had any influence on the selection of beneficiary households.

Survey technology

We decided to adopt a CAPI-based survey methodology, given that both OPM and Rural-Net had past, positive experiences with software-based surveys. The survey tool was coded using the Open Data Kit software by Rural-Net, with supervision from experienced OPM consultants. The survey tool was also translated into vernacular to ensure that the correct meaning of the questions/information sought was not distorted by the enumerators.

D.2.3 Fieldwork

After a one-day training session in Lusaka on Monday 10 June, we left for Serenje on Wednesday 12 June with a team of eight enumerators and two supervisors. We conducted a pilot to test the appropriateness of the survey tool and visited the two selected communities to present the study to CWAC members and headmen on Thursday 13 June. This led to some minor adjustments to the wording and to the inclusion of more options for MC questions.

The actual data collection exercise started on Friday 14 June and was concluded until 20 June for a total of seven days of data collection. At the end of each day work was checked and feedback provided to the Enumerators by the Supervisors.

In cases where households were not available for interview, we randomly selected the replacements. In those cases, we always substituted households with households from the same village in order to make sure we maintained an adequate geographical dispersion of the sample.

The total number of interviews completed was 296, of which 110 were in Chinsobwe and 186 in Nyamanda.

	-		
	Nyamanda	Chinsobwe	Total
Beneficiaries	63	40	103
Non-beneficiaries	123	70	193
	186	110	296

Table 27Sample size by community and beneficiary status

2

hours

D.2.4 The questionnaire

Module 1: COVERSHEET

Enumerator Identification (fill this in before starting the interview)

(1.01) Interviewer Name

Household Identification (fill this in before starting the interview)

(1.02)	Community ID		
	Nyamanda	1	
	Chisonbwe	2	
	PILOT	3	
(1.03)	Village Name		
(1.04)	Household Number		
(1.05)	Name of Household Head (select from the list or add if not present in the list)		
(1.06)	Does the Household Head have a NRC or a resident permit?	Yes	1
		No	2
		Skip to >	(1.09)
(1.07)	National Registration Card (NRC) number or resident permit number of the Household Head		
	Household Location		
(1.08)	How long has this household stayed in this community for?		
	Less than 6 months	1	
	Between 6 months and 1 year	2	
	More than 1 year	3	
(1.09)	How long does it take to walk to the community gathering location from your house? (write 99 if Do not know)		minutes

-

Module 2: HOUSEHOLD ROSTER

						FOR MEMBE	RS BELOW 18	MEMBERS AGED 15 AND A			
	(2.01)	(2.02)	(2.03)	(2.04)	(2.05)	(2.06)	(2.07)	(2.08)	(2.09)	(2.10)	(2.11)
	Please give	What is [NAME]'s relationship	Is [NAME] male or female?		Which is [NAME]'s Marital	Who is	Who is		Do you have any long-	Does [NAME] have a	Ask to see the disability
	me the names	to the head of the household?			status?	[NAME]'s	[NAME]'s		standing illness, disability or	certificate of disability?	certificate if possible.
	of all persons					mother?	father?	What is [NAME]'s main	infirmity? By long-standing I		
	who usually							economic activity?	mean any thing that has		
	live with this								troubled you over a period of		
	household.								time or that is likely to affect		
	Start with the			Age in completed					you over a period of time?		
	head of the			years (write 0 if							
	household			less than 1)							
	and include										
ш	visitors who					Write 98, if	Write 98, if				Is the presence of the
8	hav e liv ed					dead	dead				disability certificate being
ŭ	with the					Write 99, if not	Write 99, if not				verified by the enumerator?
	household for					present	present				
ŝrs	six months or						-				
a de	more. Include										
len	usual										
	members,	Enter codes from list			Married 1	-		Enter codes from list			
6	who are	below			Living	•		below			
sel 1	away visiting,				together 2						
ino	in hospital, at		Male 1		Separated 3	~			Yes 1	Yes 1	Yes 1
Ť	boarding				Div orced 4	~					
	schools or		Female 2		Widow ed 5				No 2	No 2	No 2
	college or				Never	~					
	university,				married				Skip to > (3.01)	Skip to > (3.01)	
	etc.					~					
									Don't Know 99	Don't Know 99	
										Skip to > (3.01)	
				Years							
01											
02											
03											
	Codebook							Codebook			
	101 2.02							101 2.00	09=Unable to		
		07=Brother/Si	10=Brother/Si 13=Other					01=Paid 03=Self-	work because		
	01=Head	04=Step Child ster	ster-in-law relative					Employment Employed in	06=Housewife of health reason/disabil		
								righteature	ity		
		0E-A dopted	14=M aid/Nann					02=Self-	07-Eull tiom		
	02=Spouse	Child 08=Cousin	11=Parent y/ House-					outside Family Worker	student 10=Retired		
			servant					Agriculture			
		06=Grand 09=Niece/Nep	12=Parent in 97=Non					05=Unemploy ed (actively	08=Too old		
	03=Own child	Child hew	Law Relative					looking for	for work 11= Other		
								job)		1	

1st poorest

2nd poorest

3rd poorest

Module 3: POVERTY PERCEPTION

(3.01) Can you please tell us which are the three poorest categories of households in the community?

Households with Disabled members / Members unable to work	1
Elderly-headed household	2
Widow-headed households	3
Households with Orphans	4
Households with many dependants	5
Households with children under 5	6
Other (specify)	7

(3.02) How would you rank your condition among households in your community?

Very Poor	1
Poor	2
Normal	3
Better Off	4

Module 4: KNOWLEDGE OF SOCIAL CASH TRANSFER PROGRAMME

(4.01)	Are you aware that there is a programme from the govern households in need?	ment called Social Cash Transfer which gives cash to	(4.05)	Who helped in identifying SCT beneficiaries in this c	ommunity? (Do not read the options)
	Yes	1		School teachers or health workers	1
	No	2		Headman	2
				CWAC (a group of community members)	3
(4.02)	What are the channnels through which you receive information	ation from the community? (Do not read the options)		District Social Welfare Office	4
	Headman CWAC (a group of community members) Neighbours/friends/relatives	After Answering Skip	to > 6.01	The community other (specify) I don't know	5 6 99
	other (specify)	6	(4.06)	Would you say that beneficiaries were selected in a	fair and transparent wa
(4.03)	How did you get to know about the programme? (Do not r	ead the options)		Yes No Don't know	1 2 99
	District Social Welfare Office Headman	1 2	(4.07)	Would you say that SCT beneficiaries are among th	e poorest in this comm
(4.04)	CWAC (a group of community members) Neighbours/friends/relatives Icambukila other (specify) I don't know Who is eligible for SCT? (up to 4 answers are allowed, do 1st answer 2nd answer 3rd answer 4th answer	3 4 5 6 99 not read the options) Codebook for 4.04 Households with diabled members Households with children under 5 Female headed households keeping orp Elderly headed households keeping orp Households with many decendants	(4.08) 1 2 hans 3 4 5	Yes, all of them The majority of them are among the poorest Just some of them are among the poorest None of them Don't know Has the selection of SCT beneficiaries led to tension Yes, there are lot of tensions due to the progra There are some tensions due to the programm No, there are no tensions due to the programm Don't know	1 2 3 4 99 s in the community? 1 2 3 99
		Households war haar, dependants Households selected by headmen or CV Other (specify) Don't know	VACs 6 7 99		

Module 5: BENEFICIARIES

(5.01) Is this household receiving the social cash transfer?

(5.04)

Yes	1	_
No	2	_

Skip to > (5.03)

After having being told that you were not a beneficiary, did you ask to be included in the Programme?

Yes	1
No	2
No, did not know where to go	3
l don't know	99

Skip to > (6.01)

(5.02)

Who helped in identifying you as a beneficiary? (two options are possible, do not read the options)

School teachers or health workers	1
Headman	2
CWAC (a group of community members)	3
other (specify)	4
l don't know	99

Skip to > (5.06)

(5.03) Do you think you should be receiving the transfer?

Yes	1
No	2
l don't know	99

(5.05) Were you satisfied with the response received?

_	Yes	1
-	No	2
	Somewhat	3

(5.06) Who are the beneficiaries in this household? (write the roster ID of the beneficiaries)

Skip to > (6.01)

(5.07)

Do you know under which circumstances you would graduate from the programme?

Moving to another location where the programme is not in place	1
Becoming less poor	2
Death of the beneficiary	3
Orphans becoming older than 18 years	4
Other (specify)	99

Module 6: HOUSEHOLD ASSETS AND AMENITIES

(6.01)	What is the main type of energy that your household uses for cooking?		(6.05)
	Collected Firewood	1	
	Purchased Firewood	2	
	Charcoal Own Produced	3	
	Charcoal Purchased	4	(6.06)
	Coal	5	
	Kerosine/Paraffin	6	
	Gas	7	
	Electricity	8	
	Solar	9	(6.07)
	Crop/Livestock Residues	10	
	Other (specify)	11	

(6.02) Does this household own a lounge suit/sofa?

Yes	1
No	2

(6.03) Does this household own a television?

Yes	1
No	2

(6.04) Does this household own a clock?

Yes	1
No	2

05) Does this household own a refrigerator?

Yes	1
No	2
Does this household own an electric iron?	
Yes	í
No	2
What is the main type of toilet facility for your household?	
Own Flushed Toilet inside the household	
Own Flushed Toilet Outside the household	
Own Pit Latrine with Slab	3
Communal Pit Latrine with Slab	4
Another Household's Pit Latrine with Slab	ļ
Own Pit Latrine without Slab	(
Communal Pit Latrine without Slab	-
Another Household's Pit Latrine without Slab	:
Bucket/Other Container	:
Aqua Privy	1
None	1
Other (specify)	1:

Module 7: End (to be filled in by the enumerators)

	Respondent Identification			Household Amenities (do not ask t	this to the respondent)
(7.01)	Roster ID of the Respondent		(7.04)	What kind of building materials is t	he roof of this dwelling made of?
(7.02)	Result of the Interview Codes: 01 = Completed 02 = Interview incomplete 03 = Household not found			Asbestos Sheets Asbestos Tiles Other /non-asbestos tiles Iron Sheets Grass/Straw/Thatch Concrete	1 2 3 4 5 6
	04 = Household members temporarily not at home			Other (specify)	7
(7.03)	Household Information How would you rank this household with respect to other households in the same com	munity?	(7.05)	Roster ID of headman of this comr	nunity (write 99 if nobody in the household)
			(7.06)	Roster ID of CWAC members in th	e household (write 99 if nobody in the household)
	Very Poor	1			
	Poor	2			
	Normal	3			
	Better Off	4			

Annex E MIS and Form 01

The programme is currently developing and implementing an MIS. This system seems to be almost fully developed, but it is operating only partially. In theory, all the application forms of the MC and CG schemes should have already been entered into the system and districts have the capacity to enter new data. In relation to areas where the IM operates, since the last targeting round took place several years ago and at that point in time the application form was different to the current one the programme had to visit all the beneficiaries and collect the data in order to enter it in the system. This is still an ongoing process.

From our brief interaction with the MIS and the analysis of the form we believe that:

- There is a fundamental lack of incentives in entering data, i.e. entering data must have a clear and concrete purpose: 1) Assessing eligibility; 2) Form lists to make payments; 3) Generate M&E information that can be done by the person that enters or manage the data. Only if these incentives exist can data entry quality keep up and provide faithful information (based on what is in the form).
- ⇒ The length of the form is excessive: it is necessary to strike a better balance between information collected and what is realistically used (to ensure that it will be entered). At the moment Form 01 is a mixture of an investigative questionnaire and an administrative form.

Form 01 must become an administrative form, simplified and reduced in length. The information collected should be restricted to: information required to manage delivery of cash transfers to selected households (control and identification variables: identifiers for geographical location and for each household, address, identifiers for committee and people involved in the assessment, date of visit, household person names and personal identification numbers – IC card), required information to assess eligibility (demographic characteristics, etc.) and a limited number of redundant variables (although not used to determine eligibility these could be used at the community level to correct for some clear inclusion error mistakes, interviewer assessment of household living standard, etc.).

Annex F Number of eligible households according to census data

Province/ District	Eligible to the CG	Eligible to the MC	Incapacitated	Total households
Zambia	1,476,223	738,579	593,600	2,513,768
Central	142,089	71,773	61,131	235,560
Chibombo	33,445	16,415	14,527	53,179
Kabwe	19,970	11,689	8,359	39,862
Kapiri Mposhi	27,809	14,440	12,003	45,977
Mkushi	17,891	7,090	6,984	28,389
Mumbwa	24,297	12,648	10,967	39,142
Serenje	18,677	9,491	8,291	29,011
Copperbelt	199,888	101,512	68,601	371,125
Chililabombwe	9,410	3,846	2,941	17,326
Chingola	21,565	10,124	6,712	39,657
Kalulushi	10,283	5,002	3,495	19,203
Kitwe	52,438	24,891	15,237	96,666
Luanshya	14,471	9,140	5,842	29,043
Lufwanyama	8,731	4,299	4,320	15,597
Masaiti	11,419	6,223	5,487	20,511
Mpongwe	10,650	5,219	4,438	17,350
Mufulira	15,581	8,569	5,520	30,065
Ndola	45,340	24,199	14,609	85,707
Eastern	189,045	93,345	76,048	305,198

Chadiza	12,670	6,081	5,307	19,822
Chipata	52,646	26,322	20,774	88,065
Katete	29,469	14,218	11,847	46,852
Lundazi	39,621	18,263	14,801	62,069
Mambwe	7,976	4,017	3,444	13,196
Nyimba	10,034	5,485	4,317	16,040
Petauke	36,629	18,959	15,558	59,154
Luapula	115,285	58,403	53,505	194,962
Chienge	14.358	6.605	5.422	24.415
Kawambwa	15.175	8.045	7.729	25.196
Mansa	25.796	13.492	11.760	43.631
Milenge	5 217	2 406	2,383	7 594
Mwense	13 600	7 034	6 989	23 990
Nchelenge	17 795	8 475	7 871	30 157
Samfya	23 344	12 3/6	11 351	39 979
Lusaka	23,5++	103 656	67 167	111 118
Chongwe	230,821	10,030	9 670	26 210
Kafue	21,212	11,070	0,070	30,319
Luangwa	24,556	1,190	0,007	44,550
Lusaka	2,744	1,513	1,325	4,072
Muchinga	188,307	80,883	48,835	358,871
Chama	85,934	40,685	38,479	138,/83
Chincoli	13,292	6,599	5,647	19,420
	17,736	8,107	8,235	28,668
Isoka	8,421	4,328	3,718	14,136

Mafinga	7,829	4,085	3,956	12,648
Mpika	23,697	11,243	11,353	39,956
Nakonde	14,959	6,323	5,570	23,955
Northern	134,715	61,288	59,946	220,561
Chilubi	10,115	5,274	4,711	16,716
Kaputa	15,360	6,375	6,241	23,740
Kasama	26,429	12,784	11,963	45,862
Luwingu	14,491	6,487	6,899	24,307
Mbala	25,010	10,969	10,974	40,096
Mporokoso	11,807	5,597	5,855	19,347
Mpulungu	12,369	4,814	4,609	19,650
Mungwi	19,134	8,988	8,694	30,843
North-Western	83,015	43,682	42,063	130,803
Chavuma	4,194	2,793	2,639	6,670
Ikelenge	3,732	2,150	2,037	5,830
Kabompo	10,556	6,636	5,750	16,536
Kasempa	7,834	4,085	3,933	11,970
Mufumbwe	6,810	3,450	3,496	10,119
Mwinilunga	12,161	6,640	6,402	18,103
Solwezi	28,318	12,291	12,488	46,574
Zambezi	9,410	5,637	5,318	15,001
Southern	182,993	91,430	76,036	292,179
Choma	28,287	14,948	12,567	44,483
Gwembe	6,521	3,285	3,009	9,846

ltezhi lezhi	7,887	3,875	3,238	12,237
Kalomo	31,031	14,999	14,084	44,728
Kazungula	12,586	6,503	5,668	20,024
Livingstone	14,889	7,667	4,346	30,461
Mazabuka	25,778	12,015	9,091	43,411
Monze	21,196	11,336	9,937	32,849
Namwala	11,602	5,403	4,753	16,662
Siavonga	11,012	5,267	4,201	17,757
Sinazongwe	12,204	6,132	5,142	19,721
Western	106,438	72,805	50,624	180,179
Kalabo	15,434	12,190	7,791	26,480
Kaoma	21.636	14.602	10.311	36.068
Lukulu	10.645	6.809	4,980	16.676
Mongu	20.426	14 919	9.357	36.605
Senanga	14 957	9 934	7 031	25 162
Sesheke	11 691	7 319	5 502	20,159
Shang'ombo	11,649	7,032	5,556	19,029

Source: CSO