



Summary 5: The role of structured demand activities

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Introduction

Social protection has emerged rapidly as a key development and humanitarian policy issue in the last decade. At the same time, there have been major food price shocks in many countries in the last 5 years. As a result, interest in social protection and food systems is converging and many donor agencies and governments are looking at how different social protection instruments might better support or enable the different components of food systems and maintain their resilience in the face of major shocks and stresses. These summaries, based on a series of reports, explore the impacts of different social protection instruments on resilient food systems and provide a set of key messages for policy makers and programmers working on social protection and food security.

Defining a food system

We conceptualise a food system by drawing on a shared and common definition of food security ('when all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life' FAO 1996) and we focus on four specific dimensions of food security:

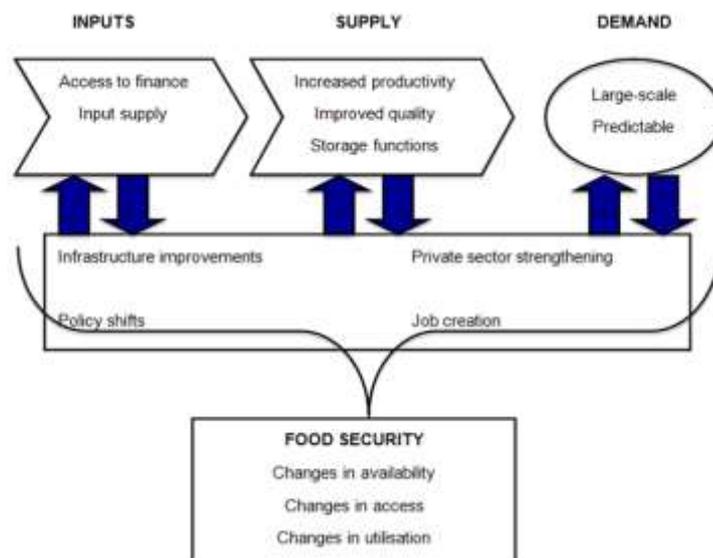
- The availability of food: the supply of food at the macro national (global) level
- People's entitlement to food (henceforth called 'access to food'): households' ability to produce and/or purchase food
- The utilisation of food: the intake of sufficient, safe and quality food
- Crisis prevention and management: maintaining availability, access and utilisation in contexts of emergencies, shocks and stresses

This briefing paper presents the results of a review of the evidence for impacts of structured demand programmes on resilient food systems. Structured demand is one of several instruments that contribute to food security by reducing risk and vulnerability through enhancing productivity and/or ensuring a reliable supply of food. Structured demand programmes connect large, predictable sources of demand for agricultural products to small farmers, which, in theory, reduces risk and encourages improved quality, leading to improved systems, increased income, and reduced poverty.

What is structured demand?

The theory of change is that large-scale, relatively predictable programmes employing food for social good drive systemic changes needed to provide sustainable market access for smallholder farmers in developing countries, which impact upon the four dimensions of food security – availability, access, utilisation and shocks. Structured demand may impact these elements directly, that is, for its recipients, or indirectly to producers through procurement practices and income effects (see The Gates Foundation, 2010; Sumberg and Sabates-Wheeler, 2010, and Mitchell, 2011 for definitions and background).

Sources of structured demand include schools, hospitals, the military, planned aggregate demand (such as that in the Gulf states) and food aid programmes. This paper focuses upon the main three main kinds of structured demand programme for which there is a significant body of evidence – home-grown school feeding (HGSF), local and regional food aid procurement (LRP) and, in particular, the United Nations World Food Programme's (WFP) Purchase for Progress (P4P) initiative, and Indian Public Distribution System (PDS) schemes. While the sources of demand and, therefore, uses of food differ, all forms of structured demand involve some form of LRP and, therefore, we treat supply side impacts together.



Home-grown school feeding (HGSF)

HGSF is the combination of local agricultural production (local and regional purchase - LRP) and traditional Food-for-Education (FFE) 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 (e.g. IFPRI, 2001).

UN World Food Programme Purchase for Progress (WFP P4P)

P4P is a complex portfolio of supply side and market interventions working under the premise that not only should food transfers positively impact the food security of recipient communities (demand side) but also should improve the livelihoods (and, thereby, food security) of small-scale, poor producers (supply side) through LRP activities (e.g. WFP 2011).

Indian Public Distribution System (PDS)

The PDS in India provides subsidised food grains and other essential commodities through a network of 'fair price shops'. Since its establishment under colonial rule, the programme has evolved from being universal, through geographic targeting in tribal, arid, hill and remote areas in 1992 (Revamped PDS - RPDS), and subsequent economic targeting – the Targeted Public Distribution System (TPDS) – in 1997 (e.g. Khera, 2011).

Key results

Direct impacts

1. Localised demand can increase food availability through shifting the demand curve, raising prices and eliciting a supply response. All forms of structured demand, through their shared LRP procurement modalities, can increase food availability by causing upward shifts in local demand curves, raising farmer prices and, thus, stimulating production (USDA, 2009; Ferguson and Kepe, 2011). Corruption and inefficiencies caused by poor design of PDS have resulted in much food being channelled through regular markets (Khera, 2001). Procurement from vulnerable, food insecure farmers may be potentially harmful to them and P4P programmes work on a precautionary principle (USDA, 2009). While it is possible that poor targeting may have damaging effects on suppliers we found no evidence of this in the literature. It is key to disaster recovery efforts that food markets continue to function during shocks (*ibid*).

2. LRP for any form of structured demand can potentially stabilise food prices. LRP for structured demand can secure access by stabilising food prices within and between years, albeit often at an initially elevated level (Aberman, 2007). If made at the appropriate scale and timing it can avoid harmful market distortions, although distribution is more likely to disrupt food systems (Garg *et al.*, 2012; Lentz, Barrett and Gómez, 2012). The PDS subsidy is key in granting access to food although the targeting excludes many poor households (Malhotra *et al.*, 2010).

3. Nutrition can be improved and calorie intake be can increased. Food distributed to students and their families can improve the nutrition of school children and other members of their households (e.g. Aberman, 2007; Bundy *et al.*, 2009). Locally procured food is preferred over internationally sourced rations, contributing to enhanced utilisation by households (Violette *et al.*, 2012). There is significant evidence that PDS increases both calorie and nutrient intakes of participating households (Ray, 2007; Chaudhuri, 2008; Khera, 2011).

4. Structured demand programme can mitigate shocks but evidence is sparse. There is very little evidence for how structured demand programmes contribute to food security in the presence of shocks. However, what little information exists demonstrates that FFE programmes can enable households to avoid coping strategies such as selling assets in order to purchase food (Devereux, Sabates-Wheeler and Martínez, 2010). Evidence from LRP programmes suggests that, if well administered, they can help to prevent malnutrition and associated diseases during droughts (USDA, 2009).

Indirect impacts

5. Producer net benefits depend upon whether they are net buyers or net sellers. Producers who are net sellers stand to gain from local increases in food prices, whereas net buyers lose out (Aberman, 2007).

6. Structured demand represents a reliable market for poor producers. Supporting interventions assist in raising incomes and improving access to food and reducing the risk of local price rises. All forms of structured demand present a more reliable, continuous market and supporting intervention such as improved access to credit and inputs and better post-harvest handling procedures can raise productivity and incomes. P4P warehouse receipt systems raise incomes by smoothing supply beyond low-price gluts around harvests (Mitchell and Leturque, 2011).

7. Inaccurate and inadequate market intelligence and analysis risks causing harm. Interventions based upon flawed market analyses can be disastrous – a high-profile example was the Malawi food crisis of 2001-02, where the WFP procured food locally based upon inaccurate production data, precipitating a maize shortage (Dorward *et al.*, 2006).

Policy implications

Impacts of structured demand interventions on food marketing systems are highly dependent upon their scale, timing and the quality of the information they are based upon. Best practice is to take a precautionary sequenced approach, moving from initially food security focussed to ultimately market-based policies (Dorward *et al.*, 2006):

1. Ensuring immediate food security

- Needs policies that will work in the absence of effective markets
- Implies a dominant role for social safety nets (where the choice between cash and food transfers must be based on sound market analysis) and less focus on economic growth

2. In the medium-term there is a need to *develop effective markets and rural infrastructure* and maintain social protection measures that are sensitive to local market conditions.

3. In the longer term, once markets and traders are well established and rural infrastructure is in place, then *market-based policies can be increasingly relied upon* to promote food security and rural economic growth.

Table 1: Impact matrix

Evidence for direct and indirect impacts of structured demand programmes on four aspects of food security (resilient food systems). Text in parentheses identifies which kind of structured demand programme the evidence was sourced from

	Availability	Access	Utilisation	Shocks
Direct	<p>Causes upward shift of demand curve, raising farmer prices and stimulating production (all).</p> <p>Corruption, inefficiency and poor design limits availability through food being sold into regular market channels (PDS).</p>	<p>Can stabilise intra- and inter-annual food prices (albeit often at an initially elevated level).</p> <p>Distribution more likely to disrupt markets than procurement.</p> <p>Appropriate scale & timing can avoid harm (LRP/P4P)*.</p> <p>Subsidy enables access for many but targeting excludes many BPL households (PDS).</p>	<p>Improved child nutrition & spill overs to other household members (FFE).</p> <p>Improved quality of WFP crops but no spill over to others.</p> <p>Quality improvements though higher LRP/P4P standards.</p> <p>Locally procured food preferred over imported. (LRP/P4P)*.</p> <p>Increased calorie and nutrient intake result in improved nutrition (PDS).</p>	<p>Households can avoid coping strategies of selling assets to buy food (FFE).</p> <p>Can prevent malnutrition and disease during drought, depending upon nutritional value (LRP/P4P)*.</p>
Indirect	<p>Careful targeting can avoid harm to vulnerable (food insecure) producers (LRP/P4P)*.</p>	<p>Net sellers benefit from increased demand through higher farmer prices; net buyers lose out.</p> <p>Reliable market, continuous demand, better handling & improved access to credit & inputs raise productivity and incomes (LRP/P4P)*.</p> <p>Warehouse receipt systems smooth supply, increasing income (P4P).</p>	-	-

*LRP is a feature of every form of structured demand

References

- Aberman, N. (2007). Home Grown School Feeding Mapping Report. Report to The World Bank. Washington, DC, IFPRI.
- Bundy, D., Burbano, C., Grosh, M., Gelli, A., Jukes, M. and Drake, L. (2009). Rethinking School Feeding, Social Safety Nets, Child Development and the Education Sector. Washington, DC, The World Bank.
- Chaudhuri, T. (2008). An Overview of the Public Distribution System. Unpublished background paper.
- Devereux, S., Sabates-Wheeler, R. and Martínez, A.P. (2010). Home-Grown School Feeding & Social Protection. Partnership for Child Development working paper no. 216. Brighton, IDS.
- Dorward, A., Sabates-Wheeler, R., MacAuslan, I., Penrose-Buckley, C., Kydd, J. and Chirwa, E. (2006). Promoting Agriculture for Social Protection or Social Protection for Agriculture: Policy and Research Issues. Future Agricultures Research Paper 002.
- Ferguson, H. and Kepe, T. (2011). Smallholder farmer participation in local and regional food aid procurement: Assessing the benefits and challenges in southwestern Uganda. International Development Planning Review 33 (IDPR).
- Garg, T., Barrett, C.B., Gomez, M.I., Lentz, E.C. and Violette, W. (2012). Market prices and food aid local and regional procurement and distribution: A Multi-country analysis. Working paper. Ithaca, Cornell University.
- The Gates Foundation (2010). Thinking Differently About Structured Demand: Opportunities and Linkages for the Foundation. The Gates Foundation, internal draft document.
- IFPRI (2001). Food for Education Brief. Washington, DC, International Food Policy Research Institute.
- Khera, R. (2011). India's Public Distribution System: Utilisation and Impact. Journal of Development Studies. First published on: 07 March 2011 (iFirst).
- Lentz, E.C., Barrett, C.B. and Gómez, M.I. (2012). The Impacts of Local and Regional Procurement of US Food Aid: Learning Alliance Synthesis Report
- Mitchell, A. (2011). Structured Demand and Home-Grown School Feeding: Background and Funding Options. Presentation to Global Child Nutrition Forum 2011, Nairobi. The Bill and Melinda Gates Foundation.
- Mitchell, J. and Leturque, H. (2011). WFP 2008 – 2013 Purchase for Progress (P4P) Initiative: A Strategic Evaluation (mid-term). Rome, UN World Food Programme.
- Ray, R. (2007). Changes in Food Consumption and the Implications for Food Security and Undernourishment: India in the 1990s. Development and Change 38: 321–343.
- Sumberg, J. and Sabates-Wheeler (2010). Linking Agricultural Development to School Feeding. Future Agricultures Working Paper 012.
- USDA (2009). The Use of Local and Regional Procurement in Meeting the Food Needs of Those Affected by Disasters and Food Crises. Washington, DC, United States Department of Agriculture.
- Violette, W.J., Harou, A.P., Upton, J.B., Bell, S.D., Barrett, C.B., Gómez, M.I., and Lentz, E.C. (2012). Recipients' Satisfaction with Locally Procured Food Aid Rations: Comparative Evidence from a Three Country Matched Survey. Draft manuscript.
- WFP (2011). Taking stock: WFP and stakeholders review. P4P implementation at mid-point. Rome, UN World Food Programme.