

The role of governments in developing agriculture value chains



1. Introduction

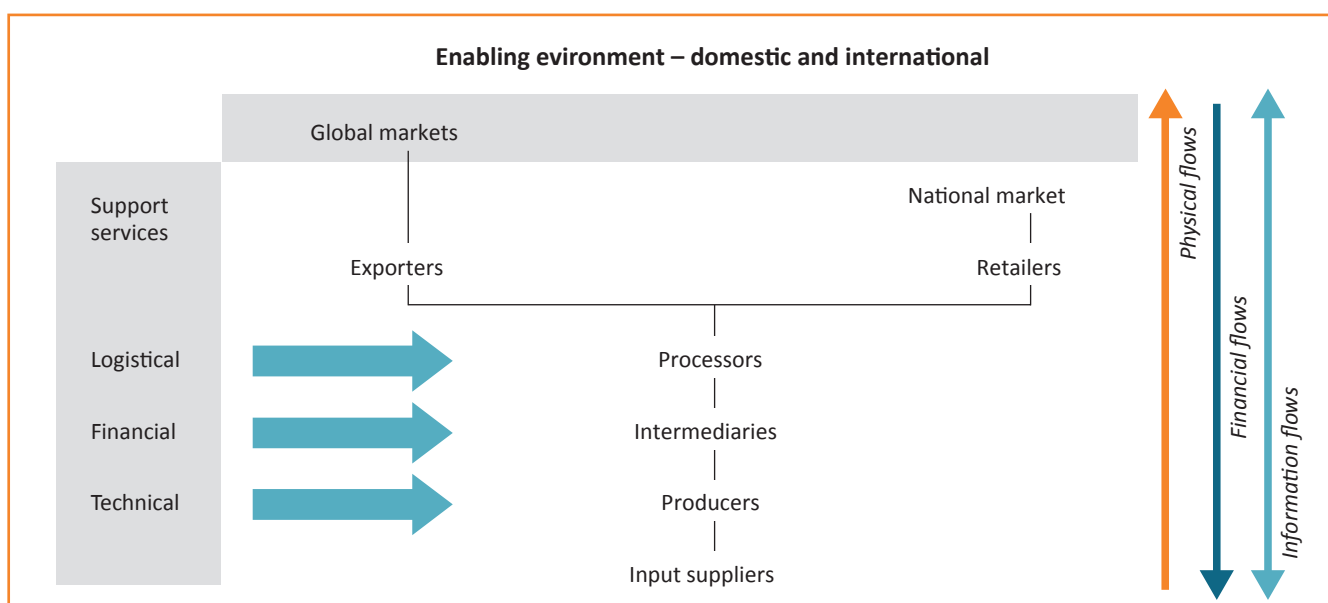
A policy dialogue was organised by CABRI in March 2019 on ‘The Role of Governments in Developing Agriculture Value Chains for Employment Creation and Poverty Reduction’. Policy dialogues provide a platform for practitioners to learn from and share the experiences of their peers, applying the lessons learnt where appropriate. The dialogue brought together officials from 11 African¹ countries working in ministries of finance, budget and agriculture. An environment of peer learning and exchange was created through the use of case studies, country-led presentations and facilitated discussions. This paper summarises the most important public interventions, as identified in the dialogue, and their respective funding implications. The event was part of CABRI’s value for money in public spending work.

A value-chain approach (VCA) considers the full range of value-adding actors from production to consumption, including input suppliers, farmers, processors and storage, distribution and marketing agents.

Establishing a VCA may require investment in new projects and some revision and reprioritisation of existing public interventions. There is a strong focus on correcting for market failure and inefficiency and creating a conducive business environment. This results in more emphasis on partnerships with the private sector and on assessing whether all actors in the chain have positive and sustained incentives.

Given limited resources, governments cannot support all value chains, all actors or all interventions. A VCA involves methods for prioritising interventions, typically using multi-criteria analysis. Most development agencies and banks have guides on using the VCA. The main areas of intervention identified at the dialogue included: (i) forms of smallholder co-operation to address fragmented production; (ii) support for processing and marketing firms; and (iii) policies affecting trade and prices.

Figure 1: Typical value-chain map



Source: Jaffee, Siegel & Andrews (2010)

1 Countries represented were Benin, Central African Republic, Côte d’Ivoire, Ethiopia, Guinea, Kenya, Liberia, Mauritius, Morocco, Nigeria and South Africa.



2. Smallholder engagement in the value chain

In sub-Saharan Africa, 65 per cent of the population live in rural areas and are employed largely in small-scale farming using labour-intensive traditional methods (World Bank 2010; ASFG 2013). Farms are fragmented, which prevents farmers from exploiting economies of scale. With a lack of basic infrastructure and public services (transport, irrigation, education, health and social services), smallholders are vulnerable and find it difficult to access training, input supplies, market information and financial services (ASFG 2013).

Government interventions often target smallholders because this contributes to food security and poverty reduction.² Traditionally, ministries of agriculture have devoted most of their funding to research and extension and input supplies. Some ministries also have smaller divisions supporting storage, processing and marketing. Other government bodies support rural roads, electrification and financial services. All of these traditional public interventions can adopt a VCA simply by ensuring that they address the main challenges faced by all the actors through the value chains involved, either 'mainstreaming' VCA into their routine operations or setting up projects to give a temporary boost to selected value chains.

Development partners are often important sources of funding for agriculture. In the 1980s and 1990s, there was a strong focus on integrated rural development programmes (IRDPs), which supported a wide range of interventions. However, experience with IRDPs suggested that many were spread too thinly over a wide range of interventions and that capacity needed to be built in both the private and public sectors. This led to increased popularity of the VCA.

The challenges associated specifically with fragmentation have been addressed through various policies, with land reform and co-operatives featuring strongly in the first decades of development. Collaboration between larger producers and smallholders was sometimes attempted through the establishment of outgrower (or 'off-taker') schemes in the 1980s and 1990s. These were based mainly on commercial farmers acting as marketing agents for smallholders and were mostly unsuccessful because smallholders were vulnerable to exploitation. In recent years, outgrower schemes have become popular again, due to the following changes:

- market demand and the capacity of larger companies is greater;
- large companies recognise the value of smallholders in providing a more secure supply chain and in offering different qualities of product;
- outgrower schemes now extend beyond marketing to include technical advice, input supply and financial services;
- smallholders have greater choice in the options for institutional co-operation, going beyond co-operatives to social enterprises and NGOs (e.g. relating to fair trade);
- the instruments available are more diverse, as the capacity of the financial sector has improved and experience with collaboration and mediation has increased; and
- corporate social responsibility has a higher profile and can include outgrowers.

Box 1 provides an example, presented at the policy dialogue, of a recent outgrower scheme in Nigeria.

Box 1: ERGP and Anchor Borrowers' Programme

The Economic Recovery and Growth Programme (ERGP) was launched in 2017 and covers agriculture, energy, transport and small and medium enterprises (SMEs). The programme focuses on collaboration between the public and private sectors, using a 'focus labs' approach, which brings together the public and private sectors (PEMANDU 2018). The ERGP has helped agricultural sector funding to increase by 15 per cent in 2018. An outgrower support scheme works with the Anchor Borrowers' Programme (ABP), which has a budget of USD150 million and aims to reach 250 000 farmers, with 80 per cent going to rice production (Central Bank of Nigeria 2016). Large processing enterprises act as 'anchors' and have access to funding at 9 per cent from the Central Bank of Nigeria (CBN), which is less than half the market interest rate. In addition, the CBN guarantees half of the value of any loan defaults. The anchors also have access to some grants and waivers. Anchors sign agreements with smallholder farmers in terms of which they supply input in exchange for guaranteed sales of a proportion of the crop (usually 80 per cent) at a pre-agreed price, with the cost of inputs deducted from these sales. Farmers are expected to organise themselves into co-operatives and to engage in cross-guarantees. About 30 large enterprises have committed themselves to the ABP. The government assists with technical services, certification and minimising the risks of contracts failing to be honoured. The outgrower scheme also includes plans to facilitate land title registration in a second phase.

2 Empirical evidence shows the higher elasticity between growth in the agriculture sector and poverty reduction compared to growth in other sectors.



3. Supporting domestic processors

The challenges faced by domestic processors vary greatly, depending on the technological options for processing and the nature of markets and private sector capacity. Table 1 describes the main technical and market-related challenges facing processors and the public responses that are available when taking a VCA. Experience with crop-specific VCA projects suggests that it is often a mistake to spread efforts too broadly and that it is better to focus on only two or three of the most serious challenges and responses.

The selection of priority actions should be undertaken using a transparent and structured process which may be based on multi-criteria analysis, informed by some economic and financial analysis. This analysis should provide targets that can be monitored to assess evolving policy effectiveness. The policy dialogue reviewed several programmes of support for processing and highlighted the importance of links between processors and farmers.

Table 1: Challenges for processing and value-chain public response

Challenges	Value-chain public response
Technological challenges tend to be highest when there are opportunities for big gains from investment in industrial-scale processing, which may be available to large international competitors, but not in smaller African markets (e.g. cashew processing).	<ul style="list-style-type: none"> • Technical assistance, start-up grants and soft loans to help new investors invest with the latest technology.
Standards and quality control are serious challenges for high-value crops (e.g. horticulture). Conversely, for some products (e.g. coffee), labour-intensive methods can add value by improving quality and niche marketing.	<ul style="list-style-type: none"> • Clear regulations governing standards and quality and an effective enforcement agency for these regulations.
Processors of new products often face basic challenges with productivity and profitability while farming and trading systems are evolving. Processors can have high market power, and squeezing farm margins can reduce reliability of supplies.	<ul style="list-style-type: none"> • Price subsidies and trade policies to protect against cheaper imports. • Grants, loans and technical assistance for new processing ventures. • Institutional and technical support for outgrower schemes.
Processors of highly traded products are often vulnerable to volatile world markets. This applies particularly to rice, cashew, tea and coffee.	<ul style="list-style-type: none"> • Trade policies to reduce exposure to international price variability (e.g. variable import levies). • Technical support for futures contracts and insurance. • Regulations requiring use of local produce (e.g. Nigerian cassava flour).
There can also be severe challenges for processors of cereals (e.g. maize) and other staples that are strongly affected by cropping seasons and weather variability.	<ul style="list-style-type: none"> • Market price intervention, either by fixing floor and ceiling prices or by trading by parastatals to influence prices.
Perishable horticultural products (e.g. fruit and vegetables) have specific market-related challenges that may create incentives for processors who are able to absorb surplus crops and convert them into non-perishable products.	<ul style="list-style-type: none"> • Market information systems. • Business connection services to improve collaboration between processors, traders and farmers. • Public campaigns related to nutrition.
Many African countries face institutional and bureaucratic challenges that interfere with efficient marketing.	<ul style="list-style-type: none"> • Measures to reduce bureaucratic burdens (e.g. licensing, informal local taxes) and improve efficiency of public bodies.
Lack of access to finance as a result of concern from banks about risks associated with any of the above challenges.	<ul style="list-style-type: none"> • Loanable funds and guarantees for banks. • Subsidies on interest rates and loan terms. • Technical support to banks. • Support for collaborative institutions.



4. Policies relating to trade and price

Agricultural products are vulnerable to price fluctuations as determined by international market prices, exchange rates, the effects of weather on yield and the routine seasonality of production. This volatility, coupled with negative terms of trade in many African countries, may justify protectionist policies. However, in the decades after independence, excessive protectionism led to large inefficiencies and contributed to unsustainable debt levels.

The structural adjustment programmes of the 1980s and 1990s often involved trade, market and exchange-rate liberalisation, which should have improved incentives for farmers and processors. Despite these reforms, African agriculture still has low yields and low levels of agro-processing. Since the mid-1970s, Africa has been a net food importer (FAO 2011). Trade and price policies are again becoming popular, with the aim of supporting domestic prices and stimulating production. These policies include direct market interventions (e.g. through price setting and the use of commodity exchange boards) and indirect intervention (e.g. involving exchange rates, tariffs and other trade barriers).

Price regulation policies usually involve setting a price floor (the lowest price at which a good can be sold) and/or a price ceiling (the highest price at which a good can be sold). Price floors protect farmers by ensuring they receive a minimum price for their product, which provides an incentive for production. Price setting distorts markets and can encourage parallel informal markets which undermine the policy. The effectiveness of the policy depends on the degree to which it can be enforced and regulated.

Price regulations may be complemented by public-sector trading, through government agencies and commodity exchange boards. These vary from country to country in terms of scope and mechanisms. Most aim to provide some price stabilisation, while also improving producer prices by cutting out the middle man. However, there is some controversy surrounding the effectiveness of direct

trading. Problems are encountered frequently with the operational efficiency of agencies and with the tendency to make commitments that are politically attractive but fiscally unaffordable. The experience of Ethiopia showed that the price received by coffee farmers did not increase when international prices increased, or vice versa (Hernandez et al. 2015).

Trade policies include tariffs and other trade barriers that reduce cheap imports and improve incentives for farmers and processors to invest in efficiency and expansion. Trade policies have been applied with some degree of success, particularly for rice where production has increased significantly in several African countries. For example, in Nigeria, high tariff rates have been used to protect domestic rice farmers and processors and have led to a rise in the domestic price of rice, domestic rice production and processing.³ However, trade policies can be difficult to enforce, creating incentives for illegal imports of cheap products, especially across porous land borders. In Africa, this is particularly true for cheap imports (e.g. of rice) from Asia.

Trade policies can also be limited by the rules of regional economic communities (RECs), which prevent countries from imposing their own tariffs. With variable enforcement of common tariffs, cheap imports may enter the REC in one country and then be smuggled into a neighbouring country, as happens with rice in Nigeria. As the African Union agenda has progressed, the role of RECs in facilitating regional integration has gained prominence. One of the most developed RECs is the Economic Community of West African States (ECOWAS). The ECOWAS Trade Liberalisation Scheme promotes the free movement of goods originating from inside the REC, while the ECOWAS Common External Tariff ensures the harmonisation of tariffs for goods originating from outside the REC. However, as discussed at the dialogue, some countries still have an incentive to find ways of regulating regional trade despite the REC (e.g. in Benin, as described in Box 2).

³ This has been combined with support for improved productivity. The increase in production has come mainly from increased area, not yield, but it is unclear whether this reflects rational farm decision-making, taking into account the productivity of labour, capital and land.



Box 2: The Benin cashew value chain

Benin's raw cashew nut production increased from 36 487 tonnes in 2001 to 116 398 tonnes in 2008, making it the second largest producer in Africa. Raw cashew farmgate prices are susceptible to fluctuations in world market prices, in the real effective exchange rate and in quality standards.

A grower's price floor for raw cashew nuts is fixed by the government following multiparty negotiations with growers, buyers, exporters and government agencies. The policy has had little success since its introduction in 2000, with most growers receiving a price 25 per cent lower than the set floor. This is partly because the few raw cashew nut buyers in Benin often enter into pre-harvest purchase agreements with farmers in exchange for financing usually used to buy input supplies.

Renowned for their superior quality, Benin raw cashew nuts fetch a premium price on international markets. This has resulted in an influx of raw cashew nuts from neighbouring countries such as Nigeria, Togo and Burkina Faso which account for 15 per cent of the total product. Most of this trade takes place through land borders. Benin, therefore, has made use of informal trade barriers on the import of raw cashew nuts as a way of protecting the quality of its product. However, such policies are unsustainable as they go against the principles and protocols of the ECOWAS Trade Liberalisation Scheme.

Source: African Cashew Initiative (2010), Benin Ministère de l'Agriculture, de l'élevage et de la Pêche (2019)

5. PFM challenges

A VCA can be integrated into the whole planning and budgeting cycle simply by requiring the design of policies and programmes to take the whole value chain into account. It can also involve specific time-bound initiatives to boost the performance of several value chains. Table 2 presents the fiscal impact of the main interventions that may be involved and can be used to assess the relative needs of each value-chain development (VCD) programme. Interventions with high recurrent costs are likely to create the biggest challenges with sustainability.

The most expensive policies are often those associated with direct market intervention. In theory, it is possible to limit the fiscal cost of this but, in practice, the prices of key

agricultural inputs and products are highly sensitive and governments tend to find it difficult to limit expenditure once policies have been introduced. Apart from direct intervention, the other two policies that usually account for a large share of a VCD programme are rural infrastructure and market support, including grants, loanable funds and any equity investment by the government. The costs of regulation, information and technical assistance for the value chain are lower, but they are often underestimated and mechanisms need to be found to ensure that the recurrent costs are either given priority in the budget or are funded by a levy or some other independent source.



Where programmes cover a range of interventions, phasing can be critical. In particular, the introduction of market support for business development may need to be delayed for several years, while information and price policies are refined and institutional capacity and capabilities are built.

(CABRI 2019)



Table 2: Likely fiscal impact of taking a VCA

Policy	Typical fiscal impact	Cost (1=low, 5=High)	
		Recurrent	Capital
Research and extension	Typically accounts for the largest share of the recurrent budget.	3	–
Information services	Modest recurrent funding and may have occasional, modest project support for an initiative or upgrade.	1	1
Market intervention	Direct intervention in input supply or crop marketing can be very large and volatile. Costs may be hidden in parastatals.	5	–
Regulation	Little direct budget commitments but costs of enforcement of regulations are often underestimated.	2	-
Quality controls	Cost of enforcement often underestimated. Occasional small investments in upgrading.	2	1
Roads and irrigation	High investment costs. Maintenance costs are also high and often underfunded.	3	4
Market infrastructure	Relatively modest and potentially self-financing.	–	2
Tax incentives	Potentially large, for major export or food import crops.	3	–
Market support	Potentially large investment in public equity. Some grants, loanable funds and technical assistance.	2	4
Trade policies	Significant costs from reduced duties and for customs. Some investment in new agreements.	3	2

6. Effective VCAs in agriculture

Taking a VCA in agriculture often includes selecting a few priority value chains and providing time-bound project support (e.g. for 5–10 years) to give a temporary boost to efficiency in the value chain to a level that is competitive and self-sustaining. It may also include ‘mainstreaming’ a VCA into existing investments and services across the whole sector (e.g. in an agricultural transformation agenda). The balance between a ‘projectised’ and ‘mainstreamed’ VCA needs to be considered strategically to maximise overall performance of the wider VCA initiative.

The CABRI dialogue identified a number of critical considerations for a successful VCA.

- It is often effective to complement policies to support the productivity of actors in the value chain with trade and price policies. These need to be designed to respect hard budget ceilings over the short and medium term.
- There are opportunities for new forms of institutional collaboration (e.g. in benefit sharing, technical co-

operation and mediation/arbitration) to limit the concentration of market power and promote a sustainable division of profits in the value chain.

- A VCA needs to be based on a sound understanding of the incentives and risks facing all actors in all key value chains and how these may change over time. This understanding can be built into targets for policy design, management and monitoring.
- Adopting a VCA for agriculture will require some capacity-building within the ministry of agriculture, including experience with skills relating to the private sector (e.g. relating to contracts and risk management).
- A VCA also requires improved co-ordination with other ministries, particularly those involved in promoting a conducive and reliable business environment.
- There may be opportunities for new types of collaboration with development partners, including those relating to trade agreements and foreign direct investment.



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