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Exploring the Role of Social Protection in Enhancing Food Security in Africa

Introduction

In spite of remarkable economic and social progress in the region, food security remains challenging in many parts of Sub-Saharan Africa. West Africa's Sahel region has proven particularly vulnerable, having experienced two severe food crises less than five years apart (in 2005 and 2010). Social protection policies can play an important role within an urgently needed framework that, going beyond traditional responses, effectively addresses the causes of food insecurity.

Social protection policies seek to reduce the vulnerability of individuals and communities, both in the short and long-term. These programmes are constantly evolving (as is the conceptual debate on the subject) while new methodologies are developed to assess their benefits. Programmes range from the response to transitory shocks such as economic crises and weather shocks, to the prevention and reduction of chronic poverty, and the provision of social justice for the marginalized.

Understanding that poverty is multidimensional, social protection, broadly defined, attends to the causes of poverty in addition to its symptoms (Barrientos et al. 2006). It looks to reduce the vulnerability of the poor in the face of hazards, risks and stresses, and the impact of these on well-being (directly through lower asset and consumption, and indirectly, through the adoption of behavioral responses that can lead to negative effects on welfare, productivity and income in the long run) (Ibid). As such, comprehensive social protection policies aim to protect the poor from both transitory and chronic poverty, taking the shape of safety nets and workfare, employment, health and social pension programmes, among others.

Notwithstanding the value of more comprehensive protection policies to address poverty in general and food security in particular, the present note will concentrate on the management of unexpected shocks, focusing on the temporary nature of events that detonate food crises in the region.

Studies in social protection and risk management differentiate between *ex-ante* programmes (already in place before the event takes place, aiming at prevention and resilience) and *ex-post* ones (as a response after the shock occurs, helping with coping measures). Ex-ante mechanisms are more efficient for obvious reasons; nevertheless, in some cases public action can only take place after the shock has occurred, the case of ex-programmes. There is an alternative approach: Devereux and Sabates-Wheeler (2004) classify social protection categories in preventive and protecting measures which are aimed at preventing damaging coping strategies and protecting livelihoods. Promoting measures tend to promote resilience through livelihood diversification and security, therefore beyond coping mechanisms. *Ex-ante* and *ex-post* strategies can include the three (preventive, promoting and protecting) categories (see below). We do not follow this approach in this paper, but we intend to explore it further in the future.

In terms of food security, shocks affect the availability, access and/or use of food. Common shocks include the weather-related disasters that diminish food production in a given year (i.e., droughts and floods). Yet, as Amartya Sen notably stated in his seminal work on famines, it is often the inability to access food through legal means that results in mass hunger.

The present note has been prepared as a background document for the analysis of food insecurity in the Sahel region. Given the context of recurring food insecurity it seeks to provide insights on general lessons learnt that could be applied to Sub-Saharan Africa. The note focuses on risk management, aiming to provide guidance on how countries, communities and households can deal with food price shocks. As such, the note briefly discusses recent work on *ex-ante* and *ex-post* social protection mechanisms, as well as their rationale. It also explores the issue of social protection for food security, including the matter of seasonality, as well as the circumstances under which food aid can be effective.

The document is organized as follows. The following section provides a brief background of the state of food security in Sub-Saharan Africa. Section 3 presents an overview of risk management mechanisms, including applied examples of *ex-ante* and *ex-post* strategies. Social protection in the context of food security; and the issues of food aid and seasonality are discussed in Section 4. Conclusions are presented in Section 5.

Background

Although Sub-Saharan has made remarkable progress on important fronts in the last decade, consistent with the path to meet several MGD goals, food security continues to be a critical issue in the region.

Sub-Saharan Africa still holds the highest proportion of people living in hunger in the world, although the share of undernourished people in the region has been slowly declining during the last decade (from 32 percent in the 1990-1997 period, to 30 percent between 2000 and 2002, to 28 percent in 2004-2006) (FAO, 2009). Yet, the effect of the global financial crisis of 2008/09 compounded with the impact of the previous food and fuel crisis appears to be reversing the progress achieved in terms of hunger.

Largely as a result of the rising food prices, the proportion of undernourished people rose by a percentage point in 2008, reaching 29 percent of the population, effectively setting back the progress on ending hunger (UN, 2009). Furthermore, although the proportion had dropped in recent years, in the presence of persistently high fertility rates and population growth –Sub-Saharan Africa's population grew by more than 2 per cent between 2008 and 2009– the absolute number of people suffering from hunger has in fact been rising, even before the trend reversal of 2008 (Table 1). In this sense, the advancement towards halving the number of people unable to attain an adequate intake of food remains limited (Wiggings & Keats, 2009).

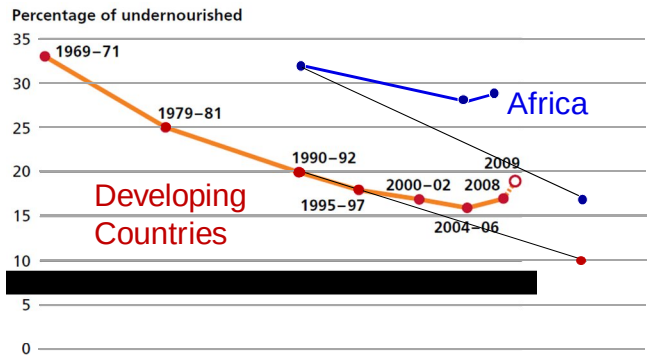
Table 1: Food deprivation in Sub-Saharan Africa

	1990-92	1995-97	2000-2002	2004-6	2008
Percentage of total population	32	32	30	28	29
Number of people (millions)	170.5	105.9	207.0	213.9	

Source: FAO (2009); UN (2009)

The hike in commodity prices up to 2008 had a significant impact on the food security of poorer countries, particularly given their growing dependence on food imports over the past decades.[i] While the increased trade of the past decade has contributed to affordable prices, it has also rendered countries more vulnerable to the volatility of international markets. This vulnerability is evident when considering countries which rely on food imports for more than half of their supply of grain, for instance, as in the case of eleven Sub-Saharan economies during 2005-06.[ii]

Figure 1. Impact of the crisis on Hunger MDG



Sources: FAO (2009)

By the end of 2008, staple food prices in domestic markets were still 17 percent higher in real terms than they were two years before, with the consequent contraction in consumer's purchasing power (FAO, 2009). The impact was particularly serious for the lower income population, for whom food expenditure represents a large portion of their budget (often up to 40 percent of their income). This budget allocation is at the root of vulnerability to food insecurity which in turn can lead to damaging coping mechanisms in the face of food price shock triggered by an economic crisis or a disaster. The food crisis meant that the price of food in certain countries nearly doubled while earnings did not. For instance, in the case of Mozambique, the consumption of food fell by 20 percent, while income nearly contracted by half. In this country "children's weight for age and body mass index were reduced with no change in height forage, indicating the price rise has seriously compromised nutrition" (WB, 2010).

West Africa's Sahel region has proven particularly vulnerable to food insecurity. The region –encompassing Burkina Faso, Ethiopia, Mali, Mauritania, Niger, Senegal, Somalia, Sudan and Chad– experienced a critical food crisis in 2010, less than five years after its severe crisis in 2005. Close to 10 million people are food insecure in this area; estimates point to 7.1 million undernourished people in Niger, 2 million in Chad and 650,000 in Mali (UNDP, 2010). The vulnerability to food insecurity varies across countries; nevertheless, geography and agricultural dependence make the region as a whole highly susceptible to climate change, land degradation and desertification (Ibid).

The outlook for the region looks bleaker when considering that food prices are on the rise again. In January of 2011, the UN Food and Agriculture Organization (FAO) global food price index reached 231 points, higher than the previous peak of 213.5 in 2008 (FAO, 2011). Although oil prices are still below their 2008 level (over USD$150 per barrel), they have currently passed the USD$100 mark, the cutoff at which the use of maize-based fuels becomes more cost-effective (WFP, 2011). Although good harvests and adequate reserves have kept the cost of basic staples stable for the most part, the upward pressure on world food prices is not subsiding (Ibid).

In the long run, one of Sub-Saharan Africa's critical challenges, climate change, compounds the threat of food insecurity. The local climate effects of global warming – increasing temperatures and changes in rainfall– impact the frequency and intensity of natural disasters, affecting crop yields and increasing water stress, including floods, draughts, overflowing rivers, and lack of access to safe water. The effect of these shocks on human development outcomes is multidimensional, including increasing food insecurity. The impact is both serious and fast-approaching. The Intergovernmental Panel on Climate Change (IPCC) estimates that by 2020 between 75 and 250 million people in Africa will be exposed to increased water stress due to climate change. Yields from rain-fed agriculture could decrease by up to 50% in the continent by the same year, compromising access to food, and aggravating food insecurity and malnutrition (IPCC, 2007). This is particularly critical in the present context considering the high vulnerability of the Sahel region to climate change.

Risk Management: prevention and coping

Risk management mechanisms encompass a wide range of public policy options (see table 2), and tend to be highly culture and context-specific. Programme characteristics vary according to the nature of the crisis, whether caused by an economic shock, a natural disaster or rising food prices (Grosh et al. 2008). Ideally, a policy response that protects the human development process of those most vulnerable should: "help poor households maintain their consumption; ensure that the poor do not lose whatever access they have to basic social services; prevent permanent reversals in the human, financial and physical capital of the poor; avert self-defeating behavior such as criminal activity, substance abuse, prostitution, and exploitative forms of child labor; and protect the most vulnerable members within the household (children, women, the elderly, and the sick) from bearing the brunt of the adjustment" (Lustig, 2010).

Ex-ante *strategies*

It is widely agreed that government intervention is more likely to be efficient if it occurs before the shocks (*ex-ante*), given that information and coordination problems are widespread during –and immediately following– crisis periods (Skoufias, 2003; de la Fuente, 2010; Owens et al. 2003; and Vakis, 2006). More specifically, interventions preceding shocks are more effective since "constraints [during crises] multiply due to the severe scarcity of fiscal resources, the lack or weakness of institutional capacity to act quickly, the lack of instruments, and severe information problems" (Skoufias, 2003).

As the top *ex-ante* priority, governments at the local and national levels need to identify the nature of the risk faced by the population, and consequently design timely policies that can minimize the impact of a given shock in the human development process. Mapping the distribution of risks is now feasible in a large number of countries due to the technological progress that allows the collection of data via satellite (including terrain conditions and natural hazards), the new risk modules in household surveys, and "small area estimation" techniques (poverty mapping). The use of these instruments can provide policy makers with a detailed assessment of the population's socioeconomic conditions.[iii] (Vakis, 2006; Hoddinott & Quisumbing, 2009; de la Fuente, 2010).

Existing safety nets contribute to stabilize economies when they are faced with shocks, with a pro-poor profile. Recent efforts to expand safety nets as *ex-ante* risk management tools (Grosh et al. 2008) coupled with a more detailed mapping of the distribution of risk and vulnerability, can allow for a faster and more organized way to scale up interventions in the face of shocks.[iv] A recent study by Zhang et al. (2010), shows that the *size* of social protection measures (including safety nets) is relevant, given their role to "help prevent people from losing their income, shedding their assets, or reverting to coping strategies that may be harmful to their current and future wellbeing".

Safety nets must be flexible to be effective as risk management

Figure 2: Public sector interventions in response to shocks					
Type of measure	Intervention	Beneficiaries	Common targeting methods	Advantages	Disadvantages
Provision	Cash transfers (family allowance, poor unemployed and elderly assistance, disability assistance)	–Poor families, women and children	–Means and proxy means test and/or	–Do not distort prices	–Can distort incentives to labor market participation
		–Working poor including informal poor	–Categorical	–Transfers are fungible, can directly meet critical household needs	–Transfers are fungible, subject to unintended household uses
		–Disabled		–Can be conditioned to incur behavioral changes	–Implementation of means testing and conditionalities can be information intensive
		–Poor elderly			
		–Other vulnerable groups			
Prevention and promotion	Unemployment assistance (unemployment benefits, severance payments)	–Formal sector unemployed	–Coverage determined by eligibility and employer/employee contributions	–Provides immediate assistance to eligible beneficiaries in the event of a crisis	–Can distort incentives to labor market participation
				–Has automatic counter-cyclical financing characteristics	–Difficult to adapt quickly due to qualifications and contribution requirements
					–Biased to urban formal sector
Promotion	Public works (labor-intensive, usually infrastructure development projects)	–Poor unemployed and underemployed including informal sector	–Self selection (by setting program remuneration below the minimum wage)	–Can be implemented or adapted quickly after crisis onset provided capacity exists	–Can distort incentives to labor market participation
		–Poor agricultural workers during off seasons	–Geographic	–Program size can be easily reduced once the crisis is over	–Substantial leakage to nonpoor depending on program design and targeting methods
				–Needed infrastructure is created or maintained	–Difficult to administer, tradeoff between infrastructure development and poverty alleviation objective
	Wage subsidies	–Formal sector unemployed, working age youth, usually poor	–Targeting by firm type, industrial category, firm size, and/or age of the worker	–Can be implemented quickly after crisis onset	–Substantial negative incentive effects for employers
Source: based on Skoufias (2003) and Devereux and Sabates-Wheeler (2004).					

mechanisms, given that the ability to change existing programs is the simplest way to cope with a negative shock (Grosh et al. 2008). Existent conditional cash transfer programmes (CCTs), currently present in many countries, could be temporarily expanded to include those affected by the shock.[v] Evidence shows that these programmes are effective at shielding the poor against a permanent reduction in human development. For example, Mexico's Oportunidades and Indonesia's Jaring Pengaman Sosial (a system of targeted fee waivers for public health care and scholarships for poor children system) protected children's school enrolment during income shocks in these countries (de Janvry et al. 2006; Cameron, 2002; Grosh et al. 2008). In terms of shielding against shocks, however, conditionality is not a priority where this type of programs is not already in place, as conditional schemes take longer to implement than unconditional ones. Conditionality could also exclude the most vulnerable as this population may not have access to the public services upon which transfers are conditioned (Paci et al. 2009).

Implementing well-designed multi-annual *ex-ante* strategies can also increase efficiency, allowing individuals to engage in riskier activities with a higher expected return –breaking thus a cycle of deprivation. Evidence indicates that households in extreme poverty engage in low-risk activities in detriment to potential returns: South Indian farmers facing hazardous environments forego profits when they choose assets and technologies that reduce sensitivity to rainfall variation but produce low returns (Rosenzweig & Binswanger, 1993); poor rural households in Tanzania do not typically own cattle, a profitable investment, likely due to lack of credit and inability to make high pay-up-front payments (Dercon, 1998). By allowing poor households to invest efficiently, *ex-ante* strategies such as long-term well-designed safety nets, not only reduce vulnerability but also increase well-being (Dercon, 2005).

Evidence from the International Labour Organization (ILO) shows that beneficiaries of various social transfer programmes are able to save and invest a fraction of their grain. A study of Bolivia's Bono Dignidad, a social pension, has estimated that consumption among beneficiaries in rural areas increased by twice the amount of the benefit – suggesting that improved household production was facilitated by the transfer. Studies of Mexico's Oportunidades, and Namibia and Brazil's social pension schemes observe similar results. Other programmes, such as Bangladesh's Targeting the Ultra Poor programme, are specifically designed to facilitate productive and financial asset accumulation (ILO 2010).

India's National Rural Employment Guarantee Act (NREGA) seeks to smooth consumption in rural areas by providing up to 100 days of employment per household per year. Building on a successful experience from the state of Maharashtra, the public works programme, approved nationally in 2005, offers a minimum amount of work to those who need it, at the prevailing basic unskilled wage rate. Though it is early to evaluate the national impact, evidence from Maharashtra indicates that the scheme is effective at stabilizing and smoothing the income of the poor in the agricultural off-season "reducing their need to adjust by cutting down on food expenditure, sale of livestock or resorting to expensive loans" (Sjoblom & Farrington 2008). Agricultural wages have also risen as an indirect effect of the programme. Yet, as with other public works initiatives, the scheme has to ensure that benefits are not captured by the better-off, that those unable to participate are not left behind, and that, by incentivizing local production, the programme does not discourage engagement in higher productivity areas (Ibid).

Some applied examples of *ex-ante* strategies in Africa include Ethiopia (with the Productive Safety Net Program) and northern Kenya (with the Hunger Safety Net), where food aid is being slowly replaced –and sometimes complemented– by cash transfers. This mechanism allows poor households, mostly pastoralist, to smooth their consumption, better manage economic and weather cycles, and increase their investments, breaking thus the cycle of deprivation. The Productive Safety Net Programme (PSNP), for instance, intends to break a long-term pattern. Historically, the large share of Ethiopia's population under the threat of food insecurity has been confronted with external food aid –often characterized as uncertain, ill-timed and insufficient (Andersson et al. 2009). The goal of the PSNP is to move away from these annual emergency appeals, providing "…transfers to the food insecure population in chronically food insecure *woredas* (districts) in a way that prevents asset depletion at the household level and creates assets at the community level" (Gilligan et al. 2008).

The PSNP provides beneficiaries with employment in exchange for cash during the non-farming months of January to June during a five year period, helping to make their medium-term income flow predictable; (households unable to participate in the public works receive a direct support in either food or cash). The first cohort of participants is expected to "graduate" in 2010, too early yet to evaluate the impact of the programme; however, exit studies suggest that beneficiaries have tended to accumulate more assets as a result of the programme (Andersson et al. 2009).

Another *ex-ante* policy that has shown potential is weather-based insurance –a cover for farmers based on a weather index. This type of insurance avoids *moral hazard* given that the farmer has no control over the event that triggers the insurance payment. At the same time, the index has the benefit of being highly correlated with the risk faced by the household. Such an index was introduced as a pilot program in the Mexican state of Guanajuato in 2003. By 2006, the program covered 2.3 million hectares across the 32 states in Mexico (Agroasemex, 2006; Ibarra, 2003 & 2006). Similar programs are in place in Ukraine, India, Malawi, Morocco, Nicaragua, Peru, Ethiopia, China, and Thailand. A potential drawback of these insurance policies

is the frequent lack of access for the households most in need. In India and Malawi, insurance is available to farmers taking out loans to increase productivity, effectively shutting out farmers that lack access to the credit market. Moreover, premiums can be high: farmers in Malawi pay 6 to 10 percent of the insured crop value (de la Fuente, 2010). The system in Mexico does not cover the poorest segments of the agricultural production (the rain-fed crop area) and focuses instead on the financially viable commercial agriculture (Ibid).

Expanding credit and insurance markets for poor households (for example, through microfinance) constitutes a powerful *ex-ante* mechanism given the insufficiency of asset-based self-insurance –which tends to be risky and highly correlated with income (Dercon, 2005). The private sector could also benefit from the expansion of credit and insurance market during economic recessions. Filling the credit gap for small viable firms in the face of credit-market collapse can minimize the loss in employment; several countries, including Argentina, Brazil, China, France, India, Italy, Japan, Serbia and Tanzania, recurred to this strategy during the recent global financial crisis (Paci, Revenga & Rijkers, 2009; ILO, 2009). Yet, the usual informational problems inherent in these mechanisms persist (mostly adverse selection), while governments are seldom efficient in allocating credit.

It has been argued that microfinance institutions should offer flexible products to their clients, allowing them to access credit despite the high risks they face (Dercon, 2005). One such flexible product refers to interlinked contracts –linking credit with health insurance, for instance (Ibid). Interest in linking safety nets with microfinance is rising, under the notion that "transfers from the safety net program are necessary for immediate poverty relief, but that access to vehicles for saving and credit, usually accompanied by some training in financial literacy or business development, can help beneficiaries raise their autonomous incomes and graduate out of social assistance" (Grosh et al. 2008).

Some nations have turned to the international capital markets to hedge against large, country-level shocks but many countries still lack access to these markets. Partly for this reason, the World Bank has recently launched an initiative –the MultiCat programme (WB, 2009)– to facilitate the issuance of "catastrophe bonds". This programme aims to help countries access financial markets to insure their budget against large economic losses due to natural disasters. The IMF, in turn, has recently approved the new "Rapid Credit Facility (RCF)" in order to provide "rapid financial assistance to LICs facing an urgent balance of payments need, without the need for program-based conditionality. It can provide flexible support in a wide variety of circumstances, including shocks, natural disasters, and emergencies resulting from fragility" (IMF, 2010).

Conversely, medium and high human development countries with a high dependency on commodity exports have expanded their own sovereign wealth funds to save for a rainy day, minimizing the volatility of government spending. Chile, for instance, created a fund with the windfall from copper exports.

Ex-post strategies

Shocks happen. And even the best prepared society suffers in the face of unexpected large shocks. The level of preparedness, however, can influence the depth of the suffering –and the implications for the human development process. Governments at all levels can benefit from the broad portfolio of policies to cope with the impacts of an economic or natural shock: public works (including food-for-work- and cash-for-work programmes); food aid; subsidies; and the use of social funds (WDR, 2000/2001; Skoufias, 2003; Lustig, 2010). Moreover, in some cases the possibility arises to use the emergency policy response to the crisis to set up a permanent safety net. In fact, some of the best safety nets have emerged in the wake of a crisis; for instance going back to the nineteenth century famine relief programmes in India (Ravallion, 2008). In Mexico, for example, the Tequila crisis of 1994-1995 pushed the government to recognize the absence of an effective safety net, which led to the creation of *Progresa-Oportunidades* (Ravallion, 2008).

The fiscal sustainability of social protection programmes in poor countries with high resource-constraints is often met with reservations. Yet, evidence suggests that fiscal concerns tend to be overstated. The cost of social protection interventions is frequently lower than perceived to be, particularly considering the efficiency gains from a social cost-benefit analysis standpoint. Projections from the ILO for seven Sub-Saharan countries (Burkina Faso, Cameroon, Guinea and Senegal, Tanzania, Ethiopia and Kenya) indicate that a universal old-age and disability pension programme in 2010 would cost between 0.6 and 1.1 percent of GDP, while the cost of a benefit paid to all children up to the age of 14 would lie between 1.5 and 3.1 percent of GDP (ILO, 2008). Fiscal space for these schemes may be attained "by reallocating expenditures that offer little tangible benefit for the poor, as well as by increasing efficiencies of social expenditures through capacity enhancements" (Adato & Hoddinot, 2008). International aid can also play a significant role in this regard (Ibid).

Since their inception by F.D. Roosevelt as a response to the Great Depression, public works have become a popular mechanism, and are widespread today in countries lacking effective unemployment insurance schemes (Grosh et al. 2008). Public work programmes can be implemented or adapted with relative ease once the shock hits (at least in countries with infrastructure needs); and are usually effective if well designed (particularly, if the wage paid is set below the market wage) and if participation is limited to people in need (successful self-selection –see discussion on targeting below) (Skoufias, 2003). A focus on

community-initiated projects is another desirable characteristic (Ravallion, 2008). On the other hand, public works are less effective if labor markets adjust to the programmes through a reduction in wages.

The ability to target effectively the most vulnerable groups plays a recurrent role in the success of social protection schemes. Too wide a net may make the programme unnecessarily expensive; conversely, if it is too narrow, the probability of excluding the most vulnerable grows. Yet, even in the case of countries unable to rely on statistical data to target through means tests, other options are available. Selection can be made categorically through characteristics such as age, gender or region; for instance "old-age pensions in South African (…) shown to improve children's education and nutrition"; or by community-based committees (Adato & Hoddinot, 2008). Self-selection mechanisms –where benefits are open to anyone, but the level is such that only the poorest tend to participate– have also shown to be successful in many countries (Ibid).

A policy instrument that relies on self-selection consists on the subsidy of goods for which demand falls as income increases –the so called *inferior goods*. Under this scheme the poor "receive more of any subsidy on that good in absolute terms than the non-poor" (Alderman & Haque, 2006). Yellow maize likely constitutes such a good in most African countries, and evidence shows that its distribution –and consequent self-targeting– during the drought relief of 1985 in Kenya, contributed to a more progressive allocation of aid (Dreze & Sen, 1989). The government of Tunisia increased the cost-effectiveness of its food aid program -which had ballooned to 10 percent of total government spending and was deemed highly regressive- by switching to inferior goods. Subsidies on baguettes, for instance, were eliminated while those on large loaves of bread were maintained (Alderman & Lindert, 1998). Nevertheless, self-targeting subsidies can be associated with creating stigma, a highly undesirable characteristic.

The effectiveness and cost-efficiency use of social funds –initially employed to minimize the costs of structural adjustment– has proven valuable to deal with large nation-wide shocks. Over 2100 projects were approved by the Honduras Social Fund during the first 100 days following Hurricane Mitch, with a total value of USD $40 million and the creation of more than 100,000 person-months of employment (Alderman & Haque, 2006; Grosh et al. 2008). The fund had been in place for eight years and was a well-established organization by the time Mitch hit. Yet, it was its flexible legal framework that allowed it to adapt and provide a quick response to the disaster. For example, the fund's subproject cycle was reduced from fifty steps to eight (Grosh et al. 2008) while the speed of implementation increased four-fold during this time (Alderman & Haque, 2006).

This experience has shed light on specific lessons that can increase the effectiveness of social funds as coping policies (Grosh et al. 2008; Alderman & Haque, 2006; IEU, 2006). Some of these lessons include: preparing contingency manuals ahead of time (which can enhance the capacity to respond); fostering partnerships with lower levels of government (including municipalities and communities); strengthening the ability to decentralize and delegate; and isolating the emergency response from normal operations in order to avoid confusion.

Social protection and food security?

Smallholder farmers in Africa are subject to idiosyncratic and aggregate shocks, and constrained by the unavailability of inputs, assets and infrastructure. Social protection can be a tool to enhance food security, although it has yet to live up to its full potential. In the two decades running from the 1960s to the 1980s, a comprehensive set of policies to protect farmers were set in place in several African countries, later referred to as the "old social protection agenda" (Devereux, 2009). These included strategic grain-reserve management, food pricing policies, input subsidies and government-owned marketing agencies. The liberalization agenda that took place in the 1980s and 1990s, however, dismantled these policies for the most part, leaving farmers vulnerable to external shocks. As is often the case, the pendulum has swung back, and many of these policies are being reinstated (as in the case of the Malawi maize input subsidy program).

Well-functioning social protection systems can help protect households and individuals against shocks, constituting a vital component of strategies to reduce poverty, hunger and undernutrition. Properly designed and implemented, these policies and programmes can contribute greatly to support food-insecure and vulnerable households. They help individuals meet their nutritional needs throughout periods of crisis, preventing them from resorting to coping mechanisms with adverse consequences, such as forced labourer migration. In the best cases they accommodate the specific nutritional needs of individuals based on their geographic location, age, gender, health, livelihood, and other conditions; employing a multiplicity of approaches to reach their objective. Such programmes can be components of more comprehensive systems that provide a minimal level of social protection, often known as a social protection floor.[vi]

While progress has been made in aligning and coordinating nationally-funded and externally-supported programmes, and in improving efficiency, there is much to be done to improve the coverage of vulnerable groups. This includes designing the benefit levels that will cover basic but often differentiated needs; for instance, enabling pregnant and breastfeeding women, and children under two to achieve the nutritional status needed to fulfil their growth and development potential.

The new social protection agenda for food security also needs to be fully coherent with the development plan of

countries –an element that was clearly missing in previous safety nets. As the debate on social protection has evolved, so has the recognition that risk is an ever-present element in the lives of people. To this point, Devereux (2009) has argued that social protection can be used to increase agricultural growth in Africa, both directly and indirectly. The author proposes the mechanisms included in table 3.

Figure 3: Social protection mechanisms to enhance agricultural growth

Entitlement category	Intervention categories	Social protection responses
Production-based	• Productivity enhancing safety nets	• Free input distribution • Input subsidies • Input fairs (seeds, fertilizers)
Labour based	• Public works programmes • Guaranteed employment	• Cash-for-work • Food-for-work • Employment guarantee schemes
Trade-based	• Control of food supplies • Control of food prices	• Open marketing operations • Price hedging • Food price subsidies
Transfer-based	• Cash transfers • Food aid • Social insurance	• Unconditional cash transfers • Emergency food aid • Weather-indexed insurance

Source: Devereux (2009)

Safety net and social protection interventions have the potential to alleviate constraints to agricultural productivity. Public works programmes can build much-needed rural infrastructure that enhances food availability either directly (for example through soil and water conservation) or indirectly (for example by constructing feeder roads that link input and output markets and stabilize food supplies and prices). Cash transfers can help ease seasonal cash flow bottlenecks and help farmers access agricultural inputs.

It is also possible to enhance food production directly by modifying more traditional safety net instruments. For example, food-for-work programs may be substituted by input-for-work programmes. In many circumstances, rather than meeting consumption deficits through emergency relief, it can be more beneficial to enhance production through 'productivity-enhancing' safety nets. This may be the case in land-locked nations and other contexts where countries face steep food import prices.

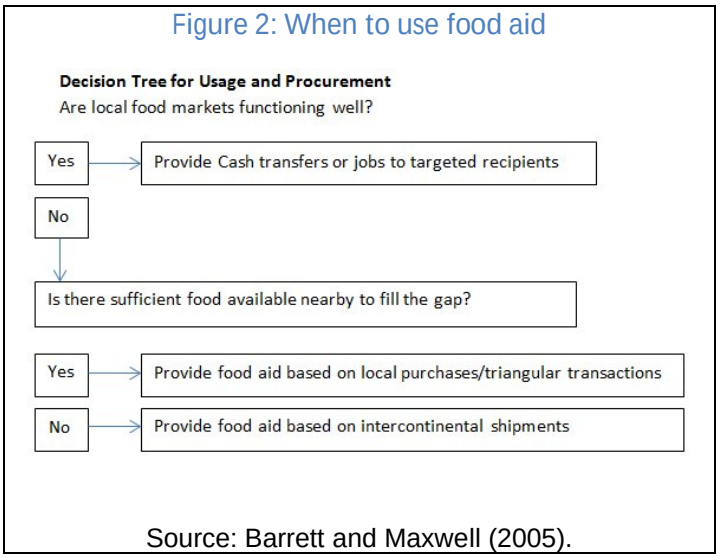
Within the context of social protection against shocks, two elements in particular deserve special attention: food aid and seasonality.

Food aid

Food aid has been used for more than fifty years, despite nearly universal consensus regarding the superiority of cash transfers in terms of improving welfare (Alderman & Haque, 2006). One of the main downfalls of food aid is its association with creating disincentives for local production. Food aid may depress food production and market development (although it has been argued that local effects of aid vary depending on market integration and the timing of deliveries, among other elements). On the political front, food aid has been often used by donors to support farm prices and commercial exports and to help maintain the maritime industry (Barret & Maxwell, 2005).

Notwithstanding deficiencies, food aid is ideally suited to address a specific type of crisis: acute food insecurity in the context of humanitarian emergencies, where food is short and local markets do not respond to increases in demand (Barrett & Maxwell, 2005). Figure 2 presents a rule of thumb to determine when is food aid a sensible policy.

Figure 2: When to use food aid



Source: Barrett and Maxwell (2005).

Timing and Seasonality

Addressing seasonality –the recurrent swings in the price of food and income, with strong welfare implications– can be challenging, with the meaning of *ex-ante* and *ex-post* lost in the presence of constant recurrence. Furthermore, although seasonal food crises have distinct characteristics that differentiate them from other shocks –namely the fact that they are both recurrent and predictable[vii]-interventions

in these cases are often too similar to social protection schemes. “In the context of the annual hungry season and seasonal food crises, relevant interventions include transfers to smooth consumption and safety nets against shocks” (Devereux, 2010) –common to the social protection literature, including instruments such as food supply management, food price subsidies, public works programmes and seasonal cash transfers. However, interventions in food crises vis-à-vis other social protection mechanisms need differ in that timing becomes of the utmost importance in the former.

The issue of timing in seasonal social protection is well reflected in the case of Ethiopia’s PSNP. Public works is one of the key social protection schemes to handle seasonality. In 2005, the PSNP in Ethiopia provided most of its employment between April and September, almost in perfect synchronicity with the hunger season (May–September). However, employment-based safety nets designed without adequate attention to timing may conflict with smallholders’ labour requirements of their own. As Devereux argues, the timing of the PSNP programme is unfortunate, as the hunger season coincides with the period when farmers work on the field, making public employment redundant (Devereux, 2010). Another element that has limited the benefits of the public work component of the PSNP refers to late payments, which by definition are useless to address seasonality.

Box 1: Elements of the Action Framework

(Updated Comprehensive Framework for Action, High Level Task Force on Global Food Security, 2010)

Outcome 2.1: Expanded social protection systems

Actions:

- Strengthen capacity to design and implement social protection policies and programmes to provide the basis for introducing or scaling up social assistance initiatives. Countries need to be equipped with policy frameworks and technical capacities to assist those who may suffer chronic disadvantages, as well as being able to rapidly respond to crises. Programmes and policies, based on a country-specific assessment of options, should be mindful of the need to avoid building up or perpetuating unnecessary fiscal or political liabilities that may lead to the system becoming unresponsive to changing needs.The design and implementation of social protection policies should ensure the participation of a broad range of stakeholders, including the most vulnerable, or their representative organizations.
- Ensure that special care is taken in identifying and addressing the needs of the most vulnerable. Food and nutrition insecurity may be pervasive in certain population groups defined by geography, gender, nature of livelihood, age, disease, disability, ethnicity or other characteristics. Care must be taken in matching the nutrition needs of these groups with the kind of support provided. It is also important to address any implicit or overt forms of discrimination that may exist in social or institutional settings, and that may be exacerbating the problem. For example, migrant workers, while not explicitly recognized as a group that is discriminated against, might turn out to be among the hardest to reach and therefore in need to special targeting measures. Defining the benefits allocated through the programme and policies as a right can reduce the element of stigma attached to participation.
- Balance the need to ensure effective coverage of the vulnerable with the need to maintain efficient use of resources. There is no universal blueprint to ensure adequate coverage of vulnerable populations. In some cases (e.g. micronutrient fortification of basic foods), universal coverage may well meet the needs of both effectiveness and efficiency. In other cases, there might be a need to develop appropriate targeting criteria and mechanisms, and improve programme delivery methods through learning and innovation, in accordance with country-level capacity. In all cases, there is a need to ensure accountability and transparency in order to ensure effective coverage of the vulnerable and efficient use of resources.
- Improve linkages between sectors and between actors. For example, employment guarantee programmes that engage the unemployed can help rehabilitate or create small-scale infrastructure and agricultural assets that provide lasting benefits for the community. Similarly, Food/Cash-For-Training can assist people in adopting skills, (re-)entering the labour market and moving towards self-sufficiency. School feeding, an effective incentive to improve school enrolment and attendance is a valuable tool for improving nutrition among children, especially girls. This can be enhanced by introducing food and nutrition education and school gardening into the school curriculum. While governments are primarily responsible for ensuring social protection, encouraging the participation of NGOs, CSOs and other stakeholders may be especially important in building awareness about patterns of vulnerability among different sections of the population, as well as helping monitor the

reach and efficacy of programs. Other forms of complementing public sector efforts are also possible: e.g. the private sector can be given incentives for local production of nutritionally rich foods.

- Support the implementation of international labour standards by States, in particular those applicable to the agrifood sector and rural areas, in order to safeguard purchasing power of waged workers, including waged agricultural workers, thereby strengthening their access to adequate food. Such measures should include establishing a legally-defined minimum wage corresponding to a living wage, ensuring labour inspection in agriculture, securing legal entitlement to social security by agricultural workers equivalent to those applicable to other industries, establishing compulsory registries of agricultural workers and the compulsory licensing of labour contractors. Support ratification of relevant International Labour Organization (ILO) conventions by States where necessary.

Conclusion

Food security continues to be a critical issue for Sub-Saharan Africa and its Sahel region. Achieving food security will be even more challenging without the benefits of a well-designed social protection scheme.

The social protection debate has evolved over the past decades, moving past emergency relief and residual safety nets. Today, food security and social protection go hand in hand. Effective mechanisms that protect people's ability to access and use food must be closely intertwined within the broader development agenda. Pointedly, *ex-ante* mechanisms that can reduce and mitigate risk need to take a more prominent role in social protection policies. Notwithstanding, *ex-post* mechanisms should also be properly designed, making them easy to implement in the event of shock. If social protection is well-designed, monitored and evaluated, it can provide double dividends in protecting people's food security and in increasing agricultural growth.

References

Adato, M. & J. Hoddinott (2008) 'Social Protection: Opportunities for Africa', IFPRI Policy Brief 5, Washington, D.C.: International Food Policy Research Institute.

Agroasemex (2006) The Mexican Experience in the Development and Operation of Parametric Insurances Applied to Agriculture, Queretaro: Agromex.

Alderman, H. & T.S. Haque (2006) 'Countercyclical safety nets for the poor and vulnerable', *Food Policy* Vol. 31 (4), 372-383

Alderman, H. & K. Lindert (1998) 'The potential and limitations of self-targeted food subsidies', *World Bank Research Observer,* Vol. 13 (2), pp. 213-229.

Andersson, C., A. Mekonnen & J. Stage (2009) 'Impacts of the Productive Safety Net Program in Ethiopia on Livestock and Tree Holdings of Rural Households', *Journal of Development Economics,* Vol. 94 (1), pp. 119-126.

Barret, C.B. & D.G. Maxwell (2005) Food aid after fifty years: Recasting its role, New York: Routledge.

Barrientos A., D. Hulme & K. Moore (2006) 'Social Protection for the Poorest: Taking a Broader View', in: *Poverty in Focus*, No. 8, UNDP-IPC.

Cameron, L.A. (2002) 'Did Social Safety Net Scholarships Reduce Drop-Out Rates During the Indonesian Economic Crisis?', *Policy Research Working Paper*, Washington, D.C.: World Bank.

de Janvry A., F. Finan, E. Sadoulet & R. Vakis (2006) 'Can Conditional cash transfer programs serve as safety nets in keeping children at school and from working when exposed to shocks?' *Journal of Development Economics,* Vol. 79 (2), pp. 349-373.

de la Fuente, A. (2010) 'Public Responses to Natural Disasters: What Has Been Done and What Else Could Be Done', in: R. Fuentes & P. Seck (Eds.) Risk, Vulnerability and Human Development: On the Brink, New York: Palgrave Macmillan.

Dercon, S. (2005) 'Risk, Poverty and Public Action', in: S. Dercon (Ed.) Insurance against Poverty, New York: Oxford University Press.

Dercon, S. (1998) 'Wealth, Risk and Activity Choice: Cattle in Western Tanzania', *Journal of Development Economics*, Vol.55, February, pp. 1-42.

Devereux, S (2009) 'Social Protection for Agricultural Growth in Africa', FAC Working Paper No 010.

Devereux, S. (2010) Seasonal Food Crises and Social Protection in Africa, Abingdon: Routledge.

Devereux, S. and R. Sabates-Wheeler (2004) 'Transformative Social Protection.' Working Paper 232. Brighton: IDS.

Dreze, J., & A. Sen (1989) Hunger and Public Action, Oxford: Oxford University Press.

Fiszbein, A. & N. Schady (2009) Conditional cash transfers for attacking present and future poverty, Washington, D.C.: The World Bank.

Food and Agriculture Organization of the United Nations (2011) 'Global Food Price Monitor', Global Information and Early Warning System on Food and Agriculture, Rome: FAO.

Food and Agriculture Organization of the United Nations (2009) 'The State of Food Security in the World', Rome: FAO.

Gilligan, D., J. Hoddinot, & A.S. Tafesse (2008) 'The

Impact of Ethiopia's Productive Safety Net Programme and its Linkages', IFPRI Discussion Paper No. 00839, Washington DC: IFPRI

Grosh, M., C. del Ninno, E. Tesliuc & A. Ouerghi (2008) For Protection and Promotion. The Design and Implementation of Effective Safety Nets, Washington D.C.: The World Bank.

Hoddinott, J., & A. Quisumbing (2010) 'Methods for Microeconometric Risk and Vulnerability Assessment', in: R. Fuentes & P. Seck (Eds.) Risk, Vulnerability and Human Development: On the Brink, UK: Palgrave Macmillan.

Ibarra, H. (2006) 'Weather Index Insurance: The New Technological Frontier in Natural Hazards Hedging Mechanisms', World Bank Commodity Risk Management Group, Manila, Philippines.

Ibarra, H. (2003) Discussant Reaction Paper to J. Skees 'Risk Management Challenges in Rural Financial Markets: Blending Risk Management Innovations with Rural Finance'.

Independent Evaluation Unit (2006) 'Hazards of Nature, Risks to Development. An Evaluation of World Bank Assistance for Natural Disasters', Washington, D.C.: World Bank.

Intergovernmental Panel on Climate Change (2007) 'Climate Change 2007', Contribution of Working Group I to the 4th Assessment Report of the Intergovernmental Panel on Climate Change, Geneva: IPCC.

International Labour Organization (2008) 'Can low-income countries afford basic security?', Social security policy briefings, Paper 3, Geneva: ILO.

International Labour Organization (2009) 'Global Employment Trends: January 2009', Geneva: ILO.

International Labour Organization (2010) Extending social security to all. A guide through challenges and options. Geneva: ILO.

International Monetary Fund (2010) 'IMF Rapid Credit Facility'. Retrieved on February 17, 2011, from: http://www.imf.org/external/np/exr/facts/rcf.htm

Lustig, N. (2010) 'Protecting Latin America's Poor during Economic Crises', Policy Brief No. 2, Inter-American Dialogue, Washington D.C.

Owens, T., John Hoddinott & B. Kinsey (2003) 'Ex-Ante Actions and Ex-Post Public Responses to Drought Shocks: Evidence and Simulations from Zimbabwe', *World Development,* Vol. 31 (7), pp. 1239-1255.

Paci, P., A. Revenga & B. Rijkers (2009) 'Coping with Crises. Why and How to Protect Employment and Earnings', Policy Research Working Paper 5094, Washington, D.C.: The World Bank.

Ravallion, M. (2008) 'Bailing out the World's Poorest', Policy Research Working Paper 4763, Washington, D.C.: World Bank.

Rosenzweig, M., & H. Binswanger (1993) 'Wealth, Weather Risk and the Composition and Profitability of Agricultural Investments', *Economic Journal*, Vol. 103 (416), pp. 56–78.

Skoufias, E. (2003) 'Economic crises and natural disasters: Coping strategies and policy implications', *World Developmen*t, Vol. 31 (7), pp. 1087-1102.

Sjoblom, D. & J. Farrington (2008) 'The Indian National Rural Employment Guarantee Act: Will it reduce poverty and boost the economy?', ODI Project Briefing No. 7, London: Overseas Development Institute.

UNDP (2010) 'Human and Food Security in the Sahel: Analysis of Drivers and Strategic Options to Enhance Food Security', Bureau for Crisis Prevention and Recovery & Regional Bureau for Africa, New York: UNDP.

United Nations (2009) 'The Millennium Development Goals Report 2009', New York: United Nations.

Vakis, R. (2006) 'Complementing Natural Disasters Management: The Role of Social Protection', Social Protection Discussion Paper No. 0543, Washington, D.C.: World Bank.

Wiggins, S. & S. Keats (2009) 'Current state of food security in Africa and the Africa–EU partnership on the Millennium Development Goals', Paper for 2nd Joint Experts Group Meeting, Africa-EU MDGs Partnership, Pretoria, 24 March 2009. London: FAC & ODI.

World Bank (2010) 'Global Monitoring Report 2010: The MDGs after the Crisis', Washington, D.C.: World Bank.

World Bank (2009) 'Insuring Against Natural Disaster Risk: New Catastrophe Bond Issuance Platform'. Retrieved on February 17, 2011, from: http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22369669~pagePK:64257043~piPK:437376~theSitePK:4607,00.html

World Bank (2001) 'World Development Report 2000/2001: Attacking Poverty', World Bank and Oxford University Press.

World Food Programme (2011) 'Rising Food Prices'. Retrieved on March 2, 2011, from: http://www.wfp.org/stories/rising-food-prices-10-questions-answered

Zhang, Y., N. Thelen, & A. Rao (2010). 'Social protection in fiscal stimulus packages: Some evidence', UNDP/ODS Working Paper, New York: United Nations Development Programme.

[i] [i] Between 1970 and 2003, grain imports in the least-developed countries grew from 8 percent to 17 percent; sugar and sweeteners imports rose from 18 to 45 percent, while the reliance on vegetable oil imports increased from 9 percent to 55 percent (FAO, 2009).

[ii] In 2005-06, eleven countries in Sub-Saharan Africa (Angola, Cape Verde, Eritrea, the Gambia, Lesotho, Liberia, Mauritania, Senegal, Somalia, Swaziland, and Zimbabwe) were importing over half of their grain supply, while in Benin, Cameroon, Cote d'Ivoire, the Democratic Republic of the Congo, Ghana, Guinea-Bissau and Mozambique, the same item varied between 30 and 50 percent (Ibid).

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[iii] Of course it is possible that the socioeconomic conditions map may suffer dramatic changes after the shock, making it quickly outdated. Yet, there is usually enough time-invariant information in such maps as to still provide useful insights to the policy maker.

[iv] Research, however, suggests that when countries are not well prepared and safety nets are not in place, the speed and scale of the response should be given priority in detriment of design and targeting (Grosh et al. 2008; Paci et al. 2009).

[v] Fiszbein and Schady (2009) argue that although CCTs constitute good mechanisms to weather crises, they are not the "*best* instrument to respond to idiosyncratic or systemic shocks to household income for various reasons: they have no provision whereby new households easily can be added to the roster of eligible beneficiaries, and they have no mechanisms whereby payment levels increase for households that see a temporary downturn in their economic circumstances". Of course, in the absence of other social assistance having a CCT implemented is better than not having one. Furthermore, efforts could be made to improve CCTs capacity to respond to shocks.

[vi] Recognizing the importance and necessity of adequate social protection systems, the United Nations System Chief Executives Board (CEB) adopted in April 2009 'the Social Protection Floor Initiative' (SPF). The SPF corresponds to a set of essential transfers, services and facilities that all citizens everywhere should enjoy to ensure the realization of the rights embodied in human rights treaties. By working on both supply and demand side measures, the SPF takes a holistic approach to social protection including:

1) Services: Ensuring the availability, continuity, and geographical and financial access to essential services, such as water and sanitation, food and adequate nutrition, health, education, housing, life- and asset-saving information and other social services.

Transfers: Realizing access by ensuring a basic set of essential social transfers, in cash and in kind, to provide a minimum income and livelihood security for poor and vulnerable populations and to facilitate access to essential services. It includes social transfers (but also information, entitlements and policies) to children, people in active age groups with insufficient income and older persons.

[vii] That is, the absence of climate change

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