



GOALAN

**GREEN PUBLIC
PROCUREMENT
FOR SUSTAINABLE
HORTICULTURE:
A POLICY BRIEF**



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TABLE OF CONTENTS

	Table of Contents	3
	List of Acronyms.....	3
	1 INTRODUCTION	4
	1.1 Definition Green Public Procurement (GPP)	5
	1.2 GPP, Food Security and Sustainable Agriculture.....	5
	2 THE ROLES OF GPP	7
	3 POTENTIAL CHALLENGES.....	11
	4 PUBLIC PROCUREMENT IN KENYA.....	13
	5 THE PUSH AND PULL MECHANISM OF GPP	15
	6 CONCLUSION AND FINAL REMARKS	17
	7 REFERENCES	18

LIST OF ACRONYMS

CE	Circular Economy
CPP	Circular Public Procurement
DEFRA	Department for Environment, Food and Rural Affairs
EC	European Commission
FFVs	Fresh Fruit and Vegetables
GDP	Gross Domestic Product
GPP	Green Public Procurement
ICT	Information and Communication Technologies
MSMEs	Micro-, Small- and Medium-sized Enterprises
OECD	Organisation for Economic Cooperation and Development
PP	Public Procurement
SCP	Sustainable Consumption and Production
SDGs	UN's Sustainable Development Goals
SFSCs	Short Food Supply Chains
SMEs	Small- and Medium-sized Enterprises
SPP	Sustainable Public Procurement
SPTF	Sustainable Procurement Task Force
SSA	Sub-Saharan Africa
UNDESA	UN's Department of Economic and Social Affairs
UNEP	United Nations Environment Programme

— Governments have a huge role as buyers in influencing the production of more environmentally friendly products and services through public purchases. In the European Union (EU), government expenditure on works, goods and services represents around 14 % of GDP, accounting for roughly EUR 1,8 trillion annually (EC, 2016). Governments use public procurement to pursue secondary policy objectives, while delivering goods and services necessary to accomplish their missions in a timely, economical and efficient manner (OECD, 2017). The high relevance of public procurement for economic outcomes and sound public governance, resulting from its large volume, leads governments to use public procurement as a strategic policy lever to achieve additional policy goals, aimed at addressing environmental, economic and social challenges in line with national priorities.

A green public procurement (GPP) policy can be a strategic lever for the country to achieving its Green Economy Strategy and Implementation Plan (GESIP)

In Kenya, the government has already a wide range of policy, institutional and legislative measures in place, that regulate business activities to ensure environmental protection. The Public Procurement and Disposal Act (PPDA) of 2005 and the Procurement Regulations of 2006, for example, have introduced standards for the implementation of public procurement in the country (Muraguri, et al., 2015). Meanwhile, the PPDA of 2005 has been repealed by the most recent PPDA of 2015, which came into force in January 2016 and describes ethical values to be complied with by procurement professionals in the public sector (Matasio, 2017).

A green public procurement (GPP) policy can be a strategic lever for the country to achieving its Green Economy Strategy and Implementation Plan (GESIP) 2016 – 2030. The national plan was launched in 2017 by the Cabinet Secretary for Ministry of Environment and Natural Resources, and is a blueprint for enhancing low-carbon, resource efficient, equitable and inclusive socio-economic transformation. Apparently, environmental protection and resource efficiency are high on the national agenda due to the fact that 42% of Kenya's GDP and 70% of employment are derived from natural resource related sectors, such as agriculture, tourism, forestry, mining, and energy (Government of Kenya, 2016).

1.1 DEFINITION GREEN PUBLIC PROCUREMENT (GPP)

The procurement process by which public authorities seek to establish a balance between the economic, social and environmental pillars of sustainable development is referred to as **Sustainable Public Procurement (SPP)** (EC, 2019). The Sustainable Procurement Task Force (SPTF) of the UK, defines 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 environment¹⁾” (DEFRA, 2006, p. 10).

Often SPP and **Green Public Procurement (GPP)** are used interchangeably. GPP defined by the European Commission (EC) as:

“... a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured” (EC, 2008, p. 4).

The implementation of SPP and GPP is historically linked to the goal of Sustainable Consumption and Production (SCP), which first gained its public relevance at the UN Conference on the Human Environment in 1972. Since then, SCP has become increasingly important as a strategic element for achieving sustainable development and is now anchored in Goal 12 of the SDGs adopted in 2015 (One Planet Network, n.d.).

When public procurement is used as a policy instrument to achieve economic, social, environmental and political objectives, it can be described as a horizontal policy (Arrowsmith, 2010). In the past few years, these horizontal policies have been used not only to foster social inclusion but also particularly to promote green consumption of products and services.

1.2 GPP, FOOD SECURITY AND SUSTAINABLE AGRICULTURE

Climate change is a major concern for sub-Saharan Africa (SSA) in particular, that has experienced more frequent and more intense extreme climate over the past decades (UN, 2018). According to the World Resource Institute, in

¹⁾ The corresponding footnote reads as follows: “Sustainable Procurement should consider the environmental, social and economic consequences of: Design; non-renewable material use; manufacture and production methods; logistics; service delivery; use; operation; maintenance; reuse; recycling options; disposal; and suppliers’ capabilities to address these consequences throughout the supply chain.”

2016 SSA contributed a total of 2.3 GtCO₂e (excluding GHG emission by land-use change and forestry (LUCF)), out of which 41% was generated by the agricultural sector (WRI, 2020).

In 2019, agriculture's contribution to GDP in SSA was about 15.3%. The figure increases considerably when a looking glass is put on Kenya, where the share of agriculture to the national GDP reached 34.1% (The World Bank, 2020). This illustrates the vital role of agriculture to Kenyan economy, people's livelihood and the importance to ensure its sustainability long into the future.

Pais et al. (2020) reported that half of Africans are already facing food insecurity, of which 50% are severely food insecure (McKinsey & Company, 2020). It is likely that the number of people who are hungry will double in 2020 alone, due to the global COVID-19 pandemic. Recent locust swarms in the Horn of Africa, as well as climate change related droughts and flooding have destroyed crops and livelihood of millions of smallholder farmers (Blanke, 2020). These challenges only highlight the existing problem that Africa has been facing, i.e. food security. Many people fear that the COVID-19 pandemic will erode the capacity of short-term food production and distribution. It is already forecasted that the COVID-19 pandemic will have an enormous impact on Kenya's grain supply chains for the marketing years 2020/21. According to Nairobi/FAS, national and international grain supply chains will be interrupted for an indefinite period of time. Corn and wheat production will be particularly affected, with a decline in both. Rice production, for example, is expected to stagnate (USDA, 2020).

Against this backdrop, Kenyan government can help usher in a robust agriculture and food system through GPP implementation that paves the way into sustainable agriculture. Generally, governments make large food purchases for hospitals, schools, prisons, military institutions and so on. Due to its sheer value, public food procurement can also be used to support horizontal policies related to food security, health and nutrition, agriculture, and SME sector development.

In the EU, the total government expenditure on food is EUR 82 billion per year. Based on the World Food Programme's estimation (2013), globally governments spend between USD 47 billion and USD 75 billion a year on school meals. Looking at this number, GPP for school meals alone can potentially expand market opportunities for rural producers and MSMEs, and, in turn, can foster rural economies and communities by promoting growth and job creation in the food sector. This strategy has been pursued by several countries such as the USA, the UK, Italy, Brazil and Thailand (FAO, 2018).

GPP facilitates sustainable development

Addressing environmental and social challenges through GPP policies opens up new possibilities of accelerating the shift towards SCP, greener economy and sustainable development (UNDESA, 2014). According to the OECD, the deployment of GPP policies may not only present financial savings for public authorities, but have also a significant potential to contribute to a sustainable and viable economy. Sustainable innovation and societal transition can be promoted by encouraging the private sector to produce environment-friendly, local products and services under decent work conditions (DEFRA, 2006).

GPP facilitates transition towards a circular economy

GPP can also facilitate the transition from a linear to a circular economy (CE) by closing the loop through regional and small-scale approaches (OECD, n.d.). The so-called Circular Public Procurement (CPP) is closely related to SPP/GPP and underlines the key role of public authorities in greening procurement by facilitating the transition towards CE. CPP can be understood as:

“the process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, whilst minimising, and in the best case avoiding, negative environmental impacts and waste creation across their whole life-cycle”
(EC, 2017, p. 5).

When considering the transition towards CE, it is important to first of all identify the actual needs and subsequently consider strategically how circular procurement can be integrated into procurement practices and systems that are already established. Furthermore, it is vital to analyse the life-cycle impacts of products and services in order to identify, e.g. its environmental or social impacts and to consider life-cycle costs over lowest purchase price (EC, 2017).

GPP strengthens agriculture and food systems

In many developing countries, public food procurement has been used to support smallholder farmers, i.e. promoting their economic inclusion and, by doing so, strengthen local food systems. The reason is that public food procurement can reduce market uncertainties and risks by providing access to market and a source of income to farmers and agricultural MSMEs. Improved market participation and additional source of income can generate positive impacts such as increases in household consumption of sustainable food,

dietary diversity and higher investments in sustainable production. In addition to the potential to promote local and regional economic development, GPP policies directed at local consumption offer more resilient and shorter supply chains that are not heavily dependent on fluctuating global affairs (particularly important in times of crisis, i.e. COVID-19 pandemic). Moreover, short food supply chains (SFSCs) are often linked to high-quality product trade which at the same time foster sustainability and efficiency (e. g. short transport distances, less food loss, less packaging material, less input use including pesticides & synthetic fertilizers, better product traceability, more value-added for producers, etc.) (Kiss, et al., 2019). Improvements to the livelihood of farmers and agricultural MSMEs will create positive spillover effects in the local economy at the county level.

GPP generates economic gains

GPP does not only offer environmental and social benefits, but, above all, economic gains. GPP is an effective tool to generate domestic income while reducing costs and supporting transfer of technology and skills, such as sustainable agriculture technologies (efficient drip irrigation, solar-panelled cool rooms, etc.). In making GPP decisions, a life-cycle costing (LCC) is often used. An improved economic performance through the use of LCC analysis has been confirmed by various studies, such as that of the Öko-Institut and ICLEI in 2007 and that of the Nordic Council of Ministers in 2009 (UNEP, 2012).

Kenya can also benefit from GPP implementation. According to Statista (2020), Kenya's trade balance between 2009 and 2019 has been deteriorating with imports exceeding exports. In 2019, the negative trade balance amounted to around USD 11.39 billion. Here, a compensated foreign trade balance can be targeted by strengthening agriculture (including horticulture) sector. Stimulated by the increasing global demand for high-quality and sustainable agricultural products, Kenya can strengthen its role in the global market. In a market analysis (2019) undertaken by the EU-funded Switch Africa 'GOALAN' Project, it was found out that European consumers increasingly demand for sustainable food products (ITC, 2019). It offers an untapped opportunity for Kenya to increase its export of sustainable food products.

GPP encourages the SME sector development

In general, public procurement has been widely used to advance economic policies and in particular to support the SME sector. While most OECD countries have a national GPP policy in place, an OECD survey (2017) revealed that most countries had a public procurement policy or programme targeted at expanding SMEs' access to public procurement opportunities (FAO, 2018).

The USA has one of the largest and most comprehensive schemes in this area, instituted in 1953 under the Small Business Act. But not only those countries, emerging economies such as Brazil, China and India have also created preferential treatment schemes for SME sector, including price preferences and set-asides. These strategies are also used by several African governments such as Senegal, Ethiopia, Zambia, Sierra Leone and Cameroon (Nyeck, 2015).

GPP bolsters eco-innovation

Green public procurement is a demand-side innovation policy tool. Demand-side policies can trigger innovations or diffusion of new technologies through a demand-pull effect – in contrast to supply-side policies which work through technology-push effects (OECD, 2017; DIW, 2019).

This perspective is shared by EU member states. When launching the new EU public procurement system, that entered into force on 18 April 2016, the EC highlighted the link between GPP and eco-innovation²:

“Buying innovative products, works and services plays a key role in improving the efficiency and quality of public services while addressing major societal challenges. It contributes to achieving best value for public money, as well as wider economic, environmental and societal benefits by generating new ideas, translating them into innovative products and services, and promoting sustainable economic growth” (EC, 2016).

The strengthening of eco-innovation e.g., is one of the key mechanisms for greening the economy, where technological innovations, re-organisation of institutions and improvements of social practices are pivotal means (Hazarika & Zhang, 2019). In order to mitigate e.g. the carbon footprint in public agencies, entities should focus on GPP and eco-innovation in their supply chain, renewable energy use, eco-efficiency in material consumption and services, high energy efficiency in buildings that are public and future-oriented management approaches (e.g. home office, printing less and working more digitally) (Novaes das Virgens, et al., 2020). Another demand-side measure that complements GPP by determining criteria is standardisation that – when carefully used in tenders – can influence market demand for green goods and services, in addition to accelerating eco-innovation (Rainville, 2017).

2) *“Eco-innovation is the production, assimilation or exploitation of a product, production process, service or management or business method that is novel to the organisation (developing or adopting it) and which results, throughout its life cycle, in a reduction of environmental risk, pollution and other negative impacts of resources use (including energy use) compared to relevant alternatives”* (Kemp & Pearson, 2007).

GPP creates opportunity to marginalized/vulnerable groups

Youths and women are more likely to be severely affected by the COVID-19 epidemic. They account for the majority of the workforce in both the agricultural and informal sectors, and are thus in a particularly vulnerable position (Blanke, 2020). As women are largely involved in the horticultural sector, empowerment through capacity building in green practices can lead to remarkable social benefits as women play a leading role in production on smallholder farms (English & Jaffee, 2004). Similarly, provision of training to build the capacity of youths in sustainable farming and production is vital to the agriculture sector. The sector holds a huge potential for local job creation that benefits local economy and that, in turn, ensures sufficient human resources for the farms and reduces the migration of youths to urban areas (FAO, 2018).

GPP enhances trust in public institutions

In addition to the aforementioned benefits of GPP, the implementation of this horizontal policy can also be of a qualitative nature and improve the trust in public entities and their reputation (Mbaluka, 2014). So far, the Kenyan county governments have paid little attention to GPP, and the role of an active consumer with major market power has not yet been fully acknowledged (Ngunjiri, 2019). By engaging in GPP, public institutions could take the lead as first mover, strengthen community trust and serve as role models for other counties.

THE BENEFITS OF GPP IN A NUTSHELL

Economic Benefits	Social Benefits	Environmental Benefits
<ul style="list-style-type: none"> • Boosting business competitiveness and innovation • Emergence of green industry and economy • Increased resilience of enterprises to external shocks • Innovation & development of (eco-) technologies • New markets through increased demand in sustainable products • Retention of high value materials in the economy (circular, non-wasteful economy) • Stimulation of local economies & local labour market 	<ul style="list-style-type: none"> • Education of stakeholders in green thinking • Enhanced reputation • Good governance • Marginalised group empowerment (women, youths, etc.) • More values added for producers • Poverty eradication through employment / job creation • Wealth creation 	<ul style="list-style-type: none"> • Improved environmental performance, e.g. through shorter logistics and reduced CO₂ emissions • Promotion of SCP • Resource efficiency

Table 1: English & Jaffee, 2004; EC, 2008; UNEP, 2012; EC, 2017

According to Delmonico et al. (2018), organisational culture can be one of the biggest barriers to GPP implementation and, therefore, government may consider cultural change management when developing GPP policies for different departments and public authorities. In its recent report, the EU Commission (2019) identified common obstacles to GPP implementation by public authorities such as:

- Lack of political support: a high percentage of public authorities reported on lack of management support as a barrier to broader implementation of GPP. This indicates that senior officials within the public sector across Europe do not have a high awareness of the importance of the GPP agenda. In Kenya's case, there are endeavours by the government towards GPP, e.g. through PPDA (2015) and section 60, which empowers public accountant to integrate environmentally friendly goods into the specifications during the procurement process. Nonetheless, there is still no uniform and binding national GPP policy that applies to all public institutions (Ngunjiri, 2019).
- Green products are perceived to cost more: many public sector organisations reported a challenge in changing behaviour within purchasing departments. Using purchase price alone to decide between offers, rather than the full life-cycle cost of the product or service, can particularly affect the take-up of green products and services.
- Lack of legal expertise in applying environmental criteria: many purchasers within public authorities do not and should not be expected to know all the environmental and social impacts of purchasing particular products or services. In some cases, purchasers still struggle to define what an "environmentally and/or socially preferable" product or service is, and how to include appropriate criteria to identify these in tendering.
- Lack of practical tools and information: many public sector organisations reported on lack of practical tools and information. This indicates the importance of having such tool and information available to all public procurers.
- The need for systematic implementation and integration into management systems: decentralised organisations will require effective management systems to ensure a consistent application of environmental and social initiatives – and this applies on GPP as well.

- **Lack of training:** staff responsible for carrying out specific tasks do not always have the skills, or are not provided with the appropriate training. Training is generally required for procurers on the legal and technical aspects of GPP implementation, on the concept of life-cycle costing. Training is also needed for end-users on the sustainable use of products. Mbaluka (2014) found out in his study that although 80% of the employees of Kiambu County who worked in PP were aware of the concept of green procurement, only 30% have had some training in the latter.
- **Lack of co-operation between authorities:** the EU Commission found out that a systematic implementation of GPP across Europe is still needed since the majority of public authorities are acting alone, often on their own initiative. Both informal and formal cooperation needs to grow to enhance GPP. The lack of coordinated exchange of best practice and networking between authorities has been identified as an obstacle to greater GPP implementation.
- **Limited established environmental criteria for products/services:** for many product and service groups, public authorities do not have access to clear and verifiable criteria which allow them to incorporate environmental considerations into their tendering while complying with the requirements of procurement law and regulations.



Public procurement in Kenya is estimated to account for between 70–80% of the national budget. County governments in Kenya are allocated between 15–45% of the total country's income, illustrating the important role of county governments in driving GPP (Ngunjiri, 2019).

Public procurement in Kenya is estimated to account for between 70–80% of the national budget

Case in point

Laikipia County was designated as one of the 47 counties under Kenya's new constitution in 2010. In the 2013/14 financial year, the county government received an allocation of around Ksh 2,5 billion from the national government, of which a considerable part of the budget was used for the procurement of goods, works and services for the county. Under the guidance of

PPDA (2015) in all procurement matters, the Laikipia County government was praised as the most efficient public procurement agency in Kenya in 2014. However, the performance has little to do with green procurement (Ngunjiri, 2019). In his study, Ngunjiri (2019) found out that Laikipia public procurers still lacked of knowledge on GPP. A positive correlation between knowledge gap and GPP implementation was identified.

Furthermore, the perception of procurement staff of green products and services has significantly influenced GPP implementation by Laikipia county government. The procurement staff often perceived such products as expensive, thus discouraging green procurement. In this light, Ngunjiri (2019) and Lăzăroiu et al. (2020) suggest several steps to encourage GPP implementation by county governments:

- Regular awareness creation and capacity building among procurement staff at county governments on GPP are crucial. County governments can consider providing training on GPP to procurement and finance staff.
- County governments can send their key procurement personnel to national and international forums on GPP to learn and exchange information on GPP implementation with other public authorities.
- The availability of green procurement manuals will facilitate deeper understanding about GPP and how it can be implemented in daily procurement decision-making.

- A life cycle analysis of green products and services needs to be undertaken. This can help procurement staff establish whether a green product offers value for money, thus creating a right perception on the green product in question.
- Top management and public servants should reassess their personal values and involvement in GPP, while crafting environmental procurement strategies, codes of practice, and training methodologies targeted at procurement officials. GPP may shape the consumption of goods and services, and this should adhere to the procurer's standards.



Kenya is known to be one of the largest exporters of horticultural products among developing countries and these products account meanwhile for two-thirds of Kenya's growth in agricultural exports (English & Jaffee, 2004). Currently, Kenya exports 700 tonnes of fresh produce per week, of which 250 tonnes (33%) come from the Naivasha Lake basin. Due to the rapid growth of horticulture industry around the lake, the basin has gained increasing importance as an economic hub for Kenya. The basin supplies 70% of Kenya's cut flower exports, estimated to generate 9% of total foreign exchange revenue, 20% of vegetable exports and a greater contribution to local GDP from domestic vegetable growing (WWF, 2012). Three counties, i.e. Nakuru, Narok and Nyandarua, are located around the basin, contributing to the fresh product exports. The European market is one of Kenya's key export markets.

In Europe, consumers are increasingly aware of environmental and sustainability issues. This has gained traction where consumers demand for sustainable and high-quality food products, especially fresh fruit and vegetables (FFVs). Sustainable FFVs fetch higher prices in domestic as well as international markets, which contributes to Kenya's GDP. However, serving international markets can be challenging due to high quality standards and price volatility, which can result in a supply excess in the country. When that happens, small producers (MSMEs) often struggle to find local markets for their sustainable and fresh produce. Due to its nature, fruit and vegetables have to be consumed within few days, especially when farmers do not have cool rooms to store the harvest. Food loss due to failure in finding buyers in time may exacerbate the already pressing food insecurity problem. In order to prevent this situation, county governments can orchestrate a push and pull mechanism for sustainable FFVs through GPP policies (Tecco, et al., 2016; European Committee of the Regions, 2018).

A promising tool, not only for agricultural practices, but also for the efficient implementation and transparency of business and political measures, is the use of information and communication technologies (ICT). The FAO (2018) states e.g. that one of the most powerful ways to make farms more attractive to young people is to give them access to ICT tailored to agriculture. Furthermore, Kenya's youth is known to be tech-savvy, talented and with great potential for innovative ideas that would be feasible and scalable with political or financial support (Kaseje & Kaseje, 2020).

The benefits of ICT are now also being leveraged in the area of PP. In June 2018, the President signed Executive Order No. 2, which requires all procuring entities to publish procurement information on various public platforms. The National Treasury is now responsible for ensuring that all procurements are processed via the e-procurement module by January 1, 2019. The entity already applies an e-procurement system (part of the Integrated Financial Management System) which is accessible at present only to registered suppliers (TPPR, n.d.). Another interesting topic for the future in this context is the role of GPP and automated algorithmic decision processes based on artificial intelligence, which could support public institutions in their work processes (Lăzăroiu, et al., 2020).

County governments can consider purchasing food for public institutions such as hospitals, schools, prisons, the military, etc. GPP for school meals, for example, can expand marketing opportunities of rural producers and MSMEs, and, in turn, foster rural economies and communities by promoting growth and job creation in the food sector. A public food procurement programme creates a stable demand and this will encourage small producers to continue their sustainable farming practices, which will reduce pressures to the environment. As sustainable fruit and vegetables become mainstream, local demand will increase, where businesses will follow suit, thus creating a virtuous cycle of sustainability (see Figure 1).

GPP VIRTUOUS CYCLE OF SUSTAINABILITY

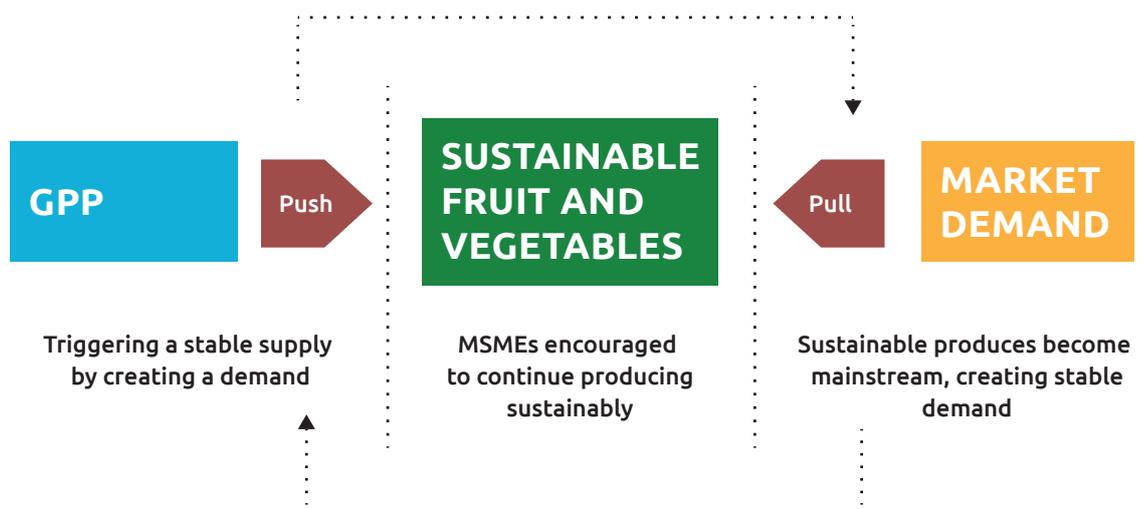


Figure 1: Authors (2020)

As laid out in previous sections of this policy brief, sustainable production and consumption (SCP) and green public procurement (GPP) present an immense potential for Kenya to realise its low-carbon, resource efficient, equitable and inclusive socio-economic objectives as described in Kenya's GESIP and Vision 2030. When used as a horizontal policy instrument, GPP can contribute to economic, social and environmental gains.

In the face of recent global events such as locust swarms and COVID-19, it becomes clear that countries, including Kenya, cannot afford employing short-term strategies, as future shocks and crises due to environmental degradation and climate change becomes more likely. A sustainable agriculture and food system that protects the environment and generates a food secure society, needs to be established. A GPP policy implementation can meet this need. It offers sustainable growth and innovation opportunities to businesses, particularly in the SME sector, and can facilitate the sustainable agriculture and food system.

For a successful GPP policy implementation, studies show the importance of awareness creation, training and capacity building provided to procurement staff of local authorities. Provision of practical tools and guidelines in GPP implementation is necessary to help procurement staff obtain a right perception of GPP.

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