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A CASE FOR INSTITUTIONAL DEMAND AS EFFECTIVE SOCIAL PROTECTION: SUPPORTING SMALLHOLDERS THROUGH PROCUREMENT AND FOOD ASSISTANCE PROGRAMMES

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This paper focuses on the rationale for state-based market interventions to support smallholder production along with some case studies that follow the evolution and impact of what we call 'institutional demand' policies. Institutional demand is an intervention that aims to improve regional markets by establishing coordinated purchases for regional distribution, primarily through local and regional food procurement (LRP). We also address the question of smallholder farmers' dependency on state-based market interventions, and review existing evidence of how institutional purchase programmes have supported income generation and increased agricultural production. The paper outlines the two direct forms of social protection offered through institutional demand: reliable income generation for targeted smallholders and expanded food availability for vulnerable populations. Our hope is that this paper will outline areas for future research to analyse the impact of institutional demand policies.

1 INTRODUCTION

Of the 1.4 billion people living on less than USD1.25 a day, about 1 billion live in rural areas, where the majority of the population rely on agricultural production for their livelihood (IDAF and UNEP 2013). Following the global food crisis in 2007-2008, when prices of staple crops doubled in a year, domestic and foreign investment in agriculture throughout the developing world has exploded. Foreign direct investment in agriculture averaged some USD600 million annually during the 1990s and expanded to an average of USD3 billion between 2005 and 2007 (Vorley, Cotula and Chan 2012: 12). However, much of the benefits of these investments are not being realised by many vulnerable producers due to investment preferences towards large-scale agriculture and an increase in investment-induced land acquisitions undermining the basic rights of many smallholders (Borras et al. 2011; FAO 2012; Wolford et al. 2013).

Therefore, the increased investment offers new opportunities, but vulnerable producers face substantial barriers to increasing production, earning a minimum income and remaining competitive in an unfavourable market environment. There is increasing demand for better integration and coordination between agricultural interventions and social protection programmes to both provide a minimum level of income security for poor and vulnerable households and support a long-term pathway out of poverty. We understand that the

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geographical coincidence of these interventions, and sometimes even the targeting of similar households, offers an opportunity to create synergies and complementarities between these programmes (Tirivayi, Knowles and Davis 2013).

Moreover, in an era of climate uncertainty and rising costs of agricultural inputs, smallholders are on the front lines of mitigating and adapting to climate variability through integrated and labour-intensive agricultural practices (Pimental 2009; Foley et al. 2011; FAO 2013). Smallholder farmers are also more efficient at producing more food per hectare with integrated production methods and less reliance on chemical inputs they continue to supply 70 per cent of global food consumption (Aliteri et al. 2012; ETC Group 2009).

Agriculture is the most important sector for governments to target to reduce hunger and fight poverty. Estimates show that the agricultural sector is two to four times more effective than any other at raising poor people's incomes. In sub-Saharan Africa agricultural growth is 11 times more effective at reducing poverty than national GDP growth (Ligon and Sadoulet 2007). However, the scale, reliability at which individual smallholders produce, and structural issues (roads, transportation, access to credit, rural extension and technical assistance etc.) can limit their ability to leverage or participate equitably in the market; thus, they remain financially weak and susceptible to external variables such as economic and climatic shocks. The creation of institutional demand through local and regional procurement (LRP) policies attempts to bolster smallholders' experience with the market through reliable market coordination based on existing agricultural practices and food demand.

This working paper situates LRP policies in terms of creating institutional demand for smallholders that, in turn, generates income, expands production through demand and improves local food security. In what follows, we explain the concept and some key aspects of institutional demand through procurement policies that specifically target smallholders. Following a discussion of the key aspects and rationale of institutional demand, several case studies will highlight the actual implementation, evidence and evolution of such policies throughout the developing world. These cases will demonstrate the varying practices of LRP policies such as: the identification and targeting of smallholders; forms of payment; crop pricing and procurement mechanisms; the strengthening of producer organisations; the establishment of food distribution networks; and any issues of dependency. This paper establishes a theoretical framework that considers the inefficiencies of local food markets and the relationship between rural household consumption and production.

2 BACKGROUND

Green Revolution technologies and industrialisation policies in the 1960s and 1970s disproportionately favoured large-scale producers through crop specialisation and the induced rural–urban migration of smallholders (Gimenez and Altieri 2013; Biasucci 2007). Proponents of Green Revolution technologies have even acknowledged that while the dissemination of productive technologies was, in part, to expand the productivity of smallholders, the lack of complementary policies and poor market infrastructure promoted a scale bias (Conway 1997; see Birner and Resnick 2010). A history of rolling back the State through neoliberal policies in the 1980s and 1990s resulted in disastrous outcomes on the already vulnerable and neglected rural population throughout much of the developing world (Dixon et al. 2004; Ellis and Biggs 2001). Following the erosion of state subsidies for agriculture, export-oriented forms of contract farming emerged as key drivers of the

adoption of technology for the production of international commodities (Oya 2012; Barrett and Mutambatsere 2008). At the same time, countries from the global North continued to support their agricultural sectors with substantial credit and subsidies to maintain control over the global food regime (McMichael 2009). However, despite decades of uneven development, smallholders have persisted and continue to produce 70 per cent of the world's food (ETC Group 2009). Governments are now recognising the productive capacity of smallholders as a way to fight poverty, mitigate climate change and boost domestic food production.

In general, renewed interest in increasing smallholder productivity is an important policy objective. However, this broad concern tends to overlook supply chain constraints that result in insufficient demand and risks for smallholders to produce effectively for the market. Additionally, rural areas tend to suffer from volatile market prices, imperfect information, inadequate infrastructure, and insufficient organisational structures to ensure that smallholders can benefit from market opportunities. Therefore, we understand that there is a role for the State and well-designed international aid programmes to play to address these shortcomings, improve smallholder incomes and increase the availability of food for vulnerable populations.

Within the last two decades, there has been a surge in LRP reflected in domestic programmes and a significant growth in international donor support to procure food aid locally and/or regionally (de Schutter 2014). For example, in 1996 the European Union shifted its development food aid from strictly tied, in-kind food aid to more development-oriented programming such as LRP (Barrett 2007). And in 2005 Canada's International Development Agency (CIDA) expanded its proportion of local and regional purchases from 10 per cent to 50 per cent of total food aid expenditures. Since then, CIDA has continued to increase its spending on LRP policies, so they now make up a majority of its spending on food assistance (Lentz, Barrett and Gómez 2012). Similarly, China, the world's third largest funder of food aid, also reformed its growing food aid to Africa using cash-based delivery that aims to boost demand for domestic food production (Barrett 2007). Australia has also followed suit.

The USA has lagged behind this trend for promoting local or regional purchase of foodstuffs, citing potential problems associated with food quality, reliability and local market volatility (Hanrahan 2013). In 2006 the US Agency for International Development (USAID) estimated that half of US expenditures on food aid went to transoceanic and in-country transportation costs. In response, the 2008 US Farm Bill initiated US food aid through an LRP policy, with a USD60 million pilot project through the McGovern-Dole International Food for Education and Child Nutrition programme. The 2014 US Farm Bill's food aid budget allocates USD80 million annually for LRP, representing just over 5 per cent of the programme's total funds (US House of Representatives 2014). Still, many countries have expanded their own domestic programmes to procure food from smallholders as a way to combine goals of reducing poverty and boosting domestic food production.

In all cases, the rationale for LRP is built on the assumption that most food markets in the developing world are often inefficient in offering a favourable market price for smallholders' (surplus) production and providing poor people with access to food (Poulton et al. 2006). LRP policies build a social protection web that coordinates local producers and consumers through procurement sponsored by the government, non-governmental organisations (NGOs) or private voluntary organisation (PVOs). While few long-term evaluations exist, several short- to mid-term evaluations of pilot projects suggest that LRP has had promising outcomes in terms of boosting smallholder incomes and fighting food insecurity where farmers' access to markets is inhibited (Lentz et al. 2013; Soares et al. 2013; Upton et al. 2012).

3 THE RATIONALE FOR INSTITUTIONAL DEMAND

Recent literature has shown that social protection programmes such as cash transfers and smallholder-specific credit schemes can boost agricultural production and income (Tirivayi, Knowles, and Davis 2013; Sabates-Wheeler, Devereux, and Guenther 2009; Devereux and Sabates-Wheeler 2004). In the case of Mexico, conditional cash transfers, agricultural credit, public works employment and crop subsidies have been shown to have income multipliers and promote investments in production (Sadoulet et al. 2001; Davis et al. 2002; Todd, Winters, and Hertz 2010). While these policies are crucial to reduce smallholder vulnerability, the recent emergence of government-sponsored institutional demand policies calls for a more targeted investigation. Evaluations are limited but hint at the transformative potential of directly supporting smallholder production by stimulating or creating demand.

Social protection policies generally aim to mitigate risks or shocks to vulnerable populations by offering economic or social support of some kind. Beyond these objectives, social protection also supports smallholder investment in productive assets, human capital and sustaining a minimum income (Tirivayi et al. 2013). However, little analysis has introduced LRP policies as a powerful component of social protection that addresses prices, demand, incomes and food security, strengthens local smallholder farming systems and stimulates inclusive agricultural growth. In this way, institutional demand provides a valuable component to the social protection repertoire. We define institutional demand as policies that promote development by procuring smallholder surplus and protecting vulnerable populations through coordinated markets to expand food access and availability.

There is no one accepted and encompassing definition of a 'smallholder' farmer or family farm. In the most general sense, smallholders in developing regions are characterised by their limited access to resources (financial, material, technological, human capital, infrastructural). For the purposes of this paper, we understand that there is a wide array of producers who could be described as 'smallholders', 'family farmers' or 'peasants'. Because of this diversity and the contextual nature of smallholders, we are concerned with farmers who primarily rely on household labour, have limited land holdings and derive an income primarily from the land. The case studies in this paper will attempt to highlight the various definitions of smallholders in their own policy context.³

Rural populations face numerous development challenges and barriers in wholly private markets. In areas where there is an overwhelming presence of private investors, they tend to favour economies of scale and export commodity production via international supply chains (Dorward et al. 2004; Poulton et al. 2006). These market channels often exclude or take advantage of smallholder surpluses through monopolistic intermediaries that reduce the bargaining power of producers (Key et al. 2000). Thus, while increasing productivity is central to underpin the potential for income growth, marketing channels need to be effective and expansive to establish smallholder-specific demand. A demand-driven approach harnesses the power of the State to support certain sectors that offer specific social and economic benefits (Tendler and Amorin 1996; McCrudden 2004; Bolton 2008).

Effective demand is necessary to provide a long-term pathway of income security and to help smallholders become net food sellers. Prior to the last decade, most food aid was tied to the donors—such as multilaterals and Western governments—with an emphasis on in-kind deliveries. More recently, however, donors have realised the financial and time benefits of procuring food for local or regional distribution. A renewed focus on utilising the productive potential of smallholders through such institutional demand policies has important development outcomes.

This paper situates institutional demand within four key components of social protection for development:

- price stability through the direct procurement of a surplus and the establishment of a regional price benchmark that helps improve access to information for negotiation;
- income effects by remunerative prices present a favourable economic environment for producers to sell their produce and engage with markets, as well as making investments in production capacity;
- food security is enhanced both directly through the procurement of food for local disbursement to vulnerable populations and increased demand for agricultural goods that incentivises production for local and regional markets; and
- farmer organisation plays a critical role in facilitating procurement and providing a space for coordinated learning about production and marketing.

All of these aspects have a certain appeal and seemingly apparent optimism. These aspects should not be considered a panacea to guarantee effective operationalisation of an institutional demand policy or a silver bullet to achieve rural development. Rather, for illustrative purposes, we see institutional demand policies as centring on these four aspects that overlap with goals of social protection and agricultural development.

3.1 INCOME GENERATION

Income insecurity as a financial risk significantly influences the decision-making of producers to invest in production or sell a surplus to the market. Precarious on- and off-farm labour is heavily dependent on the nature and composition of agricultural production and the level of market integration. The high costs of obtaining information on prices, volumes, product characteristics and market players mean that productive investments can be risky, and longer-term income gains are often not realised. For example, producers may be reluctant to buy new seed varieties unknown to them and fail to reap the benefits of new food markets and higher yields.

Morduch (1995) found evidence that households most vulnerable to income shocks focus on more conservative and less profitable activities such as choosing less risky but lower-yielding crop varieties and reducing investments in inputs. Doward et al. (1998) offered a case study on cotton growers in Tanzania that revealed how high information costs led to significant underinvestment in production. Additionally, Dercon and Krishnan (1996) demonstrated that the investment requirements to undertake more lucrative agricultural activities pose a significant structural barrier to poor farmers.

In the event of an income shock, smallholders may make choices to maintain their income despite significant costs to their well-being. Farmers often sell productive assets such as implements, livestock and land, which drastically affects their future productive capacity. Further, when an economy-wide shock occurs and many producers decide to sell their assets, asset prices fall and reduce the potential income generated from this strategy (Dercon 2002). In the agricultural household, income volatility drives the distribution of spending on food, health care and education, which can have lasting effects on long-term household welfare. During periods of crisis poor households often cut their expenditures on health and education

significantly (Chaudhuri et al. 2001). Under income shortfalls consumption is reduced, and the burden may fall disproportionately on the most vulnerable groups such as women and children (Singh et al. 2012).

Institutional demand policies help address income volatility by ensuring a minimum level of demand to sell surplus production. Typically, LRP policies coordinate with producers and agree on the time of purchase and price, which is often based on the national market and negotiated with community groups, local government leaders or farmer organisations (see section below on farmer organisation). This is sometimes referred to as a 'forward delivery contract'.

The knowledge of institutionally based prices compared to monopolistic intermediaries offers more certainty to smallholders, and, as the case studies illustrate, often a higher average purchase price for smallholder agricultural goods. Institutional demand ensures a minimum price and consistent demand for food that is predictable over time and provides a secure source of income to smallholders. It reduces risk and uncertainty related to production and marketing, thus encouraging productive investment and innovation. Productivity gains lead to greater market integration, producing a long-term positive impact on rural livelihoods. Agricultural households with greater income security are then able to invest in human capital and provide a minimum level of household welfare.

3.2 PRICE STABILISATION

Volatility in private food markets produces high risks and has a negative impact on incomes and household food security. External shocks caused by the interplay between several factors such as climate change, population growth and land degradation have generated price uncertainty. Smallholders are particularly vulnerable to volatile prices in the market for both selling their surplus and purchasing food for consumption to compensate for production shortfalls. Many rural households are net food buyers, and soaring food prices mean that a larger proportion of their income is dedicated to purchasing food (Reardon, Timmer, and Berdegue 2008). An estimate by the Food and Agriculture Organization of the United Nations (FAO 2008) indicates that 75 million people fell below the hunger threshold after 2007.

Blein and Longo (2009) demonstrated that the transmission of price rises from international markets to domestic markets depends on the relative shares of domestic demand met by domestic food production or by food imports, as well as the ability of governments to regulate domestic markets. Countries that are dependent on food imports have experienced greater transmission of international commodity prices and are more vulnerable to global food crises such as the doubling of the food price index in 2007–2008 (UN 2011).

Nonetheless, domestic markets also play an important role in reducing price volatility for smallholders. Many domestic markets in the developing world suffer from weak value chains, monopolistic intermediaries, information asymmetries and regional segmentation. Consequently, smallholders often find themselves at the whim of seasonal and regional price fluctuations, with limited information on how, when or why these price trends occur. Regional shifts in markets may require smallholders to respond over time, while seasonal price fluctuations can be especially acute. In months following the harvest, prices typically increase, but most smallholders are often forced to sell immediately following the harvest when market prices are lowest (Bronkhorst 2011, Onumah et al. 2007). This constraint is exacerbated by transportation limitations (Barrett 1997).

Price volatility has a significant adverse effect on smallholders, lowering their incomes and reducing incentives to invest in production, and high transaction costs reduce market integration (Key et al. 2000). The 2007–2008 food crisis revealed that countries with food policies aiming to support domestic production were better able to manage the impact of price hikes (Blein and Longo 2009). Institutional demand helps bolster domestic markets; when it is made at the right scale and timing, it can potentially reduce the negative impacts of price instability (Slater et al. 2013). Coordinated purchases of smallholder produce assists in creating local and regional value chains to connect producers and consumers that support the community economy. The establishment of a price benchmark helps provide more information to smallholders, allowing more room for negotiation and less reliance on seasonal price volatility. Lastly, new marketing channels introduce more competition into local and regional markets, which reduces some of the potential volatility of working with limited access to a certain number of intermediaries and traders.

3.3 FOOD SECURITY

Food security remains a prominent concern on the international development agenda. High food prices limit the purchasing power to buy food, with poor households the group most affected by this situation. In response, vulnerable households reduce their food consumption and invest less in human capital such as health and education. Food price hikes also exacerbate micronutrient deficiencies, undermining children's physical and cognitive development (World Bank 2012; Meerman and Aphane 2012; Lustig 2012). Thus, food insecurity and hunger have a negative impact on future economic and social development.

Historically, international aid increased the availability of food in developing countries by 'dumping' agricultural surpluses from developed countries such as the USA and in Europe. However, domestic procurement increases demand for food, stimulating agricultural growth and strengthening markets for smallholders.

Institutional demand can have an impact on four dimensions of food security: availability, which refers to a country's ability meet its own demand for food; access, concerned with a household's capacity to buy or produce enough food to meet its own needs; utilisation, which is related to the intake of nutritious food; and shocks, meaning the provision of food during crises and emergencies (Coles 2013).

- **Availability:** Institutional demand expands marketing channels and demand for smallholder production, which incentivises production for the market, coordinates local and regional food markets and expands supply.
- **Access:** Institutional demand uses food to advance social objectives through programmes that distribute food to vulnerable groups.
- **Utilisation:** Programmes such as school meals and take-home rations can improve the nutritional status of children and other family members. In addition, locally sourced food is more culturally appropriate and supports the production of eco-regional specific crop varieties that are tailored for veritable environments and climates.
- **Shocks:** Productivity growth stimulated by institutional demand strengthens local food systems and enhances their resilience. In the event of shocks, institutional demand provides an important safety net to producers and consumers by purchasing surplus production and distributing it to poor households.

3.4 FARMER ORGANISATION

Effective farmer organisations can reduce reliance on local traders who leverage market asymmetries due in large part to the inherent remoteness and weak value chains of smallholder farming. The limited access to market information further hinders the ability of smallholders to negotiate a favourable price. A trader can leverage purchasing power over smallholders because a trader relies heavily on transactions with a large number of smallholders. For traders, excluding a single producer who does not agree to the trader's price has little effect on the trader's bottom line. On the other side, the economic strain that poverty causes may limit an individual farmer's ability to hold out for a better price. The prohibitive cost and smallholders' limited means to transport their harvest to regional markets to receive a better price leave them with little option but to sell to traders (Barrett 2008). Storage concerns exacerbate the situation further for individual farmers.

In Uganda, traders expose market asymmetries by acting on early knowledge of regional food shortages or other causes of impending price increases (Hill, Upton, and Xavier 2011). Knowing when food and grain prices are poised to rise, traders can improve their profits during instances of shifting local and regional market prices. Farmer organisations can reduce gaps in market knowledge through coordinated sharing networks within a community and in nearby communities. Moreover, farmer organisations that collect members' harvests for bulk sale are better able to negotiate a price than individual farmers. Some of the case studies illustrate how traders play a key role in using their established networks to collect food from smallholders for collection at vendors or at the facilities of organisations such as the World Food Programme (WFP).

When food shortages arise, food-insecure communities disproportionately suffer from traders exploiting regional scarcity and market volatility (Onumah et al. 2007; Hill et al. 2011). However, pre-harvest agreements between farmer organisations for LRP can help reduce the impact of food price shocks within food-insecure communities by helping to at least guarantee a meal for school-aged children. School feeding arrangements, which are discussed at length in the following section, are the primary modality through which smallholders and recipient communities may experience less distress during price shocks.

Along similar lines, farmers often rely on 'distress sales' in which food crops are sold to traders immediately after harvest when prices are lowest (Bronkhorst 2011). This is done for multiple reasons that are typically outside their control. The first is that many smallholders must borrow money in the months leading up to the harvest to cover costs. Local traders often lend money in the absence of formal or alternative banking services and can thus leverage the immediate need of smallholders for a share of the future harvest. Other farmers also sell most of their harvest immediately after the harvest because of low funds and to take advantage of the presence of traders. Knowledge about assured payment, and in some cases local saving programmes, helps reduce 'distress sales'.

Even in years of excellent production, reliance on traders can also hurt smallholders without sufficient organisation and coordination within the market. When markets become saturated, traders may refuse to purchase from smallholders due to small and risky profit margins. With many smallholders lacking adequate and appropriate means to transport or store their harvest, the investment in that year's harvest risks spoiling. Traders, of course, know this and can benefit from farmers' marginalised position within the market. Coordinated delivery of food to organisational bodies (i.e. the WFP or national organisations) for national or regional distribution can help mitigate the impact of locally saturated markets on smallholders.

In some cases, positive spillover effects such as learning and increasing food crop diversity arise from maturing farmer organisations involved in an LRP programme. While farmer organisation is often desirable for efficiency matters, problems such as quality control remain a concern.

TABLE 1

Summary of institutional demand benefits for smallholders

Direct benefits	Indirect benefits
<ul style="list-style-type: none"> • Increased demand for food crops • New marketing channel • Reduction in risk and income uncertainty • Improved access to training, credit and technology • Higher productivity • Increases in wages and incomes • Agricultural growth 	<ul style="list-style-type: none"> • Increased demand for non-food goods and services • Lower food prices • Local economic growth • Social capital formation

Source: Summarised for our purposes from Sumberg and Sabates-Wheeler (2010).

4 CHALLENGES TO INSTITUTIONAL DEMAND

The benefits of institutional demand to smallholders are highly dependent on the procurement model used by governments. Buying food directly from associations and cooperatives reduces the role of private intermediaries, ensuring a more favourable price for producers. In addition, farmer organisations can help overcome transaction costs, enabling small-scale producers to engage more fully in formal markets. Outside cooperatives, certain LRP modalities allow farmers to deliver a specific amount of produce at a fixed price. This arrangement offers several advantages, since it provides a market channel and a guaranteed income, reducing risks and uncertainties. Nonetheless, procurement from farmer organisations can be riskier and costlier than procuring it from private traders or corporate intermediaries. Splitting tenders into smaller bids leads to supply fragmentation, which entails processing more bids, assessing and monitoring the quality of several different lots and organising transportation. There are also costs associated with providing training programmes to cooperatives, and higher default rates among farmer groups, as they are more vulnerable to risks. However, these costs can decline with appropriate investments in capacity-building strategies targeting smallholder organisations.

Another important feature of designing procurement policies is the level of decentralisation. Very decentralised approaches—where food is procured at the community level using schools or civil society organisations (such as farmer organisations or local NGOs)—are likely to produce more locally appropriate procurement systems. They can ensure that the food purchased matches local preferences and needs and stimulates community ownership, as shown in section 5.3 in the case study of Home Grown School Feeding (HGSF) in Burkina Faso (USDA 2012). In addition, transportation and storage costs are lower, as social capital is used to carry out such duties.

However, there are also a few challenges associated with this model (Bundy et al. 2009): it may be difficult to guarantee a local supply of food in food-insecure areas or in animal grazing regions; reliance on social capital may actually burden communities and schools where mothers and teachers are responsible for all school meal activities including food preparation and distribution; and it might be difficult to control the quality of the food supply and address

possible defaults on contracts and higher transaction costs (Espejo et al. 2009). In Burkina Faso, however, women (often mothers of children in school) purchase chickpeas from community members with vouchers provided by the HGSF programme.

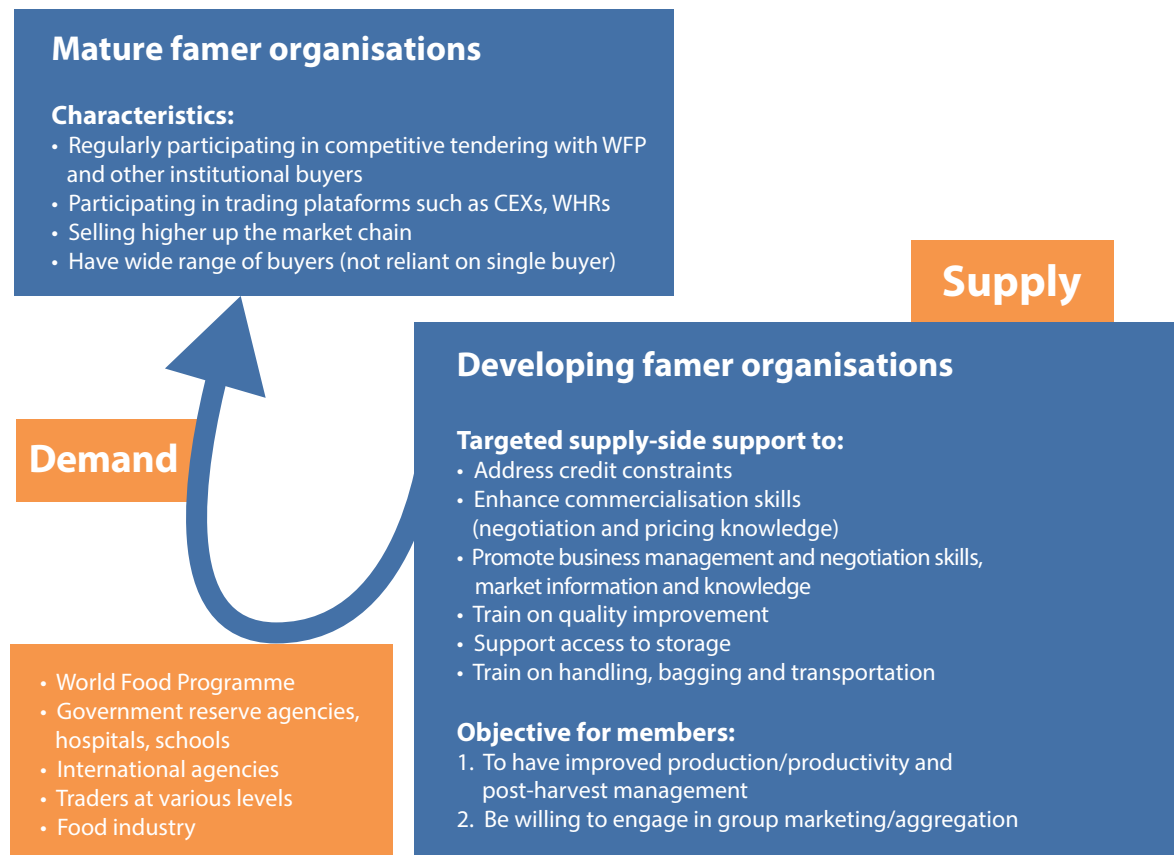
On the other hand, procurement through government agencies at the regional or national level offers greater objective authority over the quality and quantity of food, since they use formal purchasing processes and are more likely to have received more substantive quality assurance training (*ibid.*). The rules that shape the tendering process are key to achieving rural development outcomes, as they can encourage or hamper the participation of small-scale producers (Sumberg and Sabates-Wheeler 2010). Bureaucratic systems and burdensome requirements make it difficult for small producers to participate without effective targeting. However, the larger scale of the demand is more likely to stimulate production and generate backwards and forwards linkages. In addition, food can be transferred from surplus areas to food-insecure ones.

The potential gains for small-scale producers are only realised if farmers are able to meet institutional demands by achieving higher yields, which requires agricultural production policies (Birner and Resnick 2010; World Bank 2007). Risk management schemes that protect farmers against the adverse effects of climate change are also key to guaranteeing a reliable supply of food (Vermeulen et al. 2012). Investments in infrastructure and utilities such as roads, electricity, water and sanitation and information and communication technologies (ICTs) are also crucial to achieve agricultural growth (IFAD 2011). The ability of farmers (and especially women) to participate in school feeding programmes also depends on the strength of farmer associations and cooperatives; thus, technical support and training to improve management skills are another important element of supply-side measures (Penunia 2012; Hellin, Lundy, and Meijer 2009).

There are several potential risks involved with procuring food from small-scale producers. The price of staple commodities may rise due to the increase in demand, which can have an adverse effect on producers who are net food buyers. HGSF programmes can also incentivise farmers to sell a larger proportion of their harvest, threatening household food security. It may also be difficult to ensure a constant supply of food to schools, as small producers are more vulnerable to sudden shocks such as floods, droughts and natural disasters. Policies to improve productivity and enable farmers to respond to market demands are crucial to the success of HGSF strategies. In light of this, HGSF programmes must purchase a small amount of food from smallholders and scale up as the programme develops. This would allow time to learn about the best procurement practices and give producers a chance to benefit from agricultural development policies.

Dependency is a significant concern for policymakers. Figure 1 illustrates how the WFP envisages smallholder organisations evolving out of the Purchase for Progress (P4P) programme into independent entities in the regional agricultural market. While the issue of dependency is dealt with differently depending on the context, there are several important issues to consider. First, many programmes, such as Brazil's Food Procurement Programme (PAA, discussed at length below), do not aim to be the primary source of income for many producers. In that capacity, income derived from procurement has a time limit (annually or per growing season) and a minimum price per producer. Second, the support of institutional demand via LRP policies aims to build market linkages and new supply chain networks that will allow producers to expand the marketability of their produce.

FIGURE 1

The WFP's P4P graduation model as a response to dependency

Source: WFP (n.d.).

Institutional demand aims to coordinate producers and consumers, with the long-term goal of establishing market linkages in local and regional settings. Increased demand for local and regional food will help promote increased farmer productivity and less reliance on imported food or food aid. Further, the four components of institutional demand for development (income generation, price stabilisation, food security and farmer organisation) are all features of inclusive agricultural growth that promote smallholder development and fight hunger. Nevertheless, the design and implementation of institutional demand policies is a crucial factor in determining the level of impact they might have, given the wide range of country contexts.

5 MODALITIES OF LRP

It is important to avoid any notion that LRP could be implemented as a rigid, singular modality. Along the same lines, LRP policies should seek to support existing social structures (i.e. farmer groups, local NGOs) and agricultural practices, reducing the disruption to complex and often misunderstood rural livelihoods. While LRP policymakers and participants continue to learn from maturing pilot projects and evolving policies, several modalities have in part formed organically from domestic trends and needs. In this section, we explore several modalities, to demonstrate LRP in a local context, as well as the differences between the modalities.

In each modality, we will highlight relevant social protection components (income effects, price stabilisation, food security and farmer organisation) attributable or contributable to the introduction of an LRP policy.

We focus primarily on national programmes, but see Annex 2 for a table of international aid programmes, with some design features and results. The US government funded all projects listed in Annex 2, but they have been implemented by international NGOs (i.e. the WFP, Catholic Relief Services) and private businesses (i.e. Land O'Lakes), with the support of Cornell University monitoring and evaluating several of the projects. Annex 1 describes the type of tender and process the coordinating body undertook to procure and eventually distribute the food. This annex focuses primarily on the USDA's various types of tendering and definitions.

Several of the modalities were integrated into existing food chains and/or decentralised to the point that monitoring procurement and evaluating the producers' experience was difficult. However, some programmes—namely, in Burkina Faso (see section 5.3), Guatemala, Mali (P4P and school feeding programme), Uganda (see section 5.5) and Malawi—provide significant insight into producers' positive perceptions, increased incomes and improved farming practices (i.e. storage and quality techniques). The case studies that follow expand on these benefits and others.

The amount of evidence of social protection from HGSF programmes is due to the relative abundance of such programmes and corresponding literature. To date, school feeding programmes are some of the most popular LRP policies, with clear synergies between smallholder farmers and food-insecure populations. The bulk of available evidence on LRP policies, and the focus of the following section, comes from these experiences.

5.1 SCHOOL FEEDING PROGRAMMES

5.1.1 School feeding

Despite all efforts to achieve the Millennium Development Goals, there are still 842 million people in the world who do not have enough to eat (FAO 2013). According to the WFP (2013), 66 million children attend classes hungry in developing countries. Hunger and malnutrition have long-lasting effects on people's well-being and health, as well as their productivity. One intervention commonly used by governments and international development institutions to address this problem is Food for Education (FFE) programmes. These initiatives provide food to schoolchildren and, in some cases, their families in exchange for enrolment and attendance in school. Poor households are often unable to invest in nutrition and education, and school feeding is an attempt to increase these investments through the free provision of food (Adelman et al. 2008).

In the wake of the 2008 financial crisis governments in developing countries strengthened their efforts to provide a social safety net to vulnerable populations. One of the most common strategies was the implementation of school feeding programmes. The World Bank and the WFP have defined school feeding as: "targeted social safety nets that provide both educational and health benefits to the most vulnerable children thereby increasing enrolment rates, reducing absenteeism and improving food security at the household level" (World Bank 2012). Currently all governments in the developing world are seeking to provide meals to schoolchildren (World Bank 2009).

School meals, therefore, have two main purposes: (1) providing a consumption transfer to children who are often food-insecure and/or malnourished; and (2) encouraging children from poor households to attend school. According to Sabates-Wheeler and Devereux (2008), school feeding programmes can be considered a social protection intervention that integrates provision, prevention and promotive measures. They offer relief from deprivation through hunger alleviation, and they promote livelihoods by encouraging school attendance, enhancing employment opportunities in the future and providing a safety net to protect poor children and their families from shocks such as droughts and conflicts.

The design and implementation models of school feeding programmes vary greatly from country to country. However, the two key features are: (1) school meals, where children are fed in school; and (2) take-home rations, where children receive food parcels when they attend school. In the case of school meals, children need to attend school every day, while take-home rations require students to attend only a specified number of days. Some school feeding programmes combine school meals and take-home rations to promote food security in the family and provide stronger incentives to attend school. In many cases, meals and snacks are fortified to deliver micronutrients that are often missing from children's diets.

There is a wide range of literature on the benefits of school meals. In relation to educational outcomes, studies show that school feeding can increase school enrolment and attendance, improve educational achievements and lower dropout rates (Adelman et al. 2008; Jomaa et al. 2011). Research has shown that these effects are highest among poor households where food comprises a significant portion of total household expenditures (Sabates-Wheeler and Devereux 2008). Some programmes have reduced the gender gap in school attendance (Gelli et al. 2007; Kristjansson et al. 2007). Bundy et al. (2009) demonstrate in their review that school feeding can improve children's health, nutrition and food security. When school meals are coupled with micronutrient fortification and deworming, they reduce deficiencies such as iron and vitamin A and improve children's development. These effects are stronger among children who are chronically undernourished (*ibid.*).

Alderman and Bundy (2012) find that school feeding is an effective social safety net for recipient communities because it can promote human capital development by securing access to education and also provide an income transfer to poor households. In addition, these programmes can be easily scaled up in the case of crises. The WFP (2013) estimates that this transfer contributes on average 10–15 per cent of household expenditures. This income support strengthens the ability of vulnerable households to withstand shocks. Consequently, many countries include HGSF as part of their social protection networks (Bundy et al. 2012). Table 3 presents a summary of the social protection benefits of school meals.

Geographical targeting is the most common criterion in school feeding programmes. This type of targeting is the least expensive and complex, as it does not require means testing or monitoring mechanisms to ensure that the benefits are reaching individual children, or identifying changes in circumstances that can affect eligibility. In low-income countries governments usually devise poverty and food security maps which also integrate educational needs. Therefore, once the priority areas are selected, all schools and all children attending those schools will receive the benefit. In many cases, school feeding programmes provide take-home rations to especially vulnerable groups such as girls, HIV-positive children and specific ethnic groups.

In the case of WFP programmes, geographical targeting also predominates. The programme incorporates primary and secondary data to design vulnerability and food security maps which also identify areas that are affected by conflict, natural disasters, severe droughts and HIV.

Once the areas are selected, schools are screened based on an implementation criterion, which assesses the level of parental interest, school infrastructure and accessibility. Since the most vulnerable schools are unlikely to meet this criterion, the programme implements a series of capacity-building strategies to enable the provision of school meals.

TABLE 3

Summary of the social benefits of school feeding programmes

Provision	Prevention	Promotion	Transformative
<ul style="list-style-type: none"> • School feeding provides hunger alleviation, and when it is associated with other measures can address malnutrition 	<ul style="list-style-type: none"> • School feeding allows families to retain children in school, since the food provided reduces the pressure of food provision at home • In case of shocks or emergencies, school feeding may prevent children from leaving school 	<ul style="list-style-type: none"> • School feeding promotes food security and human capital formation at the same time • Better-educated farmers produce higher yields • Educated workers are more productive and earn higher wages 	<ul style="list-style-type: none"> • School feeding can address gender gaps in education by targeting interventions on girls • Community participation in school feeding programmes can strengthen social capital

Source: Devereux et al. (2010).

Research by the WFP (2013) provides an overview of the targeting mechanisms in countries with school feeding programmes. The study indicates that 74 per cent of lower-middle-income countries and 91 per cent of low-income countries use geographical targeting in their school feeding programmes. All of the 105 countries that participated in the survey reported targeting primary school children. Almost half cover primary school children exclusively, while 29 per cent provide meals to pre-school and primary school pupils. Only 11 per cent of the countries cover both primary and secondary school children. The remaining 11 per cent offer the benefit to all three levels of schooling.

When school feeding programmes target the poorest areas of a country, they can result in most of the benefits reaching poor children. However, as programmes expand, they are likely to include a higher proportion of non-poor children. This is especially relevant to upper-middle-income countries, which have more extensive school feeding programmes. In most cases, these countries adopt a combination of geographical and individual targeting. Chile is a good example of this strategy. Schools are selected based on a school vulnerability index built on socio-economic household data. A school committee that includes parents and teachers is responsible for identifying vulnerable children in each classroom. The rest of the children receive a meal, but at a cost. The evaluation of this targeting model has shown that 80 per cent of the expenditure on school feeding is concentrated on the poorest pupils (Kain et al. 2002).

In high-income countries school feeding is usually available in all schools in the public education system; however, it is not free to all children. The only exceptions are Sweden and Finland. Countries use individual targeting mechanisms to identify children who are eligible for a free school meal and usually target low-income households, children in care and ethnic minorities. This type of targeting is more likely to direct the greatest proportion of resources to the most vulnerable children. Since some school children pay for their meal, there is an element of cost recovery where better-off households subsidise poor ones. However, individual targeting requires more complex assessment systems and, therefore, is out of reach for most developing countries.

5.1.2 Home-grown school feeding

Traditionally, foreign aid supported the procurement of food for school feeding programmes. More recently, however, the research into school feeding has highlighted the potential benefits of nationally run and funded programmes to procure food from local agricultural systems (Sumberg and Sabates-Wheeler 2011). School feeding initiatives have thus shifted towards finding synergies between both rural development and social protection objectives. The current HGSF agenda aims to integrate social development, poverty reduction and local agricultural growth. The WFP has defined HGSF as: “a school feeding program that offers food produced and purchased within a country” (Espejo et al. 2009, 12). However, other definitions clearly state the link between the school feeding programmes and agricultural development:

“HGSF is the combination of local agricultural production (local and regional purchase-LRP) and traditional FFE (Food for Education) programmes. Its basic premise is that low farm productivity, poor agricultural market development and poor educational and nutritional outcomes are mutually reinforcing and they jointly determine key aspects of rural hunger and poverty” (Slater et al. 2013); “HGSF is conceived of as combining two distinct policy objectives: the first is a social protection objective focused on the health and nutritional status of school aged children, while the second focuses on the economic and technical transformation of small scale agriculture” (Sumberg and Sabates-Wheeler 2010).

Many high- and middle-income countries have well-established, government-funded HGSF programmes (Espejo et al. 2009). For example, Scotland, Italy and the USA all have established school feeding programmes that procure food from domestic producers (Morgan and Sonnino 2008). The main goal of these initiatives is to promote healthy eating, prevent obesity and improve educational outcomes.

In middle-income countries, HGSF is considered a strategy to promote rural development as well as a social safety net. In Indonesia the government implemented an HGSF programme during the financial crisis which purchased cassava, banana and rice from local producers, generating benefits to poor communities (Studdaert et al. 2004). After the 2001 earthquake, Chile began an HGSF scheme in the south of the country as part of a package of support measures. Local farmers now supply nearly all of the vegetables required by the programme (Espejo et al. 2009). Brazil has also been successful at engaging family farmers in its HGSF programme. In 2011 the average proportion of federal funds spent on purchases from smallholders was 29 per cent—close to the 30 per cent target established by law (IPC-IG 2013).

Within the last decade, HGSF programmes have been implemented in dozens of African countries. In 2003, HGSF programmes became a flagship strategy of the Comprehensive Africa Agriculture Development Programme and the New Partnership for Africa’s Development (NEPAD). Research has attempted to quantify the benefits generated by HGSF in sub-Saharan Africa. Economic modelling exercises estimated that the increase in demand would produce benefits worth USD2.6 billion per year at 2003 food prices. Of this amount, 57 per cent would go to consumers, and 43 per cent would go to producers (Ahmed and del Ninno 2004).

HGSF programmes are a strategy that can promote synergies between rural development and social protection. Besides benefits for recipient communities, HGSF programmes that use LRP can benefit smallholder farmers. The increase in demand for food

and stable prices lead to higher incomes among small-scale producers and create incentives to engage in input and output markets.

5.2 HGSF IN LATIN AMERICA

Latin American countries have been leading the way in the development of HGSF within the developing world. FFE programmes have been implemented in Latin America since the 1950s as part of governments' social protection policies. The main purpose was to guarantee food security and access to education for school-aged children. More recently, these programmes have integrated other goals such as promoting access to health care, raising poor people's incomes and rural development. According to the WFP, school feeding programmes benefit around 80 million children in the region.

International and multilateral organisations such as the WFP, the World Bank and the Inter-American Development Bank previously funded the school feeding programmes. In the last decade, however, governments have covered the bulk of the expenditure through national budgets. Nevertheless, multilaterals and NGOs have been providing additional resources to cover gaps or incremental costs. The total amount allocated by eight Latin American countries⁴ in 2011-2012 was USD938,510,000, while the total expenditure that was realised in this same period was USD230,770,000.⁵ The costs per child per year vary considerably between countries, ranging from USD10.98 to USD131.79. The difference is attributed to the different types of school meals provided to children and the relative cost of food within and between countries.

HGSF programmes aim to provide food to children and improve school enrolment, but they also include programmes related to health such as deworming, vaccination and oral hygiene. Some programmes integrate other initiatives such as teacher training, community gardens, and nutrition information for parents. One of the main goals is to promote community participation through committees, parent associations and school boards. These organisations play a key part in the management of school meals, and most families participate in the preparation and distribution of food to schools, as well as providing additional food to supplement children's diets. All food is sourced within the country, and some programmes have very decentralised procurement models.

Recent research published by the FAO (2013) explored HGSF programmes in eight Latin American countries. Many of these initiatives are fairly recent; therefore, in most countries purchases from smallholders still represent a small proportion of the total expenditure. Most of these programmes aim to procure food from family farmers and promote agricultural development. There are two examples in the FAO study—Bolivia and Honduras—that have produced successful experiences of local procurement of food from smallholders.

5.2.1 Bolivia

Family farming in Bolivia is responsible for most of the food production in the country, including cereals, fruits, vegetables and dairy products. Family farms are defined as production units that rely predominately on family labour, provide most of household income and employ traditional agricultural practices. The Ministry of Rural Development estimates that 93.7 per cent of farms in Bolivia are family farms.

In 2009, Bolivia reformed its public procurement law to facilitate purchases from small business and family farmer organisations. It created quotas for national producers and smallholders and allowed local governments to devise their own tendering process rules, buy directly from local suppliers and reduce the amount of documentation required. It also established that food procured for school feeding programmes and other food security initiatives must come from national producers and include traditional grains such as maize, soy, quinoa and amaranth. The research by the FAO (2013) found that the larger urban municipalities in the country use public tendering processes to select suppliers, which in most cases favour large enterprises. However, small and medium-sized municipalities use direct purchase modalities that tend to benefit smallholders. Municipalities with a population of less than 5000 people purchase 12 per cent of food for school meals from family farmers, while municipalities with between 5000 and 15,000 inhabitants procure 22 per cent. In larger towns with 15,000 to 50,000 residents, 44 per cent of the supply comes from smallholders.

The FAO study found that farmers were able to supply a wide range of produce such as rice, maize and quinoa, as well as processed foods such as biscuits and dairy products. In the municipalities of Yamparaéz, Zudanez, Tomina and Villa Alcalá local governments have procured organic produce from small-scale farmers as a strategy to strengthen their participation in organic food markets.

The government in La Paz also promoted organic production by smallholders by incorporating organic bananas into the school meal menu. The Organic Producers Association of Alto Beni (UNABENI) and Biodiversity International created the BanaBeni, a profit-oriented enterprise owned and operated by UNABENI. The goal was to support smallholders to produce and market organic bananas. Biodiversity International implemented a project to provide technical assistance, training and machinery to BanaBeni associations. Although the school meal programme does not pay a premium for organic produce, the stable price constituted an important incentive for the association. The BanaBeni is the primary supplier of bananas to the school feeding programme in La Paz. This experience has generated several positive outcomes for smallholders (Biodiversity International 2012). Farmers more than doubled the area devoted to bananas to respond to the demand, and adopted more efficient harvest and post-harvest practices. The higher-quality crop increased the average price in the region. They were able to sell 40 per cent of their production to the company, which accounted for 56 per cent of their income. Over 85 per cent of producers reported higher incomes and raised consumption. BanaBeni associates spend more than non-affiliates on food items such as milk and meat (*ibid.*).

5.2.2 Honduras

In Honduras, the government implemented the Glass of Milk Programme (GMP) to complement school meals. The main goal of the programme is to improve the nutritional status of children at pre-school and primary level by increasing their protein and calcium intake. Additionally, the programme also aims to promote rural development by making direct purchases from small-scale dairy producers. There is no formal definition of family farming in the country; however, the government considers all producers with 3 hectares or less of land as family farmers. According to this parameter, 60.5 per cent of production units are actually family farms, and 75 per cent of dairy production comes from family farmers.

In 2012 the GMP covered over 638,000 children in 143 different municipalities. It offered producers a fixed price throughout the year, thus guaranteeing an income. The programme is totally funded by the government. The total expenditure in 2012 was USD7.8 million, with 67 per cent of that budget allocated to purchases from family farmers. The main requirement to participate in the programme is to be certified by the National Agricultural Health and Safety Service. In many cases, producers formed groups to create processing and storage centres that facilitate direct purchases of milk by the GMP. In rural areas there is a high level of participation in the programme among smallholders; however, in the two main urban areas of Tegucigalpa and San Pedro Sula large commercial producers are still controlling a majority of the market. The Agriculture and Livestock Secretariat has implemented a series of projects to provide technical assistance, infrastructure and finance to producers involved in the GMP. The programme has become one of the best experiences of institutional demand for smallholders in Central America (FAO 2013).

The procurement model used in both Bolivia and Honduras is very decentralised. Municipal governments are responsible for designing and implementing their own school feeding programmes, with the resources coming from national budgets. Local governments and school boards are responsible for purchasing, storing and distributing food to schools, as well as guaranteeing the safety and quality.

BOX 1

Creating appropriate legal frameworks

An appropriate legal framework is a key factor for successful procurement policies that aim to purchase food from smallholders. Several types of legislation constitute such a framework, including contract law, health and safety regulations, and rules relating to cooperatives and producer associations.

Public procurement processes are usually heavily regulated to avoid corruption and waste. However, this legal structure can pose severe obstacles to public purchases from smallholder farms and producers. In many cases, they have deterred smallholder participation in school feeding programmes, despite their capacity to respond to the demand. In addition, the legislation regarding producer organisations often creates bureaucratic procedures and complex accountability mechanisms. This means that many farmer groups are unable to obtain formal status and cannot carry out financial transactions with the State. To address these challenges, governments can implement policies that favour smallholders in public procurement processes. Some examples are:

- allocate specific percentages or quotas of the total amount of public purchases to smallholder farmers;
- promote tendering processes designed specifically for smallholders;
- subdivide large purchases into smaller lots, so that small-scale producers can respond to the demand;
- remove bureaucratic requirements, and facilitate direct purchases from smallholder organisations;
- allow for exemptions to bidding processes; and
- modernise the legislation related to cooperatives and producer organisations.

Another crucial aspect is creating a legal framework that defines and characterises family farmers, institutionalising this group of producers and their role in rural development (Rozenwurcel and Drewes 2012).

School feeding programmes are not universal in either country. Governments use geographical targeting to select the poorest municipalities according to their Human Development Index. In both cases, school feeding targets pre-school and primary school children in the public education system. In Honduras, out of a total of 20,931 schools in

the country, GMP covers 10,287, most of which are in rural areas. In Bolivia, school feeding covers approximately 87 per cent of schools in the country.

The success of the linkages between smallholder agriculture and school feeding programmes is largely attributed to the favourable legislative framework for public procurement. In both countries there were laws that aimed to create markets for national producers and increase the participation of small and medium-sized enterprises (SMEs). They allowed local governments to purchase directly from producer organisations and family farmers without burdensome tendering requirements. In addition, governments in Bolivia and Honduras prioritised public procurement of food from national producers in their public policies, thus facilitating the implementation of HGSF programmes.

5.3 HGSF IN BURKINA FASO

One of the initial programmes to receive US support for LRP is a school feeding programme in Burkina Faso. The Local Education Assistance and Procurement (LEAP) programme, with assistance from Christian Relief Services (CRS) and Afrique Verte, procures three products: millet, cowpeas and vegetable oil. The project procures these items for lunch programmes for 364 schools in the Gnagna and Namentenga provinces of Burkina Faso (Upton et al. 2012). The project is unique in that it offers support to schools that would have otherwise been omitted from the USAID project, the Multi-Year Assistance Programme (MYAP). The MYAP continues in the same region, albeit along an arbitrary delineation of target schools (ibid.). The particular situation has allowed for a robust assessment of in-kind foreign food aid versus three modalities of LRP within the LEAP programme: soft tender, hard tender and vouchers (see Lentz et al., 2012, 3; see also Annex 1 for definitions of these terms).

Before comparing the LEAP programme with in-kind food aid of the MYAP programme, a brief description of agriculture and food security in the two regions in Burkina Faso allows for a more meaningful explanation of the concerns with LRP explored by affiliates of Cornell University's Learning Alliance team (Lentz et al. 2012; Upton et al. 2012; Violette et al. 2013) and the funding partner, the United States Department of Agriculture (USDA 2012).

Most farmers in Gnagna and Namentenga provinces are net buyers of food (Upton et al. 2012). After the harvest ends, local trading activities decline, and farmers must incur (prohibitive) transportation costs to bring goods to trading hubs in cities (ibid.). Moreover, waiting for higher market prices in the months following poses some risks associated with storage (insects, spoilage etc.).⁶ Thus, most smallholders have limited market options.

There are two reasons for targeting school lunch programmes in the area: first, many families cannot afford the lunchtime meal; and, second, many families live too far from schools to allow their children to return home for lunch. The USDA pilot project provides millet, cowpeas and vegetable oil to 364 schools within eight departments in Gnagna and Mamentenga to feed over 58,000 students 20 meals per month over a three-month period. The vegetable oil was purchased through an advertisement in a newspaper (hard tendering) and does not involve smallholders. The programme used a soft-tendering approach for millet and cowpeas to "harness the demand stimulus associated with LRP to support smallholders, small processors, or farmer based organizations" (Lentz et al. 2012, 3).

Millet for the school lunches came from the Boucle de Mouhoun region, which is considered a region of surplus production. In this region, LEAP staff worked with the NGO Afrique Verte to identify four farmers' organisations or cooperatives, each of which contained between 22 and 87 associations (Upton et al. 2012). Each association has between 600 and 5000 members. As part of the outreach, LEAP staff introduced the programme and CRS as a potential purchaser over the course of three meetings that included the terms and conditions related to the quality and delivery of the millet, as well as negotiations over prices after each association determined the amount they anticipated contributing.

The procurement of cowpeas came from the same two regions of the school feeding intervention. Again, staff from LEAP and Afrique Verte used their networks to identify potential farmers' associations. All 22 associations contacted by the LEAP programme staff accepted the offer to sell their surplus cowpeas. In this case, frequent visits by LEAP staff to farmers' associations, to reaffirm the need to purchase cowpeas at the agreed future date, replaced formal contracts (USDA 2012). At the time of delivery, parent-teacher associations used previously distributed vouchers to purchase the cowpeas. In this "ultra-decentralized" approach of "soft-tendering" (Lentz et al. 2012), the actual purchasers were most often women cooks who volunteered at the school their children attended.

Violette et al. (2013) and Upton et al. (2012) found that recipients (in this case, school cooks) prefer the products delivered by the LEAP LRP programme compared to the bulgar wheat and lentils shipped from the USA as part of the USAID MYAP programme. Upton et al. (2012) found that students and cooks (several of whom were also mothers of students) were more satisfied with the local LEAP commodities, despite requiring additional costs (i.e. fuel, water, oil, salt) and taking more time to prepare than the foreign commodities as part of the MYAP programme.

Violette et al. (2013, 38) noted that this is especially true for the "least well-off recipients", who preferred rations provided by the LRP project in Burkina Faso, as well as LRP projects in Guatemala and Zambia: "The least well-off individual recipients were systematically and statistically significantly more satisfied with locally sourced rations than better-off or the average recipient... stronger relative preferences for locally-sourced foods as compared to US-sourced rations."

The ideal aim of LRP projects is to target the most vulnerable households—both producers and food aid recipients. This lesson suggests socio-economic and cultural heterogeneity in recipient communities and that locally produced food aid might be more acceptable than foreign imports across a population. This is important, according to Violette et al. (2013, 38) because of "the belief that resource-constrained recipients might have more difficulty adapting their diets, food preferences, and practices to accommodate foreign-sourced commodities than varieties with which they are more accustomed".

While the quality of locally procured food aid is a commonly cited concern (Barrett 2007; Harahan 2013), Upton et al. (2012) found that 3 per cent of the bulgar wheat and 5 per cent of the lentils were rejected at port, never to be replaced. In the case of the LEAP programme, non-compliant locally procured food could be and was returned to suppliers for treatment or replacement. For deliveries of millet and cowpeas, only one vendor of each failed to comply with the formerly agreed terms (USDA 2012)

While cultural or regional taste preferences are important, the cost and timeliness of product delivery are a foremost concern to policymakers. The establishment of relations

with farmer associations, drafting contracts and testing products all took time. The average time of LEAP deliveries took 15 weeks (Upton et al. 2012). Unique to the first year is that identifying and solidifying agreements with suppliers took six weeks. In comparison, food shipped from the USA as part of the MYAP school feeding programme in the same region took on average about 35 weeks. A political crisis in Côte d'Ivoire added as much as 16 weeks to the shipping time due to blocked and overcrowded ports. If we annul the idiosyncratic delays of this particular year, given the political crisis and the establishment of LRP in its first year, we could assume that the same LRP project might require only about 10 weeks compared to 20 weeks for transoceanic shipment for the MYAP programme.

There are two major cost concerns in dealing with LRP and the transoceanic delivery of food aid. The first concern for policymakers is the cost of shipping US food commodities versus locally procuring foodstuffs. In comparison, the LEAP LRP programme provided on average 60 rations per child at a rate of USD9.48, while the USAID MYAP programme cost USD15.41 (ibid.). This means that LEAP costs 38 per cent less while also providing more fat and protein per ration than the MYAP programme.

The second cost concern regarding LRP, and most germane to this study, is the benefits smallholders receive for the crops procured and their impact on local markets. The USDA (2012) evaluation noted a sharp rise in millet prices of 45 per cent in the week before procurement, and another of 25 per cent in the week following procurement. While this time of year in late March and early April is when crop prices typically continue to rise, the amount in this particular year led USDA evaluators to not rule out the influence of the LEAP LRP programme. According to Upton et al. (2012), however, their evaluation of prices across the procurement, non-procurement, distribution and non-distribution markets found no statistically significant correlation with price increases. While their study appears to show the potential for the LRP programme to have increased the price volatility of millet in distribution areas, any rise correlating with procurement from an LRP programme could not be determined or not found attributable at a statistically significant level. Moreover, the evaluation did not detect an impact on low-income consumers.

Farmers may have incurred costs for storing their products longer than had they sold them immediately following the harvest, but for two reasons increased their revenue by waiting for the LRP purchase. First, cowpeas were sold at market prices. Since the prices for cowpeas at the predetermined time of purchase were higher than immediately after the harvest, farmers earned extra revenue. Second, farmers saved money by not having to travel as far to sell their income and made fewer transactions, streamlining their sales.

5.4 THE WFP P4P PROGRAMME

The WFP's P4P programme, coupled with its HGSP programme, aims to purchase food for school feeding from local small-scale producers. Thus, the main goal of the HGSP programme is to link school meals with agricultural production. In addition to the educational and nutritional objectives associated with school feeding, the WFP's programmes focus on three main areas: strategic procurement, agricultural development and policy development.

The interaction between the three strategic areas will provide support to farmers to produce surpluses and engage in formal markets. However, agricultural development outcomes will also depend on the institutional capacity and the political support for the HGSP programme, which ensure its long-term sustainability.

TABLE 5
World Food Programme HGSF framework

Focus area	Main goals
Strategic procurement	<ul style="list-style-type: none"> • Buy directly from smallholder organisations and reduce the roles of other participants in the supply chain that diminish their purchasing power; • Create an enabling environment for small-scale farmers to access markets by providing market information and training, promoting aggregate supply and advocating for rules, regulations and incentives for smallholder procurement.
Agricultural development	<ul style="list-style-type: none"> • Increase productivity; • Expand market access; • Produce better-quality crops; • Adopt new technologies; • Manage natural resources; • Mitigate risks; • Invest in a sustainable way.
Policy development	<ul style="list-style-type: none"> • Position the programme within sectoral mandates; • Identify an institutional home for the programme to be accountable for programme design and implementation; • Strengthen institutional coordination mechanisms to coordinate the actions of different stakeholders, particularly agriculture and education; • Develop a national strategy for HGSF to mainstream the approach, facilitating broad participation and sustainability; • Obtain legislative support for HGSF to establish its legitimacy and allocate resources; • Develop a national awareness campaign to ensure broad understanding of the programme and support for continued funding.

Source: Espejo et al. (2009).

At the initial stages, programmes purchase a small proportion of food from small-scale producers and then increase the amount as the programme develops. This is a strategy to ensure a reliable supply of food to schools and avoid price rises due to the increased demand. Food is usually procured from productive regions where there is a food surplus. In time and with the support of the programme, producers in local areas are incorporated. HGSF programmes usually target farmers who:

- own less than 3 hectares of land;
- face food insecurity and/or are living on less than USD2/day;
- have a reputation for hard work;
- have the potential to increase yields;
- belong to or are willing to join a membership-based cooperative; and
- are located in areas where other agricultural aid agencies are present.

On the supply side, HGSF programmes may target poorer regions, communities or households but need not restrict wealthier farmers interested in participating. Typically, HGSF programmes are initiatives that *integrate* and *optimise* existing policies in the education and agricultural sectors.

Therefore, WFP funding focuses on financing any incremental costs. National governments play a key role in the design, implementation and monitoring, while the WFP provides support in areas where there is weak capacity such as logistics, procurement and targeting.

5.5 THE WFP P4P IN UGANDA

5.5.1 Conflict, markets and LRP

Conflict disrupts the fabric that holds rural livelihoods together, and reconstituting components of a food-secure, agricultural livelihood can be especially challenging and subject to elite capture of resources. Other challenges are physical threats, such as lingering outbreaks of violence, landmines and damaged infrastructure. As formerly displaced people return to their homes and livelihoods, essential components may be missing. Institutional demand in such cases can play a key role in supporting smallholder farmers to pick up the pieces left by conflict.

In Uganda's northern region of Acholi—where 25 per cent of households report at least one family member abducted by the Lord's Resistance Army (LRA) during the past decades of conflict—formerly displaced farmers are resuming their agricultural livelihoods in part thanks to market access support from the WFP's P4P programme (WFP 2012).

The programme's goal is to foster a transition out of emergency aid towards reconstituting rural livelihoods and into net food sellers. Since 2010, the WFP has shut down its relief food warehouses in favour of district-level warehouses where traders *and* WFP will purchase grain for distribution in the northwest, Karamoja subregion of Uganda. In the first two years of the programme, P4P has engaged 7,000 smallholder farmers with earnings of more than USD280,000 (IRIN 2013). From maize grown and sold on markets supported by P4P interventions, farmers have been able to refurbish their homes and invest in agricultural assets such as oxen (Bryant 2012).

As natural disasters such as floods or hurricanes also disrupt and often (permanently) displace people, LRP might also serve in such cases to help reconstitute markets that include smallholders.

5.5.2 The Manyakabi Area Cooperative Enterprise: Supporting women farmers

LRP builds on existing agricultural practices, thus building on the base of the development efforts of local livelihood practices, rather than introducing a top-down approach to coordinate production.⁷ In two districts of Uganda, Mbarara and Isingiro, the Manyakabi Area Cooperative Enterprise (MACE) is one such instance of how procurement policies can identify and bolster local initiatives. Originally, the groups formed as an effort by widows to collectivise to increase their bargaining power against price setting by local traders. With more than 9000 members, of whom 95 per cent are women, from 28 individual farmer groups, the coordination between the WFP's P4P and MACE represents a key way in which procurement initiatives can target existing, grass-roots organisations.

For the WFP, the existing farmer cooperatives work well to procure large amounts of maize and beans without an otherwise cost-effective means to reach individual smallholders directly. For smallholders, as Clare Kabakyenga, the manager of MACE's stock noted, WFP prices for maize are the same as what farmers could receive in Kampala and much higher than what local traders offer.

TABLE 6
Beans and maize prices in Mbarara and Isingiro districts of Uganda (2009)

	Open market price	Local traders' price	WFP price
Beans	USD33–96 (median USD64.5)	USD55	USD70
Maize	USD14–57 (median USD35.5)	USD30	USD45

Source: Ferguson and Kepe (2009).

While studies have thus far been inconclusive as to whether or not P4P's activities create local market volatility, traders cut out of the domestic agricultural commodity trade are likely to suffer. This is important because local traders often supply a source of credit to smallholders in case of emergency before the harvest. In the absence of other means of lending to smallholders, traders are able to leverage their access to capital. This provides much-needed emergency support to smallholders in distress but comes with unfavourable rate to farmers. Moreover, the lack of access to markets and the reliance on these same traders further diminish smallholders' chances of accumulating enough surplus capital from selling their harvest to invest in productive assets.

The increased income for farmers has numerous impacts on local livelihoods. First, farmers in the cooperative have begun to invest in more durable housing materials (sheet metal and bricks) and have money for school fees and livestock (Ferguson and Kepe 2009). In addition, smallholders benefiting from improved incomes have begun to experiment with a greater diversity of food crops for household consumption and local sale or trade.

MACE addresses distress funding during the growing season with a savings and loan programme for members. Rather than selling crops pre-harvest to local traders, individuals facing an emergency can draw credit from the fund at a much better rate than previously (Whitaker Group 2009). Moreover, Rajiv Shah, the former Director of Agricultural Programmes at the Gates Foundation and now Administrator for USAID, notes that smallholder groups connected to P4P or other procurement policies can more easily gain credit at formal banking institutions.

In addition to greater incomes and a reduction in transaction costs associated with pre-harvest loans from traders, women in the group also report a greater role in community decision-making processes (Ferguson and Kepe 2009). Positive spillover effects also exist. First, coffee farmers in the region have also begun to bulk their produce to achieve greater bargaining power. Maize and bean farmers not in the cooperative have also started to emulate the processing practices of those in the cooperative to gain higher prices for their crops. The food procured from the cooperative funnels into the WFP's stock of foodstuffs that is used in HGSP programmes and as food aid for communities impacted by conflict or natural disasters.

5.6 BRAZIL'S FOOD ACQUISITION PROGRAMME (PAA)

One of the most highlighted cases of institutional demand is that of Brazil's Food Acquisition Programme (PAA). The PAA was created in 2003 along with the Zero Hunger strategy and grew out of civil society demand from the National Council for Food and Nutritional Security (CONSEA). In many rural areas throughout Brazil, the supply chain is dominated by a few intermediaries that control purchase prices and market crops. For this reason, rural unions and farmer cooperatives voiced their demands for the government to intervene in the

supply chain. Through these demands, and with the political objective of reducing hunger and poverty, the PAA was incorporated into the Zero Hunger strategy. Legally, the PAA was established by Law No. 10.696 on 2 July 2003 with the objectives of:

- incentivising family farm production by promoting its economic and social inclusion with sustainable surplus growth, the processing of food and the expansion of value-added production;
- incentivising the consumption and valorisation of family farm production;
- promoting access to food, in the quantity, quality and regularity necessary for populations in situations of food and nutritional insecurity based on legislation on the right to food;
- constructing public food stocks produced by family farms;
- assisting in the formation of food stocks through farmer cooperatives and other family farm organisations; and
- strengthening local and regional networks through food commercialisation (Brazil 2003).

Smallholders in Brazil are designated 'family farmers' under Law No. 11.326 (known in Brazil as the 'Family Farming Law'), which outlines the following criteria for consideration as a family farm:

- an establishment of under four fiscal modules (the size of a fiscal module is determined by the municipal government and varies around the country);
- a majority of the income must come from the property (i.e. farming, fishing, gathering, tourism etc.);
- a majority of the labour on the farm must be from the household; and
- the establishment must be managed by the household (Nehring and McKay 2013).

The PAA works through several different modalities that aim to offer numerous ways of procuring food from family farms and distributing the food through social assistance networks (such as community kitchens, food banks and food distribution centres). It does this by passing federal funds from the Ministry of Agrarian Development (MDA) and the Ministry of Social Development (MDS) through different institutions at various scales. Brazil's National Supply Company (CONAB) is one such institution that plays a central role in organising purchases and distributing produce throughout municipal, state and regional social protection networks. However, federal funds can also go directly to the state or municipality for direct purchase. In both cases, the PAA uses an online registration system (PAAnet with CONAB, and SISPA with direct purchases) that requires an organisation to input all of the family farmers' information (DAP) and the quota on produce to be delivered by each farmer. This whole process is often called 'the project'. On delivery, the payments are processed and transferred to either a cooperative's bank account or the individual farmer.⁸ Prices for the produce are available online and are determined by a regional survey that aggregates three municipalities together to create a single price. Through DAP, farmers are classified through a system to determine the poorest and most vulnerable farmers. It is established by law that they are prioritised to participate in the PAA.

The success of the PAA has been measured in its rapid expansion throughout Brazil. In terms of both individual transfers and overall budget, the PAA has grown from a modest programme that was largely focused in southern Brazil to a central tool of the country's new social development strategy, *Brazil without Poverty (Brasil sem Miséria)*. When it started in 2003, farmers could only receive a maximum of BRL2,500 (around USD1,250) annually by selling through the PAA. However, since 2008 the annual cap has been extended to BRL5,500 (USD2,750), and farmers can now participate in several modalities to increase their institutional sales⁹ (Sanches and Alceu 2011, 201). After 10 years in operation, the PAA has purchased more than 3 million tons of food from over 200,000 family farms and invested over BRL5 billion (USD2.5 billion). The PAA has grown 600 per cent from its inaugural budget in 2003 of USD70 million to USD700 million in 2013 (do Socorro 2013). Still, despite its growth and significance for reducing poverty and supporting small farmers, the budget only represents less than 0.0004 per cent of gross domestic product (GDP) (Nehring and McKay 2013).

The PAA directly addresses one of the central challenges to family farm production: commercialisation (Vogt and Souza 2009). It complements local variations in diet by procuring food from local farmers who have the capacity to produce diversified food crops on smaller plots. This may not be possible in private markets due to the increased presence of supermarkets in Brazil that has narrowed the supply chain and pushed out smaller producers. Supermarkets in Brazil constitute 75 per cent of all food retailers in the country, the highest percentage in Latin America (Reardon and Berdegúe 2002, 374).

However, demand-side interventions such as the PAA help to incentivise the diversification of family farm production by ensuring a stable market and prices for a variety of crops. The PAA has reignited production of many crops that were no longer being produced in many regions of Brazil, and this has resulted in a steady flow of income throughout the year for farmers, as opposed to one or maybe two payments per year at harvest time (Doretto and Michellon 2007).

Through both direct purchases and the availability of other markets, Doretto and Michellon (2007) surveyed PAA beneficiaries and non-beneficiaries to see the impact of procurement on family farm incomes in three municipalities in the state of Paraná. Among the programme participants, their survey showed an income increase of 25.2 per cent for producers who had accessed family farm credit, and a 43 per cent increase in income for those who did not receive credit (the smallest in income and land area) (*ibid.*, 128–129). Their sample of PAA beneficiaries also showed that one third of them increased their cultivated area, and two thirds of the producers increased the level of technology in crop production (*ibid.*, 126–127). The improved income, planted area and increased level of technology helped to create a more advantageous division of labour within the household, allowing family members to work outside agricultural production and also diversify their income sources. One third of the participating families in two of the sampled municipalities reported income from sources outside agricultural production.

By incentivising more diverse production, Vogt and Souza (2009, 12–13) noted that the PAA helps to expand other channels of commercialisation for farmers by either expanding access to other policies or increasing the ability to sell in local farmers' markets. They performed a qualitative case study on the Celeiro region in the state of Rio Grande do Sul, focusing on two municipalities. Their study noted the ability of the PAA to add a social character and structure to local markets and channels of commercialisation for otherwise resource-poor farmers. With closer and assured market connections and prices, they observed that the PAA was the key factor in expanding production for participating families (*ibid.*, 16).

BOX 2

Brazil's CONAB

Brazil's National Supply Company (CONAB) is one of the central institutions responsible for constructing and maintaining food stocks in the country. It was created in 1990, shortly after Brazil returned to a democracy, under the administrative arm of the Ministry of Agriculture, Livestock and Supply (MAPA) and fused three older institutions: the Brazilian Food Company (Cobal), the Company of Production Finance (CFP) and the Brazilian Storage Company (Cibrazem) (Gandolfi et al. 2010). CONAB is responsible for managing agricultural policies and food supply to ensure the basic needs of Brazilian society and preserve and encourage market mechanisms. These objectives were primarily achieved through price guarantees for farmers and limited procurement programmes, but none with a specific focus on family farmers. It would take just over a decade until CONAB began to work with a focus on family farm agriculture and social programmes in combination with the MDA and the MDS (ibid.).

The 2008 food crisis signalled an increased role for CONAB to ensure sufficient food stocks to mitigate against global prices and maintain sufficient demand for family farm production and household consumption. Almost every state in Brazil has a CONAB office that helps to extend institutional assistance to farmers and farmer organisation for procurement, price guarantees and more regionally specific food stocks. This institutional structure has been a crucial mechanism to implement and extend the coverage of structured demand policies to many vulnerable and marginalised populations throughout the country.

According to Sparovek et al. (2007), purchases through the PAA have created new relationships among family farms, intermediaries, local officials and consumers that have altered the viability of local food systems. Their study is based on a sample of 250 questionnaires in six different states in Brazil's Northeast region. The majority of the farmers were relatively old—73 per cent between the ages of 31 and 60—and organised: 91 per cent were active in some kind of social movement. They noted that the incomes of PAA participants tended to be three times greater than those of non-participants (ibid.). This is because not only do participants receive a boost in income from sales to the PAA but non-participants also tend to be subsistence producers and consume a majority of their production.

BOX 3

The case of purchasing from Africans for Africa (PAA Africa)

The Brazil-Africa Dialogue on Food Security, Fight against Hunger and Rural Development in Brasília more than two years ago brought together over 40 African ministers to share experiences in fighting hunger and supporting rural development interventions for smallholders. Brazil's PAA was a policy that stood out as being a particularly innovative component of Brazil's experience in reducing poverty and hunger while also promoting state capacity and ownership over rural development. As a result of that dialogue, 10 countries initiated a three-year pilot project. Five countries (Ghana, Zimbabwe, Côte d'Ivoire, Kenya and Rwanda) were to be part of a partnership with the ABC, the FAO and the MDA, and the other five (Mozambique, Niger, Senegal, Ethiopia and Malawi) would be under the direction of CG-Fome, the FAO and the WFP. Due to budget cuts at the ABC, the first five countries have been put on a waiting list, while the other five implemented their PAA Africa policy in mid-2012. Each country's programme is funded by the Brazilian government (USD500,000 per country) and implemented by both the FAO and the WFP (CG-Fome 2013).

PAA Africa has an emphasis on state capacity and eventual management over the programme, as well as an element of social participation in the second phase of the policy (Klug 2013). Each country has a slightly different mechanism for design and implementation, but the FAO is responsible for selecting communities that are marginalised and willing to participate. The WFP helps coordinate logistics, maintain a relationship with the producers and beneficiaries and coordinate future actions with the local government. The first pilot phase of the programme is currently ending in all five countries, with the second phase due to start at the end of 2013. There are already discussions with member countries about how to develop a five-year plan and transition the funding and management of the programmes to the national governments.

The PAA also helps set a reference price for farmers, who often do not have a competitive private purchasing market through few (or often only one) intermediaries. Agapto et al. (2013) showed from a local survey in Campina do Monte Alegre in São Paulo state that prices offered through the PAA were 45.9 per cent higher than the average price offered from intermediaries.¹⁰ They demonstrated that this reference price also had the effect of incentivising producers to transition production to higher-value vegetables and other food crops, also resulting in increased incomes (ibid., 18). Lucena and Luiz (2009) evaluated the importance of the PAA on augmenting farm gate prices in a reform settlement located in the state of Rio Grande do Norte where the PAA had the effect of doubling the price farmers had been receiving from a sole intermediary. Based on a sample of seven PAA participants, they showed an average income increase of 43 per cent, ranging from 3.9 per cent to 184.5 per cent (ibid., 15). This reference price is crucial to small farmers when trying to negotiate other prices in the private market—namely, with intermediaries. Rocha et al. (2007) conducted interviews in three municipalities in the state of Bahia, and every single PAA participant concluded that before they sold through the PAA their sale price was completely at the whim of a sole intermediary.

Other studies were also able to show an increase in total family farm production specifically to sell through the PAA because of its direct and guaranteed payment (Momberg de Camargo et al. 2013; Agapto et al. 2013; Doretto and Michellon 2007; Cordeiro 2007; Müller et al. 2007).

The PAA has also been shown to incentivise farmer organisation and integration with local officials and consumers. Due to the PAA's reliance on purchasing from farmer organisations, the programme either strengthens existing organisations to respond to the PAA's structural demand or encourages farmers to organise to meet the demand (Vogt and Souza 2009).

Finally, a recent survey of 29 PAA assessments and evaluations reported in Sambuichi et al. (2013) showed that the programme had 35 positive effects, identified either via primary data collection in general with small sample sizes, such as the ones discussed above, or through qualitative interviews with beneficiaries, non-beneficiaries and policymakers. The most common impact was diversification of production, reported in 72 per cent of the studies, followed by improvement in the quality of their products, strengthening collective organisations and higher income, all three reported in 52 per cent of studies. These dimensions are very important for the sustainability and long-term effects of the programme, as they not only allow welfare gains for the family farmers in the short term through higher incomes but also stimulate them to improve the quality of their produce and cooperation—two key factors to expand their market access beyond institutional demand.

5.7 THE PROMOTION OF DOMESTIC AGRICULTURE IN SENEGAL

One appealing aspect of LRP policy is that it often relies on supporting smallholders' existing practice, rather than introducing new agricultural production methods and crops. This approach reduces the amount of learning and technology adoption often required of export-driven contract farming that the World Bank touts as able to “bring agriculture to the market” (Oya 2012). In Senegal, the Association Sénégalaise pour la Promotion du Développement à la Base (ASPRODEB—the Senegalese Association for the Promotion of Grass-roots Development) is attempting to bring the market to agriculture.

Recently, *Le Projet Pilote de Valorisation des Céréales Locales en Panification* (Pilot Project to Develop Local Cereals into Breadmaking) seeks to help curb rising wheat flour imports by promoting 15 per cent incorporation of local cereals (namely, corn and millet) into bread for

urban consumption. Senegal imports most of its wheat for bread, and following the economic crisis in 2007 that led to increased wheat prices, ASPRODEB, with funding from the World Bank, thought to promote the use of local cereals in bread.

ASPRODEB coordinates with several NGOs to help procure millet and corn to connect the national federation of bakers with smallholders to expose synergies of health and economics. While partially substituting local cereals for flour in bread should help reduce costly imports, the increased demand from smallholders will help establish a reliable market. The programme is further justified by the nutritional benefits of bread that incorporates these grains compared to bread made entirely from wheat flour.

As of September 2012, all the pieces for the project were in place, and some cereals had been collected (PAEPARD 2012). However, low rainfall affected how much could be procured from the designated production area. Bureaucratic issues relating to importing the proper equipment to make the bread from cereals further impacted the project. The ability to rely on procuring food in regions of food need is one of the most significant concerns and questions that plague LRP.

Currently, the programme hopes to contract with the City of Dakar to provide bread to 20,000 students in 50 schools in Dakar (Sow 2014). Additional information about the status of the programme could not be located for this study.

6 MAIN LESSONS LEARNED FROM INSTITUTIONAL DEMAND

Institutional demand may have a key role to play in promoting rural development and offering a form of social protection. Deploying institutional demand policies as a social protection strategy not only supports livelihoods in volatile rural economies and changing climates but also promotes rural development through the four components: income generation, price stabilisation, food security and farmer organisation. There are five main social pathways through which institutional demand may promote social protection:

- Enabling households to make investments: A secure livelihood allows households to purchase inputs and machinery, which leads to increased productivity. They are also able to buy assets such as land and livestock and move to more profitable economic activities.
- Expanding coping strategies: A stable income prevents households from making distress sales and other choices that undermine their future welfare and productive capacity.
- Contributing to domestic food security: Institutional demand targets vulnerable groups through food assistance programmes and ensures that producers receive remunerative prices, allowing them to purchase food in local markets. At the same time, increases in demand for food generate productivity gains that strengthen local and regional food systems.
- Providing a valuable safety net that secures a minimum income and guarantees entry into a secure market.
- Promoting local development: Increased demand for food can promote local development through spillover effects, increasing employment opportunities and wages.

The case studies in this paper have illustrated different types of institutional demand strategies and their procurement models. It is important to note that international aid programmes and nationally run programmes can differ significantly in their design, implementation and results. The ability of institutional demand to produce positive agricultural development and social protection benefits depends on several factors and are context specific. Decentralised and nationally run procurement models create a sense of community ownership and allow responsiveness to regional and/or local needs. The case of Brazil's PAA demonstrates the successful combination of political will, effective design and national ownership.

Nevertheless, even in the case of Brazil, the scale and geographical distribution of procurement remains problematic. Institutional demand cannot be regarded as a silver bullet or panacea for social protection and rural development. It is merely one intersectoral policy approach to bridge the concerns of marginal populations. But design matters when considering the extent to which institutional demand can be most effective. There are a few key elements of the procurement system that must be considered when designing institutional demand policies (Sumberg and Sabates-Wheeler 2010):

- Objectives: Institutional demand aims to advance social protections goals and rural development. It is important to identify synergies and trade-offs, as highlighted in the four components of institutional demand.
- Scale: The scale of the demand will have different effects in the market and influence agricultural value chains from the local to the global.
- Rules and regulations: Tendering rules that establish bureaucratic systems may restrict the ability of smallholders to participate in procurement processes.
- Food quality management: Food safety and quality standards are crucial; however, they can set very strict regulations and burdensome registration systems with which smallholders are unable to comply.

Following the 2007–2008 and 2011 food crises, governments need new strategies to boost domestic agricultural production that complement social development goals. Support for domestic, smallholder agriculture is one crucial way to address both of those goals. Poverty is largely a rural phenomenon, with over 70 per cent of the world's poor people located in rural areas where a majority of the population relies on agricultural production for their livelihood (IFAD 2011). Agrarian reform, technical assistance and agricultural credit are all crucial policy objectives to support rural livelihoods. However, there must also be a focus on the barriers facing smallholders' entry into the market such that private intermediaries are not monopolising already underdeveloped rural markets. LRP policies are fundamental to extend favourable markets to smallholders and establish a social protection network for rural development through state intervention.

TABLE 7

County cases of local and regional procurement policies

Country* Programme	Funder/donor Budget	Objective	Implementing and organising partners	Tender/pricing mechanism	Distribution target	Key achievements
Brazil Food Acquisition Programme (PAA)	Brazilian Federal Government Approx. USD700 million	Support smallholder production and fight hunger.	Ministry of Agrarian Development; Ministry of Social Development; National Supply Company (CONAB).	Regional price survey based on a grouping of three municipalities; Survey carried out bi-weekly.	Public institutions: schools, food banks, community kitchens, prisons, hospitals etc.	Expands sustained marketing outlets for family farmers, increases farmer organisation and fights hunger through food donations.
Burkina Faso Local Education Assistance and Procurement (LEAP)	US Department of Agriculture Unknown	Use local surplus (zones of) production to provide school lunches for a food-insecure region.	Catholic Relief Services (international NGO); Afrique Verte (local NGO); Smallholder organisations.	National market price in February and March 2011; Cowpeas: voucher programme; Millet: payment to farmers' organisations.	Distribution to 364 schools (58,127 students) in the Gnagna and Namentenga provinces of Burkina; Faso: 20 rations per student from April to June 2011.	50% higher price received on average (relative to control group) and 30% higher revenue; Time and cost savings compared to USAID tied food aid programme (MYAP).
Senegal Pilot Project for Developing Local Cereals in Breadmaking (Projet Pilote de Valorisation des Céréales Locales en Panification)	West Africa Agricultural Productivity Programme (GTZ) USD100,000	Reduce rising wheat flour imports by promoting 15% incorporation of local cereals into bread, supporting existing smallholder production.	Senegalese Association for the Promotion of Development at the Grass- roots Level (ASPRODEB); Institute of Food Technology (ITA); National Federation of Bakers of Senegal.	National market price according to quality rating; Specific tender modality unknown; Purchase from farmers' organisations.	Consumers: urban populations in various locations in Senegal, primarily within the Peanut Basin.	The programme has graduated from an initial project funded by the World Bank.
Uganda World Food Programme (P4P)	Bill and Melinda Gates Foundation USD168 million (5 years, 21 countries)	Reconstitute agricultural markets in post- conflict zone; Support smallholders' markets to support displaced populations' food needs.	Multiple NGOs throughout Uganda: World Vision, DANIDA, ACTED, Mercy Corps, Oxfam, Catholic Relief Services.	Hard tendering: direct cash purchase; Voucher (warehouse receipt) programmes with farmers' organisations.	Varies by region (see case studies on Uganda).	Key support role in reconstitution of agricultural livelihoods in the Acholi region; Support for 9000 smallholders (95 per cent women) in Mbarara and Isingiro districts.
Indonesia Raskin Rice Procurement Programme	Indonesia's state- owned logistics board (Bulog)	Procure surplus production not absorbed by the market. Protect consumers with price ceiling.	Indonesia's state- owned logistics board (Bulog).		National stock. Rice for poor households.	Rice stocks from the Bulog programme replaced the need for rice imports. Anticipates a 6% increase in total rice procured this year over last year.

ANNEX 1: USDA DEFINITIONS OF TYPES OF TENDERING

Direct purchase: A non-competitive procurement approach in which a participant purchases a commodity directly from one or more suppliers without a competitive bidding process. This approach may be used for commodities that are only available from one vendor or in situations in which only one vendor can meet the necessary quality and tonnage requirements. In other cases, participants may target farmers' organisations (FOs) for direct purchases to achieve development objectives.

Hard tendering: A fully competitive tendering process or procurement approach for food aid commodities, in which all suppliers that are able to meet the tendered quantities and other requirements can bid.

Forward contract (also known as forward purchase): A forward contract defines the quantity and price of a commodity with delivery taking place at a specified future date. Food buyers may use forward contracts for hedging (i.e. locking in a price to reduce risk). The World Food Programme (WFP) uses forward contracts, with options to adjust prices if they rise between contract and delivery, to build the marketing capacities of FOs targeted under the Purchase for Progress (P4P) initiative. Forward contracts may be competitive or non-competitive.

Soft tendering: A semi-competitive tender that limits participation to invited vendors, generally smallholder FOs or small-scale traders, and allows flexibility in contract negotiations and delivery terms. In some cases, soft tendering is used when small-scale vendors cannot afford to put up standard performance bonds or do not have the capacity to meet other requirements of a hard tendering process. It is also used to build the capacity of smallholder FOs and small-scale traders by teaching them the skills they need to operate in a commercial manner. Limiting soft tenders to invited vendors permits participants, both PVOs and WFP, to procure from lower-capacity vendors to support capacity-building and agricultural and market development.

Vouchers: A voucher provided directly to targeted food-insecure individuals to purchase a fixed quantity of food (commodity-based vouchers) or to purchase food up to a fixed monetary value (value-based vouchers) from selected vendors.

ANNEX 2: SUMMARY OF USDA-FUNDED PILOT LRP PROJECTS

The table shows evaluations from the USDA-funded LRP pilot project (USDA 2012). The information presented has largely been compiled using direct quotes and some summarised text.

Country (Emergency/development programme)	Procurement period or date Crop(s) procured	Food networks Procurement actors and methods	Experience of smallholder farmers* (no, little/indirect, some or significant benefit)	Market volatility** procurement and distribution (no, possible but limited, or direct impact)
Bangladesh Development: School Feeding Programme	December 2010 17,186,000 cereal bars (687.4 MT) Ingredients: puffed rice, peanuts, chickpeas, sesame seeds and vitamin fortification	Land O'Lakes (PVO) procured cereal bars from suppliers (soft tender), who procured ingredients from contract farmers, traders and wholesalers (hard tender).	No benefit It is unlikely that farmers attributed significant benefits from cereal bar production, since the bars used such a small proportion of annual agricultural production in Bangladesh.	No impact No significant price spikes occurred due to ingredient purchase or cereal bar distribution.
Burkina Faso Local Education Assistance and Procurement (LEAP) School Feeding Programme (Development) See also Section 5.3 for more on this programme	February–April 2011 182.3 MT of cowpeas 728 MT of millet	Catholic Relief Services (CRS) (NGO) - Afrique Verte (partner NGO) contracted four large farmers' organisations for millet (soft tender). - CRS supplied Parent–Teacher Associations with vouchers to buy cowpeas from local vendors/suppliers (agreed with farmers' associations).	Significant benefit 1. Direct sales to LEAP decreased travel time and distance by statistically significant averages of 52 per cent and 91 per cent, respectively, for members of farmers' associations. 2. Many of the small farmers providing cowpeas were also parents of children attending the very school receiving such commodities. <i>This in turn provided dual benefits, in the form of additional nutrition for students as well as supplemental income for parents.</i> 3. Those involved also received a higher sales price during the project in 2011 compared to prices in 2010, and had a more profitable season. 4. Participation in LEAP led to improved storage practices. 5. All members of LEAP associations learned about the USDA-required quality standards, specifically those related to insects, moisture content and foreign matter. Other benefits recognised by farmers included sales process capacity-building, building trust within farmers' associations and outside clients, and community reinforcement through partnerships with local Parent–Teacher Associations.	Possible limited impact Two evaluations, by LEAP staff and Cornell University, showed mixed evidence about the influence of the CRS Burkina Faso LRP project's procurement on market prices. Market impact is possible, but has not been demonstrated.



Country (Emergency/development programme)	Procurement period or date Crop(s) procured	Food networks Procurement actors and methods	Experience of smallholder farmers* (no, little/indirect, some or significant benefit)	Market volatility** procurement and distribution (no, possible but limited, or direct impact)
<p>Cambodia Development: School Feeding Programme and Food for Work Programme</p>	<p>January–May 2011 339.11 MT of rice 26.1 MT of canned fish 16.15 MT of vegetable oil 3.95 MT of iron-fortified fish sauce (IFFS) 7.5 MT of instant noodles</p>	<p>International Relief Development (IRD) (NGO) procured rice, canned fish and vegetable oil via hard tender and IFFS via direct purchase to provide students with a weekly rice-based meal at school. Labourers in the Food for Work programme were supplied with vouchers to use with vendors.</p>	<p>No benefit Likely no impact on large agricultural producers. Since direct distribution and voucher procurements took place after this period, most small producers no longer maintained enough stock to sell. Therefore, impacts on small producers were not seen.</p>	<p>Possible limited impact Interview data indicate that there were no variations in prices due to the local procurements. Possible impact on retail price of canned fish. No indication of any other price impacts due to LRP procurements.</p>
<p>Cameroon Emergency: 216,000 people affected by drought in the extreme north of the country</p>	<p>February–March 2011 329 MT of sorghum 1,790 MT of maize 543 MT of bean</p>	<p>World Food Programme (WFP) procured food through hard tender with large-scale traders, who sourced the commodities from local farmers in the northern and western parts of the country.</p>	<p>Some benefit 1. WFP purchased commodities from traders, who collected the commodities from small-scale farmers in the local market. <i>The local purchase had a positive impact on these farmers, increasing their income particularly, as this purchase took place immediately after the harvest.</i> The evaluation team cannot comment as to the relative benefit to the traders vs. small farmers, but undoubtedly the procurement provided a source of income and increased demand for these small farmers as well as the traders aggregating such surplus harvests. Note WFP also reported a positive impact on secondary actors in the markets such as bag manufacturers, fumigation and quality testing companies, and transporters. Local procurement via hard tender also enhanced competition in the market and familiarised large and small agricultural producers with standard contracting processes.</p>	<p>Possible impact WFP's report indicated no impact on sorghum or maize prices but was unable to rule out impact on prices for beans. An increase in bean prices was attributed mainly to high demand from surrounding countries during the Christmas holiday season, but this demand diminished after one month.</p>



Country (Emergency/development programme)	Procurement period or date Crop(s) procured	Food networks Procurement actors and methods	Experience of smallholder farmers* (no, little/indirect, some or significant benefit)	Market volatility** procurement and distribution (no, possible but limited, or direct impact)
<p>Chad Emergency: 737,000 individuals affected by drought in regions of the Sahelian belt of Chad</p>	<p>March 2011 1,111 MT of cowpeas in Niger 1,512 MT of maize in Cameroon</p>	<p>World Food Programme (WFP) procured food through hard tender through large traders.</p>	<p>Some benefit 1. WFP reported that regional purchases had a <i>positive impact on farmers (local and regional agricultural producers) by increasing their income.</i> 2. WFP further reported that although no extensive assessments were done, LRP purchases had a positive indirect impact on improving food security by encouraging farmers to increase production. WFP's report goes on to say that hard tenders via large traders who aggregate the surpluses of small-scale farmers may <i>allow these small farmers to sell their produce at the right time and right price, permitting them to prepare for the next farming season with enough income to purchase the necessary seed stock, fertiliser and other equipment.</i></p>	<p>Possible limited impact Maize (Cameroon): The WFP Country Office indicates that prices remained stable. Beans (Niger): A 3 per cent increase between the week before purchase and the day of purchase, while a 6.6 per cent increase was recorded between the day of procurement and one week after procurement. WFP reported that in 2010 Niger produced 1,773,423 MT of beans, and it was estimated that 300,000 MT of this crop were exported. Therefore, the purchase of 1,111 MT (0.37 per cent of the market quantity) of beans for Chad would have had an insignificant impact on the market.</p>
<p>Republic of Congo Emergency: Distribution to 114,000 refugees</p>	<p>April 2011 1,458 MT of rice</p>	<p>World Food Programme (WFP) procured rice through hard tender through local commercial traders.</p>	<p>Little to some benefit Farmers interviewed by WFP explained that the <i>farm-gate price increased by 30 Congolese Francs/kg on average.</i> Note WFP reported that prices are fixed by commercial traders at the beginning of the campaign between such traders and local suppliers and small farmers, to establish the purchase price before harvest quantities are known. These traders' use of anticipatory market prices and not actual market prices at harvest provides a means for producers' commodities prices to remain rather stable over the harvest period and allow farmers and traders to set expectations at the outset of a harvest season.</p>	<p>No impact WFP and the evaluation team concur that no significant impact was evident on either consumer or producer prices due to WFP's regional rice procurement.</p>



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<p>Guatemala</p> <p>Emergency: 3,000 families in the department of Santa Rosa</p>	<p>October 2010 - September 2011</p> <p>1,224.47 MT of white maize</p> <p>159.47 MT of Incaparina</p> <p>146.94 MT of beans</p>	<p>Catholic Relief Services (CRS) (NGO)</p> <p>procured food through hard tenders and distributed it directly to project beneficiaries.</p>	<p>Some benefit</p> <p>1. Mayoreo Agrícola, a company located in Santa Rosa, markets agricultural inputs and grains. It supports small-scale farmer groups by allowing them to purchase seeds and other agricultural inputs on credit so that they can produce white maize, beans and sesame seeds. <i>Mayoreo Agrícola sold white maize and black beans to CRS at a higher price than that of the local market, which allowed the project to purchase from an increased number of small-scale farmers, albeit indirectly.</i></p> <p>2. CRS further reported that <i>small-scale farmers received training and technical assistance to improve their current agricultural production system and incorporate environmental conservation activities (e.g. establishment of forest tree and coffee nurseries, use of organic fertiliser and soil conservation practices to protect soil from erosion by rain). The project also helped small farmers establish vegetable gardens with maize, radish, cucumber, carrot, coriander and other crops to help families increase and diversify the availability of foods to improve their diet.</i></p> <p>3. In the 2011 agriculture production cycle, <i>Mayoreo Agrícola recorded improved quality and packaging of the grains that they sell to their regular clients, as a direct result of this project's quality requirements and the organisation's adherence to them under the project.</i></p> <p>Note</p> <p>As a result of the project, the farmers' association <i>Asociación ACUS</i>, which also sold maize and beans to CRS under the project, has formalised its provision of fertiliser and seeds to farmers, has defined their production areas in need of support and has begun a marketing project.</p>	<p>No impact</p> <p>According to the food price analysis performed by Cornell University, CRS reported that the price analyses conducted in the programme found that the LRP activity had no statistically significant effects on retail prices in markets within the procurement and distribution zone and additionally that project-run LRP did not adversely affect normal market functioning in the geographic region within which the CRS activities took place.</p>



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<p>Kenya Emergency: Project for Emergency Assistance in Kenya in response to emergency levels of acute malnutrition in 2011 as a result of a severe drought, benefiting 3356 households</p>	<p>February 2011 204 MT of beans 245 MT of corn-soy blend (CSB) 1,144 MT of maize 82 MT of vegetable oil</p>	<p>World Vision (NGO) procured food through hard tender with M/S Export Trading Company Limited (maize, pulses, CSB and salt) and M/S Techno Relief Services (vegetable oil).</p>	<p>No benefit Low levels of rain this year did not allow procurement directly from smallholders as initially planned.</p>	<p>Possible limited impact No evidence was found of any impact on producer or consumer prices from datasets provided by World Vision, while <i>Cornell University's analysis found temporary market price increases for maize only, but noted that other market disruptions may be behind these increases.</i></p>
<p>Malawi Development: P4P programme designed to build the capacity of smallholders to participate in profitable market relationships and thereby increase incomes and livelihoods</p>	<p>May 2010 to March 2011 873 MT of white maize 841 MT of pulses 76 MT of cowpeas 765 MT of cowpeas and pigeon peas 870 MT of CSB Plus</p>	<p>WFP procured - white maize via direct purchases with smallholder farmer organisations in six districts. - pulses, cowpeas, pigeon peas and CSB Plus via hard tender with large traders, part of Agricultural Commodity Exchange for Africa (ACE). - cowpeas via soft tender with small traders.</p>	<p>Significant benefit 1. <i>Farmers reported earning more by selling to WFP than their counterparts earned by selling to traders or small vendors.</i> 2. Farmers selling to WFP also indicated that being <i>paid in one lump sum for a significant proportion of their marketable surplus was preferable to repeated smaller sales throughout the marketing season</i> that are typical of marketing through small traders. 3. Many project-supported FOs reported an increase in the enrolment of new members after they observed the WFP buying process the previous season. FOs reported that successful marketing through WFP also contributed to better relationships and communication between FO management and members. Note Factors that contributed to the decision of some farmers not to participate included an inability to pay organisation membership fees, the need for quick payment after harvest to smooth household consumption and repay loans, and a desire to wait and observe the success of initial WFP contracts.</p>	<p>No impact The evaluation team's analysis of existing and available data indicates that this project did not have any likely impact on the prices of the affected commodities.</p>



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Mali Development: School Feeding Project in the Mopti region	Three-month period in late 2010 and early 2011 31.45 MT of millet 7.67 MT of cowpeas 7.01 MT of rice	Catholic Relief Services (CRS) (NGO) provided vouchers to 10 schools, while two others procured food via hard tender . (Purchase by voucher represents 87% of food purchased by weight.)	<p>Some benefit</p> <ol style="list-style-type: none"> CRS reported that small farmers were motivated to increase production volume, improve quality and diversify their crops to increase their revenue as a direct result of this project. When interviewed by CRS staff, some farmers supplying to voucher fairs noted that even if they were not able to sell the entirety of their stock through the fairs, the remainder of the commodities would sell quickly at the market due to the high quality of the commodities. <i>Local procurement also allowed supplying farmers and traders to pay back their loans to local banks, injecting cash into these institutions which also lend to local women through microfinance programmes.</i> <p>Note Cowpeas had long ceased to be a major commodity on the market in the implementation region, but CRS procurements stimulated increased production—an attitude which over time might have the potential to restructure the market.</p>	<p>No impact</p> <p>The net effect of this evidence was that the evaluation team concurred with CRS, which states in its market monitoring study: “The conclusion ... was that the LRP activity did not have any effect—positive or negative—on commodity prices in Mali during the period of the activity.” Indeed from the start, the small size of the LRP activity (USD106,000 pilot activity) negated the likelihood of any impact.</p>



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<p>Mali Development: Part of the P4P programme and the Protracted Relief and Recovery Operations</p>	<p>February 2010 to February 2011 620 MT of sorghum 2,201 MT of millet 48.7 MT of cowpeas</p>	<p>WFP procured all food via hard tenders, with forward delivery contracts used to purchase the farmer organisations' (group of farmer cooperatives) excess stocks after the harvest.</p>	<p>Significant benefit WFP reports that farmers:</p> <ul style="list-style-type: none"> • <i>increased smallholder farmer production to the guaranteed WFP market, access to credit and banking, and the potential or opportunity to market to other buyers.</i> • <i>improved awareness of the need for higher-quality produce to earn a higher price on the market.</i> • <i>enhanced capacity to plan how much land to cultivate to meet their commitments under the forward delivery contracts.</i> • <i>increased sales and incomes of smallholder farmers.</i> and • <i>desire among other smallholder farmers to join the FO to benefit from capacity-building, aggregating their stocks and producing higher-quality commodities.</i> <p>Note WFP reported that for less-structured FOs the biggest gain was a realisation of significantly increased incomes for members. WFP reported that well-organised FOs reaped many additional benefits, including the ability to increase the funds available to supply inputs (seeds, fertiliser etc.) to their members; purchase grain from their members to augment their central stock; finance part of the operating costs of the FO (electricity, water, staff salaries etc.); purchase post-harvest equipment such as threshers and sifters, to improve produce quality; and provide some pre-financing to allow them to deal with household expenses for which they might otherwise be forced to sell their produce prematurely (when prices were low).</p>	<p>No impact WFP and the evaluation team concur in that no impact was found on market prices due to P4P procurement.</p>



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Mozambique Emergency: Relieve 132,000 people affected by floods and drought	April–July 2011 4,178.55 MT of maize 486 MT of cowpeas	WFP procured all food on a competitive basis (hard tender): local cowpeas and maize from South Africa.	No benefit In Malawi, because of the timing of the purchases (a few months after harvest, when farmers were less likely to hold stock) and the Government of Malawi's release of 30,000 MT of maize stock into the market, the LRP project purchases were not likely to have affected producers.	No impact The evaluation team's analysis of existing and available data indicates that this project had no likely impact on the prices of the affected commodities in the procurement zones.
Nicaragua Development: School lunch programme provided school lunches that addressed malnutrition and encouraged school attendance	November 2010 to September 2011 0.4 MT of butter 12.1 MT of carrots 17.9 MT of cheese 43 MT of corn flour 12.7 MT of cream 9.9 MT of eggs 5.2 MT of green peppers 7.1 MT of pinolillo (a sweetened corn drink) 13.6 MT of onions 44.8 MT of plantains 33 MT of potatoes 1.7 MT of red beans 40.3 MT of bananas 16.1 MT of sugar 25.2 MT of tomatoes 14.5 MT of vegetable oil	Fabretto Children's Foundation (FCF) (NGO) procured fruits, vegetables and dairy products through direct purchases with FOs (the ASOGYPTBM cooperative, located in Quilali, Esteli department, provided the fruits and vegetables, while the 5 de Junio cooperative, located in Las Sabanas, Madriz department, provided the dairy products). The bulk of corn flour, cooking oil and red beans was purchased by hard tender through the Nicaraguan agricultural commodities exchange (BAGSA).	Little to some benefit <i>Negligible increase in production</i> by farmers aligned with the supplier organisations (in the direct purchase procurements). Note FCF worked with two cooperatives for the dairy, fruits and vegetables purchases, and provided them with training and technical assistance over the course of the project. Through their participation, <i>these organisations became better equipped to undertake procurement contracts for donors or other clients in the future, with greater ability to manage commodity purchases and logistics.</i>	No impact The evaluation team's review of existing and available data indicates that the amounts obtained for each commodity were much less than 1 per cent of total national production. Further, FCF purchases were relatively small and consisted of numerous purchases over the course of a year. The evaluation team's analysis of existing and available data indicates that this project had no likely impact on the prices of the affected commodities.



Country (Emergency/ development programme)	Procurement period or date Crop(s) procured	Food networks Procurement actors and methods	Experience of smallholder farmers* (no, little/indirect, some or significant benefit)	Market volatility** procurement and distribution (no, possible but limited, or direct impact)
<p>Niger Emergency: Project VOICE targeted 140,758 drought-affected people in 111 villages in the Tillabéri and Zinder regions</p>	<p>March–September 2011 4,760.52 MT of cereals 792.88 MT of cowpeas 583.54 MT of vegetable oils</p>	<p>Catholic Relief Services (CRS) (NGO) procured food through hard tender from legally registered traders contracted by vendors and provided target population vouchers to purchase the food.</p>	<p>No benefit Producers are generally small-scale farmers who sell their grain to satisfy the needs of their households, typically just after harvest in October (outside the project's purchasing time-frame). For these reasons, no impacts on producers were found.</p> <p>Note CRS reported that during the programme some vendors hired additional employees, creating economic opportunities for others in the community. Vendors without bank accounts opened accounts and now use them as a method of saving money.</p>	<p>Possible positive impact CRS reported that, given the information collected for market prices over the last three years, the intervention did not appear to have a significant impact on commodity prices. Additionally, as outlined below, consumers seemed to benefit in ways other than price, such as beneficiaries' autonomy to choose which commodities to purchase, and the quality and consistency of sufficient supply.</p>
<p>Niger Emergency: Localised Immediate Drought Response (LIDR) aimed to supply 80 per cent of food needs to 78,608 beneficiaries in the Filingué département of Tillabéri region of Niger</p>	<p>September 2010 to July 2011 (most procured in March 2011) 4,699 MT of maize 472 MT of cowpeas as well as millet, cooking oil and salt</p>	<p>Mercy Corps (NGO) procured maize, cowpeas and millet through vendors using hard tender and rationed it to the target population and allocated the oil and salt through vouchers</p>	<p>Little benefit While this programme did not directly target local and regional producers or measure the impact of the programme on this group, the main impact of the procurement methodology was an increase in demand for their products and increased sales.</p>	<p>No impact The evaluation team's analysis of existing and available data indicates that this project had a possible, but very limited, impact on the prices of affected commodities.</p>
<p>Pakistan Emergency: Help relieve 20 million people affected by flooding</p>	<p>2010 10,062 MT of wheat</p>	<p>WFP Pakistan procured wheat locally via direct purchase from the Government of Pakistan's Storage and Service Corporation (PASSCO).</p>	<p>No benefit The evaluation team's findings show no likely or measurable impact on farmers in procurement areas due to wheat purchased from government stock.</p>	<p>No impact The area where the wheat was purchased is a wheat surplus area with storage facilities. The market prices for wheat flour were either lower or similar to the prices in the area where food was distributed. The procurement of wheat had no impact on the market in the area of purchase. Procurement market locations maintained stable prices over the period prior to and following the procurement. The evaluation team's findings show no likely impact on consumer prices as a result of the purchase.</p>



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<p>Tanzania</p> <p>Development: Part of the P4P initiative uses its purchasing power and presence in staple food markets to catalyse innovations that sought to improve market exchange and reduce transaction and marketing costs</p>	<p>January 2010 to February 2011</p> <p>2,475 MT of maize</p> <p>424 MT of beans</p>	<p>WFP purchased all food from 29 farmer groups, organised in savings and credit cooperatives (SACCOs).</p> <p>Hard (competitive) tender resulted in 17 total contracts signed in several regions of Tanzania.</p>	<p>Little to some benefit</p> <ol style="list-style-type: none"> 1. WFP encouraged P4P-assisted FOs to engage in collective marketing to achieve economies of scale and reduce transaction costs. 2. Village warehouses were rehabilitated and fully equipped to facilitate storage of commodities and maintenance, ensuring good quality. P4P also provided connections with financial institutions to provide credit facilities for aggregation. 	<p>No impact</p> <p>From data provided by WFP, the evaluation team concluded that there were no apparent impacts on the price of maize in the P4P markets that were the result of the LRP procurements.</p> <p>Data on bean prices were limited, and as such the evaluation team cannot preclude the possibility of some market impacts for beans. Although unlikely, the evaluation team concludes that the possibility exists that there may have been an impact on the price of beans in local markets in the Kagera region due to the LRP purchases of beans.</p>
<p>Uganda</p> <p>Development: Acholi Voucher Project (AVP) targeted 51,111 beneficiaries in the country's most food-insecure areas. See Section 5.5 B for more on P4P in the Acholi region of Uganda</p>	<p>July 2010 to August 2011</p> <p>2,071 MT of cereals (both milled and unprocessed)</p> <p>874 MT of beans</p> <p>180 MT of cooking oil</p>	<p>World Vision (NGO) purchased food from 162 vendors and used a voucher system for beneficiaries to purchase food from local vendors.</p>	<p>Some benefit</p> <ol style="list-style-type: none"> 1. Due to the demand created by the project for a wide variety of food commodities from vouchers, <i>local agricultural producers now have a ready market for a wide range of commodities.</i> 2. World Vision further reported that <i>local farmers are likely to get better prices from buyers due to the improved quality of their goods, which was required by the LRP project, as well as improved knowledge of regional prices due to exposure to many sellers in the marketplace.</i> With this improved price transparency, local farmers now have a better bargaining position when establishing prices with vendors and traders. 	<p>No impact</p> <p>Cornell University: The two methodologies used do not yield identical results, but neither provides evidence of price spikes attributable to LRP or price rises that lie outside what might be considered normal seasonal price profiles for the commodities and markets considered. Evidence of a market impact caused by the LRP project is lacking.</p> <p>In conclusion, considering the results of the Cornell University report and the evaluation team's analysis of the World Vision data, there is no evidence to negate the null hypothesis of no price impacts due to the LRP project.</p>



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<p>Zambia Development: Zambia Local and Regional Procurement project (ZLRP) targets 10,000 food-insecure households, especially those in areas with high HIV/AIDS rates</p>	<p>January–September 2011 2,745 MT of fortified maize meal 124 MT of maize grain 500 MT of beans 173 MT of vegetable oil 50 MT of High Energy Protein Supplement (HEPS)</p>	<p>Land O'Lakes (PVO) purchased food via hard (competitive) tenders at the Zambia Agricultural Commodity Exchange (ZAMACE) in Lusaka, Zambia. It also purchased HEPS via direct purchases from the local organisation, Community Markets for Conservation.</p>	<p>Some benefit 1. During the evaluation site visits, one Lusaka-based bean supplier noted that the <i>smallholder farmer groups which supplied the company were pleased with the additional demand for beans.</i></p> <p>Notes Evaluation team interviews with traders found that some small-scale shopkeepers were positively affected by the LRP project. Hammer millers in distribution areas were concerned that the provision of maize meal to beneficiaries had a negative effect on their business</p>	<p>Land O'Lakes responded with vouchers for use at the hammer mills and the provision of maize grain to beneficiaries; to be milled by the approved millers.</p>
<p>Zimbabwe Emergency: 68,000 beneficiaries (transitorily food-insecure and chronically food-insecure households)</p>	<p>March 2011 1,291 MT of maize 233 MT of pulses (yellow peas) 89 MT of vegetable oil</p>	<p>The United Methodist Committee on Relief (UMCOR) (NGO) purchased all food from vendors in South Africa via hard tender.</p>	<p>No benefit UMCOR reported no measurable impact on producers in the procurement market in South Africa as a result of the LRP procurement due to the very small amount purchased for the project.</p>	<p>No impact UMCOR reports that there were no measurable impacts in the procurement market or on their beneficiaries' markets as a result of their project-related procurements. Although the data available were not sufficient to provide a more comprehensive independent analysis of potential market impacts, the evaluation team concludes that it is unlikely that the procurements of the listed commodities in South Africa had any discernible impact on the prices of these commodities there.</p>

Source: USDA (2012).

* Description of benefit.

Significant benefit: improved and more reliable income; accumulation of assets.

Some benefit: skills, preference, confidence, but no direct link improved livelihood.

Little or No benefit: no direct impact on farmers or lack of information.

** Description of impact.

Impact detected: volatility due to LRP, conclusive.

Possible but limited impact: negligible or probable but very minimal volatility due to LRP, but inconclusive.

No impact detected: no impact or lack of data.

REFERENCES

- Adelman, S., D. Gilligan, and K. Lehrer. 2008. "How Effective are Food for Education Programs? A critical assessment of the evidence from developing countries." *IFPRI Food Policy Review* No. 9. Washington, DC: International Food Policy Research Institute.
- Agapto, J.P., R.S. Borsatto, V.F. de S. Esquerdo, and S.M.P.P. Bergamasco. 2012. "Avaliação do Programa de Aquisição de Alimentos (PAA) em Campina do Monte Alegre, Estado de São Paulo, a partir da percepção dos agricultores." *Informações Econômicas* 42(2): 13–21.
- Ahmed, A., and C. del Ninno. 2004. *Food for Education: A review of Program Impacts*. Washington, DC: International Food Policy Research Institute.
- Alderman, H., and D. Bundy. 2011. "School Feeding Programs and Development: Are We Framing the Question Correctly?" *World Bank Research Observer* 27(2).
- Alderman, H., and R. Yemtsov. 2012. "The Productive Role of Safety Nets." *World Bank Social Protection & Labour Discussion Paper* No. 1203. Washington, DC: World Bank.
- ASPRODEB. 2010. *Projet Pilote de Valorisation des Céréales Locales en Panification*. Dakar : ASPRODEB. Accessed 22 May 2017. <http://www.doc-developpement-durable.org/file/Fabrications-Objets-Outils-Produits/boulangerie-Pains/Projet_de_valorisation_des_cereales_locales-2.pdf>.
- Barrett, C. 2007. "The United States' International Food Assistance Programs: Issues and options for the 2007 Farm Bill." *AEI Working Paper*. Washington, DC: American Enterprise Institute. Accessed 22 May 2017. <<http://www.aei.org/wp-content/uploads/2013/05/FarmBill.pdf>>.
- Barrett, C. 2008. "Smallholder market participation: Concepts and evidence from eastern and southern Africa." *Food Policy* 33: 299–317.
- Barrett, C., and E. Mutambatsere. 2008. "Agricultural markets in developing countries." *In The New Palgrave Dictionary of Economics*, 2nd edition, edited by Steven N. Durlauf and Lawrence E. Blume. London: Palgrave Macmillan.
- Becker, C., F. Sacco dos Anjos, and A.J.A. Bezerra. 2009. "O Impacto do Programa de Aquisição de Alimentos da Agricultura Familiar na Segurança Alimentar e no Desenvolvimento Rural." Paper presented at the Sociedade Brasileira de Economia, Administração e Sociologia Rural, Campo Grande, MS, 25–29 July 2009.
- Biodiversity International. 2012. "The Impact of Organic Bananas in Alto Beni, Bolivia." *Impact Assessment Brief* No. 7. Rome, Biodiversity International.
- Birner, R., and D. Resnick. 2010. "The Political Economy of Policies for Smallholder Agriculture." *World Development* 38(10): 1442–1452.
- Blein, R., and R. Longo. 2009. "Food Price Volatility: How to help smallholders farmers manage risk and uncertainty." Discussion Paper for Round Table 1. Rome, International Fund for Agricultural Development.
- Bolton, P. 2008. "Protecting the Environment through Public Procurement: the Case of South Africa." *Natural Resources Forum* 31(1).
- Borras, S.M. Jr., R. Hall, I. Scoones, B. White, and W. Wolford. 2011. "Towards a Better Understanding of Global Land Grabbing: an Editorial Introduction." *Journal of Peasant Studies* 38(2): 209–216.

- Brazil. 2003. "Lei no. 10.696, de 2 de Julho de 2003." Presidência da República website. Accessed 22 May 2017. <http://www.planalto.gov.br/ccivil_03/leis/2003/l10.696.htm>.
- Bronkhorst, R. 2011. "How to strengthen the development effectiveness of local purchase for food aid." *Development in Practice* 21(7): 913–929.
- Bryant, E. 2012. "Uganda - Farmers in the north see good times ahead." World Food Programme website. Accessed 19 May 2017. <<http://www.wfp.org/blog/blog/uganda-farmers-north-see-good-times-ahead>>.
- Bundy, D., C. Burbano, M. Grosh, A. Gelli, M. Jukes, and L. Drakes. 2009. *Rethinking School Feeding: social safety nets, Child Development, and the Education Sector*. Washington, DC: World Bank.
- Bundy, D., L. Drake, and C. Burbano. 2012. "School Food, Politics and Child Health." *Public Health Nutrition*.
- Chaudhuri, S.J., and J.A. Suryahadi. 2002. "Assessing Household Vulnerability to Poverty from Cross-sectional Data: A methodology and estimates from Indonesia." *Discussion Paper* 0102-52. New York: Department of Economics, Columbia University.
- Christiaensen, L. 2011. "The (evolving) role of agriculture in poverty reduction-An empirical perspective." *Journal of Development Economics* 2: 239–254.
- Coles, C. 2013. *What is known about the impact of structured demand activities on resilient food systems?* London: Overseas Development Institute.
- Conti, I.L. (ed.). 2010. *Programa de Aquisição Alimentos*. Passo Fundo, Brazil: REDESAN.
- Conway, G. 1997. *The Doubly Green Revolution: Food for All in the 21st Century*. Ithaca, NY: Cornell University Press.
- Cordeiro, A. 2007. *Resultados do programa de aquisição de alimentos – PAA: a perspectiva dos beneficiários*. Brasília: CONAB.
- da Silva, M.G., and S.P. Silva. 2011. "Para Além do Acesso: uma Análise da Relação entre Mercados Institucionais e Empreendimentos de Economia Solidária no Meio Rural." *Mercado de Trabalho* 49: 87–93.
- Davis, B., S. Handa, M. Ruiz-Arranz, M. Stampini, and P. Winters. 2002. "Conditionality and the Impact of Programme Design on Household welfare: Comparing two Diverse Cash Transfer Programmes in Rural Mexico." *Working Papers* 02-10. Rome: Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations.
- De Janvry, A., and E. Sadoulet. 2011. "Subsistence farming as a safety net for food-price shocks." *Development in Practice* 21(4–5): 472–480.
- De Schutter, O. 2014. "The Power of Procurement: Public Purchasing in the Service of Realizing the Right to Food." *Briefing Note* No. 8. Geneva, Office of the United Nations High Commissioner for Human Rights. Accessed on 22 May 2017. <http://www.srfood.org/images/stories/pdf/otherdocuments/20140514_procurement_en.pdf>.
- Del Grossi, M.E. 2011. "Poverty Reduction: From 44 Million to 29.6 Million People." *In The Fome Zero (Zero Hunger) Program: The Brazilian Experience*, edited by J. Graziano da Silva, M.E. Del Grossi, and C. Galvao de Franca. Brasília: Ministry of Agrarian Development.

- Delgado, G.C., J.C.P.R. da Conceição, and J.J. de Oliveira. 2005. "Avaliação do Programa de Aquisição de Alimentos (PAA)." *Texto para Discussão* No. 1145. Brasília: Ipea.
- Dercon, S. 2002. "Income Risk, Coping Strategies and Safety Nets." *WIDER Discussion Paper* No. 2002/22. Helsinki: World Institute for Development Economics Research.
- Dercon, S., and P. Krishnan. 1996. "Income Portfolios in Rural Ethiopia and Tanzania: Choices and Constraints." *Journal of Development Studies* 32(6).
- Devereux, S. 2012. "Social Protection for Enhanced Food Security in Sub-Saharan Africa." *UNDP Working Paper* 2012-010. New York: United Nations Development Programme.
- Devereux, S., and R. Sabates-Wheeler. 2004. *Transformative social protection*. Brighton, UK: Institute of Development Studies.
- Devereux, S., R. Sabates-Wheeler, and A. Martinez. 2010. "Homegrown School Feeding and Social Protection." *HGSF Working Paper Series* No. 5. Brighton, UK: Institute of Development Studies.
- Dixon, J., K. Taniguchi, H. Wattenbach, and A. Tanyeri-Arbur. 2004. "Smallholders, Globalization and Policy Analysis." *AGSF Occasional Paper* 5. Rome: Food and Agricultural Organization of the United Nations.
- Doretto, M., and E. Michellon. 2007. "Avaliação dos Impactos Econômicos, Sociais e Culturais do Programa de Aquisição de Alimentos no Paraná." in *Avaliação de Políticas de Aquisição de Alimentos*, 27th edition, edited by F.B.B. Filho and A.D. de Carvalho. Brasília: UnB, CEAM, and NER, Vol. 7: 107–138.
- Dorward, A., J. Kydd, and C. Poulton. 1998. *Smallholder Cash Crop Production under Market Liberalization: A new institutional perspective*. Wallingford, UK: CAB International.
- Dorward, A., S. Fan, J. Kydd, H. Lofgren, J. Morrison, C. Poulton, N. Rao, L. Smith, T. Hardwick, S. Thorat, I. Urey, and P. Wobst. 2004. "Institutions and Policies for Pro-Poor Agricultural Growth." *Development Policy Review* 22(6): 611–622.
- Ellis, F., and S. Biggs. 2001. "Evolving Themes in Rural Development 1950s-2000s." *Development Policy Review* 19(4): 437–448.
- Espejo, F., C. Burbano, and E. Galliano. 2009. *Home Grown School Feeding: a Framework to Link School Feeding with Local Agricultural Production*. Rome: World Food Programme.
- ETC Group. 2009. *Who Will Feed Us? Questions for the Food and Climate Crises*. Ottawa, ON: ETC Group.
- FAO. 2008. *The State of Food Insecurity in the World 2008: High Food Prices and Food Security – threats and opportunities*. Rome: Food and Agriculture Organization of the United Nations.
- FAO. 2011. *The State of Food and Agriculture: Investing in Agriculture for a Better Future*. Rome: Food and Agriculture Organization of the United Nations.
- FAO. 2012. *The State of Food and Agriculture: Food Systems for Better Nutrition*. Rome: Food and Agriculture Organization of the United Nations.
- FAO. 2013. *Alimentación Escolar y las Posibilidades de Compra Directa de la Agricultura Familiar – Estudios de caso en ocho países*. Santiago: Food and Agriculture Organization of the United Nations.
- Ferguson, H., and T. Kepe. 2009. "Smallholder farmer participation in local and regional food aid procurement: assessing the benefits and challenges in South-western Uganda." *International Development Planning Review* 33(1).

- Ferguson, H., and T. Kepe. 2011a. "Agricultural cooperatives and social empowerment of women: a Ugandan case study." *Development in Practice* 21(3): 421–429.
- Ferguson, H., and T. Kepe. 2011b. "Smallholder Farmer Participation in Local and Regional Food Aid Procurement: Assessing the Benefits and Challenges in Southwestern Uganda." *International Development Planning Review* 33(1): 27–48.
- Gandolfi, A.P.R.B., D.L. dos Santos, I.Q. Martines, M.M. de Amorim, and E.F. de Oliveira. 2010. "Conab como Instrumento de Intervenção do Estado na Economia." *Revistas Eletrônicas Toledo Presidente Prudente*.
- Gelli, A., K. Nesser, and L. Drake. 2010. "Home Grown School Feeding: Linking small holder agriculture to school food provision." *HGSF Working Paper Series* No. 1. Brighton, UK: Institute of Development Studies.
- Gimenez, E.H., and M. Altieri. 2013. "Agroecology, Food Sovereignty and the New Green Revolution." *Agroecology and Sustainable Food Systems* 37: 90–102.
- Grisa, C., C.J. Schmitt, L.F. Mattei, R.S. Maluf, and S.P. Leite. 2011. "Contribuições do Programa de Aquisição de Alimentos à segurança alimentar e nutricional e à criação de mercados para a agricultura familiar." *Agriculturas* 8(3): 34–41.
- Hanrahan, C.E. 2013. "International Food Aid Programs: Background and issues." Washington, DC: Congressional Research Service. Accessed 22 May 2017. <<https://www.fas.org/sgp/crs/misc/R41072.pdf>>.
- Hellin, J., M. Lundy, and M. Meijer. 2009. "Farmer Organization, Collective Action and Market Access in Meso-America." *Food Policy* 34(1): 16–22.
- Hill, E., J. Upton, and A. Xavier. 2011. "Local and Regional Procurement in Uganda: Lessons learned from a pilot study of the Market Information and Food Insecurity Response Analysis (MIFIRA) framework." Unpublished Draft. Ithaca, NY: Cornell University. Accessed 22 May 2017. <http://dyson.cornell.edu/faculty_sites/cbb2/MIFIRA/apps/>.
- IFAD. 2011. *Rural Poverty Report 2012*. Rome: International Fund for Agricultural Development.
- IFAD and UNEP. 2013. "Smallholders, Food Security and the Environment." Rome: International Fund for Agricultural Development.
- IPC-IG. 2013. *Structured demand and smallholder farmers in Brazil: the case of PAA and PNAE*. Brasilia: International Policy Centre for Inclusive Growth.
- IRIN Africa. 2013. "Analysis: From emergency aid to early recovery in northern Uganda." IRIN website. Accessed 22 May 2017. <<http://www.irinnews.org/report/97165/analysis-from-emergency-aid-to-early-recovery-in-northern-uganda>>.
- Jomaa, L., E. McDonnell, and C. Probart. 2011. "School Feeding Programs in Developing Countries: Impacts on children's health and educational outcomes." *Nutrition Reviews* 69(2).
- Kain, J., R. Uauy, and M. Taibo. 2002. "Chile's school feeding programme: targeting experience." *Nutrition Research* 22.
- Key, N., E. Sadoulet, and A. de Janvry. 2000. "Transaction Costs and Agricultural Household Supply Response." *American Journal of Agricultural Economics* 82(2): 245–259.

- Lentz, E.C., C.B. Barrett, and M.I. Gómez. 2012. "The Impacts of Local and Regional Procurement of US Food Aid: Learning Alliance Synthesis Report." Ithaca, NY: Cornell University. Accessed 22 May 2017. <<http://barrett.dyson.cornell.edu/files/papers/LRPCh1Lentzetetal11Jan2012Update.pdf>>.
- Ligon, E., and E. Sadoulet. 2007. "Estimating the Effects of Aggregate Agricultural Growth on the Distribution of Expenditures." Background paper for the World Development Report 2008.
- Lucena, E.K., and J.M. Luiz. 2009. "Uma Avaliação da Importância do Programa de Aquisição de Alimentos." Paper presented at the Sociedade Brasileira de Economia, Administração e Sociologia Rural, Porto Alegre, RS, 26–30 July 2009.
- Lustig, N. 2012. "Rising Food Prices and Children's Welfare." *Social and Economic Policy Working Briefs*. New York: UNICEF. Accessed 22 May 2017. <http://www.unicef.org/socialpolicy/files/Rising_Food_Prices_and_Childrens_Welfare.pdf>.
- McCrudden, C. 2004. "Using public Procurement to Achieve Social Outcomes." *Natural Resources Forum* 28(4).
- McMichael, P. 2009. "A Food Regime Genealogy." *Journal of Peasant Studies* 36(1): 139–169.
- MDS. 2013. "Programa de Aquisição de Alimentos teve investimento de R\$5 bilhões em 10 anos." Ministério de Desenvolvimento Social e Combate à Fome website. Accessed 22 May 2017. <<http://www.mds.gov.br/saladeimprensa/noticias-1/2013/julho/programa-de-aquisicao-de-alimentos-teve-investimento-de-r-5-bilhoes-em-10-anos>>.
- Meerman, J., and J. Aphane. 2012. "Impact of High Food Prices on Nutrition." Proceedings for FAO's Expert Consultation on Policy Responses to High and Volatile Food Prices, November 2012. Rome: Food and Agriculture Organization of the United Nations. Accessed 22 May 2017. <http://www.fao.org/fileadmin/user_upload/agn/pdf/Meerman_Aphane_ICN2_FINAL.pdf>.
- Momberg de Camargo, E.A. de O., S. Gomes, R. Raggio, B. Carolina de Meira, and R. Serra Borsatto. 2013. "Programa de Aquisição de Alimentos (PAA) como Instrumento de Fortalecimento de Assentamentos Rurais: o caso do assentamento 23 de Maio, Itapetininga, Estado de São Paulo." *Informações Econômicas* 43(1): 18–28.
- Morduch, J. 1995. "Income Smoothing and Consumption Smoothing." *The Journal of Economic Perspectives* 9(3).
- Morgan, K., and R. Sonnino. 2008. *The School Food Revolution: Public food and the challenge of sustainable development*. London: Earthscan.
- Morgan, K., T. Bastia, and T. Kanemasu. 2007. *Home Grown: The new era of school feeding*. Cardiff, UK: School of City and Regional Planning, Cardiff University.
- Nehring, R., and B. McKay. 2013. "Scaling-up Local Development Initiatives: Brazil's Food Acquisition Programme." *IPC-IG Working Paper* No. 106. Brasília: International Policy Centre for Inclusive Growth.
- Onumah, G., J. Davis, U. Kleih, and F. Proctor. 2007. "Empowering smallholder farmers in markets: Changing agricultural marketing systems and innovative responses by producer organizations." *ESFIM Working Paper* 2. Paris: European Consortium for Agricultural Research in the Tropics.
- Oya, C. 2012. "Contract Farming in Sub-Saharan Africa: A Survey of Approaches, Debates and Issues." *Journal of Agrarian Change* 12(1): 1–33.

- PAEPARD. 2012. *Le Fonds National de Recherche Agricole et Agro-alimentaire (FNRAA): Un mécanisme innovant de financement public de recherche agricole*. Paris: Plateforme pour un partenariat Afrique-Europe dans le domaine de la recherche agricole pour le développement: 21–23. Accessed 22 May 2017. <http://csa-be.org/IMG/pdf_Le_FNRAA-etude_de_casFINAL.pdf>.
- Penunia, E.A. 2012. "The Role of Farmers' Organizations in Empowering and Promoting the Leadership of Rural Women." Paper prepared for the UN Women Expert Group Meeting: Enabling rural women's economic empowerment: institutions, opportunities and participation, Accra, Ghana, September 2011. Accessed 22 May 2017. <<http://www.un.org/womenwatch/daw/csw/csw56/egm/Penunia-EP-12-EGM-RW-Oct-2011.pdf>>.
- Poulton, C., A. Dorward, and J. Kydd. 2006. "Overcoming Market Constraints to Pro-Poor Agricultural Growth in Sub-Saharan Africa." *Development Policy Review* 24(3): 243–277.
- Reardon, T., and J. Berdegue. 2002. "The rapid rise of supermarkets in Latin America: Challenges and opportunities for development." *Development Policy Review* 20: 371–388.
- Reardon, T., C.P. Timmer, and J.A. Berdegue. 2008. "The Rapid Rise of Supermarkets in Developing Countries: Induced Organizational, Institutional and Technological Change in Agri-Food Systems." In *The Transformation of Agri-Food Systems: Globalization, Supply Chains and Smallholder Farmers*, edited by E.B. McCullough, P.L. Pingali, and K.G. Stamoulis, 47–66. London: Earthscan.
- Rocha, A.G.P., S.P. Cerqueira, and V.P. Coelho. 2007. "Um panorama do Programa de Aquisição de Alimentos no Estado da Bahia: estudos de caso em Boa Vista do Tupim, Tapiramutá e Vitória da Conquista." *Sociedade e desenvolvimento rural* 1(1).
- Sabates-Wheeler, R., S. Devereux, and B. Guenther. 2009. "Building Synergies Between Social Protection and Smallholder Agricultural Policies." *Growth & Social Protection Working Paper* 1. Brighton, UK: Future Agricultures Consortium. Accessed 22 May 2017. <<http://r4d.dfid.gov.uk/PDF/Outputs/Futureagriculture/WorkingpaperNo1-SocialprotectioninAfrica.pdf>>.
- Sadoulet, E., A. de Janvry, and B. Davis. 2001. "Cash transfer programs with income multipliers: PROCAMPO in Mexico." *World Development* 29(6): 1043–1056.
- Sanches Peraci, A., and G.B. Alceu. 2011. "Family Farming and Price Guarantee Programs in Brazil: The Food Acquisition Program (PAA)." In *The Fome Zero (Zero Hunger) Program: The Brazilian Experience*, edited by J. Graziano da Silva, M.E. Del Grossi, and C. Galvão de França. Brasília: Ministry of Agrarian Development.
- Santamaria, C. 2013. "USAID's controversial new food aid strategy." Devex website. Accessed 22 May 2017. <<https://www.devex.com/news/usaids-controversial-new-food-aid-strategy-80688>>.
- Singh, P., A. Park, and S. Dercon. 2012. "School Meals as a Safety Net: An evaluation of the midday meal scheme in India." *Working Paper* No. 75. Oxford: Department of International Studies, University of Oxford.
- Slater, R., R. Holmes, and D. Bhuvanendra. 2013. *Social Protection and Resilient Food Systems*. London: Overseas Development Institute.
- Soares, F.V., R. Nehring, R.B. Schwengber, C.G. Rodrigues, G. Lambais, D.S. Balaban, C. Jones, and A. Galante. 2013. "Structured Demand and Smallholder Farmers in Brazil: the Case of PAA and PNAE." *IPC-IG Technical Paper* No. 7. Brasília: International Policy Centre for Inclusive Growth.

- Sow, H.A. 2014. "ASPRODEB's experience in Senegal." Presentation at Séminaire agricole international : Les achats institutionnels au service de l'agriculture familiale, Collectif Stratégies Alimentaires, Brussels, Belgium. Accessed 22 May 2017. <http://www.csa-be.org/spip.php?page=art-seminaire&id_mot=199&id_article=990>.
- Sparovek, G, A.E.P. Ludwig, and R.F. Maule. 2007. "Estudo Comparativo das Diferentes Modalidades do PAA – Região Nordeste." *Revista Cadernos de Estudos -Desenvolvimento Social em Debate* No. 5. Brasília: Ministério do Desenvolvimento Social e Combate à Fome.
- Studdert, L. 2004. "Community based school feeding during Indonesia's economic crisis – implementation, benefits and sustainability." *Food and Nutrition Bulletin* 25(2).
- Sumberg, J., and R. Sabates-Wheeler. 2010. "Linking Agricultural Development to School Feeding." *HGSF Working Paper Series* No. 2. Brighton, UK: Institute of Development Studies.
- Sumberg, J., and R. Sabates-Wheeler. 2011. "Linking Agricultural Development to School Feeding in sub-Saharan Africa: Theoretical perspective." *Food Policy* 36.
- Tendler, J., and M. Amorin. 1996. "Small Firms and their Helpers: Lessons on Demand." *World Development* 24(3).
- Tirivary, N., M. Knowles, and B. Davis. 2013. *The Interaction between Social Protection and Agriculture: A Review of Evidence*. Rome: Food and Agriculture Organization of the United Nations.
- Todd, J.E., P.C. Winters, and T. Hertz. 2010. "Conditional Cash Transfers and Agricultural Production: Lessons from the Oportunidades Experience in Mexico." *The Journal of Development Studies* 46(1): 39–67.
- Upton, J., E.C. Lentz, C.B. Barrett, and T. Garg. 2012. "Local Food for Local Schools: An analysis of the impact of local procurement for a school feeding program in Burkina Faso." *Cornell University Working Paper*. Ithaca, NY: Cornell University.
- UN. 2011. *The Global Social Crisis: Report on the World Social Situation 2011*. New York: Department of Economic and Social Affairs of the United Nations.
- USDA. 2012. *USDA Local and regional food aid procurement pilot project*. Washington, DC: US Department of Agriculture. Accessed 22 May 2017. <http://www.fas.usda.gov/sites/default/files/lrp_annexes_12-12-12_to_print.pdf>.
- US House of Representatives. 2014. H.R. 2642, *Agricultural Act of 2014, 113th Congress, 2nd Session*. Washington, DC: Government Printing Office.
- Vaitsman, J., and R. Paes-Souza. 2007. *Evaluation of MDS Policies and Programs—Results*. Brasília: MDS-SAGI.
- Violette, W.J., A.P. Harou, J.B. Upton, S.D. Bell, C.B. Barrett, and M.I. Gómez. 2013. "Recipients' satisfaction with locally procured food aid rations: Comparative evidence from a three country matched survey." *World Development* 49: 30–43.
- Vogt, S.P.C., and R.S. de Souza. 2009. "Mercados Institucionais Locais como Instrumento de Fortalecimento da Agricultura Familiar: uma Análise do Programa de Aquisição de Alimentos na Região Celeiro, RS." Paper presented at the Sociedade Brasileira de Economia, Administração e Sociologia Rural, Porto Alegre, RS, 26–30 July 2009.

Vorley, B., L. Cotula, and M.-K. Chan. 2012. "Tipping the Balance: Policies to Shape Agricultural and Markets in Favour of Small-Scale Farmers." *IIED Research Report*. London: International Institute for Environment and Development. Accessed 22 May 2017. <<http://pubs.iied.org/G03470.html>>.

Whitaker Group. 2009. "WFP buys food from Ugandan Farmers." *Uganda Update*, Winter 2008/2009. Washington, DC: Whitaker Group. Accessed 22 May 2017. <<http://allafrica.com/download/resource/main/main/idatcs/00011753:b7be05c52bef0879719f23cad66a976c.pdf>>.

Wolford, W., S.M. Borras Jr., R. Hall, I. Scoones, and B. White. 2013. "Governing the Global Land Grab: the Role of the State in the Rush for Land." *Development and Change* 44(2): 189–471.

World Bank. 2007. *World Development Report 2008: Agriculture For Development*. Washington, DC: World Bank.

World Bank. 2012. *Food Prices, Nutrition and the Millennium Development Goals. Global Monitoring Report 2012*. Washington, DC: World Bank. Accessed 22 May 2017. <<http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1327948020811/8401693-1327957211156/8402494-1334239337250/Chapter-2.pdf>>.

WFP. 2012. "Uganda: Acholi farmers now selling food to WFP, instead of receiving it." AllAfrica website. Accessed 19 May 2017. <<http://allafrica.com/stories/201210150732.html>>.

WFP. n.d. *Purchase for Progress*. Rome: World Food Programme.

NOTES

3. Only a few available evaluations include complete baseline data for producers.
4. Bolivia, Colombia, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Peru.
5. This figure does not include Colombia and Peru, since there were no available data on expenditure.
6. For these reasons, it is important that LRP programmes that require producers to store their harvest should also include techniques and training on appropriate quality control and storage.
7. In contrast, contract farming typically involves new technology (crops, tools, methods etc.).
8. In the case of transferring payment to the cooperative, they are then responsible for dividing the payments based on each farmer's production. Recently, the MDS has instituted a new debit card system that works with the Bank of Brazil to transfer payments directly to the card's account.
9. The limit increases to BRL8000 (USD4000) when 50 per cent of the family farmers in a cooperative (or just the individual) are receiving the *Bolsa Família*, Brazil's conditional cash transfer (MDS 2013).
10. The survey included six different crops, and the only lower price offered through the PAA was cherry tomatoes at 5.2 per cent lower than the market price (Agapto et al. 2012, 18).



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