CHAPTER 11

Designing Social Protection Programs

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Rooted in the notion that most poor Africans reside in rural areas and earn their income from agriculture, the Malabo Declaration emphasizes agriculture-led growth as the engine for poverty reduction. But even the most inclusive agricultural growth may not be sufficient to lift everyone out of poverty. In order to take part in and benefit from the growth process, households need to have some basic level of capital (land, productive or durable assets, human capital in terms of health and education, or a combination of these)—and security that these assets will not be depleted in the face of drought or other shocks (Coady, Grosh, and Hoddinott 2004b).

There is now strong evidence that social protection programs can be used effectively to assist those trapped—or at risk of being trapped—in chronic poverty (Andrews, Hsiao, and Ralston 2018; Hidrobo et al. 2018). These programs aim to address chronic poverty through redistribution (transfers) and to protect vulnerable households against falling (further) below the poverty line. Investments in social protection programs are often motivated on the grounds of equity. But they can also contribute to economic growth by encouraging savings (asset accumulation), creating community assets, and addressing credit market imperfections (Alderman and Yemtsov 2014). For example, in Ethiopia, the national safety net program is estimated to contribute to between 0.7 and 1.4 percent of real gross domestic product, even after accounting for the costs of running the program (Filipski et al. 2016).

Encouragingly, social protection programs are becoming increasingly popular in Africa, where their number has tripled in the past 15 years (Hickey et al. 2018). Today, each African country has at least one social safety net program (Beegle, Honorati, and Monsalve 2018). But external funding continues to play an important role in financing these programs, raising concerns about the long-term sustainability of social protection on the continent.[1]

The purpose of this chapter is to give policy makers insights into how to design cost-effective social protection programs. Focusing on social assistance (noncontributory transfers to the poor), we review the literature with respect to three key features of the decision to put such a program in place: targeting, choice of payment modality, and graduation. [2]

How Should Targeting Be Designed in Social Protection Programs?

Costs and Benefits of Targeting

Social protection programs typically aim to target the assistance to the poorest households or individuals. Theoretically, the benefits of targeting are clear. Consider a social protection program with a $100 million annual budget in a country with a population of 10 million people, of whom 2 million are poor. An untargeted transfer program would give $10 to each citizen, whereas a perfectly targeted program would give $50 to every poor individual. All other things constant, the latter program would have more impact in terms of lifting people out of poverty.

However, targeting is easier said than done. Due to imperfect information, identifying the poorest is not straightforward. Thus, program implementers need first to acquire information on the welfare levels of the potential beneficiaries. Collecting this information is costly and reduces the overall budget that can be used for the transfers. There can also be other costs, depending on the targeting method. First, there could be private costs for the beneficiaries. For example, some programs are

1 Bossuroy and Coudouel (2018) estimate that 55 percent of the funding for social protection in Africa comes from development partners.

2 The purpose is not to provide an exhaustive treatment of each topic. As further reading on each topic, we recommend the following: On targeting of social protection programs, see Hoddinott (1999); Coady, Grosh, and Hoddinott (2004a, 2004b); and Ravallion (2015, Chapter 9). For an overview of different payment modalities, see Alderman, Gentilini, and Yemtsov (2017). On graduation, see Devereux and Sabates-Wheeler (2015) and the references therein.

based on self-selection, whereby beneficiaries participate in public works for a small payment or are expected to wait in line in order to receive the transfer. These types of programs carry an opportunity cost in terms of other forgone income-generating opportunities (Coady, Grosh, and Hoddinott 2004b). Alternatively, a strict eligibility criterion may lead households to hide their income or assets—or discourage them from making investments (Coady, Grosh, and Hoddinott 2004b). Second, targeting may also have political costs (see Ravallion 2015, 561). For example, the relatively less poor may feel excluded and decide to vote against the government that initiated the program.[3]

Unsuccessful targeting manifests itself as either exclusion or inclusion errors, or both. Exclusion errors (or undercoverage) arise when some poor households that are eligible are excluded from the program. Inclusion errors (or leakage) are cases in which a nonpoor household is selected into the program. There are many reasons that exclusion and inclusion errors may occur. Exclusion errors may arise due to inadequate budgets, lack of clearly defined eligibility criteria, or lack of proper execution of the set of criteria. Poor households may have limited knowledge about the program and therefore may not apply. Inclusion errors may arise if the program is poorly implemented at the local level.

Targeting errors are also connected to the social protection budget. If the priority is poverty reduction, then exclusion errors should get more weight, but if the priority is to minimize costs, then inclusion errors should get more weight (Hoddinott 1999). Next, we discuss the advantages and disadvantages of different targeting methods, especially with respect to exclusion and inclusion errors.

Different Targeting Methods

Social protection programs can be targeted to the poorest or most vulnerable households in multiple ways. The benchmark is an untargeted transfer program that provides transfers to every person in society. This approach can be effective if the administrative, social, or political costs of targeting are extremely high.

Social protection programs that use income or wealth thresholds to determine eligibility are often considered the most accurate. This targeting method, called *means testing*, is typically used in middle- and high-income countries because these countries tend to have official tax or employment records that facilitate the availability of reliable information on income (wealth or consumption) levels. But in most low-income countries, most people work in the informal sector, and therefore reliable information on incomes is not easy to acquire.

The *proxy means testing* (PMT) method aims to address this problem of imperfect information. The PMT method collects information on selected household characteristics that are thought to be highly correlated with households' level of income or earning capacity. For example, a household that owns a house in good condition (metal roof, cement floor) in addition to cattle and a motorbike is less likely to be poor than one that does not have such commodities. A PMT model aggregates basic household characteristics by assigning different weights to different characteristics. The weights are obtained from an econometric model that regresses household consumption on a set of predetermined, easily observable household characteristics. Characteristics that are highly correlated with consumption get a larger weight in the PMT model. After this econometric exercise, program implementers visit all households in the area and list the assets they own. Each household then gets a score that is basically a weighted sum of the assets it possesses, weights of which come from the regression model.

3 This mechanism could also go another way: poor targeting may cost local leaders (see de Janvry, Finan, and Sadoulet 2012).

Households are then ranked based on their scores, and a certain number of the poorest households are selected to benefit from the program.

Despite the considerable popularity of PMT (Coady, Grosh, and Hoddinott 2004a), there are three main criticisms of the method. First, the main criticism is that PMT is often highly inaccurate in distinguishing poor from nonpoor households (Kidd and Wylde 2011; Brown, Ravallion, and Van de Walle 2018). Using data from nine African countries, [4] Brown, Ravallion, and Van de Walle (2018) find that whereas PMT performs well in reducing inclusion errors, it excludes a large number of poor households. In terms of overall poverty reduction, the authors further find that the gains of PMT over a universal transfer program are marginal. Second, although PMT is sometimes preferred for its transparency, it may be difficult for communities to grasp the method behind it, and as a result, it may become difficult for the local authorities to explain to people why some households are chosen and others are not (Adato and Roopnaraine 2004). In Indonesia, a poorly targeted transfer program was found to undermine social cohesion and increase the incidence of crime in participating communities (Cameron and Shah 2013). Finally, because PMT typically focuses on easily observable assets, it tends to ignore the effect of recent economic shocks on household well-being. Therefore it is better suited for identifying chronically poor households than for capturing transient poverty or vulnerability.

An alternative—and increasingly popular (Coady, Grosh, and Hoddinott 2004a)—solution to address information asymmetries is to ask the communities themselves to identify the poorest households. The underlying assumption here is that communities have better knowledge than program implementers of households' poverty status. In addition, communities may also apply a concept of poverty that is different from the money metric underlying the PMT approach (Alatas et al. 2012). Typically, community leaders rank each household in the community by its poverty or food security status, and the poorest households are selected to benefit from the program. The risk of community-based targeting is that leaders may manipulate the process to favor their friends and relatives. The available evidence suggests that such elite capture is less likely to occur in communities that are more egalitarian and have more transparent decision-making structures in place (Conning and Kevane 2002).

Under geographic targeting, the program is rolled out in certain geographic areas that have a high poverty rate or host a large number of poor and vulnerable households. Similarly, demographic targeting restricts transfers to certain demographic groups, such as the elderly, women, or households with young children. For example, Ethiopia's Productive Safety Net Programme uses geographic targeting (together with community targeting) (Coll-Black et al. 2011) whereas the South African old-age pension program (Case and Deaton 1998) is based on demographic targeting. These targeting instruments are blunt in the sense that, depending on the context, many people who simply reside in the area or belong to the demographic group but are not in real need may end up receiving transfers. Thus, geographic targeting makes sense when the density of poverty is high in the targeted area. Similarly, demographic targeting works best when a large fraction of people in the demographic group are poor.

Self-selection methods, in which everyone is eligible but only the poorest may want to take part in the program, may also be an effective way to target. For example, public works programs typically require program participants to undertake manual labor for relatively low pay. In this case, wealthier households may voluntarily opt out. Other examples of targeting based on self-selection are programs that offer in-kind benefits, such as inferior-quality starchy staples that are not preferred by richer households, or programs in which recipients must stand in line to receive the transfer.

4 Burkina Faso, Ethiopia, Ghana, Malawi, Mali, Niger, Nigeria, Tanzania, and Uganda.

Whatever the targeting method, implementation efficiency and overall implementation capacity cannot be overlooked. International evidence on targeting accuracy suggest that richer countries—supposedly with better administrative capacity—are better at reaching their poor than are lower-income countries (Coady, Grosh, and Hoddinott 2004a; Ravallion 2015, 547–550). It also seems obvious that the choice of targeting method needs to be grounded in the local context. As recommended by Brown, Ravallion, and Van de Walle (2018), it is advisable to pilot and evaluate different targeting methods before a full scale-up. Finally, the evidence provided in Coady, Grosh, and Hoddinott (2004a) suggests that a combination of different targeting methods leads to better targeting accuracy than a single method.

Choice of Payment Modality

Another key decision in social assistance programs is the choice of payment modality: cash, in-kind, or both. [5] In-kind transfers can be in the form of food or nonfood items or services (such as education and health services). They are sourced either locally or internationally and delivered to beneficiaries by the program implementers. Cash transfers can be made via hard cash or electronically, for example using mobile banking. [6] In contrast to in-kind transfers, cash transfers do not restrict the consumption choices of the recipients. Relative to food or in-kind transfers, the cost of administering cash transfers is typically considerably lower (Gentilini 2016b). Cunha (2014) estimated that in Mexico, in-kind transfers were at least 18 percent more costly to administer than cash transfers. The estimates by Hidrobo and colleagues (2014) from Ecuador are of a similar magnitude.

Despite these considerations, in-kind and voucher-based transfers remain more common in low- and middle-income countries than cash transfers (Alderman, Gentilini, and Yemtsov 2017, 6–7). In-kind transfers are often chosen to encourage beneficiaries to consume products or services that are considered beneficial to them. Common examples include food, education, and healthcare (Currie and Gahvari 2008). An important question is whether consumption outcomes actually differ across payment modalities. Research on the consumption effects of different payment modalities in low- and middle-income countries suggests that program beneficiaries mostly spend their extra income on food (Hoddinott and Skoufias 2004; Attanasio and Mesnard 2006; Maluccio 2010; Gilligan et al. 2013). Recent experimental studies comparing different payment modalities find negligible differences in the amount spent on food. Using an experimental design in Ecuador, Hidrobo and colleagues (2014) found that cash, food, and vouchers all increased food consumption. Similarly, using a program that randomly allocated cash or food transfers to recipients in Mexico, Cunha (2014) was unable to reject the hypothesis that both transfer modalities led to the same increase in food consumption. Finally, an often cited concern about cash transfers is that they increase the consumption of temptation goods such as alcohol and tobacco. However, the available evidence does not lend support to this notion (Evans and Popova 2017).

Sometimes, specific conditions lead policy makers to abandon cash payments. First, the obvious precondition for cash payments is that markets exist (Gentilini 2016a). Second, cash transfers are often thought to increase food prices, especially in areas characterized by poorly integrated markets. However, studies from Mexico (Cunha, De Giorgi, and Jayachandran 2018) and Ethiopia (Hoddinott et al. 2018) do not find evidence that they do so, suggesting that these concerns may not be warranted. Rapid food price inflation offers another reason for favoring food transfers. The value of a cash transfer is typically fixed so that it permits the purchase of a certain (food) consumption basket. But if value adjustment is done infrequently (such as only once a year), food price inflation can quickly erode the (real)

5 Payments can also be made in the form of vouchers, typically tied to the purchase of a given good.

6 For a useful review of the advantages and disadvantages of electronic payments, see Bruni, Guven, and Monsalve (2018).

value of the cash transfer. This is what happened in Ethiopia during the 2008 food price spike (Sabates-Wheeler and Devereux 2010).

Finally, in-kind transfers may also be preferred on targeting grounds (Nichols and Zeckhauser 1982; Bearse, Glomm, and Janeba 2000; Currie and Gahvari 2008). As discussed earlier, if identifying eligible beneficiaries is problematic, in-kind transfers are thought to be useful, presumably because they appeal only to those in need. However, in practice, it is difficult to identify products or services that wealthier households are not interested in. Moreover, offering a good or service that is not valued by beneficiaries is unlikely to be efficient, or a good use of public resources.

Graduation

As discussed above, the core objective of social protection programs is to lift households out of chronic poverty into livelihoods that are sustainable. This aspiration implies that after a certain period of support, households are expected to sustainably exit the program. Devereux and Sabates-Wheeler define *graduation* as "leaving a social protection programme after reaching a well-being threshold, once the participant has acquired a set of resources that is expected to equip them for a higher-income future livelihood" (2015, 1).[7]

Graduation is closely linked with overall budget considerations. Increasing the number of households that sustainably graduate from social assistance programs leads to a reduction in the number of beneficiaries. Thus, investments in successful graduation programs could also serve to reduce the fiscal burden of social protection.

However, it is important to note that to graduate, households often need additional support that is not part of the basic safety net package. Emerging research tries to understand what type of support is needed to ensure sustainable graduation. Graduation programs typically involve providing *sequenced* and *intensive* packages of support to the very poor with the aim of raising their well-being above a threshold where they are no longer considered extremely poor and are progressing toward resilient and sustainable livelihoods (Devereux and Sabates-Wheeler 2015).

Graduation is a relatively new concept and there is no blueprint as to which combination works better in what context. Summarizing empirical studies from evaluations of programs in eight countries in Asia and Africa, Devereux and Sabates-Wheeler (2015) describe "graduation-model" programs pioneered by BRAC (the former Bangladesh Rural Advancement Committee) in Bangladesh. The BRAC model, which has been successfully applied in a wide variety of contexts (Banerjee et al. 2015), begins with the recognition that graduation cannot be achieved through cash transfers alone. A holistic approach with complementary promotional interventions such as a household asset-building plan, followed by savings and access to credit as well as coaching in life skills—all combining to guarantee a future stream of income after the program ends—is deemed critical (Hashemi and Umaira 2011). Cash transfers are thus expected to play a protective role, stabilizing household consumption and thereby protecting against asset depletion so the household can meet basic needs and mitigate liquidity constraints as needed for productive investments.

Much more research is needed to better understand different aspects of graduation models. First, there is little evidence on the long-term sustainability of these programs: do graduated households eventually regress to engaging in low-income activities? The available evidence from East Asia suggests that this is not the case; the large positive impacts documented in the short term persist in the medium term (seven years) (Banerjee et al. 2016; Bandiera et al. 2017). Second, can these graduation models be scaled up? In particular, it remains to be seen whether public servants, often burdened with several competing duties, can effectively manage these

7 In the context of the Ethiopian Productive Safety Net Programme, graduation is defined as follows: "Households whose food security status has improved sufficiently that they no longer need transfers are expected to graduate from the program. The key criteria[on] for graduation is that *households achieve food sufficiency in the absence of external support*" (Ethiopia, MoARD 2014, 3-2, emphasis added).

BRAC-type graduation programs, for which implementation intensity is high. Third, can these programs be successful in remote areas characterized by limited economic opportunities? In these areas, moving away from low-productivity activities could be very difficult (Kraay and McKenzie 2014). Therefore, in remote, landlocked geographies, reducing barriers to migrating internally could be a more promising strategy to reduce poverty (De Weerdt 2010; Bryan, Chowdhury, and Mobarak 2014; Hirvonen 2016).

Concluding Discussion

The implementation of social protection programs involves several important decisions, ranging from how transfers should be targeted to what type of transfers should be given (food, cash, or vouchers) and how to promote sustainable graduation from these programs. This chapter has reviewed several options that policy makers have at their disposal regarding these decisions, while pointing out that decisions should be based on and tailored to the local context. Experimenting with small-scale pilots and evaluating different approaches is highly recommended before a full scale-up takes place. Furthermore, monitoring and evaluation (M&E) systems should be developed early on as a core component of program design. Well-functioning M&E systems provide the opportunity to document progress in implementation and to generate information that can be used to improve the overall design of programs.

Finally, to ensure the long-term sustainability of these programs, it is important to move toward domestic financing models. Currently, most low-income countries do not have the capacity to fund their own social protection programs through tax income alone (Ravallion 2010). Therefore, it is imperative to put in place an effective domestic resource mobilization system and strengthen national tax collection systems (Niño-Zarazúa et al. 2012; Bruni, Guven, and Monsalve 2018).