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Public food procurement from smallholder farmers: Literature review and best practices

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Food and Agriculture
Organization of the
United Nations



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Public food procurement from smallholder farmers: literature review and best practices

By Ana Miranda

This publication is part of a series of Working Papers produced in the context of the International Year of Family Farming, helping to inform regional discussions and debates about the phenomenon worldwide.

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ACRONYMS AND ABBREVIATIONS

| | |
|-------------|---|
| DAP | <i>Declaração de Aptidão ao Pronaf</i> |
| EU | European Union |
| FAO | Food and Agriculture Organization of the United Nations |
| FCI | Food Corporation of India |
| GSFP | Ghana School Feeding Programme |
| HGSF | Home Grown School Feeding |
| HLC | High Level Committee |
| MSP | Minimum support price |
| NGO | Non-governmental organisation |
| NSGR | National Strategic Grain Reserve |
| OECD | Organisation for Economic Co-operation and Development |
| SME | Small and medium-sized enterprise |
| SPP | Sustainable public procurement |
| TPDS | Targeted Public Distribution System |
| UNEP | United Nations Environmental Programme |
| WFP | World Food Programme |
| MDA | Ministry of Agrarian Development |
| PAA | <i>Programa de Aquisição de Alimentos</i> |
| PNAE | <i>Programa Nacional de Alimentação Escolar</i> |

GLOSSARY

Bid declaration: A non-monetary form of bid security; declarations are usually a notarised sworn statement made by a bidder committing to sign the contract if they are selected before the end of the bid validity period.

Bid security: A monetary guarantee intended to dissuade bidders from withdrawing their bids before the end of the bid validity process. The most common forms of bid security are bank guarantees, letters of credit, bonds, cheques and cash.

Direct contracting involves a non-competitive process whereby the buyer uses a contract to directly procure from a supplier.

Forward contract: A contract between two parties to buy or sell an asset at a specified price on a future date.

Horizontal policies: Economic, social, political and environmental policies that are promoted through public procurement.

Legal capacity: The ability provided by the law to natural persons or juridical persons to enter into binding contracts and sue and be sued.

Open tendering: A competitive bidding process whereby any interested party can submit a bid and compete to win a government contract.

Performance guarantee: A written guarantee from a third-party guarantor (usually a bank or an insurance company) submitted to a procuring entity by a contractor on winning the bid, to guarantee the full and proper performance of the contract. The most common types are cheques, bank deposits, letters of credit, insurance guarantees and performance bonds.

Preferential treatment scheme: A scheme that gives preferences to certain categories of suppliers, goods or services by providing a competitive advantage in public procurement processes.

Prequalification: A preliminary stage that can be adopted in the tendering process; it aims to select potential tenderers that can meet the specific criteria for a contract and are, therefore, deemed capable of performing satisfactorily.

Procurement methods: Basic methods adopted by governments for purchasing goods and services; the most common methods are open tendering, request for quotation and single-source procurement.

Public procurement: The process by which governments purchase goods, services, capital and technologies for their own or public use.

Public procurement frameworks: Laws, regulations and procedures that guide public procurement.

Soft tenders: A tendering process is restricted to a target group of suppliers, and less stringent procurement requirements are applied.

Tendering or bidding processes precede a procurement contract to generate competing offers from different bidders interested in winning a contract.

PUBLIC FOOD PROCUREMENT FROM SMALLHOLDER FARMERS: LITERATURE REVIEW AND BEST PRACTICES

Ana Miranda¹

ABSTRACT

Governments in all parts of the world use their purchasing power to advance social, economic and environmental goals. In a similar vein, public food procurement has also been used to promote a number of positive outcomes. There is growing interest among countries and international institutions in using public food purchases to promote the integration of smallholders into markets and strengthen rural livelihoods. Despite the expansion of public food procurement from smallholder farmers, research into these novel strategies is still limited. This paper will address some of the research gaps by identifying best practices in promoting smallholder participation in public food procurement. It reviews the body of available literature in the field and draws key lessons learned. The findings can assist policymakers in the design and implementation of public food procurement initiatives targeted at smallholders.

1 INTRODUCTION

The role of public food procurement in promoting social and economic benefits has gained prominence in recent years. The significant size and value of government food purchases can be used to drive a number of policy objectives such as encouraging healthier diets, promoting agricultural development and fostering more sustainable food systems. Countries are increasingly using public food procurement as a strategy to promote smallholder market participation and strengthen rural livelihoods. Despite the expansion of public food procurement targeted at smallholders, this approach is still relatively new; thus research on impacts, challenges and best practices is rather limited. So far there have been no systematic attempts to analyse the available research on public food procurement initiatives and draw lessons learned from their design and implementation.

This review aims to address some of these research gaps by systematising the literature on public food procurement from smallholders and pinpointing best practices. It identifies factors that directly influence the ability of smallholders to participate in public food procurement markets. Naturally, the participation of farmers in formal markets depends on a wide range of factors which play a positive or negative role in their integration. Well-functioning input

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and output markets, appropriate infrastructure and transportation, as well as progressive tax systems and coherent trade policies can all be considered important to market integration. It would not be feasible, however, to examine every possible aspect. The review thus concentrates on elements that are very particular to public food procurement, isolating factors that can be controlled or shaped by food procurement processes and their related institutions.

The findings in this review are based on the current research on public food procurement strategies adopted in different countries. It also draws on the literature on horizontal policies in public procurement and the work of the Organisation for Economic Co-operation and Development (OECD) and the World Bank on best practices in public procurement, particularly the World Bank's Benchmarking Framework.² The analysis also includes, whenever relevant, the literature on public procurement and development of small and medium-sized enterprises (SMEs).

The first section provides a brief overview of the discussions around the pursuit of horizontal policies through public procurement. The following section situates food procurement within this context, highlighting how it can be used to advance different policy goals such as food security and nutrition, poverty reduction, agricultural development and more sustainable food systems. The third part explores best practices in public food procurement that enable smallholder access to public food markets while lessening any potential integrity risks to public procurement systems. Furthermore, it discusses aspects related to smallholder capacity development, policy coordination and multisectoral arrangements which also play a crucial role in facilitating smallholder farmer participation in public food procurement. Best practices are summarised in the final section.

2 PUBLIC PROCUREMENT AND HORIZONTAL POLICIES: ADVANCING NATIONAL DEVELOPMENT GOALS THROUGH GOVERNMENT PURCHASES

In both public and private procurement, entities aim to achieve the best deal when purchasing goods and services. Nonetheless, the similarities between the two types of procurement seem to end there. Public procurement is influenced by additional demands that are not normally imposed on the private sector (Telgen et al. 2007). The State is expected to set an example in terms of ethical practices and standards. Unlike the private sector, governments can define and control the rules that guide public purchases, making it both a player and a decision-maker in markets. Importantly, the large size of government purchases gives public procurement the power to influence markets and regulate market players. Given its power, public procurement has been used to serve several development goals, including job creation, innovation, industrial growth, environmental sustainability and social inclusion (McCrudden 2007; Arrowsmith 2010).

Public procurement processes are in principle designed to enable governments to purchase goods and services as cost-effectively as possible. However, procuring entities normally consider aspects other than cost-efficiency when purchasing good and services (Arrowsmith 2010). For example, governments in all cases require compliance with legal norms and obligations, such as paying taxes and complying with labour law and health and safety regulations. This is designed to ensure that public procurement is not associated with unlawful behaviour.

The State can also enforce compliance by excluding certain firms from public procurement processes. Governments often ban firms from tendering processes as a sanction for violating

the law or on ethical and moral grounds. For instance, in Northern Ireland firms that are found to discriminate on the grounds of religion or political belief are excluded from public procurement (Erridge and Hennigan 2006). This strategy has also been used to advance human rights transnationally, with governments excluding firms that do business in countries where there are serious human rights abuses (McCrudden 2007).

Procurement policies can also be instrumental in enabling the State to advance social, economic, political and environmental benefits that go beyond compliance with general law and responding to the public sector's procurement needs. Socio-economic and environmental concerns can, for example, inform governments' decisions on which goods and services to purchase. Procuring entities may, for instance, decide to only procure fairly traded goods or invest in green products (UNEP 2013).

Moreover, governments can create additional contract requirements that seek to support development goals such as providing employment opportunities to minorities, subcontracting SMEs, guaranteeing equal pay or complying with environmental standards (Arrowsmith 2010). These requirements can also go beyond the government contract, stipulating that suppliers must adopt these policies across their business practices to be eligible to participate in public procurement processes. In doing so, the State sets an example and promotes equality principles, social rights and sound environmental practices in the economy. Governments can also favour particular categories of suppliers through mechanisms that give them preferential access to public procurement markets.

Policies that promote the use of public procurement as a means to accomplish social, economic, political and environmental goals have been defined as horizontal policies (Arrowsmith 2010). This kind of strategy is not a recent development and has been widely explored in the literature on public procurement (Arrowsmith et al. 2000; McCrudden 2007). Arrowsmith (2010) provides a detailed taxonomy of horizontal policies which also distinguishes nine different mechanisms for their implementation.

In Europe, for example, public procurement as a policy tool was first adopted in the 19th century, when the UK, France and Belgium sought to increase employment and secure a minimum wage for workers by stipulating specific requirements in government contracts (McCrudden 2004). Public procurement has historically played an important role in tackling discrimination and promoting social inclusion in many countries (McCrudden 2007). In the USA, public procurement constituted a significant tool to enforce racial equality legislation. In the 1960s, government-imposed contract conditions that required firms to take affirmative action applied to companies as a whole, not just the divisions or branches involved in the contract. Non-discrimination policies targeted African-Americans at first but were later extended to women and persons with disabilities. The US government went further and reserved a proportion of public contracts to businesses owned by African-Americans, women or minorities. Canada adopted a very similar approach in the 1970s to enforce its human rights law and promote the inclusion of aboriginal peoples. Another notable example is South Africa. After apartheid, the government instituted an extensive preferential procurement system in the constitution to promote the social and economic empowerment of black South Africans in the country (Bolton 2006).

Currently most countries pursue some form of horizontal policy in their public procurement (OECD 2017; Quinot 2013). Public procurement is widely used to advance economic policies, in particular to encourage the development of the SME sector. An OECD (2017) survey on public procurement found that most countries had a policy or programme

aimed at expanding the access of SMEs to public procurement opportunities. The USA has one of the largest and most comprehensive schemes in this area, instituted in 1953 under the Small Business Act. Emerging economies such as Brazil, China and India have also created preferential treatment schemes for this sector, including price preferences and set-asides (G20 2016). These strategies are also used by several African governments such as Senegal, Ethiopia, Zambia, Kenya, Sierra Leone and Cameroon (Nyeck 2015).

Horizontal policies have been commonly adopted to promote green products and services supporting environmental protection goals (European Commission 2008; OECD 2015). This strategy has often been referred to as Green Public Procurement (GPP) and has been adopted by the majority of OECD countries. Furthermore, countries use public procurement to deliver good social outcomes such as employment opportunities to disadvantaged groups as well as decent wages and working conditions. Several countries in Africa use preference schemes to give competitive advantages to women, persons with disabilities, and ethnic minorities (Quinot 2013). The European Union has also devised specific guidelines for Member Countries to apply social criteria in public procurement processes (European Commission 2010).

More recently, governments have also sought to promote a more integrated approach to address both social and environmental issues through public procurement under the banner of sustainable public procurement (SPP) (Brammer and Walker 2010). The United Nations Environment Programme (UNEP 2010) has defined SPP as: "A process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment." The UNEP (2017) *Global Review of Sustainable Public Procurement* found that 41 different countries had SPP provisions in their policy and/or regulatory frameworks. Most OECD countries now have a national SPP policy in place. The revised European Union (EU) directives on public procurement also aim to integrate social and environmental considerations (Directive 2014/24/EU). International institutions such as the OECD, the World Bank and the United Nations have also devised guidelines and best practices to assist countries to implement these policies (UNEP 2010; OECD 2015; World Bank 2016).

Therefore, the current debates around public procurement have highlighted its potential to create or expand markets for goods and services that support the achievement of social, economic and environmental objectives. The wide range of horizontal policies implemented all over the world represent a shift from a narrow focus on lowest price to a concern with achieving the optimum combination of price, quality and social and environmental outcomes.

3 PUBLIC FOOD PROCUREMENT: PROMOTING MORE SUSTAINABLE, HEALTHY AND INCLUSIVE FOOD SYSTEMS THROUGH GOVERNMENT FOOD PURCHASES

In this context, the role of government food purchases in promoting social and economic benefits has also gained prominence in recent years. Governments generally make large food purchases for hospitals, schools, nursing homes, prisons, the military, etc. Because of its sheer value, public food procurement can be used to drive horizontal policies related to food security, nutrition and agricultural development. Although there are no figures so far on the

global value of government food purchases, there are some indications of its significance. According to the European Commission, the total government expenditure on food in Europe is EUR82 billion per year (Caldeira et al. 2017). The World Food Programme (WFP 2013) estimates that governments spend between USD47 billion and USD75 billion a year globally on school meals.

Linking public food procurement to domestic food production can be used to promote economic outcomes in a similar vein to the benefits generated by public procurement on SME development. Expanding marketing opportunities to producers and rural enterprises can boost rural economies and communities by promoting growth and job creation in the food sector. This link has been promoted by several countries in all parts of the world—for example, the USA, the UK, Italy, Brazil and Thailand (USDA 2015; Morgan & Sonnino 2008; IPC-IG 2013; Jabbar and Ahuja 2011).

In many developing countries, public food procurement has specifically targeted smallholder farmers to promote their economic inclusion and strengthen local food systems. In this case the rationale is that public food procurement can reduce some of the uncertainties and risks associated with market participation by providing an accessible market channel and a source of income to farmers. Greater market participation and an additional source of income can generate a number of positive impacts such as increases in household food consumption, dietary diversity and higher investments in production and diversification (Sumberg and Sabates-Wheeler 2011). Moreover, improvements to smallholder livelihoods can generate positive spillover effects in local economies.

In addition, public food procurement can also lead to positive outcomes on health and nutrition, particularly among children and other vulnerable groups (Caldeira et al. 2017; Niebylski et al. 2014; NPLAN 2011). Food procurement can target better-quality and more nutritionally balanced meals, improving their nutritional status and encouraging healthier eating habits. Research in England, Scotland, Canada and the USA has shown that food and nutrient intakes improved after fruit and vegetables were introduced to meals in schools, hospitals and other public facilities (Niebylski et al. 2014; Cohen et al. 2014). Increases in healthy food consumption also led to improvements in health indicators such as lower blood pressure and Body Mass Index (BMI) among beneficiaries.

Most studies on the impacts of public food procurement on health and nutrition have focused on developed economies. However, this link has also been explored in developing countries, mostly in relation to school feeding. In low-income countries, school food has been widely used as a social protection strategy (Devereux et al. 2010; Bundy et al. 2008). Public food procurement can address the nutritional requirements of school children by increasing the supply of nutritious foods. Some pilot experiences in Malawi, Mozambique and Ethiopia have been successful at using food procurement strategies to introduce locally sourced fruits, vegetables and pulses to school menus, diversifying children's diets and increasing access to nutrient-rich foods (Gyori et al. 2016). Governments in El Salvador and Tanzania are also using school milk programmes to improve the nutritional content of school meals and strengthen the national dairy sector (FAO 2014; 2013a).

It should be noted that the 2013 *Lancet* series concluded that school feeding could not be considered an effective strategy to tackle stunting in children (Bhutta 2013). Nonetheless, other research has disputed this review. More recent evidence has shown that stunting can be reduced after the age of 2 years and that in some instances school feeding played a crucial role in this

reduction (Global Panel on Agriculture and Food Systems for Nutrition 2015; Singh et al. 2014). Other systematic studies have also demonstrated further positive impacts of school meals on nutritional and health outcomes in children (Ashe and Sonnino 2012; Jomaa et al. 2011).

Public food procurement for food assistance, therefore, has the potential to create an integrated framework which can generate benefits for smallholder livelihoods, food security and nutrition (Drake and Woolnough 2016; De Schutter 2014). Government food purchases can target commodities that address the nutritional requirements of vulnerable populations. These foods can be procured from smallholder farmers and distributed through different food assistance strategies, expanding access to more diverse foods while at the same time encouraging production diversification (Drake and Woolnough 2016). This link can deliver benefits in terms of income to producers, as well as better nutrition at the household and community levels through increases in the availability of and access to healthier and diverse foods.

There is a growing trend among countries to foster synergies between local food systems, smallholder farmers and better nutrition through public food procurement (Drake and Woolnough 2016; Caldeira et al. 2017). Both Brazil and the USA, for example, have well-established public food procurement programmes of this kind. The Brazilian National School Feeding Programme (*Programa Nacional de Alimentação Escolar*—PNAE) and the Public Food Purchase Programme (*Programa de Aquisição de Alimentos*—PAA) were conceived as strategies to increase farmers' incomes, stimulate local economies and improve access to nutritious food (IPC-IG 2013). In the USA, the Farm to School programme also aims to make purchases from local producers and suppliers for school lunches, to support the farming sector and increase consumption of fresh foods (USDA 2015). Likewise, countries in Latin America such as Bolivia, Paraguay, Guatemala and Honduras have instituted Home Grown School Feeding (HGSF) programmes through specific laws. Countries in Africa have also piloted HGSF initiatives supported by development partners. Governments of countries such as Kenya, Ghana, Senegal and Ethiopia have made substantial progress towards nationally owned HGSF programmes (Drake and Woolnough 2016; Gyori et al. 2016).

International institutions have also highlighted the potential of public food procurement initiatives to generate positive synergies between smallholder livelihoods and food security and nutrition. HGSF is being promoted by the African Union through the Comprehensive Africa Agriculture Development Programme (CAADP). Latin American governments have strengthened their commitment to public food procurement from smallholders by including specific measures in the Community of Latin American Countries Plan for Food and Nutrition Security and Eradication of Hunger 2015. The Committee on World Food Security (CFS) 2015 policy recommendations also contain actions to promote links between smallholders and public food procurement. These include targeting food assistance purchases at farmers, adapting procurement procedures to facilitate their participation in public food markets, and promoting more research into public food procurement initiatives. The WFP, in collaboration with national governments, also includes HGSF as part of its food assistance strategies. A total of 46 countries currently have a WFP-supported HGSF programme.

Governments are also seeking to create synergies between food procurement and SPP policies to foster more sustainable food systems. For example, in the EU, food and catering is an important category under the Green Public Procurement policy. Public procurement can favour production techniques that are more environmentally friendly, such as organic foods. This approach has been widely adopted in Sweden, Finland and Denmark (Risku-Norja and Loes 2017; Sørensen et al. 2016; Smith et al. 2015). The procurement of seasonal foods

and favouring short supply chains can also increase demand for commodities and products that have lower greenhouse gas emissions. In fact, purchasing food from local suppliers/producers is a common strategy to promote more sustainable public procurement in several countries across Europe and Asia as well as North and Latin America (Brammer and Walker 2010). Another example is the UK, where the government is implementing the Plan for Public Procurement, which specifically aims to reduce the environmental impact of food consumption by increasing public procurement from local suppliers and producers (DEFRA 2014).

BOX 1

Definition of public food procurement

Public food procurement refers to initiatives that aim to provide a market channel to smallholder farmers by removing key barriers to entry in public food procurement markets.

4 PUBLIC FOOD PROCUREMENT FROM SMALLHOLDER FARMERS: BEST PRACTICES

Despite the expansion of public food procurement targeted at smallholders, these initiatives are still relatively new; thus research on impacts, challenges and best practices is rather limited. Peer-reviewed research is scarce, and most of the evidence available comes from evaluations which rely heavily on qualitative surveys and case studies. Nonetheless, it is possible to identify some key lessons emerging from current public food procurement initiatives being implemented in different parts of the world. The general literature on the implementation of horizontal policies aiming to promote the economic inclusion of disadvantaged groups and SME market integration can also provide relevant insights into public food procurement.

4.1 CREATING SPECIFIC PUBLIC FOOD PROCUREMENT FRAMEWORKS FOR FOOD PURCHASES FROM SMALLHOLDERS

Public procurement processes are tightly regulated and involve financial and technical requirements that often generate high transaction costs to sellers. They also entail high levels of competition, which can create additional hurdles to smaller suppliers. Most public procurement frameworks can thus create significant barriers to entry to smallholder farmers and limit their ability to take advantage of public food markets. This section explores how adaptations to public procurement frameworks can facilitate smallholder participation in public food procurement, highlighting best practices in this regard. For the purpose of this review, public procurement framework has been defined as laws, regulations, procedures and institutions that guide government purchases (Thai 2008).

The first part will identify preferential treatment schemes—i.e. strategies that give preference or competitive advantages to specific categories of suppliers—and describe how countries have applied these to food procurement from smallholders. It will pinpoint key challenges governments must address when implementing such schemes. The following part focuses on the technical, financial and legal requirements involved in public procurement and how these can hinder smallholder access to public procurement opportunities. Best practices

on possible adaptations to these requirements will also be discussed. The subsequent sections will explore additional strategies to reduce transaction costs such as access to information, payment time-frames and contract size. The best practices explored here draw on the current experiences in public food procurement from smallholders for food assistance. Given that smallholders and SMEs often face similar barriers to entry in public procurement processes, this section also includes insights from the literature in this area.

4.1.1 Addressing competition challenges in public procurement processes through preferential treatment schemes

Governments have a responsibility to ensure that public spending is efficient and delivers high-quality services and goods to society. Given the significant size of public procurement markets, there is a lot of concern around corruption and abuse. Naturally, governments make serious efforts to guarantee the integrity of their public procurement systems (OECD 2005). Furthermore, public procurement is limited by fixed budgets, and governments must ensure sound financial management and fiscal responsibility. Public procurement processes are thus highly regulated by legislation at national and sometimes international levels. They are guided by the principles of transparency, accountability, non-discrimination and objectivity, and their main goal is to promote competition among contractors to guarantee the most efficient allocation of resources (OECD 2015; Arrowsmith et al. 2000).

In most public procurement systems open tendering is the main procurement method used by procuring entities (UNCITRAL 2011; OECD 2015; Arrowsmith et al. 2000). In open tendering, any interested supplier may submit a tender, and sellers compete with each other to win the government contract. Governments adopt this procurement modality because it offers the greatest degree of transparency and competition in line with the principles and objectives of public procurement (OECD 2005). Open tendering allows the maximum number of tenders, thus increasing the chances of acquiring the best-quality good or service at the best possible price. Public procurement legislation usually permits the use of methods other than open tendering, such as restricted tendering, single-source tendering and request for quotation—however, only in limited circumstances and subject to safeguards (Arrowsmith et al. 2000).

Competitive tendering is certainly effective at creating competition and increasing efficiency in public procurement. However, it will not necessarily ensure that all market players will benefit equally from market access (International Trade Centre 2014). The nature of public procurement processes—characterised by high levels of competition and formal requirements—can create significant barriers to entry to smaller suppliers and disadvantaged social groups (Brookes et al. 2014; International Trade Centre 2014; FAO 2015; Kelly and Swensson 2017). Significant market failures in developing economies often mean that smallholders and farmer organisations are unable to compete with larger suppliers. Traders and other large food suppliers have many advantages over smallholders, as they have more experience in formal markets and more access to working capital and finance. These actors also have better access to information on public tendering opportunities and more resources and skills to participate in public procurement processes. Many governments have, therefore, devised preferential treatment schemes to facilitate access to public food markets by addressing issues related to competition. As mentioned in the first section of this review, these strategies are not new and have been widely used by countries to promote several policy objectives, especially SME development.

It should be noted that studies on the economic impact of preferential treatment schemes are still limited. There is evidence that these instruments have contributed to increases in SME participation in public procurement in some countries (DCED 2017). For example, in Mexico targeted assistance which included preferential treatment schemes to SMEs led to a six-fold increase in the number of contracts awarded to them. Research on the impact of public procurement policies for SMEs in Brazil has found positive impacts on growth and employment rates (Ferraz et al. 2015). However, evidence regarding outcomes such as productivity, competitiveness, innovation and job creation remains scarce. Naturally, this is not indicative that preferential treatment schemes are not effective. Rather, it points to the need for more research in this area (DCED 2017).

There are various types of preferential treatment schemes that countries can adopt to provide competitive advantages to smallholders in public food procurement processes. These range from interventionist approaches such as reservations and set-asides to simply supportive ones that give target groups assistance to prepare bids and fulfil requirements. Nonetheless, the most common preferential treatment schemes adopted in developing countries and emerging economies are reservations and preferencing (World Bank 2016; International Development Centre n.d.; Quinot and Arrowsmith 2013).

Given the diversity of public food procurement initiatives, it cannot be asserted that one preferential treatment scheme should be recommended over another, but rather that countries should choose based on their particular contexts and policy goals. It is also possible to combine more than one preferential treatment scheme. The review will focus on the most widely used strategies in public food procurement. All options will present challenges, but experiences from different countries can point to effective ways to address key issues.

a) Reservation schemes

This is a form of targeted procurement which reserves a certain percentage of government procurement purchases to a specific category of suppliers that meet predefined criteria (Watermayer 2004). Reservation schemes can be subdivided into three different categories: (i) set-asides; (ii) qualification criteria; and (iii) subcontracting conditions. The sections below describe their main features and give examples of how they have been applied to public food procurement initiatives.

Set-aside

A set-aside is essentially a quota allocated to a target group. The main goal of set-asides is to segregate competition, as targeted suppliers only compete with each other. Procurement set-asides have been extensively used to promote the inclusion of SMEs and historically disadvantaged groups in public procurement (Quinot 2013; Asian Development Bank 2012; McCrudden 2007). According to the World Bank (2016), around 17 per cent of countries use set-asides to favour SMEs. Some examples are India, China, South Africa, Kenya, Namibia and Zambia. In the USA, set-asides for SMEs and minority-owned businesses have existed since the 1950s (US Small Business Administration 2018). Annual targets—i.e. the percentage value of total government contracts reserved for targeted suppliers—are defined at the federal level each year.

National governments have adopted this approach to expand smallholder access to public food procurement markets. Some examples of countries that have established quotas for

food procurement from smallholder farmers and farmer organisations are Brazil, Burkina Faso, Rwanda and Uruguay. These set-asides typically apply to food assistance programmes such as school feeding and food reserves. However, in Uruguay the smallholder quota applies to all government food purchases (Law no. 19.299). Research into this type of preferential treatment indicates that the proportion of food purchases reserved for smallholder procurement is carried out through either competitive or non-competitive processes.

The WFP has also adopted reservation schemes to provide market access to smallholders. As part of the WFP's local and regional food procurement, a proportion of food purchases has been allocated to targeted farmer organisations and small-scale traders. Traditionally, this food was purchased from prequalified large-scale suppliers through competitive tenders. However, more recently a proportion of the purchases carried out through the HGSF programme and the Purchase for Progress (P4P) initiative has been reserved for farmer organisations. The goal is to increase smallholder farmer engagement in markets and strengthen their productive and marketing capacity. Farmer organisations are selected according to country-specific criteria developed by the WFP (WFP 2016). Selected farmer organisations can range from local farmer groups and women-only groups to regional federations and farmer unions. However, they must have the minimum capacity to aggregate production and benefit from increases in demand. The WFP procurement process adopts both competitive and non-competitive processes according to the country. The WFP also sets the price, which is pegged to the prevailing market price for high-quality commodities and must not exceed the import parity price.

Non-competitive processes

In Brazil, the national school feeding legislation (Law no. 11947/2009) determines that 30 per cent of food purchases for school feeding must be reserved for family farmers. The share of public food purchases reserved for family farmers follows a special procurement method that waives the competitive bidding requirements established through Brazilian public procurement legislation. Eligible suppliers are not required to submit a bid or compete on the basis of lowest price and best quality. Instead, procuring entities issue a public call for food procurement which defines the commodities, quantities, quality requirements and delivery terms. Interested suppliers that meet the family farmer criteria submit a proposal stating the products and quantities they wish to sell to the programme. To participate in the programmes, smallholders and farmer organisations must obtain an eligibility declaration (*Declaração de Aptidão ao PRONAF—DAP*) which certifies their family farmer status. The definition and criteria to identify family farmers is stipulated by Brazilian law (Law no. 11326/2006). The PNAE adopts reference prices which aim to reflect local market prices. According to the legislation, reference prices cannot be above or below regional prices. They must also take into account transportation, processing and tax costs. Prices are publicised in the public call for food procurement, so that farmers can decide if the terms are favourable to them.

The WFP also adopts a non-competitive process in its food procurement from smallholder farmers which waives bidding requirements. This is carried out through either direct contracts or forward contracts (WFP n.d.). In the case of direct contracts, the WFP negotiates to buy commodities at harvest time from farmer organisations and small traders that have been selected to participate in the HGSF and/or P4P programmes. On the other hand, forward contracts are signed with target groups at planting time for the delivery of a specified quantity and quality of a commodity in the future for an agreed price. Non-competitive processes are

used as an entry point to the WFP procurement market and thus target farmer organisations that have little experience in formal markets and selling in groups.

Competitive processes

In competitive processes contracts are reserved for smallholders or farmer organisations; however, they must submit bids and compete to win the government contract. In Rwanda, the government issued a directive in 2011 allocating a 40 per cent quota for farmer cooperatives which is being employed by the National Strategic Grain Reserve (NSGR). Similarly, in Burkina Faso in 2014 the government set aside 30 per cent of procurement for the country's food reserve to farmer organisations. To participate, farmer organisations must be registered with the respective government institution. In both cases, farmer organisations are invited to submit bids specifying quantities, types of commodities and price per metric tonne (Amani 2014; NSGR 2013). The grain reserves select bids according to best price and quality criteria.

In the case of the WFP, competitive processes are carried out through the soft tendering modality; only farmer organisations and traders that meet the established criteria are invited to submit bids and compete for the contract. The WFP also applies less stringent conditions for tendering, such as supplying smaller quantities, providing bags with WFP logos and waiving bond guarantees, to facilitate smallholder participation. This modality was used in most countries where P4P was implemented. Bids are evaluated according to the criteria established by the WFP, which considers both price and quality.

Subcontracting conditions

Reservations can also be applied through subcontracting conditions whereby governments require food suppliers to buy a certain percentage or quota of the total value of food purchases from smallholders and farmer organisations. This is usually done through caterers, traders or processors. In this case, governments do not procure food directly from smallholders but instead require their suppliers to buy a proportion of food from them. This approach has been commonly used, for example, to encourage large government suppliers to subcontract SMEs. The USA has a well-established subcontracting programme for SMEs which applies to all contracts above USD650,000 (International Trade Centre 2014). Contracts above this threshold require suppliers to submit subcontracting plans with targets for small businesses which must also include minority- and women-owned businesses.

Subcontracting schemes have been applied to public food procurement from smallholders in the School Milk Programme (SMP) in Thailand, the P4P programme and the Ghana School Feeding Programme (GSFP). The GSFP uses a third-party procurement model with caterers in charge of purchasing, preparing and distributing school meals. The programme guidelines determine that caterers must procure 80 per cent of commodities for school feeding from smallholder farmers, preferably from local communities or within the district. Caterers are selected through open tendering carried out by district assemblies. The programme benefits around 1.6 million primary school children attending 4,952 schools (Home Grown School Feeding 2018).

The SMP in Thailand was instituted in 1992 as a strategy to improve the nutritional status of school children and provide dairy producers with a remunerative market. Dairy processors supplying milk to the SMP are required to buy a certain quantity of raw milk from dairy farmers

and cooperatives. The quota is established through Memorandums of Understanding between individual processors and the Ministry of Agriculture and Cooperatives. The SMP covers all pre-primary and primary schools in the country, reaching a total of 7 million pupils (Dairy Farming Promotion Organization of Thailand n.d.).

In the P4P case, selected small and medium-sized traders were required to make purchases from farmer organisations targeted by the programme. P4P contracts stipulated the terms and conditions for these purchases. This type of procurement was tested in only a few countries and represented 3 per cent of commodities purchased (WFP n.d.)

Qualification criteria

Governments have also reserved food purchases for smallholders and domestic producers through qualification criteria. In this type of reservation scheme, sellers that do not meet specific criteria—i.e. they are not smallholder farmers or farmer organisations—are not eligible to participate in public procurement processes that reserve the entirety of food purchases to one category of supplier. Qualification criteria have been applied to food purchases for specific food assistance programmes or purchases carried out by a particular government institution. In Paraguay, however, all types of government food purchases have been reserved for family farmers through qualification criteria. Other sellers are only able to supply government institutions when procurement from smallholders is not possible or there are residual purchases (Decree 1056/13).

In the case of the PAA in Brazil, the totality of food procurement is reserved for family farmers, and producers that do not meet this criterion are excluded from the procurement process. Within the family farmer category, the PAA prioritises the most vulnerable producers, such as women, land reform settlements, indigenous tribes and slave-descendent communities. Similar to the PNAE, farmers must be certified through the DAP to be eligible to participate in the programme. The PAA also follows the same procurement method as the PNAE and offers farmers market price for commodities.

Qualification criteria are often applied to food purchases carried out by marketing boards or similar government institutions. One important example in this regard is the Food Corporation of India (FCI), which is the central government agency responsible for food procurement and distribution along with state agencies. The FCI's mandate is to guarantee a fair price to farmers and ensure food security through price stabilisation and the distribution of subsidised grains. The FCI procures grain (wheat and paddy rice) solely from domestic producers at a minimum support price (MSP) and sells it at subsidised price to consumers through the Targeted Public Distribution System (TPDS). FCI grain is also distributed through other welfare schemes targeting poor people. In addition to food distribution for food assistance strategies, the FCI releases buffer stocks in domestic markets when prices rise. Commodity prices are defined by the government, taking into consideration the recommendations of the Commission of Agricultural Costs and Prices.

It should be noted that the TPDS is the most important social protection programme in India and one of the largest in the world (Bhattacharya et al. 2017). Its annual budget represents around 1 per cent of GDP and targets approximately 800 million people (ibid.). The reach of the TPDS is likely to grow even more with the implementation of the National Food Security Act, which was passed in 2013. The Act determines that 50 per cent of the urban population and 75 per cent of the rural population are entitled to subsidised grain through the TPDS.

b) Preferencing schemes

Preferencing refers to open tendering processes where competitive advantages are given to bidders that meet specific social, economic and/or environmental criteria. Within preferencing there are two subcategories: (i) price preference or bid price preference; and (ii) procurement award criteria.

Bid price preference

In the price preference or bid price preference scheme, procuring entities increase the prices of non-preferred suppliers by a set number of percentage points for evaluation purposes. Alternatively, a bid from an eligible supplier—for example, an SME or a farmer organisation—is discounted by a given percentage to make it more competitive. This modality clearly acknowledges that certain categories of suppliers will not always be able to compete at the same price point with other suppliers and, therefore, gives target groups a price advantage. For example, in an open tendering process, a procuring entity might give a price preference to a target group of suppliers by increasing the bid prices of non-preferred suppliers by 10 per cent, making their bid more expensive. On the other hand, a bid from a targeted supplier can be discounted by, for instance, 5 per cent, giving it a competitive advantage over other bids.

This type of preferential treatment has often been used to promote SME access to public procurement markets. According to the World Bank (2016), 10 per cent of countries use bid price preferences for SMEs. For example, China applies a bid price preference to SMEs of 6–10 per cent, while India gives preference to SME bids if their prices are up to 15 per cent higher than the competition. Procuring entities also provide a price preference of up to 15 per cent to cottage and small-scale businesses. Public procurement legislation in Bolivia gives a 20 per cent margin of preference to SMEs as well as smallholders and farmer organisations.

Price preference is the main preferential treatment scheme adopted by the US Child Nutrition Programme. However, it should be noted that bid preferences are not used to favour smallholder farmers but, rather, locally sourced fresh foods. In 2008 the US Farm Bill instituted the use of geographical preferences in food procurement, allowing procuring entities to favour local food purchases. Subsequently, the US Department of Agriculture (USDA 2015) issued regulations to incorporate local food procurement using geographical preferencing in all its child nutrition programmes, including school meals.

School districts are in charge of procurement processes and determine their own definition of local. Yet geographical preference is not meant to work as a set-aside. The preference applies to the commodities and not the supplier. Therefore, the law allows schools to favour local foods but does not allow procurement to directly target local producers or suppliers. Furthermore, these preferences only apply to unprocessed agricultural commodities.³ It should also be noted that this procurement method is used in food purchases above a certain threshold established by the federal and state governments. Purchases below the threshold are made using a request for quotation, which should involve at least three suppliers. In this case, school districts are allowed to request quotes exclusively from local suppliers. Procuring entities have autonomy to decide the percentage discount they want to give to local vendors according to their context.

Award criteria

This scheme assigns additional points to bids that meet social, economic and environmental criteria. Award criteria constitute the basis on which the contracting authority awards a contract. The more criteria a bid is able to meet, the more points it will receive. It differs significantly from the lowest price criterion, where the contract is awarded to the lowest tender. Award criteria are also different from technical specifications, which refer to basic requirements that all bids must meet. When using award criteria, procuring entities allocate extra points to bids that go beyond these minimum requirements. In many cases, relative weighting of each criterion is also used to assess the bid, which reflects the relative importance of non-price factors.

This procurement modality has been adopted in South Africa to promote the economic inclusion of black South Africans and by the school meals programme in Peru⁴ (Quinot 2013; MIDIS 2013). Some district assemblies in Ghana have also introduced award criteria to select caterers for the GSFP, with additional points given to suppliers that purchase food from local smallholders. However, this scheme is at an early stage and has only been applied in a few districts. Nonetheless, research into the application of award criteria to food purchases in these countries is limited. Therefore, it is not possible to provide a detailed analysis in this review. However, award criteria have been widely used by EU countries in their public food procurement to promote a number of policy outcomes such as improving nutrition, promoting SME development, strengthening local economies and fostering more sustainable food supply chains. In the EU nearly 90 per cent of contracts for food provision use competitive tendering, and most countries use award criteria in the bid selection process (Caldeira et al. 2017).

EU countries are a very particular public procurement case, given that their national public procurement laws are guided by supranational EU legislation. The EU public procurement framework is constituted by the Treaty of Rome and the EU Procurement Directives (Directives 2014/24/EU, 2014/25/EU and 2014/23/EU). The Treaty of Rome establishes four fundamental principles for the award of public contracts: (i) non-discrimination on the grounds of nationality; (ii) freedom of movements of goods; (iii) freedom to provide services; and (iv) freedom of establishment. This means that governments cannot target their public procurement towards domestic producers or suppliers, as this would go against the terms of the Treaty. However, Directive 2014/24/EU allows the inclusion of qualitative, environmental and/or social award criteria in public procurement. It aims to create public procurement processes that select the most economically advantageous tender (MEAT) according to a best price–quality ratio as well as aspects such as socio-economic and environmental outcomes

Food procurement from local producers or suppliers is thus constrained by EU legislation. Governments can only promote this goal rather indirectly through award criteria that create more favourable conditions for local farmers and SMEs, such as favouring short supply chains and fresh foods that reflect the natural growing season of the country, as well as quick delivery response times. The EU law also allows countries to purchase region-specific products with protected designation of origin (PDO) and protected geographical indication (PGI) certification. Another option available to EU countries is to split contracts into smaller lots, making tenders more accessible to smaller suppliers. Procuring entities can also use procurement award criteria to favour food purchases that meet specific nutritional requirements, production standards and environmental criteria. In line with European law, the EU has devised guidelines to support countries to translate their health and nutrition policies into food procurement criteria (Caldeira et al. 2017). Many countries in Europe are expanding their efforts to procure

locally produced food, not only to strengthen local economies and promote healthy eating but also to support traditional products and production methods (Smith et al. 2015; Morgan and Sonnino 2010). In many cases, supporting the local economy and local agriculture is one of the stated goals in European school food policies (European Commission 2015a). There are some successful experiences in school meals in Scotland and Italy, where farmers, cooperatives and local SMEs supply schools with locally grown and seasonal food (Sonnino 2009; Morgan and Sonnino 2007).

4.1.2 Tackling potential risks involved in preferential treatment schemes

The literature on public procurement has pointed to some potential risks associated with preferential treatment schemes. One of the most common concerns is that efficiency can be undermined by reducing competition, thus increasing procurement costs. Issues have also been raised in relation to eligibility and transparency in preferential access to public procurement markets. Moreover, there are concerns around how government purchases can affect domestic markets and prices which are frequently expressed in regard to public food purchases. Preventing corruption and abuse in public procurement is a general preoccupation for all governments. The effectiveness of preferential treatment schemes relies on their careful design and implementation (Linarelli 2011). Nonetheless, it should be highlighted that the integrity of public procurement systems also depends on the quality of the wider public procurement environment, particularly sound procurement practices and monitoring and compliance mechanisms, including enforceable sanctions. The following sections will explore strategies adopted by governments to address some of the main risks involved in public food procurement initiatives.

a) Competition and efficiency issues in preferential treatment schemes

In all preferential treatment schemes, competition in public procurement processes is limited in one way or another. One of the biggest risks to public procurement systems is that governments may end up paying higher prices for goods and services than the private sector. Reducing competition is, therefore, a relatively interventionist approach that can generate risks which need to be weighed against benefits.

Reservation schemes can produce quick and visible results in terms of promoting access to public procurement markets. It limits competition and thus reserves a certain market share for smallholders. On the other hand, restricting competition to specific groups means that competitive suppliers that do not meet the criteria are excluded from public procurement processes. Set-asides could potentially function as a form of subsidy allowing businesses that cannot survive without government support to continue in the market. Indeed, they can reduce the incentives to improve competitiveness and create dependency on government support. Reservation schemes could thus adversely affect competition and economic efficiency. Some research into set-asides and quotas targeting SMEs has raised doubts about their ability to improve the competitiveness of firms and promote greater market integration (Nicholas and Fruhmann 2014; Asian Development Bank 2012; International Trade Centre n.d.).

Price/bid price preferences can also have distortionary effects on prices. They give preferred suppliers incentives to put up prices, since they cannot be outbid by non-preferred suppliers. It could be argued that non-preferred suppliers might respond to price preferences

by lowering their bids to make them more competitive. However, their profit margins may be significantly reduced, making public procurement contracts unattractive to them and thus reducing competition in the future (McCrudden 2007). Overall, any price preference will result in reduced competition, which can have an impact on price efficiency (USDA 2011). This is dependent, however, on market characteristics and the size of the preference. When price preferences are small, their effects on prices and markets might also be small, though they need to be large enough to give a significant competitive advantage to favoured suppliers (International Trade Centre n.d). Finding the optimal percentage could leave governments facing a price preference conundrum.

To minimise the impacts of preferential treatment schemes on competition, the US child nutrition programmes chose to target their food procurement towards local commodities and not categories of suppliers. School districts are also instructed to adopt definitions of local that do not place unreasonable restrictions on competition. This ensures that the procurement process is open to any vendor that can supply local food (USDA 2015). Yet it could be argued that there are issues regarding what constitutes 'unreasonable restrictions on competition' and the degree of discretion school districts have in defining what local foods actually mean. Furthermore, it is important to highlight that providing preferential treatment to specific types of commodities—i.e. local foods—as opposed to specific categories of suppliers—i.e. smallholder farmers and farmer organisations—does not necessarily mean that the government will buy food directly from smallholders, as is the case for quotas and set-asides. Given the well-known market system problems in many developing countries, this could raise some concerns around smallholder access to public food markets and how they are integrated into public food procurement supply chains.

Subcontracting schemes have advantages, as they do not limit competition; this increases the chances of procuring entities obtaining best prices, and ensures efficiency in public procurement. Procuring food from larger suppliers can help overcome some smallholder supply chain challenges by facilitating aggregation and processing. However, this strategy will only be successful at providing a market to smallholder farmers if procuring entities are able to ensure that suppliers comply with the established quotas.

The GSFP provides some examples of the challenges involved in this respect. Despite the clear orientation towards providing a market to smallholders, programme evaluations have shown that sourcing food from smallholder farmers is a significant problem for caterers (Drake and Woolnough 2016; Shaibu and Al-hassan 2014). Many problems are related to payment delays which force caterers to only purchase food on credit. However, there are also important issues regarding the enforcement of the smallholder quota. The 80 per cent quota in the programme guidelines has not been translated into any type of contractual obligation. District assemblies have not established any way to monitor and enforce compliance. As a consequence, the participation of local smallholders in the school feeding supply chain remains limited.

Furthermore, the P4P evaluation results raised a few questions about the suitability of the subcontracting approach in promoting longer-term linkages between smallholders and traders (WFP 2014). The evaluation could not establish whether traders would continue to buy food from targeted farmers beyond their contracts with the WFP. It should be highlighted, however, that the evaluation does not expand on the reasons for this. Additionally, the analysis of P4P procurement showed that the highest default rates were found in contracts with traders mainly as a result of limited aggregation capacity.

The effectiveness of these subcontracting schemes in providing smallholders with access to public food markets is thus highly dependent on the ability of procuring entities to ensure that suppliers observe the established subcontracting requirements (International Trade Centre 2014). This entails creating effective monitoring and certification mechanisms. In the US programme for SMEs, for example, contractors are not only required to define clear procurement targets for small businesses but there is also a monitoring system for compliance. Contracting officers supervise performance against subcontracting targets for SMEs, and there are penalties if contractors do not achieve the agreed goals.

Nonetheless, monitoring and certification systems can be onerous and costly to both procuring entities and suppliers. Additionally, there are important issues around price transmission from suppliers to farmers, and how the benefits are distributed along the supply chain to ensure that farmers receive a fair proportion of the market price. The difficulties associated with subcontracting schemes do not necessarily mean that they are always inappropriate to promote smallholder market access. Similar to other preferential treatment schemes, they present their own set of challenges which countries must find ways to address.

Arguably, award criteria can be a less risky option in terms of restrictions to competition in public procurement. Award criteria are effective at promoting equal treatment, non-discrimination and efficiency, since the tendering process under this scheme is open and accessible to all suppliers. However, it is possible for award criteria to lead to high procurement prices when substantial weight is given to non-price criteria. Moreover, the challenge is to ensure that there is transparency and fairness in a bid evaluation process that uses criteria other than a price–quality ratio (OECD 2011). The award criteria must be clear and fully disclosed to tenders and public procurement oversight bodies. The criteria must also be objective and, whenever possible, quantifiable or measurable. This will guarantee objectivity and reduce room for discretion on the part of procuring entities. A common practice among countries adopting award criteria is to use scorecards to guarantee that the award criteria and bid evaluation process are transparent and objective. In the UK the Department of Environment, Food and Rural Affairs has created a scorecard for public food purchases which converts the goals of the Plan for Public Procurement into award criteria (DEFRA 2015). It also defines the method to assess bids against more complex food procurement criteria such as nutrition, farm assurance, food waste management and engagement with SMEs. Scorecards have also been adopted in South Africa to assess the level of compliance with Broad-Based Black Economic Empowerment (B-BBEE) requirements.

Perhaps one of the greatest challenges in this procurement modality is to integrate different policy goals into the award criteria in a coherent way to ensure that public food procurement delivers the desired outcomes (Morgan and Sonnino 2007). Most countries will have a series of policies regarding nutrition, food security and agriculture which can be advanced through public food procurement. These will need to be articulated clearly in procurement guidelines and plans, which subsequently need to be translated into feasible award criteria. This entails real investments and efforts on the part of governments to achieve an integrated framework for public procurement. It will also require capacity development so that procuring entities are able to implement more complex procurement criteria. In terms of promoting smallholder inclusion in public procurement markets, it remains to be seen whether award criteria are an effective strategy, especially in the context of low-income countries, considering the relatively high level of competition involved in the procurement process.

Most preferential treatment strategies will have costs and are likely to involve trade-offs between price, efficiency, and social and economic outcomes. It is important to bear in

mind when considering such trade-offs that competitive processes which use price as the main criterion do not take into account positive and negative externalities involved in food production and consumption. Without market failures, a free and open market is always efficient and will move towards price equilibrium (Arrow and Debreu 1954). However, perfect markets are at best an infrequent phenomenon (Greenwald and Stiglitz 1988; Stiglitz 1993). Moreover, efficiency says little about whether outcomes are fair or just (Stiglitz 1993). If public procurement processes create barriers to entry that exclude whole segments of society, they cannot possibly be considered efficient, transparent or fair.

There is a need to promote a better understanding of the extent to which preferential treatment schemes can boost smallholder farmer production and marketing, as well as an analysis of these benefits in relation to the associated costs (DCED 2017; G20 2016; International Trade Centre n.d). If the costs of subsidies are known and agreed, governments will be in a better position to understand trade-offs between efficiency and distribution. More research is needed to address these crucial knowledge gaps.

b) Preventing domestic price rises and market distortions

The design of public food procurement initiatives is not only relevant to procurement costs but also to potential distortionary effects government food purchases can have on domestic food markets. This issue is clearly illustrated by the case of the public food distribution system in India. The procurement process adopted by the FCI and state agencies is both non-competitive and open-ended. Before harvest the government announces the MSP for procurement based on the recommendation of the Commission of Agricultural Costs and Prices, which considers the costs of production, domestic market trends and world market prices. Farmers interested in selling to the government bring their grain to the various purchasing centres run by the FCI and state agencies. There are no forms of tendering involved in the procurement process. The government does not stipulate any type of procurement limit. The FCI buys all the grain brought to its procurement centres, provided that it meets the technical specifications stipulated by the government. All farmers can sell to the government as long as they are local producers.

The TPDS and the FCI date back to the 1960s, and their operations have been subject to extensive debate around efficiency and effectiveness, particularly issues related to exclusion errors in the targeting mechanism and leakage. Leakage refers to the amount of grain that fails to reach the intended beneficiaries. The fiscal burden of procurement and storage as well as the food subsidy have also been the focus of discussion in several studies (Kozicka et al. 2015; World Bank 2011; Umali-Deininger and Deininger 2001). However, it should be noted that research has demonstrated that TPDS implementation has improved significantly in the past 10 years (Bhattacharya et al. 2017). Since programme execution has been decentralised to the state level, there is some variation in programme performance, with some states implementing innovations that have successfully addressed key challenges in procurement and distribution (UNDP 2015). Studies have also pointed to the positive impacts of the TPDS on food security among vulnerable populations (Bhattacharya et al. 2017; Kozicka et al. 2015).

In terms of procurement practices, the public food distribution system in India offers some important insights into procurement targeting and price mechanisms. The Commission of Agricultural Costs and Prices advises on commodity prices, but the central government has the autonomy to decide the MSP offered to producers. Both central and state governments often adjust prices upwards to give producers a bonus for their crops. The government,

therefore, not only provides price support but effectively pays a price premium (HLC 2015; CFS 2015; Kozicka et al. 2015). The procurement volume is driven by the production level and the difference between MSP and market price (Kozicka et al. 2015). The central government is responsible for determining buffer stock norms for operational and strategic needs; however, these norms are not always observed by procuring entities. For example, from 2011 to 2014, stocks more than doubled the amount established by the government (HLC 2015; Kozicka et al. 2015). The open-ended nature of procurement, whereby the FCI does not establish any kind of procurement limit, coupled with high MSP prices, has generated direct impacts on markets. In many states, the government has become the preferred and almost exclusive buyer (ODI 2002). FCI procurement policies have raised domestic prices and crowded out private investment (HLC 2015; Kozicka et al. 2015). Moreover, the growing procurement levels—i.e. the size of the buffer stock—and storage requirements have significantly increased fiscal costs (Kozicka et al. 2015; Umali-Deininger and Deininger 2001; Lalvani and Shome 2017).

Importantly, research has found that procurement is concentrated in a few states—namely, Punjab, Haryana, some parts of Uttar Pradesh, and Andhra Pradesh to a lesser extent (World Bank 2011). These states are surplus areas characterised in many instances by successful commercial farming. In states where smallholder farming predominates, procurement is very limited. The vast majority of producers in the country do not benefit from the MSP. In 2015 the High Level Committee (HLC 2015) found that in 2013, out of the 5.5 million households that reported rice sales, only 10 per cent of farmers sold rice to the TPDS. In the case of wheat, 16 per cent of the 13 million households that reported sales sold wheat to the TPDS (*ibid.*). This represents a total of 5.8 per cent of farmers in the country. On the other hand, in the states where FCI concentrates its procurement operations, the government purchases around 70–90 per cent of marketed surplus (*ibid.*). Both the HLC (2015) and the World Bank (2011) have highlighted the need to spread the benefits of market access and the MSP to smallholders across the country, as well as to build innovative procurement systems that are suitable to their needs.

Having said that, other country experiences point to effective ways to address potential risks to domestic food markets. The Brazilian programmes and the WFP set the price they are willing to pay for commodities according to the market. Likewise, in Burkina Faso and Rwanda market prices are also used as the benchmark for food purchases. This ensures that farmers benefiting from preferential treatment are price-takers. Reduced competition and the absence of a bidding process thus do not necessarily mean that the government will pay more than the private sector. It is unlikely that any competitive process will lead to suppliers submitting bids that are below market prices. Conversely, in India minimum support prices do not reflect market prices. Both state and central governments often give farmers a bonus in addition to the MSP, keeping producer prices above market values.

Although governments may want to protect producers when market prices drop below the costs of production, prices should not exceed a benchmark. Price premiums not only push procurement costs up but can also generate price distortions in domestic markets. This outcome undermines the ability of preferential treatment schemes to be aligned with sound procurement practices in terms of cost-efficiency and sustainability. These considerations are particularly important when governments decide to make large food purchases in domestic markets, as the magnitude of these market effects will be correlated with the size of government procurement.

The adoption of reference prices is common in public procurement, and some governments such as those in Thailand, Mexico and Italy establish reference prices for the procurement of all goods and services. This strategy aims to control public expenditures by ensuring that

prices and costs remain within budget. Reference prices, however, need to adequately reflect market prices. If prices are too low, farmers will be discouraged from participating in public food markets; if prices are too high, procuring entities will end up paying more than the private sector, undermining cost-efficiency. Price mechanisms are likely to be context-specific, and their effectiveness requires access to market information and expertise.

It should be noted nonetheless that the Brazilian programmes did offer producers a minimum price guarantee (Graziano et al. 2010). This was implemented through the Price Support Programme (*Programa de Garantia de Preços de la Agricultura Familiar*—PGPAF), which was managed by a specific multisectoral working group. The PGPAF is linked to the government special credit scheme for family farmers (*Programa Nacional de Fortalecimento da Agricultura Familiar*—PRONAF) and thus only applies to smallholders enrolled in it. When prices fall below a price floor, the government gives a discount on the PRONAF debt. This discount corresponds to the difference between the floor price and the market price. The government, therefore, does not purchase surplus production at a minimum price; instead, farmers are compensated through a PRONAF discount. This strategy constitutes an interesting innovation, given that it gives farmers protection against price decreases but food procurement prices remain unaffected.

Furthermore, in the Indian case there are no procurement limits for individual farmers; therefore, producers can sell as much grain as they like to the government. The open-ended character of procurement creates strong incentives for producers to become reliant on the government. The concentration of purchases in a few states mean that only a limited number of producers are actually benefiting from the market opportunities provided by the TPDS. Crucially, commercial farmers comprise the majority of producers in these areas; therefore, most smallholders in the country are excluded from public food markets. The Brazilian programmes, on the other hand, established a procurement cap for individual producers and farmer organisations. This policy created incentives for farmers to engage with other markets. Moreover, market prices offered in the PAA and the PNAE reduce the risk of the government becoming the preferred buyer. The procurement cap also ensured that the benefits of public food procurement reached the largest number of farmers possible. The PAA specifically targeted the most vulnerable family farmer groups, meaning that preferential treatment was actually given to poor people. The effective targeting of public food purchases is of particular relevance when governments work with limited budgets.

Procurement costs are also affected by commodity prices and the size of government purchases. Public procurement is principally a financial management and fiscal responsibility issue and not just a matter of compliance with legal requirements (OECD 2009, Principle 3). Above-market prices can compromise public food procurement objectives by rendering government food purchases fiscally unsustainable. Governments should give careful consideration to public food procurement budget planning and execution.

c) Defining eligibility criteria

Defining clear eligibility rules for preferential treatment schemes is crucial to the integrity and transparency of public procurement systems. Limiting competition may require even more transparency to lessen the risk of corruption and abuse (OECD 2009; Kuhn and Sherman 2014). The absence of well-defined eligibility criteria gives procuring entities a high degree of discretion, which can lead to questions regarding access to preferential treatment schemes and

procurement decisions (Quinot 2013). The OECD Principles for Integrity in Public Procurement establish that exceptions to competitive tendering must be strictly defined, and accompanied by specific criteria and guidelines for their application (OECD 2009, Principle 2). In addition to predefined criteria, there must be some form of certification process to verify eligibility. Furthermore, it is important to ensure that eligibility is not set on an *ad hoc* basis by each procuring entity but, rather, that criteria are consistent, clear, certifiable and adopted across all procuring entities (Quinot 2013).

The challenges involved in establishing clear eligibility criteria and certifying compliance are highlighted by the South African case. The constitution established that preferential treatment should be given to historically disadvantaged individuals and provided a definition for this target group. However, procuring entities had nearly total discretion over how the preference would be applied (Quinot 2013). Each tender would specify the criteria for historically disadvantaged individuals and the way preference points would be awarded to suppliers. Importantly, procuring entities had to certify that each supplier met the predefined criteria. This system led to significant problems around effectiveness and transparency, prompting the government to reform the public procurement regulations. Currently, the regulations define the preferential treatment criteria that are applicable to all public procurement processes. They also outline the preference points system. The new regulations have thus removed discretion from procuring entities and have created clear preferential treatment rules.

It is thus essential that governments define specific criteria to identify smallholders and farmer organisations that are eligible to receive preferential treatment in public food procurement. Smallholder farming is characterised by its heterogeneity, and governments must explicitly define this category to identify a clear target group. There is no consensus around a unique definition of smallholder, and it is not the goal of this review to establish the best classification. The purpose here is to highlight the need for a clear definition which can provide a basis for eligibility criteria for preferential treatment schemes. This should be devised according to country contexts and key features in smallholder farming systems.

Most country experiences in public food procurement have used some form of eligibility criteria to identify and target smallholders and farmer organisations. In many cases, countries have created legislation defining this category of farmer. In Brazil, the definition and criteria for family farming are instituted by law and have been adopted in all rural development policies and programmes (Law no. 11326/2006). Other countries in Latin America such as Bolivia, Paraguay and Uruguay have established formal definitions and criteria to identify family farmers through specific legislation. These formal definitions and criteria have also been accompanied by the establishment of registration systems that certify eligibility. These are usually under the responsibility of the Ministry of Agriculture; therefore, procuring entities do not need to verify eligibility when they make purchases from smallholders. The Brazilian DAP registration system certainly stands out as an example of best practice, as it also classifies farmers according to their income, allowing government institutions to identify priority groups. There is also a DAP registration specifically for women and female-headed households.

Governments can also consider if they wish to prioritise subgroups of smallholders by giving additional preferences to more vulnerable producers. In Brazil, for example, the PAA gave priority to the poorest farmers in the country. Similarly, the P4P programme prioritised farmer organisations with little prior experience in collective marketing and limited access to

resources. Both programmes demonstrated success at making regular purchases from these groups; however, not without challenges (WFP 2014; PAA 2006). Including these farmers in public procurement markets requires significant long-term investments in capacity-building. The P4P also included small and medium-sized traders in its eligibility criteria. Preferential treatment schemes can also target small-scale fishers, forest dwellers, processors and other small rural enterprises, given that most smallholders engage in a variety of income-generating activities (Kelly and Swensson 2017). Targeting choices should be based on and coherent with policy objectives. Nonetheless, it can be stated that it is always good practice to give women and women-only farmer organisations preference in food procurement processes. For example, the P4P initiative established a target of 50 per cent for women. The importance of gender inclusion is well established in rural development strategies, and public food procurement should follow suit (FAO 2013; 2011).

Certification systems should be able to identify and profile smallholders, farmer organisations and other small rural enterprises. Importantly, certification procedures should be simple so as not to burden target groups with additional bureaucracy and fees. It should also be noted that it may not be necessary to create legislation defining smallholder farming. However, governments must always define eligibility rules and certification processes for preferential treatment through regulations, policies or similar means.

4.1.3 Simplifying requirements and reducing transaction costs for smallholders and farmer organisations

Public procurement systems are not only characterised by competition among suppliers but also by legal, technical and financial requirements, which can make it a rather complex process. These requirements are designed to assess whether suppliers have the necessary financial means and technical capacities to fulfil a government contract. Even when preferential treatment schemes are in place, public procurement laws and regulations may still require compliance with these requirements. The level of bureaucracy and the financial costs involved are often beyond the capacities of poor producers and farmer organisations. Requirements thus create significant transaction costs to farmers, which can outweigh the benefits of participating in public food markets. Furthermore, other aspects in public procurement processes such as access to information, payment time-frames and contract size can also create significant obstacles to smallholder participation in public food markets. The sections below will explore possible ways to address these barriers, drawing on the public procurement literature and the current research on public food procurement initiatives that target smallholders.

a) Rationalising public food procurement requirements

Public procurement requirements vary across countries, procuring entities and types of contract. Yet they usually entail registering as some form of legal entity, paying taxes and opening bank accounts. In some countries suppliers need to demonstrate they are not bankrupt, nor have they been convicted of a criminal offence, as well as submit audited financial accounts. The technical requirements often involve obtaining licences and permits. Public procurement systems frequently require suppliers to prequalify and register in approved vendor lists. Furthermore, bid security and performance guarantees are still common public procurement requirements (World Bank 2017a).

These stringent requirements can create significant challenges to any small business or supplier, but they are particularly problematic for smallholders and farmer organisations (European Commission 2008; Brooks et al. 2014; International Trade Centre 2014; FAO 2015; DCED 2017; Kelly and Swensson 2017). Most farmer organisations operate informally through farmer groups and clubs which do not fulfil the legal requirements to enter into contracts and participate in public procurement processes. HGSF experiences have shown that compliance with public procurement requirements was a key obstacle to linking smallholders to school feeding (FAO 2013). In the vast majority of cases, farmer organisations need to transition into some type of formal organisation that satisfies this legal requirement—i.e. associations, societies, cooperatives or enterprises. This entails filling in the necessary forms, presenting documentation, paying tax and fees and raising capital. This process can be challenging, especially for poor producers in remote rural areas. It is important to note that registration with the Ministry of Agriculture may not always give farmer organisations the necessary legal capacity to participate in public procurement. In addition, food suppliers are usually required to comply with food safety regulations and obtain permits and licences, which means going through inspections, paying fees and making investments to upgrade food processing sites. Performance guarantees and bid securities are virtually unattainable to poor farmers, who are thus usually excluded from financial markets.

The high level of requirements stipulated by public procurement legislation has in many cases undermined the ability of preferential treatment schemes to offer a secure market for smallholders. In Bolivia, the school feeding law (Law no. 622/2014) instituted in 2014 determines that smallholder farmer organisations are to be the only suppliers of school meals, reserving the entirety of these food purchases to this single group. This constitutes a significant benefit, given that the school feeding programme covers approximately 89 per cent of schools in the country. Additionally, the government has also provided significant price preferences to smallholders and farmer organisations in all tendering processes. However, the inclusion of smallholders in the school food market remains a challenge because farmers cannot comply with most of the requirements established in the legislation (PNACE 2015). The law stipulates that farmer organisations must register with the Ministry of Agriculture and obtain legal personality to enter into contracts. Additionally, farmer organisations must have a tax identification number and open bank accounts. Procuring entities also retain 7 per cent of the initial payments as a guarantee against contract performance, which creates a significant disincentive to capital-constrained farmers.

A comparable situation occurs in the school feeding programme in Peru, although it should be noted that the programme does not reserve food purchases to smallholders but, instead, gives preference to farmer organisations and local SMEs. To fulfil the requirements, suppliers must present a total of 21 different documents (MIDIS 2013). These include identity and business registration papers, land and property ownership documentation and eight different types of certificates and declarations. A study by the FAO (2013) into HGSF encompassing eight Latin American countries concluded that the high level of requirements in public procurement was a common challenge in all programmes in the region. Likewise, food procurement from smallholders in Mozambique and Kenya has also run into similar problems due to farmer organisations' informal status and low capacity to comply with procurement rules (Drake and Woolnough 2016; Milhorange et al. 2015).

Nonetheless, some experiences point to adaptations governments can make to their procurement requirements which can facilitate smallholder access to public food markets. In Paraguay, the government has created a special procurement modality specifically designed for

food purchases from family farmers and farmer organisations. This modality has been instituted by a law which also reserves all food procurement to family farmers, as mentioned in the previous section (Decree 1056/13). The requirements to participate in public food procurement have been simplified, tailoring it to the capacities of smallholders and farmer organisations. The decree waives bid and performance guarantees, tax registration and legal personality requirements. Suppliers must only comply with basic requisites: (i) registration with the Ministry of Agriculture and Livestock or the National Institute for Cooperatives (Instituto Nacional de Cooperativismo—INCOOP) and; (ii) participate in technical assistance programmes implemented by the government, non-government organisations (NGOs) or international cooperation agencies. Furthermore, the regulations guiding the country's school feeding programme mandate that food purchases must adopt this procurement modality (Resolution 15866/15).

In addition to defining preferential treatment schemes, the requirements for participation in public procurement must also be adapted to address key barriers to entry facing smallholder farmers. The subsections below pinpoint the most common obstacles and the best practices found in the literature to tackle them.

Food safety standards and food procurement specifications

Procuring entities must always guarantee quality and safety standards in their food procurement. However, it is important to ensure that these safeguards do not create onerous public procurement requirements that entail obtaining several types of certificates and licences. Governments should look to waive some of the requirements that have little or no effect on food safety and quality (International Trade Centre 2014). It should be emphasised that many food safety standards have been tailored to medium- to large-scale enterprises which have high levels of technical and financial capacity (International Trade Centre 2014; CSM 2016). Food safety standards and quality control systems should correspond to different scales, contexts and modes of production as well as the types and levels of risk involved in each food type (Roesel and Grace 2014; CSM 2016). The costs of meeting standards will disproportionately affect smallholders, as they must make significant investments in production and processing. Farmers who cannot comply with these standards will most likely be excluded from public food markets as well as higher-value private markets (Roesel and Grace 2014).

Although addressing the bureaucracy and costs related to acquiring licences and permits is outside the scope of public procurement frameworks, governments should look into possible interventions to facilitate this process. In Brazil, the National Health Surveillance Agency (Agência Nacional de Vigilância Sanitária—ANVISA) simplified the bureaucratic procedures required for sanitary certification to facilitate compliance by family farmers (Kelly and Swensson 2017). Smallholders and farmer organisations also need to receive the necessary support to comply with food safety and quality standards, as this is crucial for participation not only in public procurement but also in other formal markets.

Regarding food procurement specifications, adaptations in this area should be easier to implement, as they fall within the remit of procuring entities. Food purchases will be guided by nutritional policies; however, it is possible to have specifications that meet the nutritional needs of vulnerable populations without creating taxing requirements on suppliers. Food specifications can set minimum requirements and allow for alternatives that correspond to nutritional content and local preferences (Caldeira et al. 2017). In the EU, suppliers may provide variants—i.e. substitutes which meet these basic requirements (European Commission 2008).

This strategy has been adopted specifically to facilitate the participation of SMEs in public procurement processes (ibid.). In the case of food procurement, for example, fruit and vegetable specifications in many EU countries do not specify varieties and sizes but, rather, are based on food types, seasonality, diversity, serving frequency and portion size (Caldeira et al. 2017). Similarly, the food specifications in the PNAE in Brazil aimed to avoid restrictive standards and focused on types of food and food groups (Department of Education, State Government of Rio de Janeiro 2015).

Registration requirements

The issue of legal capacity is a significant one and merits special attention when targeting smallholder farmers with food procurement programmes. Naturally, participation in public procurement processes will entail some form of registration. Some countries have opted for registration with the Ministry of Agriculture, as is the case of Paraguay and Brazil; however, many countries require farmer organisations to register as some type of enterprise, as in Ghana and Kenya (Quinot and Arrowsmith 2013). Procurement rules that require farmer organisations to register as enterprises⁵ can create additional hurdles for smallholders. Although most governments have implemented reforms, the process of registering a business remains long and costly (World Bank 2017b). The choice of registration requirement should always consider bureaucracy and costs and favour options that are more accessible to smallholders and farmer organisations. These requirements should also take into consideration the most common models of association adopted by farmer organisations in their countries (Kelly and Swensson 2017).

The Rwandan case clearly illustrates this issue. The NSGR initially required farmer organisations to form cooperatives and present a registration certificate from the Rwandan Cooperative Agency. However, most farmer organisations could not fulfil this requirement, given the complex and costly process of establishing and registering a cooperative (Nizeyimana 2015). This prompted the NSGR to change the rules, and now farmer organisations are only required to register with the decentralised offices of the Ministry of Agriculture, which is a less complicated procedure (ibid.). On the other hand, the case of Bolivia—where smallholders are required to have two types of registration—demonstrates how this form of requirement can create extra obstacles to participation in public food markets. In addition to rationalising registration requirements for public food procurement, governments should seek to simplify business registration procedures, as this enables farmers to not only participate in public procurement processes but also engage with other private buyers.

Procurement systems that entail prequalification—i.e. registration in approved vendor lists or databases—can generate some advantages but can also create challenges to smaller suppliers (International Development Centre 2014). Prequalification can make supplier selection easier for procuring entities. Supplier databases are often used in lower-value procurement modalities such as requests for quotations, creating opportunities for smallholders and farmer organisations. Yet this registration often entails bureaucracy and fees. Research into SME participation in public procurement markets has shown that prequalification is often so onerous and time-consuming that most SMEs choose not to take part (International Development Centre n.d.).

Furthermore, in many cases, suppliers need to register with each procuring entity. This process is likely to be too burdensome to smallholders and farmer organisations. The costs and paperwork involved in this process may outweigh any benefit arising from

food sales. Ideally, governments should look to create a single registration system for which suppliers provide the necessary information only once (European Commission 2014). In India, for example, SMEs registered with the Single Point Registration Scheme are considered registered suppliers for government contracts; thus, there is no additional need for prequalification with procuring entities (National Small Industries Corporation 2018). However, it should be noted that registration in government supplier systems will require farmers to provide multiple types of registration, which again will create another layer of bureaucracy and costs. In Uruguay, for example, farmer organisations are required to register as a society, cooperative or association, as well as sign up with the Ministry of Agriculture and the central government supplier system (Ministerio de Ganadería, Agricultura y Pesca 2014). Finally, if procuring entities choose to keep their prequalification systems, they should also aim to renew their supplier lists on a rolling basis as opposed to periodically, which can lock interested suppliers out of any procurement opportunities for long periods of time (International Development Centre 2014).

Bid securities and performance guarantees

Rules related to bid securities and performance guarantees must also be considered when adapting procurement requirements to smallholders. These requirements are considered a good practice in public procurement, as they protect procuring entities from poor contract performance and prevent suppliers from withdrawing their bid at the very early stages of the procurement process. Nearly all countries in the world require bid securities, while performance guarantees are also common but found only in developing countries (World Bank 2017a). There is, however, agreement in the public procurement literature that these instruments can create significant barriers to smaller suppliers (World Bank 2017a; European Commission 2008). This is particularly the case for smallholders who are cash-constrained and have limited or no access to financial services. Most countries have established controls over bid security amounts to ensure that they represent only a very small percentage of the contract. In the case of performance guarantees, there is no recognised best practice, and virtually all high-income economies have abolished them altogether (World Bank 2017a).

It is important to recognise the risks associated with food procurement from smallholder farmers, but financial requirements cannot be so high as to hinder their participation in public food markets. In the EU, many governments have substituted bid securities for bid declarations (notarised or not), requiring suppliers to declare on their honour that they will accept the contract and fulfil all the stipulated conditions. This is meant to address the financial and administrative burden involved in bid securities while still providing procuring entities with some degree of protection (European Commission 2008). Furthermore, many countries—such as Bolivia, Egypt, India and Russia—have waived both bid securities and performance guarantees for SMEs (World Bank 2017b; International Trade Centre n.d.). These same strategies should also be considered in food procurement from smallholders and farmer organisations.

Although procuring entities must ensure that suppliers are able to fulfil their contracts, public procurement requirements should be tailored to the size and complexity of the contract (International Trade Centre 2014). Procuring entities should limit these conditions to those that are essential and make adaptations to reduce bureaucracy and costs. The rationalisation of technical and financial requirements is a common practice among countries aiming to improve SME access to public procurement (OECD 2015; International Trade Centre 2014; European Commission 2008). Governments should look to establish simple and standardised procurement requirements for food purchases from smallholders.

b) Ensuring access to information on public food procurement processes

Smaller suppliers in general have limited knowledge and information about public procurement processes. This is also the case for smallholder farmers, who do not normally engage in public food markets. Obtaining information is generally a key transaction cost in market exchanges. Farmers, therefore, may not be aware of tendering opportunities, preferential access rules or requirements for participation in public procurement. Importantly, providing smallholders with information reduces uncertainties, as it makes the terms of the exchange clear to them. Ensuring access to public procurement information has been considered of key importance to SMEs' participation in tendering processes (European Commission 2008). To address information gaps, some governments have established specific information centres that provide general information on tendering opportunities as well as advice and support to SMEs. Furthermore, many countries have created web portals or electronic gateways that provide information on tendering opportunities and allow suppliers to download tender documents and submit tenders on line.

Several institutions recognise online systems as a best practice, given that they increase transparency and competition among suppliers by making information on public procurement widely available and free (International Trade Centre 2014; European Commission 2008). However, the appropriateness of online tools will depend on the level of Internet use in a country. Accessing information online could be a challenge for smallholders, especially those living in remote rural areas. The PNAE in Brazil establishes in its regulations that in addition to government websites public calls for food purchases must be published in local newspapers and on notice boards in public spaces as well as advertised on local radio stations (Resolution no. 26/2013). Using local media channels can make information about tendering processes and special treatment schemes more accessible to smallholders. This information should also be given directly to farmers through farmer organisations, extension services, NGOs or other organisations that work closely with them.

Public procurement calls must provide all the information necessary for smallholder participation. Procurement notices and calls should be clear and provide details on food standards, food safety and quality requirements, prices, delivery points and schedules. Smallholders must also be informed about eligibility criteria and certification requirements involved in preferential treatment schemes. Procuring entities must also allow enough time for farmers to prepare tenders and respond to public calls for food purchases. Information should be provided well in advance to enable interested producers to plan and make provisions for their participation in public procurement processes.

c) Defining appropriate payment time-frames and ensuring timely payments

Timely payments are critical to all types of suppliers, large or small, but are especially important to smallholders, who face significant cash constraints. Farm incomes are crucial not only for household welfare but also for investments in production. Delays in payments mean that farmers are unable to meet their immediate needs and can also lead to significant losses in income due to rises in farm gate prices after harvest. The risks associated with late payments may discourage farmers from engaging in public procurement markets. A P4P study concluded that the lengthy delays in payments to farmers was one of the main contributing factors in high default rates (Amani 2014). Likewise, the PAA and PNAE also struggled to ensure timely payments to participating smallholders (PAA 2006; Delgado et al. 2005). In the GSFP, late

payment to caterers is one of the main causes for the weak link between school meals, caterers and farmers (Shaibu and Al-hassan 2014). Delays in payment force caterers to only procure from suppliers that are capable of providing them with food on credit, which is clearly not the case for smallholders (Drake and Woolnough 2016).

Research into public procurement has also found that delays in payment are one of the key disincentives to competing for a government contract in most countries in the world (World Bank 2017b; European Commission 2015; 2008). Despite their detrimental impact on both suppliers and procuring entities, late payments remain widespread. Research by the World Bank (2017a) shows that 62 per cent of countries have delays of over 30 days. The longest delays are found in upper middle-income countries, where suppliers have to wait between 91 and 180 days, whereas in low-income countries payment times are on average 30 days or less. In lower middle-income countries payments occur between 31 and 90 days.

The recognised best practice is to pay suppliers in no more than 30 days (World Bank 2017a; European Commission 2008). Research has found that countries with faster payment time-frames tend to have greater SME participation in public procurement (DCED 2017). In India and Mexico payment times for SMEs have been reduced to 10 and 20 days, respectively (ibid.). A 30-day payment time-frame can also be too long for smallholder farmers, especially more vulnerable producers. This was certainly the case for the Brazilian food procurement programmes and P4P (Kelly and Swensson 2017). The PAA aimed to pay farmers within 10 days, and the PNAE between 15 and 30 days. The WFP also made modifications to its standard payment procedure and reduced it to 15 days.

In most cases the public procurement legislation stipulates time-frames for supplier payments which all procuring entities must observe. This type of safeguard can be found, for instance, in Angola, Guinea Bissau, Kenya, Uganda, Bangladesh, Kosovo and the USA. The EU has also tried to address late payment issues by instituting the Late Payment Directive, which sets interest rates for delayed payments and a EUR40 minimum compensation for suppliers (Directive 2011/7/ EU). The USA, South Africa and India have also introduced Prompt Payment Acts and Codes which also establish deadlines and penalties for delays in payment to contractors.

Nonetheless, an evaluation of the EU directive has highlighted some issues that governments must take into account when creating prompt payment policies and legislation (European Commission 2015). In most countries, suppliers only receive compensation after they have triggered recourse/remedy procedures. These can be time-consuming and also entail costs. Additionally, the power and importance of public buyers often leave suppliers feeling reluctant to exercise their rights, as they fear this might adversely affect their relationship with procuring entities and potentially harm their participation in future procurement processes.

For prompt payment strategies to be effective, they must not entail lengthy juridical procedures. Ideally, procuring entities should introduce automatic interest or fines on late payments which remove the need for recourse processes (World Bank 2017a; European Commission 2015). Governments must also monitor compliance. For example, in the UK, government departments and agencies are required to publish their payment performance in their annual reports, which are subject to review by oversight bodies (European Commission 2015). Furthermore, the strategies discussed can certainly help to address payment delays; however, problems will remain if transfers from central government to procuring entities are slow. This issue is likely to require wider improvements in public finance management.

In addition to ensuring that procuring entities honour payment time-frames, it is important

to define appropriate payment methods that do not involve long transaction periods. These must be tailored according to the needs of smallholders, their access to financial systems and the options provided by national banking systems. Some of the literature has pointed to the potential of electronic payment systems such as specialised debit cards to facilitate payment processes (Kelly and Swensson 2017). These have been introduced for government food purchases in the UK and Brazil. Ghana is also implementing a mobile payment system for caterers supplying the HGSF programme. Nonetheless, the effectiveness of these innovations will depend on the level of development of a country's banking system and smallholders' integration into it.

d) Subdividing contracts into lots

It is common practice in public procurement systems to bundle government purchases into one large contract to promote greater efficiency. In fact, public procurement legislation often establishes that purchases should always be bundled whenever possible, as is the case, for example, in Zambia and Ghana. Contract bundling prevents procuring entities from having to manage numerous contracts and multiple suppliers. Procuring entities are also more likely to benefit from lower prices due to economies of scale. However, public procurement research has found that this practice has had a significant negative effect on small suppliers' access to public procurement markets. SMEs are often excluded from procurement processes simply because they do not have the capacity to fulfil large contracts. There is consensus in the literature that the size of government contracts constitutes one of the greatest obstacles to SME participation (European Commission 2014; International Development Centre 2014; Asian Development Bank 2012). Given the nature of smallholder farming systems and the related challenges in production and aggregation, contract bundling can create similar hurdles to their access to public food markets.

In light of this, subdividing contracts into lots—or contract lotting—has been highlighted as one of the most important ways to facilitate small and medium-sized suppliers' access to government contracts (European Commission 2014; Thomassen et al. 2014; International Development Centre 2014; Asian Development Bank 2012). Breaking contracts down into smaller lots not only benefits suppliers but can also generate advantages to procuring entities. Contract lotting can stimulate competition by increasing the number of suppliers participating in public procurement processes, thus improving the chances of obtaining the best quality of goods and services for the lowest price.

This strategy has been widely used by European countries to promote SME participation in public tendering processes (European Commission 2014). The EU reform of public procurement legislation specifically encourages procuring authorities to split contracts into lots to promote SME access (European Commission 2016). If procuring entities choose not to split their contracts, they must provide a public explanation. Research into SME inclusion in public procurement markets in Europe has found that contract lotting has increased their participation in tendering processes (Thomassen et al. 2014). Moreover, EU guidelines for public food procurement also recommend subdividing contracts into lots by type of food, such as bread, meat and vegetables, and allowing suppliers to submit tenders to more than one contract (Caldeira et al. 2017).

Smaller contract lots correspond more closely to the capacities of smallholder farmers to supply food to government institutions. Given the evidence, procuring entities should always look to subdivide their food contracts when looking to promote smallholder participation in public food markets. The literature on contract lotting as a strategy to facilitate stallholder

access is currently rather limited, thus it is difficult to pinpoint more specific best practices in this area. It could be argued that decentralised procurement modalities will always entail smaller contracts. On the other hand, centralised purchases at national and regional levels are more likely to require dividing contracts into smaller lots. Governments should look for efficient decentralisation levels that also consider costs, transportation and storage. The choice of contract lotting strategy will generally depend on local contexts and procurement models.

e) Defining contract modalities: Key issues related to forward contracts and advance payments

In some preferential treatment schemes targeted at smallholders and farmer organisations, procuring entities used forward contracts as a way to further facilitate their access to public procurement markets. Forward contracts are contracts between two parties to buy or sell an asset at a specified price on a future date. This type of arrangement can remove some of the risk and uncertainty related to marketing and protects suppliers and contracting entities against price fluctuations.

Both PAA and the P4P programmes adopted this strategy to provide additional incentives to more vulnerable producers. In the case of P4P, forward contracts were signed before harvest, giving farmers more certainty and thus allowing them to make investments and plan production. In the Brazilian case, the PAA also provided an advance payment to farmers as a means to finance production. Smallholders had the option of repaying the loan in cash or by delivering crops to the procuring entities. The PAA required all farmers under this contract modality to take on insurance (PROAGRO), also provided by the government. PROAGRO was meant to act as a safeguard against contract default.

Although this contract modality presents several advantages to smallholders by removing some of the uncertainties associated with market participation, the PAA and P4P experiences indicate that there are risks governments should consider when adopting this approach. In the P4P, forward contracts had the highest rates of default, at 21 per cent (WFP n.d.). This was predominantly due to a lack of supplier capacity to produce and aggregate commodities and comply with quality standards. Nonetheless, in some P4P countries upward price volatility coupled with delays in payment led to side selling and default among participating farmers, as farm gate prices increased beyond the prices in forward contracts (Amani 2014).

The PAA also encountered similar problems, leading the evaluation to conclude that most implementation challenges were closely associated with this type of contract (PAA 2006). In 2004 and 2005 the default rate in forward contracts totalled 70 per cent, leading to the cancellation of this contract modality in the PAA (Graziano et al. 2010). The lack of coordination between the PAA and production support programmes (discussed in the following section) left farmers exposed to adverse climate conditions which impacted harvests. Many producers were unable to generate enough surplus to fulfil their contracts or could not meet the quality requirements. PROAGRO payments were often delayed, and many smallholders were simply not aware of its existence or how to access it. The PAA provided advance payments based on the total value of the purchase, while PROAGRO covered only the costs of production. Therefore, insurance payments were smaller than the debt farmers had contracted with the PAA, leaving them worse off, even when they accessed the insurance scheme. Other studies have pointed to the fact that the National Supply Company (CONAB) was solely in charge of forward contract operations, even though it did not have any experience or skills in finance (ibid.).

Given the findings of the P4P and PAA evaluations, governments must pay special attention to the requirements involved in forward contracts. This is particularly the case for advance payments. Although access to technical assistance, finance and insurance are key to ensuring that farmers can fulfil any type of contract, this is particularly important under this contract modality. The risks to procuring entities are considerable, and, as the Brazilian programme shows, smallholders can also be adversely affected by contract default. Forward contracts and advance payments, therefore, require effective strategies to reduce or spread risk. Investments must be made in capacity-building initiatives that will enable farmers to raise production levels and meet quality requirements. The default rates in P4P showed a downward trend over the five-year pilot, which was attributed to improvements in smallholder capacity. In the case of advance payments, special insurance schemes are crucial and must be made available to farmers and tailored to their needs. The institutional arrangements to manage forward contracts and advance payments should include actors that have experience and skills in microcredit and credit schemes targeted at smallholders.

Moreover, forward contracts present commercial risk to both smallholder farmers and government buyers (UNIDROIT/FAO/IFAD 2015). Contract prices may turn out to be lower than spot market prices or may not cover rising costs of production. For procuring entities the risk is that agreed prices may actually be higher than spot market prices, thus raising procurement costs. In both cases there is an incentive to breach the contract—i.e. farmers default on their contract, or procuring entities limit procurement from smallholders or cancel purchases altogether. These incentives are stronger when commodity markets are more dynamic.

Commercial risks can be addressed by defining effective price mechanisms and stipulating them in forward contracts (*ibid.*). Price mechanisms need to provide a rate of return to smallholders that covers fixed and variable costs of production and allows profitability. Inadequate price mechanisms can actually create uncertainty among farmers in relation to the income derived from sales to government institutions. Effective price mechanisms also ensure the financial sustainability of public food procurement. This can be achieved by allowing prices to be renegotiated near the time of delivery. This approach was adopted by the P4P programme in Kenya (Amani 2014). Price terms must be clearly defined in contractual clauses to provide more certainty to farmers and procuring entities.

Finally, prompt advance payments play a critical role in these cases, as they act as an instrument to finance production. Delays will certainly undermine farmers' ability to increase production and improve food quality. The success of this approach depends on procuring entities' capacities, the effectiveness of agricultural support programmes, effective price mechanisms and the design of appropriate financial schemes.

4.2 ENSURING CROSS-SECTOR COORDINATION

All countries in the world will have a national policy framework to promote economic development, poverty alleviation and sustainable growth. These frameworks are comprehensive and encompass macroeconomic, sectoral and multisectoral policies. As discussed above, food procurement from smallholders is a multifaceted strategy; thus a number of policies will influence its outcomes. Nonetheless, it would not be possible to isolate how every aspect of the national policy framework will facilitate or hinder smallholder participation in public food markets. Based on the current research on country experiences, it could be argued that food procurement from smallholder farmers is closely linked to policies

and programmes related to food security, nutrition and food assistance, as well as agricultural development in terms of strengthening smallholder production and their integration into markets. Typically, food procurement strategies combine food security and nutrition goals with the development of smallholder farming systems.

The following section discusses best practices in policy frameworks, focusing on capacity development strategies that enable farmers to increase production and productivity and comply with government food procurement requirements. Capacity development is a fundamental element, as it addresses supply-side constraints and enables farmers to respond to increases in food demand and higher food quality and safety requirements. Furthermore, food procurement for food assistance must find ways to address the challenge of meeting the nutritional requirements of vulnerable populations through smallholder food supply. This is particularly important for nutrition interventions that aim to diversify diets and provide a wider range of foods. This section will discuss strategies to create food baskets/menus that are compatible with smallholder production. Given that food procurement from smallholders involves concerted action among actors responsible for food assistance, public procurement and capacity development, this section will also provide a discussion on the importance of multi-stakeholder arrangements. It will also pinpoint specific focus areas for coordination between sectors and stakeholders which play a key role in the success of public food procurement initiatives.

4.2.1 Multi-stakeholder arrangements: fostering coordination among key sectors and actors

Most public food procurement aim to achieve a number of goals, ranging from strengthening the smallholder farming sector and food security and nutrition, to stimulating local economies. The multisectoral nature of these initiatives requires coordinated responses that can address their complexities (Swenson and Klug 2017; Kelly and Swensson 2017). They demand multisectoral arrangements that bring together various stakeholders to make joint decisions on programme design and implementation (FAO 2014).

Multisectoral platforms should be present at national, regional and local levels, enabling synergies to happen on the ground where food is produced, procured and consumed. Importantly, coordination arrangements must have a clear mandate for the implementation, coordination and monitoring of public food procurement. Multi-stakeholder involvement is important in all policy processes (UN Agenda 21; Hemmati 2002). These arrangements thus should also enable the active participation—not just the mere representation—of civil society and farmer organisations in decision-making processes (Hickey and Mohan 2005; Cornwall 2002). These actors play an important role in providing information and inputs to policy development as well as monitoring programme performance. Furthermore, civil society participation also contributes to legitimacy and accountability in public food procurement initiatives.

The importance of multisectoral coordination and corresponding arrangements is illustrated by the implementation of the PAA in Brazil. The PAA established a working group comprising several government ministries, including the Ministry of Social Development, the Ministry of Agrarian Development (MDA) and the Ministry of Finance. Despite its multisectoral make-up, the working group's mandate was rather narrow in focus. Its responsibilities were restricted to selecting commodities, defining contract modalities and prices, identifying priority regions and establishing food donation arrangements. The PAA evaluation found

that the majority of the joint decisions made by the working group focused on prices and contract modalities (Delgado et al. 2005). Most of the programmatic activities were implemented sectorally, with each ministry concentrating on its own areas and with little shared or coordinated action among them (ibid.). The lack of concerted action within the working group, combined with its limited mandate, contributed to a series of challenges for the programme's implementation, particularly in terms of coordination with agricultural development programmes (PAA 2006; Delgado et al 2005).

The type of multisectoral arrangement for food procurement from smallholders will depend greatly on country contexts and the different policy objectives that governments pursue. The research on public food procurement initiatives, however, points to critical areas where cross-sectoral coordination is key to their success: (i) providing farmers with the necessary agricultural support to meet the market requirements of public food procurement; (ii) defining coordinated targeting mechanisms that can promote an overlap between farmers benefiting from capacity development programmes and farmers participating in food procurement initiatives; and (iii) creating food baskets/menus that are compatible with both nutrition goals and the nature of smallholder production.

4.2.2 Capacity development strategies: Addressing constraints in smallholder farming systems

Smallholder inclusion in public procurement markets depends not only on adaptations to public procurement frameworks but also on farmers' capacity to respond to increases in market demand. Smallholder farming systems are diverse, and there are significant differences among countries and regions in terms of production levels and market integration. Yet in the vast majority of countries smallholders face significant challenges, and agriculture remains predominately a low-return and highly risky activity (Gollin 2014; Poulton et al. 2006; Poole 2017).

Engaging in public food procurement markets requires increased production and productivity to ensure that smallholders can meet the demand from government institutions. Importantly, it also entails strengthening their capacity to diversify production and comply with higher food quality and safety standards. Supporting smallholders and farmer organisations in value addition is also key to their participation in formal markets. Public food procurement initiatives need to be well coordinated, with agricultural interventions that aim to address key constraints in production, post-harvest management, processing and marketing. There is a need for interventions at the household level which expand access to productive assets, finance, skills and improved technologies; however, strategies that address physical infrastructure constraints—for example, transport, storage and irrigation—are also necessary (Barret 2008; Kydd and Dorward 2004). Farmer organisations also need support to develop their aggregation and marketing capabilities and their business skills. This includes assistance to transition into some type of formal organisation that enables them to obtain legal capacity. Capacity development strategies should look to remove some of the hurdles in registration processes that often prevent farmers from formalising their organisations.

Given that smallholder participation in markets varies across households, geographical locations and markets, the challenge for capacity development initiatives is to identify key constraints that need to be addressed (FAO 2013). Effective support strategies are thus very

context-specific (FAO 2013; Webber and Labaste 2010). There is evidence from P4P programme evaluations that targeted agricultural support strategies played a significant role in enabling farmer organisations to access WFP food markets (WFP 2014). As part of the P4P programme strategies, selected farmer organisations received training and equipment to improve production, post-harvest handling, crop quality and safety. Support through P4P was provided through partnerships with government agencies and NGOs which were already working closely with farmer organisations. P4P was able to tailor agricultural interventions according to the requirements of WFP food markets and target this assistance towards farmer organisations participating in the programme.

Many governments, however, have chosen to promote capacity development through ongoing national policies and programmes implemented by the Ministry of Agriculture. For example, in Brazil the PAA and PNAE did not envisage specific support strategies as part of their programmatic activities. Instead, the programmes aimed to capitalise on the national programmes carried out by the MDA. The MDA was entirely dedicated to the development of the family farming sector, and its policies and programmes, which included access to credit, technical assistance, extension services and insurance schemes, were implemented all over the country. Among these initiatives the government also created a specific programme (*Ater Mais Gestão*) to strengthen farmer organisations' marketing capacity. The PAA and PNAE, therefore, sought to build synergies with the country's broad set of initiatives focusing on family farming.

Governments may wish to devise specific programmes to support smallholder engagement in public food procurement. Yet the P4P evaluations concluded that capitalising on existing capacity development programmes and agricultural investments is likely to simplify implementation and reduce costs. Taking a comprehensive approach to capacity development, such as in Brazil, can ensure that improvements in smallholders' capacities are achieved in a sustainable way and foster synergies with national rural development efforts.

Importantly, coordination between food procurement initiatives and national agricultural development programmes entails effective targeting mechanisms that can promote overlaps between programme beneficiaries. In its first years the PAA struggled to target farmers who were benefiting from the government's agricultural support interventions. Many farmers reported that they chose not to participate in the programme because of the lack of government assistance to improve production and productivity. The inadequate coordination between the PAA and rural extension services contributed to the high default rates among the poorest producers, as they did not receive enough support to meet the demand for food (PAA 2006). Only 57 per cent of the farmers in the evaluation sample were enrolled in PRONAF, the government's special credit scheme for family farming (ibid.). Other studies also found that in many cases farmer organisations that were selling commodities to the PAA had not been targeted by *Ater Mais Gestão* (Kelly and Swensson 2017). The poor linkage between capacity development initiatives and access to public food markets inadvertently favoured better-off smallholders who were either already receiving government support or were at a level that allowed them to generate surpluses.

Furthermore, PAA purchases did not always coincide with harvest seasons, meaning that in some cases when farmers were ready to sell commodities the programme was not ready to buy them (PAA 2006). In other instances, the PAA procured crops that farmers were not familiar with, creating a mismatch between food procurement and smallholder production. This was compounded by a lack of specific support strategies to enable farmers to engage with these new crops (ibid.). The PAA working group was created at the national level, but similar multisectoral platforms were not always replicated at the state or municipal level. State and

local governments had a high degree of autonomy to implement the programme, leading to an array of arrangements with varying degrees of success. The evaluations also found that there were no formal mechanisms for programme monitoring.

Effective coordination between the PAA and the MDA's agricultural programmes did happen in some cases (*ibid.*). For example, in the state of Bahia, farmers benefiting from PRONAF and technical assistance were specifically targeted by the PAA. In the state of Rio Grande do Norte, EMATER was actually responsible for programme implementation, enabling it to promote coordinated targeting between the PAA and extension services. A common element in these successful experiences were strategies to identify capacity development beneficiaries and farmers participating in the PAA. The evaluation concluded that these strategies could potentially be replicated in other states.

As the Brazilian case illustrates, it is crucial for public food procurement initiatives to promote coordinated targeting mechanisms. Coordinated targeting consists of a deliberate effort to identify and select beneficiaries of agricultural interventions and public food procurement initiatives (Cirillo et al. 2017). There must be an overlap between capacity development beneficiaries and farmers who supply food to government programmes and institutions (Gyori et al. 2016). As highlighted by the literature, all targeting mechanisms will be imperfect in their design and implementation. However, they should aim to promote overlaps to the greatest extent possible by adopting similar targeting criteria, methods and common registration systems (Cirillo et al. 2017). Importantly, they must avoid over-complex and expensive mechanisms. The success stories in the PAA and PNAE point to the importance of close collaboration between procuring entities and rural extension services. Furthermore, the Ministry of Agriculture and its agencies must play a major role in any implementation arrangements for public food procurement from smallholders.

In Paraguay the government attempted to achieve a link between technical assistance provision and access to public food markets through procurement requirements. To be eligible to participate in public food procurement, smallholders and farmer organisations must be receiving technical assistance from the Ministry of Agriculture and Livestock or development partners (Decree 1054/13). However, this has created unforeseen challenges, as extension services do not have the capacity to provide support to large numbers of farmers, leading to the exclusion of many smallholders from public food procurement (Swensson forthcoming). This experience highlights the need for appropriate investments not only to improve smallholder capacity but also to ensure that government institutions are able to provide farmers with the necessary support. Given the already extensive requirements involved in public procurement, perhaps the best way to promote capacity development is by creating effective targeting mechanisms, rather than through the food procurement process itself.

4.2.3 Adaptations to food baskets/menus: Addressing nutritional needs of target populations through smallholder production

All government food purchases most likely follow food security and nutrition policies. In some cases, the government policy is to guarantee food security through access to staple foods; in other instances, the policy aims to meet the nutritional needs of target populations and promote dietary diversification. Food procurement will thus increase the demand for a wider range of foods. For smallholders to meet this demand, agricultural interventions are needed to support increased farm production and diversification. However, food baskets also need to be

tailored to include crops that are normally produced by smallholders or that farmers have the potential to produce. Food baskets should seek to meet food security and nutrition objectives and correspond to smallholder production to the greatest extent possible.

The selection of food items should include specific criteria that aim to incorporate smallholder production. Food menus/baskets are usually under the sole responsibility of nutritionists, and guidelines usually concentrate on dietary, caloric and nutritional concerns. Creating guidelines and criteria for food baskets that are compatible with smallholder production requires cross-sectoral collaboration and dialogue among stakeholders involved in procurement, agriculture and nutrition. It also entails obtaining data and information on smallholder crop and livestock production systems and their production levels.

Criteria and guidelines that take into consideration agricultural seasons, agro-ecological zones of production, local cultures, food habits and preferences will facilitate procurement from smallholder farmers. Ideally, they should specifically aim to include smallholder crops. The PNAE guidelines, for example, stipulate that fresh, non-processed and seasonal foods must be prioritised, and that school menus should be based on local production systems (Resolution no. 26/2013). The PNAE rules have thus a clear orientation towards locally grown, traditional and seasonal crops, which are better suited to smallholder production.

The experience of the PNAE also highlights the importance of coordinating multiple stakeholders in the design of school menus. To create school menus based on smallholder production systems, the PNAE Guide for Nutritionists instructs nutrition professionals to learn about local food systems and work in partnership with extension services, municipal agriculture secretariats and farmer organisations (Ministry of Education 2012). In line with this, many municipalities formed multi-stakeholder arrangements to promote dialogue among farmers, local governments, nutritionists and schools. In some cases, working groups or committees were created to bring together different stakeholders to identify ways to tailor school menus to smallholder food supply (Triches and Schneider 2010). Another common strategy was to carry out participatory mappings of smallholder production, to identify the main crops and their seasons, establishing a basis for the design of school menus (Araujo et al. 2015; Toyoyoshi et al. 2013). Close collaboration between different actors allowed the school demand to match local smallholder farming systems and enabled farmers to plan production.

The extent to which this dialogue was successful varied greatly from one municipality to another, mostly due to local contexts and capacities. However, the inclusion of extension services and farmer organisations in these discussions was considered crucial (Rodrigues et al. 2017; Araujo et al. 2015). Research into the PNAE has demonstrated that most of the public calls targeted at smallholders requested fresh fruits, vegetables and tubers (Amorin et al. 2016). Overall the programme was able to purchase a wide variety of food from participating family farmers (Toyoyoshi et al. 2013). However, research also found that many public calls included highly processed foods that were not normally produced by smallholders, pointing to the need to further expand dialogue between agriculture and nutrition stakeholders (Amorin et al. 2016).

Tailoring food procurement to local food supply is a more straightforward task in cases where agricultural production systems are diverse. In countries or areas where subsistence farming predominates or where farmers specialise in a few rain-fed crops, adapting food baskets to local production and ensuring dietary diversity could be more challenging. Public food procurement initiatives should focus on the main crops produced by smallholders.

As the initiative progresses and farmers' capacities develop, other foods can be procured from them. Likewise, governments need not aim to fulfil 100 per cent of the food demand with smallholder production. Procurement from smallholders can be scaled up as their productive capacities increase. Cross-sectoral collaboration is key to achieving this, as capacity development strategies are needed to support farmers to diversify production and meet government food demand. Some pilot experiences in African countries implemented by the Purchase from Africans for Africa (PAA Africa) programme were successful at introducing fresh vegetables and fruits to school menus (Milhorance 2017; Gyori et al. 2016). This was achieved by providing smallholders with tailored production support, including input distribution, machinery and training (Milhorance 2017; Gyori et al. 2016).

5 CONCLUSION

The potential of public procurement to support the achievement of social, economic and environmental objectives is highlighted by the wide range of horizontal policies found in most countries in the world. Governments have shifted from a narrow focus on lowest prices to obtaining the optimum balance between price, quality and development outcomes. In this context, many countries are using the power of public food procurement as a way to strengthen smallholder livelihoods.

However, smallholder participation in public food markets, as with most formal markets, can be constrained by barriers to entry and high transaction costs. In sum, the most critical constraints are related to the high levels of competition and requirements involved in public procurement. Furthermore, there are challenges in terms of smallholder capacity to respond to increases in demand and higher food quality and safety standards, as well as to supply a wider range of foods.

Governments must create specific public food procurement frameworks that remove bureaucratic hurdles, reduce costs and give smallholders competitive advantages. Public food purchases from smallholder must also be closely coordinated with interventions in different sectors. Capacity development strategies are crucial to raise agricultural production and support diversification and compliance with food standards. Public food procurement initiatives must establish coordinated targeting mechanisms that can promote an overlap between agricultural intervention beneficiaries and farmers who supply food to government institutions. Moreover, government food demand must also be compatible with the nature of smallholder production—i.e. seasonal, low to medium production diversity and traditional or indigenous crops. Creating food baskets and menus that integrate nutrition goals, smallholder production and seasonality also requires cross-sectoral collaboration and close dialogue among procurement, agriculture and nutrition stakeholders.

Public food procurement is a multidimensional strategy encompassing interventions in public procurement, agriculture and food security and nutrition. Therefore, the success of public food procurement in terms of promoting smallholder market access and strengthening their livelihoods depends on concerted action among different actors and sectors. Multisectoral arrangements play an important role in enabling dialogue and coordination and are crucial element in these initiatives.

Table 1 provides a summary of the best practices found in the literature review.

TABLE 1

Best practices summary

| Focus area | Best practice |
|---|--|
| Addressing competition challenges in public procurement processes | Competition is a good practice in public procurement; however, it may also skew these markets towards larger suppliers that have more capacity to face high levels of competition and fulfil requirements. Public food procurement initiatives must define preferential treatment schemes to provide farmers with competitive advantages. Women should receive additional preferences to promote their inclusion in public food markets. Preferential treatment is only effective if governments are able to monitor and enforce compliance with preferential treatment rules. |
| | In some reservation schemes procurement follows a non-competitive process. In these cases, food procurement should establish procurement caps to prevent governments from becoming the only buyer, create incentives for farmers to find other markets and ensure that the benefits of market access are spread across the largest possible number of smallholders. |
| | Preferential treatment schemes must have clear eligibility criteria and certification processes. Eligibility rules reduce doubts and ambiguity regarding procurement decisions. This ensures transparency, accountability and fairness in preferential treatment. |
| | Public food procurement should use market prices as a benchmark, as this promotes fiscal responsibility and reduces the risks of market distortions. Governments must establish effective price mechanisms to identify market prices and make procurement prices readily available to suppliers and the public. |
| Simplifying requirements and reducing transaction costs | To reduce uncertainty related to market participation, the terms of transactions must be made clear to smallholders. Obtaining information on public procurement is also a key transaction cost. Information on public procurement opportunities, preferential treatment and requirements must be publicised through channels accessible to farmers and include all the necessary information for participation in public procurement processes. |
| | Registration requirements are key transaction cost in public procurement, as they usually involve bureaucracy and fees. Ideally farmers or farmer organisations should be required to provide only one type of registration which is the least onerous to them. |
| | Although bid securities are a good practice in public procurement, they can also pose significant obstacles to participation, as smallholders have limited liquidity and access to financial services. Bid security requirements should be waived, reduced or substituted by a bid declaration. |
| | Although performance guarantees are also a good practice in public procurement, they pose significant obstacles to smallholders, given their limited liquidity and access to financial services. This requirement should also be waived or reduced. |
| | Governments should always ensure food safety and quality in food procurement. Although these standards should not be lowered, procuring entities should look to waive requirements that have no impact on food quality and safety. These requirements should also be simplified to the greatest extent possible without compromising safety. |
| | It can be difficult for smallholders to comply with overly specific food requirements. Food specifications should focus on food groups, types of food and nutritional properties, rather than specific crop varieties. Procuring entities should allow for variants that meet the minimum requirements established by procuring entities. |
| | Payment delays in public procurement are still common in all parts of the world. The recognised best practice is to pay suppliers within 30 calendar days. This time-frame could be too long for smallholders due to their immediate cash needs and limited access to credit. Governments should also establish fines and penalties for late payment. |
| | Forward contracts offer a number of benefits to smallholders by reducing uncertainty related to market participation. However, the risk of default can adversely affect both procuring entities and smallholders. Governments must establish mechanisms to safeguard both parties against default. |
| | The size of government contracts can create obstacles to smallholder participation in public food procurement, as they may have limited capacity to supply large quantities of food. More decentralised procurement models can potentially lead to smaller contracts. Governments should always seek to subdivide contracts into smaller lots to ensure that smallholders can meet the demand for food. |
| | |



| | |
|-----------------------------------|---|
| Capacity development strategies | <p>Governments and development partners should provide specific support to farmers to ensure that they can meet public food procurement market requirements and participate in public food procurement processes.</p> <p>In addition to specific support, as described above, farmers should receive assistance to expand their production, post-harvest, processing and marketing capacities. Public food procurement initiatives must be well coordinated with agricultural development interventions.</p> <p>Coordination between food procurement initiatives and national agricultural development programmes entails effective targeting mechanisms that can promote overlaps between farmers receiving agricultural support and those supplying food to government institutions. Targeting mechanisms should adopt similar targeting criteria and methods as well as common registration systems. They should aim to identify women and women-only farmer organisations.</p> |
| Adaptations to food baskets/menus | <p>Food baskets/menus must reflect smallholder production. Governments should devise specific guidelines on how to incorporate smallholder production in the design of food baskets/menus. The design of food baskets/menus should also involve close collaboration among nutrition, agriculture and procurement stakeholders.</p> |
| Multi-stakeholder arrangements | <p>Public food procurement initiatives are multidimensional and thus require concerted action among different sectors. Ideally, governments should establish a specific multisectoral arrangement responsible for the design and implementation of public food procurement initiatives targeted at smallholders. These arrangements must include the procurement, food security and nutrition and agricultural development sectors as well as civil society and farmer organisations.</p> |

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NOTES

2. See: <<http://bpp.worldbank.org/>>.

3. The USDA (2015) has defined unprocessed products as locally grown or raised products that retain their inherent character.

4. Government guidelines in Peru award 15 extra points to farmer organisations and suppliers that purchase food from smallholders (MIDIS 2013). In South Africa, a maximum of 20 points are awarded to the BBBE criteria for contracts between R30,000 and R1 million, and a maximum of 10 points for contracts over R1 million (Quinot 2013).

5. This refers to the most common forms of enterprises found in the great majority countries—i.e. sole proprietorship, partnership, corporation, cooperative or company.

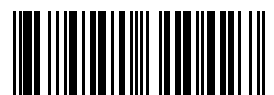


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