

THE INTERACTIONS OF LAND TENURE AND AGRICULTURAL VALUE CHAIN DEVELOPMENT IN AFRICA: A SYNTHESIS FROM VCA4D STUDIES

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Abstract

This synthesis study analyses the relation between value chain development and land tenure in Africa, primarily through the discussion of eight studies from the VCA4D project. These studies were purposively selected to represent export-oriented and domestic value chains in the sub-regions of Africa. After an overview of EU cooperation policy in the field of land tenure and land governance, we present an overview analysis of the pro-forma social profiles of 37 VCA4D studies, and then brief summaries of the land components of the eight country studies against a standardised list of questions.

In almost all the countries studied, the majority of agricultural land is held under some modified or codified form of customary tenure. This does not necessarily act as a barrier to the development of sustainable value chains, either domestic or export-oriented. However, customary tenure can limit smallholders' negotiating power with commercial investors, and can be associated with various forms of inequity. Gender inequality is reported in nearly all the studies, both in the modified customary tenure and in newer titling initiatives, which are proceeding in many of the countries studied, but generally at a slow pace and unevenly. Rental markets are developing in some of the value chains, but may have negative impacts on agricultural sustainability. In the selected studies there is little evidence of large-scale land acquisition by external actors, but countries are not well equipped to manage potential large-scale land acquisitions, for example the VGGT principles are either unknown or widely flouted. In one case (cassava in Côte d'Ivoire) land acquisition for export crops is negatively affecting and geographically displacing production of a domestic staple.

The studies represent a range of pathways by which value chain development is or is not driving changes in land tenure: no apparent impact in three cases, an apparent shift from customary allocation towards informal sales in one case (maize in Zambia), geographical displacement and development of a form of short-term land rental for cassava in Côte d'Ivoire. The highly organised cotton value chain in Cameroon has very limited ability to address problems of land tenure. In Burundi the development of the milk value chain may affect land tenure, but only in association with other drivers. In Sierra Leone, commercial investment in oil palm has largely circumvented requirements for consultation, but there is some evidence that companies are now engaging more usefully with farmers and other stakeholders.

Key messages for policy-makers on both land policy and value chain development are presented based on these findings.

Introduction

This paper primarily uses evidence from eight studies of agricultural value chains (VCs) carried out under the VCA4D (Value Chain Analysis for Development) Programme to cast light on the two-way interactions between land tenure systems and agricultural value chain development in Africa. Specifically it seeks to answer the questions:

- a) How are land tenure and land policy constraining or enabling the development of inclusive and sustainable value chains in Africa?
- b) Is the development of value chains in Africa (autonomously or through project interventions) affecting land access and secure tenure rights?

The study considers land tenure in the broadest sense: “the terms under which land and natural resources are held by individuals, households or social groups” (Quan and Dyer 2008). Natural resources can be taken here to include access to forest and grazing land, as well as agricultural land. Land tenure issues that we have aimed to consider here include, non-exclusively:

- i. Large scale land acquisition (LSLA) either by foreign investors or domestic actors such as large landlords
- ii. Women’s access to productive lands within households
- iii. Issues raised by formal and semi-formal titling programmes
- iv. Communal or open-access management of grazing lands.

The VCA4D programme¹ is implemented by Agrinatura on behalf of the European Commission and performs value chain analyses on selected agricultural commodities in developing countries in Africa, Latin America, Asia and Oceania. These studies use a common structure and methodological framework to appraise VCs from an economic, social and environmental perspective. They are structured by four framing questions:

- FQ1: What is the contribution of the VC to economic growth?
- FQ2: Is this economic growth inclusive?
- FQ3: Is the VC socially sustainable?
- FQ4: Is the VC environmentally sustainable?

This study draws primarily on sections of the VCA4D reports that address FQ3, but take into account also material presented under the other FQs. The social sustainability analysis includes six domains, of which the current study has focussed on land and water rights (LWR) and gender equality.² For the land and water rights domain a number of sub-questions are proposed (see Table 1). Semi-quantified responses to the sub-questions (High, Substantial, Moderate/Low, Not at all) are also used in constructing social profiles, that are annexed to each report and which are summarised in radar charts showing a scoring for each of the six domains. This study is primarily based on close reading of the narrative section of eight selected VCA4D reports, but this has been supplemented for greater context by an analysis of the semi-quantified responses across a broader sample.

¹ See <https://europa.eu/capacity4dev/value-chain-analysis-for-development-vca4d->

² The others being working conditions, food and nutrition security, social capital, and living conditions.

Table 1 : VCA4D questions relevant to the land and water rights domain

Sub-domain	Sub-questions
Adherence to the VGGT ³	2.1.1 Do the companies/institutions involved in the value chain declare their adherence to the VGGT?
	2.1.2 If large scale investments for land acquisition are at stake, do the involved companies/institutions apply the 'Guide to due diligence of agribusiness projects that affect land and property rights' ⁴ ?
Transparency, participation and consultation	2.2.1 Level of prior disclosure of project related information to local stakeholders?
	2.2.2 Level of accessibility of intervention policies, laws, procedures and decisions to all stakeholders of the value chain?
	2.2.3 Level of participation and consultation of all individuals and groups in the decision-making process?
	2.2.4 To what extent prior consent of those affected by the decisions was reached?
Equity, compensation and justice	2.3.1 Do the locally applied rules promote secure and equitable tenure rights or access to land and water?
	2.3.2 In case disruption of livelihoods is expected, have alternative strategies been considered?
	2.3.3 Where expropriation is indispensable: is a system for ensuring fair and prompt compensation in place (in accordance with the national law and publicly acknowledged as being fair)?
	2.3.4 Are there provisions foreseen to address stakeholder complains and for arbitration of possible conflicts caused by value chain investments?

Question 2.3.1 includes the issue of rights to and access to water, but in practice the VCA4D reports selected as case-studies include little information specifically on water.

In addition to sub-questions from the land and water domain, a sub-question belonging to the gender equality domain, 3.2.2 “Do women have equal land rights to men?” is also important for this study.

The VCA4D studies are carried out by teams each composed of an economist, an environmental expert and a social sector expert recruited internationally, with one high-level national consultant assisting work across all three domains.⁵ The international social sector experts in almost all cases have had prior professional experience in the country concerned.

The social sector analyses are carried out through mixed-method approaches, using review of secondary data and existing reports, focus groups or similar forms of qualitative data-gathering, and in some cases social-sector-oriented questions within structured questionnaire surveys.

The study is primarily based on a comparative analysis of eight VC analyses of agricultural or livestock VCs in Africa.⁶ These VCs *were not* selected based on the conclusions of the reports

³ See below.

⁴ The Guide to Due Diligence of Agribusiness Projects the Affect Land and Property Rights, published by the Technical Committee on Land and Property Rights in 2014 <https://www.foncier-developpement.fr/wp-content/uploads/Guide-to-due-diligence.pdf>

⁵ There have been variations on this model. In particular in the Burundi Milk study, there was a dedicated national expert for each of the three sectors.

⁶ Fisheries- or aquaculture-based VCs have not been included.

on their social sustainability (or on their inclusivity or economic or environmental sustainability). They were purposively sampled to cover export-oriented and domestic value chains (though the distinction is not always clear-cut) from different sub-regions of Africa (see Table 2).⁷ The cases include both anglophone and francophone countries (for practical reasons lusophone countries were not selected) and are shown in the table below and in Figure 1.⁸

Table 2: Value chains considered in this synthesis by sub-region and orientation

Sub-Region	Sahel	Coastal West Africa	East and Central Africa	Southern Africa
Export-Oriented VC.	• Cameroon Cotton	• Sierra Leone Palm Oil	• Tanzania Coffee	• Eswatini Beef
Domestic VC		• Ghana Sorghum • Côte d'Ivoire Cassava	• Burundi Milk	• Zambia Maize

We do not claim that the selected VCA4D studies, or the information we have gleaned from them, are representative of the value chains found in Africa, or allow strong generalisations about causal linkages. It should be noted that there is not necessarily a one-to-one relation between the VCA4D sub-questions and sub-sections of the studies. Also, not every study answers every question, and the different studies have chosen to emphasise different aspects of land tenure and its governance, in some cases going beyond a narrow response to the questions, according to the situation on the ground. They are used as case-studies (in the spirit of Flyvbjerg 2005) to explore the range of possible relations between land tenure and value chains.

⁷ The only example of a study of a domestic VC in the Sahel, Mali Rice, proved to have insufficient detail on the current land tenure systems, so two domestic VCs were chosen from coastal West Africa, representing crops from both humid and semi-arid regions.

⁸ Details of authorship etc. of the eight studies are given in Annex A.

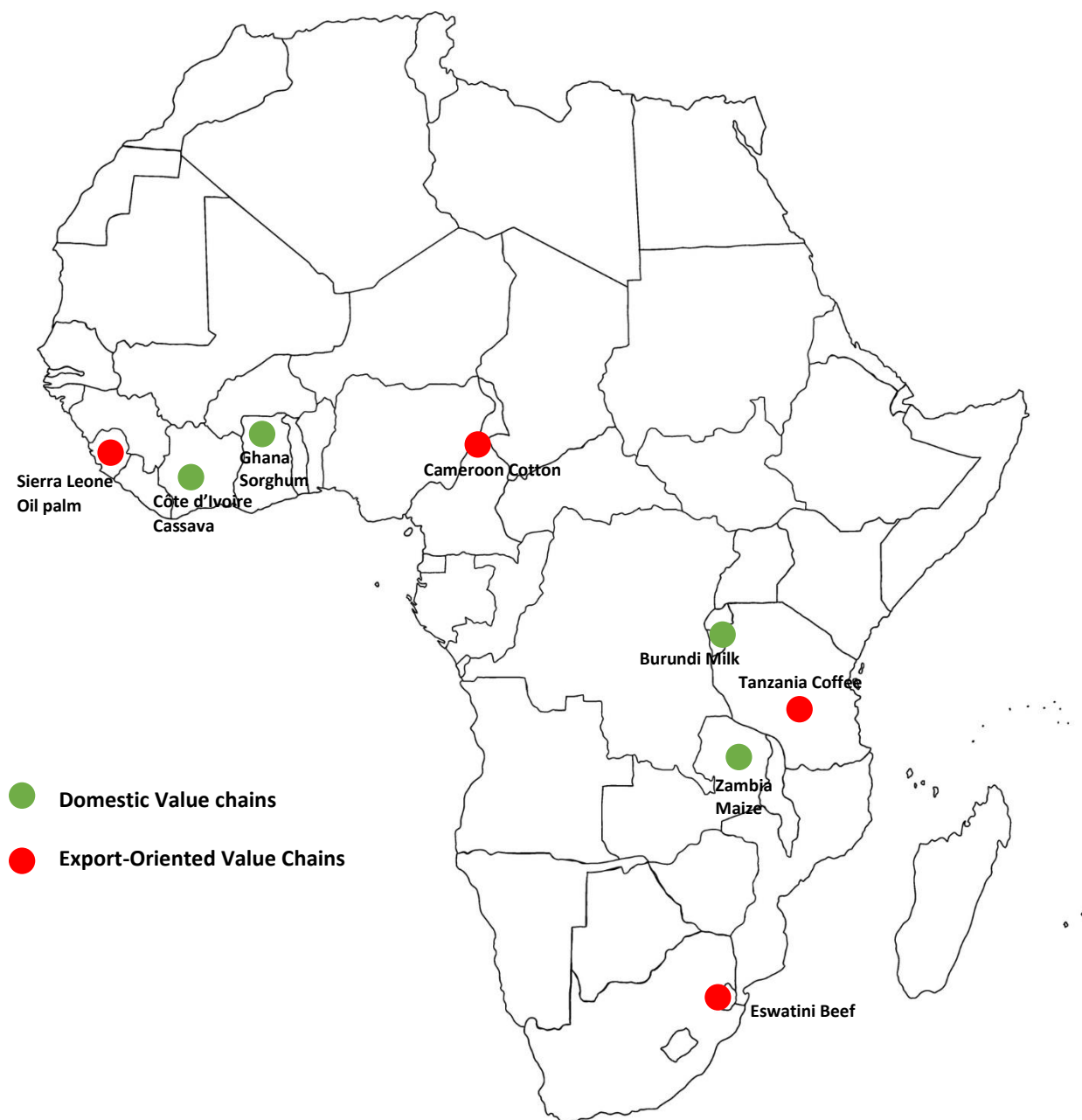


Figure 1: Value chains considered in this synthesis

In addition to the detailed analysis of eight VCs considered in this synthesis, based in close reading of the relevant sections of the reports, we also conducted an overview analysis of the quantified ratings of aspects of land and water rights in the pro-forma social profiles of those studies and 29 others (mainly in Africa but including some in Asia and Latin America). After an overview of EU cooperation policy in the field of land tenure and land governance, we present the 37-study overview analysis, and then brief analyses of the land components of the eight country studies. We then present a comparative analysis structured by the two main research questions, and a concluding section with the main messages for policy-makers in Africa and in the donor community.

Overview of EU Cooperation Policy on Land and Land Governance⁹

Land tenure and land governance are increasingly recognised as key issues for sustainable development, and land-related targets and indicators are linked with several of the SDGs. The European Union has increasingly reflected this in its cooperation policy. The *European Development Consensus* “recognises responsible land governance and secure access to land as important drivers of human development, economic growth, better governance of natural resources” and as an aspect of respect for the rights of indigenous people and local communities (*State of Play 2021*). Land governance is also addressed in the *European Investment Plan* and the *Farm to Fork Strategy*.

The EU collaborated with other donors and international organisations to prepare and disseminate two key documents on land governance, the *Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of Food Security* (VGGT) published by FAO and the Committee on World Food Security (CFS) in 2012, and the *Principles for Responsible Investment in Agriculture and Food Systems* (RAI) endorsed by the CFS in 2014. The VGGT are addressed to state and non-state actors and provide guidance on land restitution, land redistribution, tenurial reform, land administration, and most notably commercial investment in agriculture, which is also addressed by the RAI.

In the years 2018-2020, the EU funded 73 actions with a land governance objective or component with a total budget of €234.9 million. 40% of this funding was for projects with land governance as a main or significant project purpose, the rest on multi-purpose projects which included land governance activities. 76.8% of the funding was for Sub-Saharan Africa, with a further 9.5% for programmes covering multiple continents. In terms of major activities, the portfolio included:

- Projects aimed at strengthening national capacities to implement land policies, laws, strategies and tools (21% of funding)
- Projects aiming to improve land rights at household level through support to land registration, awareness raising, land conflict resolution etc. (68% of funding)
- Projects to strengthen Civil Society Organisations, land rights defenders and farmer organisations (11% of funding)

Of particular relevance is the EU Land Governance Programme supporting 18 countries (15 in Sub-Saharan Africa) to apply the VGGT and, in Africa, the *African Union Declaration on Land Issues and Challenges in Africa*, and the *Framework and Guidelines on Land Policy in Africa*. EU development funding recognises the importance of empowering local stakeholders and supporting customary rights to land within pluralistic land tenure regimes, of using support to land governance to address gender inequality, of helping governments manage the process of commercial investment in land, and of strengthening capacities in technical aspects of land administration.

Overview analysis of Land and Water Rights across 37 VCA4D studies

Adherence to VGGT

As captured in Figure 2, more than one-third (36%) of the VC studies (only 25 studies addressed the question) reported non-adherence to VGGT norms by the companies/institutions involved in value chains. Another 36% of the studies reported only a ‘moderate/low’ level of adherence to VGGT norms by the companies/institutions involved.

⁹ This section draws heavily on the draft document *EU Support to Responsible and Inclusive Land Governance State of Play 2021*, to be published later this year by INTPA. Findings here are provisional until full publication.

Interestingly, all the VCs where no adherence to VGGT norms was reported, except cassava in Côte d'Ivoire, are export-oriented, such as processed fruit in Dominican Republic, cocoa in Cameroon, cashews in Mali, beef in Zimbabwe and Eswatini, and palm oil in Sierra Leone. Most of the VCs where moderate to low compliance with the VGGT was reported are also related to export-oriented crops such as cocoa in Ecuador and Sao Tome, cotton in Ethiopia and Cameroon, and coffee in Angola and Honduras. So low level of compliance with the VGGT is more likely to be witnessed in export-oriented VCs – where compliance is all the more essential. Among the selected eight VC case studies, four studies reported no compliance while another two studies reported moderate to low compliance with the VGGT and for the other two this parameter was not applicable.

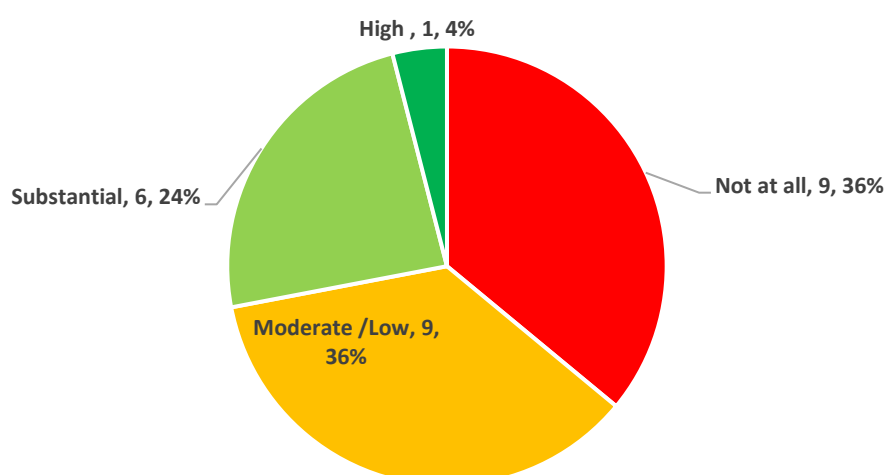


Figure 2. Number of VCA4D studies (n=25) reporting extent to which "Companies/institutions involved in the value chain declare adherence to the VGGT"

A very similar picture is portrayed for another parameter – application of the Guide to Due Diligence in large scale investments for land acquisition by companies/institutions involved in the VCs. Again only 25 studies addressed the question, of those nine studies (36%) reported no compliance, and reported at a moderate/low level by another nine studies (32%). Clearly the Guide to Due Diligence in agribusiness projects that affect land and property rights is not being applied in most VC cases such as cassava in Côte d'Ivoire, oil palm in Sierra Leone, beef in Eswatini, and sorghum in Ghana.

Transparency, participation, and consultations

As shown in Table 3, close to one quarter of the VC studies reported non-compliance by agri-business investments with regard to transparency, participation and consultation. Some of these value chains are cassava in Côte d'Ivoire, mango in Burkina Faso, oil palm in Sierra Leone, beef in Zimbabwe, and cocoa in Nicaragua. On most parameters of transparency, participation and consultation, a majority of the VC studies reported moderate or low level of compliance by agri-business investments. There are few stand-out examples of VCs, such as aquaculture in Zambia, cashews in Sierra Leone and Mali, and pineapple in Benin and Togo, where transparency, participation and consultation are reported as 'high' or 'substantial'. Overall, close to three-quarters of VC studies reported no or a moderate/low level of compliance. There seems to be no perceptible difference in compliances among export-oriented or domestic value chains for this parameter.

Table 3: Level of compliance reported by VCA4D studies on LWR parameters related to transparency, participation, and consultation

Parameter	Number of VC studies reporting	Level of compliances with the LWR parameter (% of VC studies)			
		Not at all	Moderate /Low	Substantial	High
Prior disclosure of project related information to local stakeholders	28	14%	57%	25%	4%
Accessibility of intervention policies, laws, procedures, and decisions to all stakeholders	30	23%	67%	10%	0%
Participation and consultation of all individuals and groups in the decision-making process	29	24%	52%	24%	0%
Prior consent of those affected by the decisions was reached	25	24%	48%	24%	4%

Equity, compensation, and justice:

As shown in Table 4, close to one quarter of the VC studies reported problems with regard to ‘equity, compensation, and justice’¹⁰. Interpretation of this is difficult as some of the studies addressed issues of equity within traditional or neo-traditional smallholder land tenure systems (see below), rather than or alongside issues relating to acquisition by external actors. Some of these VCs reporting problems were cassava in Côte d’Ivoire, mango in Burkina Faso, oil palm in Sierra Leone, beef in Zimbabwe, processed fruits in the Dominican Republic, and cocoa in Nicaragua. On most parameters of equity, compensation, and justice a majority of VCs reported a moderate or low level of compliance by relevant institutions/stakeholders. There were a few stand-out examples of VCs, such as green beans in Kenya, cocoa in São Tomé and Papua New Guinea, fisheries in Mali, coffee in Angola, and aquaculture in Georgia where ‘equity, compensation, and justice’ are reported as ‘high’ or ‘substantial’. Overall, more than three-quarters of VC studies reported no or a moderate/low level of compliance. There seems to be no perceptible difference in compliance among export-oriented or domestic value chains on this parameter.

¹⁰ In the context of possible conflicts related to land-tenures and arising due to large-scale land acquisitions, the ‘Equity, Compensation and Justice’ sub-question explores and assesses issues such as: a) the extent to which locally applied rules promote secure and equitable tenure rights; b) alternative strategies in case of disruption of livelihoods; c) fair and prompt compensation; d) addressing stakeholder complaints and arbitration of conflicts.

Table 4: Level of compliance reported by VCA4D studies on LWR parameters related to equity, compensation, and justice

Parameter	Number of VC studies reporting	Level of compliances with the LWR parameter (% of VC studies)			
		Not at all	Moderate /Low	Substantial	High
Locally applied rules promote secure and equitable tenure rights or access to land and water	36	8%	64%	28%	0%
In case disruption of livelihoods, alternative strategies been considered	26	19%	62%	15%	4%
Where expropriation is indispensable: a system for ensuring fair and prompt compensation in place	22	18%	73%	9%	0%
Provisions foreseen to address stakeholder complains and for arbitration of possible conflicts	22	23%	64%	14%	0%

Land rights for women

As shown in Figure 3, more than one-third (35%) of the VC studies (n=37) reported no possibility for women to have equal land rights to men. Another 43% of VC studies reported the possibility of women having equal land rights as 'moderate/low'. Interestingly, a few VC studies such as aquaculture in Cambodia, egg in Zambia, beef in Eswatini, cocoa in São Tomé, fisheries in the Gambia, pineapple in Benin, and cocoa and coffee in Ecuador reported the possibility of women having equal land rights as 'substantial', or 'high'. The situation regarding women's land rights is equally challenging across both export-oriented and domestic crops.

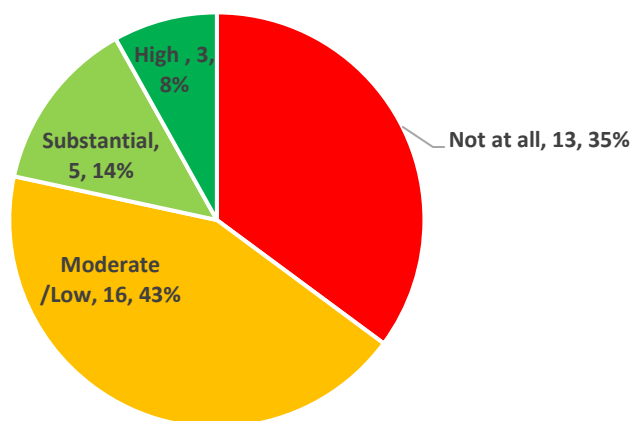


Figure 3. Number of VCA studies (N=37) reporting extent to which "women have equal land rights as men"

Summary of Land Findings from Selected VCA4D Studies¹¹

Export-Oriented Value Chains

Cameroon Cotton

a) Overview

The study concerns the cotton VC in Cameroon, for which the production zone is in the far north of the country, which involves the close integration of production, input supply, extension, crop purchase, and ginning, with strong linkages to textile production and export of by-products. The VC is governed under a tripartite partnership between the parastatal Sodecoton¹², village-level Producer Groups and the Cameroon National Confederation of Cotton Producers. The VC exhibits important similarities with other cotton VCs in francophone Africa that trace their descent from the system established in colonial times by the *Compagnie française pour le développement des fibres textiles* (CFDT). Sodecoton has been mandated by the government to provide services outside the VC, notably in road maintenance and in support to livestock production, and in some ways is a local proxy for the government which is otherwise largely absent.

152,000 producers, or 30-40 % of the population of the two relevant regions, are registered cotton producers, with larger numbers unofficially involved. Cotton is grown in rotation with cereal crops, with fertilisers supplied through the cotton VC also being used on cereals, which is very important for household food security.

Although the area, and the body of producers, is ethnically mixed, the tenure system is governed by the local hierarchy of Fulani traditional authorities, the Fulani having gained primacy in the area through conquest in the early 19th century. Cotton producers share the land with indigenous cultivators, agro-pastoralists and pastoralists. Land rights for cotton production are based on long-term usufruct grants by traditional authorities, with a secondary rental market. Secondary data for all farm households in the area give an average of 3.1 ha per household: figures for cotton producers are higher, and range according to the figures given “from less than 3 ha to more than 20 ha”. Land shortage due to demographic pressure is a major factor in some but not all areas covered by the report.

b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders’ and poor people’s livelihoods?

The study identifies no risk in relation to adherence of VC actors to the VGGT: while the VGGT covers many other issues this certainly suggests that land acquisition at a truly large scale and by actors external to the system is not present and is not an issue. The report does mention what it calls “large-scale investments” in cotton production – the largest currently reaching 40 ha – suggesting wealthier smallholders or urban-based interests. Such investments risk creating social tensions with the mass of producers who are already poor in land and in employment opportunities. The relative absence of the State from local governance and land allocation presents a risk to transparency, participation, equity, compensation and justice.

¹¹ Each case study includes findings from a range of published and unpublished sources and from the respective VCA4D team’s own research. In general, these summaries compiled for this synthesis, are not further referenced.

¹² La Société de développement du coton du Cameroun, also referred to as SDCC.

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

Landholdings within the cotton VC vary greatly in size. The VC is judged to be inclusive in that smallholder households with very low landholdings (3 ha or less) can receive VC services, and grow and sell cotton. The study notes that 63% of value added is generated by holders of less than 5 ha of cotton land, of which 26% by holders of less than 1 ha. However, Sodecoton is also criticised for not better defining specific strategies for small (3-5 ha), medium (5-20 ha) and large (>20 ha) producers. The embedding of land allocation in the traditional Fulani chiefdoms is seen more as an issue of conflict and sustainability rather than an issue of equity per se. Although only the well-connected can obtain official tenure documents, in areas where there is no land shortage, there is sufficient trust in the titles bestowed by chiefdoms. According to the report, the formalisation of land holding through a cadastre would not provide solutions for the mass of producers and would contribute to the destabilisation of rural society.

There is an important information gap on the nature and extent of the land rental market, which is growing for cotton and other crops and is clearly associated with inequalities. Rental agreements, which can be withdrawn from one year to another, are associated with groups such as first and second generation immigrants and families of low social status. Average yields and investment in soil fertility and intensification are lower on rented lands.

Access to water is barely mentioned in the report, but has apparently been improved by the collective action of producer groups, and non-cotton farmers also benefit.

The nature of women's land rights is not completely clear in the report, but they are obviously limited. Women within households have their own fields, but women lack opportunities to work on these, as the husband's fields are accorded higher priority. Women's lack of access to land as well as other resources is seen as presenting a risk, one not amenable to management by the main value chain actors, and whose mitigation would be most easily achieved through action on primary education, business training and mass media. The new Sodecoton policy of favouring larger cotton farms (see below) is seen as particularly impacting on women.

- d) Is the land tenure situation favourable to sustainability?

At a general level, the rooting of the VC in smallholder agriculture and an essentially traditional mode of land tenure has enabled the growth of a successful VC with widespread benefits to small farmers. It also appears that this system is associated with a strong and cohesive social life and pride in the local communities, which among other impacts acts as a brake on the migration of youth to large towns and Europe. However, it also leaves the VC and smallholder farmers vulnerable to demographic pressure – experienced unevenly in some parts of the production area. A rental market might be seen as one way of flexibly reallocating land under demographic pressure, but the current rental market is inequitable and short-term, is empirically associated with lower yields, and acts as a disincentive to investment in soil fertility. The report suggests the establishment of a novel form of mid-term (5-6 year) land lease, but it is unclear who has the capacity to do this.

The domination of land allocation by traditional authorities, the lack of any mandate for Sodecoton on land policy or land administration, and the local absence of other organs of the state, presents risks for good governance of land, including transparency, participation and consultation. In particular, a lack of dialogue between the chiefdoms and the modern administration often causes land conflicts, including conflicts between cotton farmers and livestock producers. Damage to cotton by livestock is rarely compensated and the state does not intervene. Increasing local conflict over resources is part of a nexus that also involves Boko Haram terrorism and widespread kidnapping for ransom, and one aspect of this is that

both cotton farmers and livestock-producers are increasingly encroaching on protected areas and hunting reserves. All these categories of conflict bring significant economic and human costs. The report suggests a radical shift towards support to the chiefdoms by the government and development partners.

- e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

Rented land is growing as a proportion of cultivated land, but it is unclear how closely this can be attributed to the VC. Isolated references are made to “the new policy of SDCC to increase the size of cotton farms and gradually replace farms of less than 5 ha”. It is not clear whether this means literally consolidating farms, and if so through what means, or decreasing Sodecoton support for very small farms. The increase in the area cultivated with cotton, together with institutional weakness at local level, is certainly a factor in increased farmer-herder conflict, and encroachment on protected areas and hunting reserves.

Sierra Leone Palm Oil

- a) Overview

In Sierra Leone, around 95% of land is governed by customary law. As perceived by key stakeholders interviewed, land tenure in Sierra Leone is ambiguous, vested in the Paramount Chief for the benefit of future generations. Provincial land¹³ cannot be sold; it can only be leased, the potential timeframe for a lease being 50 to 71 years. The Government of Sierra Leone (GoSL) through the Sierra Leone Investment and Export Promotion Agency (SLIEPA) and other arms of the Government have invited and promoted large-scale land-based investments in many agricultural commodities – sugarcane, rice, palm oil, rubber, forestry etc. There are many varying estimates of scale or volumes of these investments so far. Some NGO estimate that in the provinces at least 1,154,777 ha, (about 21% of the country’s total arable land) have been leased out on 50-year leases, with possible extensions of 21 years, to investors for large-scale industrial agriculture (Baxter and Schäfter 2013). The GoSL claims that only about 11-15% of arable land is being used. Some NGO activists claim that in Pujehun district, up to 50% of arable land has been leased out. The value chain study estimates¹⁴ that some 100,000 hectares of land previously occupied under customary tenure is involved in land concession/leases for oil palm, which is about 20% of the gross area under oil palm. The remaining 80% is either farmed by smallholders or gathered from the wild.

- b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders’ and poor people’s livelihoods?

The Provinces Land Act of 1927, Cap 122 provides the basis for new land acquisitions. This is the operational law for land acquisition and establishes conditions for allocation of lands to “non-natives” in the provincial areas of Sierra Leone.¹⁵ It establishes that all land leases to “non-natives” must have the consent of the Chiefdom Council headed by the Paramount Chief of the area. It fixes the maximum term of any approved lease to a non-native to 50 years, with

¹³ For reasons relating to Sierra Leone’s unique history, land outside the capital Freetown is known as provincial land.

¹⁴ Estimates derived based on land concession information either publicly available or provided by key informants. These lands are community /customary lands where the rights of land holders were given away (without due processes) as land concessions to companies undertaking industrial scale plantations in oil palm.

¹⁵ Source: Leasing Agricultural Land in Sierra Leone, Information for Investors March 2010, produced by SLIEPA. “Non-natives” include Sierra Leoneans without traditional links to the areas outside Freetown.

possibility of 21-year renewal. While it is acknowledged that large-scale land investments in oil palm and other commodities are economically good for the country, the approach taken in negotiating these investments has been top-down both at the government and private sector company level. This approach violates many of the VGGT principles including Free, Prior and Informed Consent (FPIC). Compared to the top-down approach, a bottom-up approach takes longer, is more expensive (about 3 times more as per one company's estimates) and may result in dispersed patches of plantations, eventually leading to higher transportation costs. However, as per the large-scale investor interviewed by the VC study, this approach is more sustainable and litigation-free in the long term. The land lease agreements in the value chain have not followed proper procedures and prior disclosure of project related information to local stakeholders. The smallholders' knowledge and awareness on laws and procedures related land-leases has been very limited. The level of participation and consultation of all affected individuals and groups in decision-making process has left much to be desired.

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

In the context of large-scale land acquisitions in Sierra Leone, equity, compensation, and justice have been hostage to the discretion of customary and formal governing authorities and have led to compromises on legitimate tenure rights of individuals and communities. While women play significant economic roles in the oil palm VC, their lack of land ownership has imposed restrictions on their share of rental income from the land leases. This can manifest in many other ways, e.g. the financial inclusion of women is reduced due to loss of land. There is a reduction in capacities and confidence for accessing agriculture extension, financial and other services from formal government and other institutions. Overall women have not been able to influence land transactions or hold those with decision-making power accountable even though they often suffer adversely from the consequences of decisions by their menfolk. The new land policy provides for "joint spousal registration and documentation of land rights". It also stipulates "joint spousal consent to land disposals". The implementation of the policy is yet to be promulgated.

- d) Is the land tenure situation favourable to sustainability?

The land concession processes have not promoted sustainable behaviour by either smallholders or by large companies involved in industrial-scale plantations. In the absence of proper awareness, capacities and bargaining power, the smallholders have found themselves given short shrift, leading to grievances and conflicts with the companies and with the Ministries, Departments and Authorities (MDAs) of the Government of Sierra Leone. This has sparked wide-scale protests against these threats to social and environmental sustainability of land tenure. In addition, Environmental Protection Agency (EPA) audits conducted by the Government do not necessarily contribute to better environmental management by large-scale investors in the VC, even though companies are charged \$100,000 for the annual exercise. EPA procedures and capacity-related weaknesses at EPA have possibly compromised both social and environmental sustainability requirements in the development of the VC.

- e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

The examples of large-scale land leases in the value chain suggest a history of violations and non-compliance with the principles of VGGT. The value chain has seen many controversial investments. The Guide to Due Diligence and associated tools have not been applied until recently. Most companies had adopted a 'top-down' approach to land acquisition in the beginning. This has in part been facilitated by the weak legal and regulatory framework governing large-scale land investments in the country. The formula for division of annual

compensation or proceeds from land-lease leads to a very small actual compensation (50% of \$12.5 /ha /year) going to the customary landholders who are parting away with their lands and livelihoods. However, lessons are being learnt. The new National Land Policy (NLP) contains many provisions to address these issues. Also, some signs and demonstrable evidence are emerging showing that companies (large-scale land investors) are intent on improving their land-leasing and community engagement processes. A group of NGOs¹⁶ and international organisations are playing instrumental roles and multi-stakeholder partnerships are emerging. These developments have potential for a better future.

Tanzania coffee

a) Overview

Coffee is a perennial crop for which farmers need tenure security, either under customary law or through legal title, and which is never, in Tanzania, grown on rented land. Smallholder coffee farmers have secure rights to the land on which they farm coffee (or are members of the family who own it). Quantifying whether this is by customary allocation or by legal title is difficult, but in some of the coffee-producing areas over 90% of coffee farmers may be holding land traditionally and without registration. Depending on their financial and labour capacity, a household can buy additional land for coffee, and/or rent land to be used for other crops. Coffee increases the monetary value of land, so it becomes more expensive to buy an established coffee stand. Land under coffee can be inherited, but is unlikely to be gifted to other family members during the owner's lifetime.

Commercial coffee estates, the origins of which go back to the colonial period, are not currently dominant in the VC, being estimated to produce only 10 percent of total annual coffee production. In the Songwe region, the VCA4D study reported that estates were typically over 100 acres, and in one case 700 acres.

b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders' and poor people's livelihoods?

The VCA4D study found no explicit reference to the VGGT, or examples of their use, in the VC, though that may change general awareness of the guidelines is increasing nationally. Without having accessed details of any recent large scale land purchase for coffee, the VCA4D study was not able to reach conclusions on the process and the status of engagement and consultation within it.

c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

The Tanzanian Land Act of 1998 gives women the same rights as men to access, own and control land, and to participate in land-related decision-making. The inclusion of provisions for gender equality in the Land Act, and also in the Village Land Act, was due to the lobbying of policy-makers by the Gender Land Task Force formed by several women's rights groups. In spite of this, women rarely buy land: by USAID estimates for 2015, only around 20% percent of women owned land in their own names. Most farmland is owned, either under the customary system or through legal title, by the male head of household. The relevant legislation treats the respective legal bases for land tenure, marriage and inheritance separately, but in practice they are inextricably linked, with women only having access to land through their husbands. A

¹⁶ Including Namati, Welthungerhilfe and several national NGOs (personal communications to Ravi Kumar).

widow's access to land is entirely dependent on the male family member who inherits it. In cases where women do own land, it is usually smaller and of poorer quality.

d) Is the land tenure situation favourable to sustainability?

The land tenure system does not itself present a barrier to sustainability. However, organic coffee from small farms will have lower environmental impacts than conventional coffee due to less or no use of chemical fertilizers

e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

There is not much evidence of value chain initiatives affecting the land tenure system as it remains largely based on inheritance.

Eswatini Beef

a) Overview

The Eswatini beef VC, which produces export-grade beef for the European, primarily Norwegian, market as well as lower-grade beef for domestic consumption, sources beef from both commercial enterprises and from smallholders. The Eswatini report estimates that 40% to 50% of rural homesteads (which may constitute one or more households) own cattle, and are thus at least minimally involved in the VC, through occasional slaughter for local butchering and consumption. For these smallholder households, cattle production, organised extensively, is deeply bound up with cultural perceptions of cattle and with a modified form of traditional organisation – which includes land tenure.

Land tenure in Eswatini is dualistic under the Constitution and the law. 39% of the land is designated as Title Deed Land (TDL), a continuation of the land granted to settlers of European origin during the early colonial period, much of which was then acquired by Swazi individuals and companies following independence. It remains strongly distinct as freehold land, freely saleable to Swazi individuals and to companies with a majority Swazi shareholding, with the possibility of exemptions for foreign companies. 1% of land, mainly in urban areas, is designated as Crown Land, though there is some ambiguity about a fourth category, Tibiyo land, bought by successive monarchs for popular use but at least notionally separate from the largest category, the Swazi Nation Land (SNL).

The SNL accounts for 60% of land, regarded as held in Trust for the Swazi Nation (in an ethnic sense) and governed by local traditional authorities. Chiefs can allocate cultivable land on a revocable but long-term usufruct basis, which precludes sale or transfer, but allows in practice inheritance by a man's sons or widows. Grazing land appears to be held communally within each of Eswatini's 400 Chiefdom: there is some notional right for a Swazi man to graze his cattle anywhere on the SNL but in practice this is exercised with a Chiefdom and within the area served by a single communal diptank.

b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders' and poor people's livelihoods?

There was no trend at the time of the report of commercial land acquisition in the beef VC, on either the TDL or SNL. It is theoretically possible for wealthier members of SNL communities, or external commercial actors, to obtain leases of up to 99 years on the SNL from a local chief. There were no such examples, actual or planned, and it was not an issue of concern for SNL producers. Outside the beef sector there had been positive experiences of SNL rights-holders

being compensated with shares in new agribusiness ventures, but there was a general impression from stakeholders that these processes were less than transparent. The VGGT appeared to be completely unknown to stakeholders in the VC (including government and development agencies).

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

There is a perceived problem of environmental degradation on communal (SNL) grazing lands, and some observers attribute this to domination of grazing land by larger SNL cattle-owners, using the range at the expense of poorer sheep- and goat-owning households. A related problem is the tendency of urban households to re-establish themselves on the SNL because of lower property taxes in rural areas, and then to be granted traditional usufruct rights for cropping, thus encroaching on communal rangelands.

The question of women's rights over cattle is a complex one, and the official system for registering cattle-owners at diptanks may obscure the reality of women's informal decision-making on cattle production – and in any case there is a trend for women to appear increasingly on diptank registers, either jointly with their husbands or independently. In terms of grazing rights, where women own cattle and/or make production decisions, the consensus was that they have equal rights to use rangelands and watering points.

- d) Is the land tenure situation favourable to sustainability?

As mentioned above, there are severe problems of environmental degradation, both general loss of grazing productivity and gullying and point erosion on tracks between homesteads, diptanks and grazing lands. Some stakeholders see rangeland degradation as an intrinsic feature of lightly regulated communal grazing (implicitly appealing to a “Tragedy of the Commons” argument). But others associate it with the pattern of rangeland use skewed towards wealthier cattle owners (whose herds are particularly associated with erosion along paths), or encroachment by homesteads and associated cultivation plots, particularly given urban-rural migration associated with urban property taxes.

- e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

The dual land tenure system in Eswatini is deeply embedded in the country's history as both a traditional African monarchy and as an outpost of the Southern Africa settler economy. There is no evidence of major changes, attributed to the beef VC or otherwise.

Domestic Value Chains

Côte d'Ivoire Cassava

- a) Overview

Cassava is the second most important staple crop in Côte d'Ivoire after yam. Women make up 80% of producers, farming on small plots of between 0.25 and 0.5 ha, using very few inputs and receiving very little financial investment. 54% of Ivorian agricultural land – looking at all cultivated crops – is governed by customary tenure, 38% is held under land grants (27% definitive grants, 11% provisional grants), 1% under official title, and 4% under rental contract. Plots held by women make up only 18% of the total, with a slightly higher figure of 21% of customary land. In the food-crop sub-sector generally, only 25% of farmers are female, and in export crops only 16%. There is a recent tendency for men to cultivate cassava on individual

or cooperatively held plots of 2-3 ha. Although the national land law of 1998 defines land as a national patrimony and guarantees access to land to any physical or moral person, the law has only been implemented to a small degree and its provisions are not widely known, leading to a generally perceived lack of tenure security. This applies to both genders, but women are even more marginalised by the land tenure situation.

- b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders' and poor people's livelihoods?

Although Côte d'Ivoire has adopted the VGGT, the study team found through interview and document review that stakeholders were not observing the VGGT, and that cassava producers were therefore not protected from expropriation. This has led (the precise mechanism is not clear in the VCA4D study) to a geographical shift of cassava production. Production in the south and southeast of the country is increasingly being replaced by more lucrative plantation crops such as rubber, oil palm and cocoa and cultivated on smaller plots with inadequate allowance for fallow. Production is being displaced towards the central and central-west regions, where cassava is often cultivated on fallow land for rent or otherwise temporarily allocated. The VCA4D study repeatedly draws attention to the general lack of tenure security.

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

The general under-representation of women as landholders under all forms of tenure has been highlighted above. The VCA4D study notes that women can inherit customary rights to land in matrilineal areas (though the norm there is that men pass land to their sisters' sons). Women can cultivate cassava on land associated with their husbands' cash crop fields, or be granted fallow land by larger landowners who are still accumulating funds to invest in cash-cropping. In these ways, presumably, women make up the majority of cassava farmers, while making up a minority even of food-crop farmers.

The VCA4D study mentions that under the 1998 land law all "physical and moral persons" have access to land, but only Ivorian nationals can own land. The implications of this, in a country where around 15-20% of residents are nationals of other African countries and national status has been highly politicised, are not further explored.

- d) Is the land tenure situation favourable to sustainability?

It is strongly suggested at various points of the VCA4D study, that both in the south/southeast where it is being marginalised by export crops, and in the centre and west, that cassava is being grown on fallow fields in ways that may not be conducive to long-term sustainability.

- e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

The continuing inadequate promotion and implementation of the 1998 land law has contributed to a situation where smallholder cassava cultivation is being marginalised in some parts of the country in favour of plantation crops for export such as rubber, oil palm and cocoa, leading also to the growth of short-term tenancy in regions to which cassava production is being displaced.

Ghana Sorghum

a) Overview

The principal land tenure issues in the sorghum VC in Ghana involve a) the traditional system of land ownership and b) exclusion of women. Although about 20% of land is legally owned by the state, the great majority of land is held informally, without legal title, under customary tenure and allocated by local chiefs. For farmers this system very much depends on a farmer's personal and family relationships and goodwill of the chiefs. Very little land has legal title, and titles are difficult to acquire, especially for women and youth, though there are recent initiatives in this direction. It is generally impossible to buy land, but where farmers are allowed to purchase lands from the traditional authorities, registration and titling is done under the state system and coordination is poor – an example of general poor collaboration and lack of alignment - with land litigations and tenure insecurity as results. Formalisation of land titles is a long and complex process, which farmers perceive as never-ending and are understandably reluctant to start. Lack of property rights places some constraints on access to credit and expansion of cultivation, but is not perceived as a major challenge by actors in the sorghum VC.

An extensive analysis of land sector governance in Ghana by LANDAC (2012)¹⁷ states that the three northern regions (Northern, Upper East and Upper West), the main production zones for sorghum, differ considerably from the rest of the country, ecologically and culturally, and constitute a tenure niche in which land inheritance is predominantly patrilineal.

b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders' and poor people's livelihoods?

Although Ghana has formally adopted the VGGT, the relevant actors do not incorporate the guidelines systematically into their national laws, land programmes, safeguards or company policies (according to a report by ActionAid in 2019¹⁸). ActionAid also identified a lack of resources and capacity for implementation of the VGGT as a problem that needs addressing. Delays in compensation for land that has been compulsorily acquired by the state appear as a major cause of lawsuits and tenure insecurity in Ghana, but in the view of the VCA4D study there were no cases related to the sorghum VC, where smallholders are still predominant and there are no recent cases of land expropriation. Industrial brewers are entering into large-scale supply contracts with mainly commercial farmers, subject to compliance assessments by the brewery.

c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

With regard to gender, women have formal legal rights to own and inherit property, but under customary law their rights are greatly restricted in practice and they do not own land. More generally, there is a risk to equity in the temptation for smallholders to sell land for a lump sum paid immediately, but which in fact represents a very low price – the report suggests that many regret this subsequently. Farmers are not in receipt of reliable information from elsewhere about the true price of land and the unwisdom of selling. Outsiders to a community can either buy family-owned land if it is available or ask for rights to cultivate (but not “own”) land from the local chief.

¹⁷ Reference to this study was not made in the VCA4D report but is added here by the authors for additional context.

¹⁸ Not identifiable from information given in the report.

d) Is the land tenure situation favourable to sustainability?

The sorghum VC in Ghana involves three sub-chains. Sub-chain 1 is mostly smallholders producing sorghum for consumption and for rural brewers of traditional beer. Sub-chain 2 consists of smallholder farmers working with large-scale aggregators or commercial farmers targeting mainly urban consumers, where agriculture investments and agro-chemical use is reported. Sub-chain 3 is medium or commercial farmers catering to industrial breweries reporting higher productivity than the sub-chains. While the VC analysis has not dealt with land tenure situations across these sub-chains, it is likely that the sub-chains give rise to differential land tenure challenges faced by producers and consequently differential incentives for investment in fertility management, use of agro-chemicals and attaining threshold of viability and sustainability. The VCA4D report discusses the threats to smallholder farmers from the impacts of climate change, but does not explicitly link these to land tenure.

e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

Without examples of recent large scale land purchase in the sorghum sector in Ghana, this study was not able to go into detail of the process and level of engagement and consultation. The study however reports that decision-making based on a traditional local system has the potential to overrule the formal rules and regulations. Therefore, even though the sorghum VC has not experienced any large-scale land acquisitions so far, development of the VC needs to take a path based on learning from past experiences of VGGT violations with other commodities in the country.

Burundi Milk

a) Overview

The production level of the Burundi milk VC is complex, involving smallholder households that have adopted some specialist dairy production practices such as fodder cultivation and the use of dairy breeds, more traditional smallholder households practicing more extensive production with indigenous breeds, and wealthier peri-urban producers using purchased fodder.

The two categories of smallholder farmers hold land under a modified version of traditional land rights, based around informal inheritance (usually equally between male offspring) and informal agreements to sell or rent, but without the pre-colonial and colonial institution of chiefs allocating land rights in return for labour services. Burundian land policy discussions have been dominated by the issue of conflict, particularly the conflicts linked to the return of refugees in 2005, and fears of demographic pressure and land fragmentation. Since 2012, Municipal Land Certification, a process for registration of land rights by municipalities, which gives greater rights than the traditional system, including the ability to use land as collateral, but has considerably smaller transaction costs than the centralised formal title process, has been rolled out, but still only covers 7.4% of the national area.

While not narrowly related to property rights, the 2018 Law on Zero-Grazing and the Prohibition of Livestock Movement, brought into force from late 2021, has had an enormous impact on the livelihoods of milk producers. There were a number of policy drivers behind the Law, including the need to reduce conflicts caused by livestock damaging fields on their way to pasture; the desire to organise livestock production better including reducing herd numbers in favour of the most productive animals; perceived risks of animal disease; the habit of some

cattle-owners of grazing on public lands, associated with the deliberate starting of bushfires: a perceived opportunity of increasing soil fertility through improved manure management. However, it is important to note that the open grazing practices targeted by the Law, at least in legal terms, involved public land and not any form of pre-existing communal grazing land. As well as requiring veterinary registration of all cattle and compliance with norms of good feeding with cultivated or purchased fodder, the Law forbids movement of ruminant animals beyond the homestead, except to paddocked lands dedicated to the use of a single household.

- b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders' and poor people's livelihoods?

The issue of large-scale land acquisition for dairy production was not raised to the study team by smallholder producers or other stakeholders, and neither LSLA nor adherence to the VGGT are topics of policy interest in Burundi. Processing enterprises in the milk VC were able to purchase or rent their (generally small) urban premises without problems.

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

The modified traditional system of land allocation, while associated with local-level conflicts and not allowing farmers to use land as collateral, has not in general been associated with inequity between households. Nor to date has the implementation of Municipal Land Certification. There is however considerable evidence that the modified traditional system is associated with serious gender inequalities: under it women do not securely inherit land from either their fathers or their husbands. In some cases a deceased man's daughters may jointly inherit a very small parcel equivalent to the share of a single one of their brothers. Widows do not inherit land from their husbands, and may be subject to violence at the hands of their in-laws, and expropriation of property they have themselves acquired during their husbands' lifetimes. According to ActionAid Burundi (2016) and Serwat (2018), a married woman has an extremely limited role in making decisions either over the household land or over any small plot she may have been allocated for herself (Focus Group Discussions with women during the milk CV study painted a slightly more favourable picture of joint decision-making). Serwat (2018) demonstrates that the Municipal Land Certification initiative has not assisted gender inequality and may even have reduced it.

The impacts of the Law on Zero-Grazing, which was being implemented at the time of the milk VC study, are likely to be profound, and result in a large-scale reorientation of dairy production to the benefit of wealthier smallholders who are able to cultivate fodder on-farm, and to the detriment of a) more traditional highly extensive producers in certain areas of the country, notably the South, and b) smaller-scale cattle-owners who have depended on feed resources along roads and around homesteads. Whether this will result in land consolidation, or simply farmers dropping out of cattle production, it is too early to say.

- d) Is the land tenure situation favourable to sustainability?

Smallholder milk production is extremely important for soil fertility through manure management, indeed 80% of rural dairy producers in a structured survey (responses from peri-urban producers were different) ranked soil fertility as the most important role of cattle production, well above cash income. The current modified traditional land tenure system supports such a role for cattle production and there is no evidence that the Municipal Land Certification initiative would undermine it, indeed the rationale for the initiative is that it would make tenure slightly more secure, create possibilities of consolidating land that would otherwise be fragmented through inheritance and give farmers the ability to use land as collateral, all of which might increase incentives to farm sustainably.

The Law for Zero-Grazing has been brought into force in a rather authoritarian manner with inadequate communication, but under Burundian conditions appears designed to safeguard public lands from irregular grazing, rather than dismantling a pre-existing communal grazing system (although the history of these public lands remains unclear). Responses from dairy producers were generally favourable in areas of intensive production, more equivocal in areas of traditional extensive production. As stated above, the Law for Zero-Grazing may have implications for the equity of the milk VC, but will be neutral or favourable to the environmental sustainability of the VC.

- e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

The profound though gradual change in the Burundian land tenure system represented by the Municipal Land Certification initiative has had dual drivers in political concerns over land conflict and in concerns to bring landholding closer to tradable freehold (while not incurring massive transaction costs) as part of agricultural modernization. The milk VC, as fundamentally minor compared to major food or export crops such as banana, cassava or coffee, has played a very minor role in this. The drive for the Law for Zero-Grazing, inasmuch as it can be seen as part of land policy, also reflects a concern with conflict, but in tandem with a desire to modernize the cattle economy, not just in terms of spatial organisation but also in terms of breed, fodder production and veterinary services, and can clearly be linked to policy for the milk CV.

Zambia Maize

- a) Overview

In Zambia land cannot be held as private property or sold. Land is either under the authority of Chiefs (Customary Land), or of the State (Leasehold or Reserve Land). Rights to cultivate customary land are initially acquired either through clearing new land and/or through allocation of existing land by a village head. Customary tenure has operated alongside the legislative structure, but in ways that have changed over the last 20 years, and practices have been instituted for customary land to be converted either into titled leasehold land, or more recently into a new category of land certified by “Chiefs’ Certificates”.

- b) Is the governance of land acquisition by commercial actors transparent and supportive of smallholders’ and poor people’s livelihoods?

The study highlighted research that has raised concerns of “land grabbing” for cultivation of *jatropha* and mango with negative impact on rural farming households (Sitko and Chamberlin, 2016), but it is not clear how this affects the maize VC – discussion of Chiefs’ Certificates and titling (see below) suggest it is a potential issue. The study has reported the relatively new development, practiced in many rural areas but by a minority of households, of an informal rental or lending system for cropping land. Chapoto and Subakanya (2019) report that 1.7% of land is rented in and 0.5% is rented out, and that 2% is borrowed in and 0.8% is borrowed out. This practice is nevertheless indicative of a rural economy increasingly subject to market relations and a view of land as having commercial value.

- c) Is the land tenure system within the smallholder sector equitable (including in terms of gender)?

The practice of issuing titles on customary land has been criticised by the House of Chiefs, whose members have a major role in the allocation of customary land to newcomers to their

areas. The Chiefs have proposed that this process is stopped with only Chiefs' Certificates being issued for customary land. In areas of land scarcity, and where investors have shown interest in land acquisition, Chiefs' Certificates are being promoted as a way to secure and protect customary rights, or for households to claim for compensation if land title is given to an investor (DanChurchAid, n.d.). Chiefs' criticisms are phrased in terms of the future land scarcity that will result if customary land is not protected from conversion to titled land by investors. Some researchers suggest, however that the use of Chiefs' Certificates in Eastern Province is instead potentially worsening tenure equality and incentivising rent-seeking behaviour by local chiefs (Green & Norberg, 2018).

The situation with regard to gender equality in land access is complex, to some extent differentiated by ethnic group, and changing. Where rights to land are inherited (this is the second-most important mode of access after allocation by chiefs) are as female-headed households are as likely to inherit, but only inherit on average slightly over half the land inherited by male household heads. There is evidence that the male-centric system of customary land allocation results in far fewer female-headed households becoming "emergent farmers involved in commercialisation of crop production and intensive use of inputs.

d) Is the land tenure situation favourable to sustainability?

The general trend of crop land becoming less available, particularly in areas which have the advantage of proximity to markets, has important implications for any programme aiming to increase the levels of maize production by small and medium scale farmers, as fragmented land holdings will be likely to limit production and productivity.

e) Is there evidence that the land tenure system is changing, and can this be attributed either to market-led or policy-led changes within the value chain?

Despite the law stating that land cannot be sold (though improvements on the land can be recognised as having commercial value), there is unofficial sale of rights to land, including rural cropland, for cash, which may be sanctioned by local chiefs. Where land is thus unofficially sold to non-family members, then descendants of the selling family effectively lose their claims, but can still request alternative land from their local chief, or from a headman in another area where land is available. Such a strategy option will become less viable as agricultural land becomes scarcer and more highly valued.

Comparative Analysis

Based on the above summaries, and conscious of the limitations of working with eight case-studies where the base material provides relevant and usable information to varying degrees, our comparative analysis looks at both the impact of land tenure and land policy on the development of inclusive and sustainable VCs and the impact of the development of VCs (autonomous or supported by project interventions) on land tenure.

How are land tenure and land policy constraining or enabling the development of inclusive and sustainable value chains in Africa?

Some important sub-questions here are:

- Are customary land tenure systems compatible with either **export-oriented or domestic value chains**?¹⁹
- How does customary land tenure impact the **equity and inclusiveness** of value chains?
- Are land tenure systems and/or land policy **constraining gender equality** in value chain development?
- Are **titling initiatives** assisting the development of value chains, and enhancing equity within them?
- Are there **rental markets** for land in the VCs and what are their effects on equity and sustainability?
- What are the impacts of **acquisition of land by commercial actors** on equity and sustainability within value chains?

Customary Land Tenure

In almost all the countries represented here, the majority of agricultural land is governed under some modification of customary tenure, as “traditional” chiefs have been recognised by colonial governments and their authority to allocate usufruct to land has been codified.²⁰ National proportions of cultivated land under modified customary tenure in the case studies vary between 95% in Sierra Leone to around half in Côte d’Ivoire and Tanzania. In Eswatini, where the important metric is overall rural land including grazing land, 60% is designated as Swazi Nation Land under the authority of local chiefs.

Modified traditional tenure can be associated with situations where smallholders have limited power in negotiations with private sector actors, and are forced to rely on governments which may fail to represent their interests. However, traditional tenure does not *necessarily* act as a barrier to the development of sustainable VCs, either domestic or export-oriented. This is a particularly important finding for export-oriented VCs and is supported by the cases of cotton in Cameroon and coffee in Tanzania. The Cameroon cotton VC where landownership is overwhelmingly through allocation by traditional authorities, and which includes some very small landholdings (< 1 ha) is to some extent a special case, as it has a long history of functioning in a highly integrated way under the strong direction of the state (and previously the colonial state). The Tanzania coffee case more clearly shows that an export-oriented VC built around a perennial crop requiring de facto security of tenure can be based on a traditional tenure situation (a titling process is underway, but it is proceeding very slowly). 90% of coffee production is from smallholders, and one estimate is that 95% of farms in the coffee-producing Songwe and Mbeya regions are unregistered, i.e. held under customary rights.

However, the fact that these two value chains are inclusive (i.e. a large proportion of their production is from smallholders) does not necessarily make their functioning equitable (i.e. benefits from the value chain are fairly distributed). The Cameroon cotton VC study criticises the dominant parastatal company, Sodecoton, for not better defining specific strategies (for services such as input and credit supply) for different landholding categories. The Tanzania coffee study notes that prices of mineral and organic fertiliser for smallholders are rising, differentially decreasing their benefits from the VC.

¹⁹ Recognising that many value chains serve both domestic and export end-markets.

²⁰ See Cotula (2007). The Executive Summary of this volume discusses the various ways in which customary systems have been “profoundly changed by decades of colonial and post-independence government interference, and are continually adapted and reinterpreted as a result of social, economic, political and cultural change”.

For domestic value chains there is evidence from at least two studies that modified customary tenure is not a fundamental constraint on value chain development, but smallholders operating under these systems are subject to certain negative trends in terms of benefits from the VCs. In Burundi the great majority of dairy producers hold land under modified customary tenure, though there is some speculation that the production share of larger landholders within this system will increase in future. Ghanaian smallholders in the sorghum VC do not see their informal land rights as a major challenge, but do feel constrained by them when they wish to expand cultivation or access credit. There is also evidence some are being incentivised to make sales of land that is against their long-term interests.

Land held under modified traditional tenure should be distinguished from rented land (including land rented out short-term by those who own it under traditional tenure), which is discussed below.

Gender Inequality

Gender inequality in access to land is reported in virtually all the selected case studies, and applies to both modified customary tenure and to the way that titling initiatives and other more formal modes of tenure are implemented in practice. In the overview analysis, for the question of whether women had equal land rights to men, 78% of the studies reported “not at all” or “moderate/low”. Among our case studies, in Burundi, under the current modified tenure regime, women are far less likely to inherit usable parcels of land than are their brothers, have no rights to inherit as widows their deceased husbands’ lands, and may be subject to violence and even to expropriation of land they themselves have acquired. Women may be allocated plots by their husbands, but have very limited decision-making powers on them. The Municipal Land Certification initiative, while open in principle to women, is not in practice significantly improving this situation.

A VC may be highly inclusive of women as producers and processors, while the land tenure system it operates within makes their access to land in their own rights difficult. In Côte d’Ivoire, 80% of cassava producers are women, but nationally farm plots held by women make up only 21% of the total, and an even smaller proportion for other forms of tenure. While the report does not make this explicit, the geographical displacement of cassava production from the south to the centre of the country may be linked to women’s insecurity of tenure. There is an increasing pattern of women cultivating cassava under one-year rental agreements in the new production zones. The representation of women in the VC should not divert attention from the difficulties they face in accessing land.

Titling Initiatives

Several of the countries studied are implementing titling initiatives, either converting land held under customary rights to full legal title, or as in Burundi to establish an intermediate form of land certification carried out at local level with low transaction costs. However, these initiatives are generally being rolled out extremely slowly, and/or are meeting resistance – the Burundian Municipal Land Certification initiative begun in 2012 (which benefits from some EU support) only covers 7% of national cultivated land, and the use of “Chiefs’ Certificates” in Zambia is highly controversial, bringing accusations of rent-seeking. In Ghana, the process of obtaining formal title is viewed by smallholders as long and difficult, disincentivising them from even starting.

Rental Markets

The studies of Cameroon, Sierra Leone, Tanzania, Côte d'Ivoire, Burundi and Zambia report rental markets in land: it is important to note that land held under modified customary tenure can be rented out for cash, usually one season at a time.

The studies of export-oriented VCs support a negative association of land rental markets with agricultural sustainability. In Tanzania coffee is never grown on rented land as there would be no incentive for investing in a perennial crop, although coffee-producers may use the rental market to expand their fields of other crops. In Cameroon there is a knowledge gap on the extent of use of rented land in the cotton VC but it is concluded that a) renting of land is associated with low social status and recent immigration from elsewhere in Cameroon, and b) average yields and investment in soil fertility are lower on rented land than land allocated directly by traditional authorities. A recommendation is made that a new institution of a 5-6 year lease of land be established.

For domestic value chains, renting of land (from those holding it under modified traditional tenure) occurs but is of minor significance in Burundi and Zambia. In Côte d'Ivoire renting of land on a single-year basis provides an opportunity for mainly female farmers to cultivate fallow areas of larger farms, but is arguably not conducive to long-term development of this value chain.

Land Acquisition by Commercial Actors

The VC studies selected here do not generally support a narrative of large-scale land acquisition by commercial actors, that could be characterised as “land-grabbing” in the way the term is generally used, but we do not wish to deny the importance of such processes elsewhere in Africa. In terms of processes and safeguards, the VGGT were unknown to stakeholders (in Tanzania, Eswatini) or widely flouted in practice (in Sierra Leone, Côte d'Ivoire, Ghana). In the overview analysis, 18 of the 25 VCs where the issue was addressed reported no or low/moderate adherence to the VGGT by VC actors. Ignorance of VGGT principles may become an issue in future, for example in Tanzania, where commercial estates may seek to expand in the context of smallholder farms becoming fragmented through inheritance.

In the overview analysis, the sub-questions relating to transparency, participation and equity in decision-making (which are associated with actual or potential land acquisition by external actors) had responses of “not at all” or “moderate/low” in between 71 and 90% of studies (with the 90% figure relating to a sub-question on accessibility of information to all stakeholders). Sub-questions relating to equity, compensation and justice had responses of “not at all” or “moderate/low” in between 72% and 91% of studies.

However, in practice, within the case study VCs and with the partial exception of Sierra Leone oil palm, there is no truly large-scale acquisition by external actors. In Sierra Leone, land leases of 50 years, extendable for another 21 years, can be allocated to “non-natives” (which can include residents of Freetown as well as foreigners) only with the consent of the Paramount Chief of the area. There is concern that proper procedures for this have not been followed. For the country as a whole, estimates of agricultural land under such leases vary between 11% and 20%, considerably higher in some districts, while for oil palm, about 20% of cropped area has been allocated as leases, the rest being held by smallholders or used for wild harvesting.

In Cameroon there was mention of some cases of acquisition of farms of up to 40 ha, but this suggests a small number of wealthier smallholders or Cameroonian urban investors. It does

not fundamentally alter the dynamic of cotton production by smallholders for which the normal range of landholdings is 1 – 20 ha. In Tanzania, estates account for only 10% of coffee production and it does not appear that this is a recent phenomenon. In Eswatini, 39% of land is Title Deed Land farmed by commercial interests, but this is an established division rooted in Eswatini's colonial history. There is no evidence that land is being acquired at a large scale for beef production, and large-scale acquisition for other commodities is subject to some safeguards.

For the domestic value chains, there is no evidence of large-scale land acquisition associated with sorghum in Ghana, milk on Burundi or maize in Zambia. For Côte d'Ivoire the picture is more complex. Acquisition of land in south and southeast Côte d'Ivoire for commercial production of rubber, oil palm and cocoa (the study does not make clear what actors and what land acquisition mechanisms are involved) has meant a displacement of cassava production to central and west-central regions, and the development of a niche form of land access in short-term rental of fallow land on larger farms. This shows that the large-scale land acquisition can have complex knock-on effects on other value chains.

Is the development of value chains in Africa (autonomously or through project interventions) affecting land access and secure tenure rights?

In some of the selected VCs, VC development can be seen to be driving changes in land access and tenure in very different ways. In Eswatini, Tanzania and Ghana there is, for different reasons, no apparent impact of VC development on land tenure, and in Zambia there appears to be some shift towards informal sale of land that has been allocated under customary tenure, as land values rise - but it is not clear how attributable this is to development of the maize VC specifically. The case of the cassava VC in Côte d'Ivoire, its geographical shift northwards and its shift into a niche form of land access, under pressure from land acquisition for other crops, has been discussed above. The remaining VCs studied can be characterised in a simplified way as: a highly organised VC that is insufficiently able to influence land policy (Cameroon); a VC which is one of several independent drivers of land policy (Burundi); and a VC raising major problems of equity in land tenure that are generating different solutions from different stakeholders (Sierra Leone).

In Cameroon, the VCA4D study notes that Sodecoton is beginning to favour larger holdings (more than 5 ha) but it is unclear how actively and in what way it is pursuing such a policy. Proportions of rented land are increasing, but rented land is not per se advantageous to those who manage the VC, as it is associated with lower investment. By making recommendations for a) a new institution of medium-term land leasing and b) better state involvement in managing land conflicts between farmers, herders and protected areas, the study in fact shows that Sodecoton, as the organisation de facto governing this VC, is at present not easily able to adapt land policy to the needs of the VC.

In Burundi, the major shift in land policy, from modified customary tenure towards the roll-out (so far very slow) of municipal titling, has been driven more by political and demographic factors rather than the specific needs of the dairy or any other VC – Burundian land policy discussions are dominated by the fear of conflict following the return of refugees to rural areas in 2005, and by concerns about land fragmentation as a result of population growth. But the 2018 Law on Zero-Grazing, which profoundly affects land use and land access though not land ownership has been driven by concerns relating more specifically to the livestock economy, of which the milk VC is the most important economic manifestation. These concerns include the need to reduce low-level conflict around livestock movements, the need for better veterinary control and the perceived need to modernise livestock production by encouraging on-farm cultivation of fodder. The Burundi study suggests a generally favourable evaluation of

the Law by producers, though less so in the geographical area most associated with extensive cattle production.

In Sierra Leone, the case study VC with the most significant problem of commercial land acquisition that has circumvented requirements for consultation with smallholders, there are now limited signs of change: while implementation of the agreed land reform is drastically under-budgeted and inadequately organised, companies that are involved in land acquisition are working, sometimes in the face of negative publicity, to improve their leasing and community engagement processes, and involving NGOs and international organisations in multi-stakeholder partnerships.²¹

Conclusions: What are the messages for policy makers in Africa?

While the VC studies selected are very varied in terms of the sorts of land tenure situations they describe, and in the detail they give on different aspects of land tenure, some important messages for policy-makers are emerging. We outline these under the headings of messages on land policy and messages for value chain governance.

Land policy

- The studies taken as a group make clear that profitable and inclusive VCs, including export-oriented VCs, can be built on the basis of a wide range of land tenure situations, including systems dominated by modified customary tenure.
- Titling initiatives are under way in several of the countries covered, but in general they are proceeding very slowly, and in one case have been controversial. There may be important benefits for well-designed titling initiatives in conflict reduction and incentivising investment, but they will not be a magic bullet for development of value chains.
- In several of the VCs, specific innovations in land policy (e.g. establishment of multi-year rental contracts for smallholders, support for export crop production on medium-size holdings²², block-farming models²³ or outgrower models²⁴ for contract agriculture, would be helpful in the medium-term, but these solutions need to be tailored to the specific contexts of the VCs and to have a clear benefit-sharing mechanism between an exporting company on one side and landowners or producers on the other.
- The companies and value chain actors can also learn from innovations in VCs where aggregators are linked with smallholders. Aggregators are local traders or

²¹ We could not observe a similar pattern in other case-study VCs, but it has been reported elsewhere, such as in Mozambique (Julian Quan, pers.comm).

²² Promoting master farmer and medium size holdings (~10 ha) can facilitate sourcing from the point of view of investors. Investors can strengthen master farmers and help them become stronger financially. This model is discussed from the point of view of its potential contribution to capital accumulation but also its potential negative effects on equity by Hall *et al.* (2017).

²³ In the block-farm approach, the investor engages with landowners to collectivise a 20 to 40 ha piece of land for establishing a plantation under a management agreement with specified benefit-sharing.

²⁴ In outgrower models, the company enters into formal or informal contracts with the producers which guarantees agricultural support and higher than market prices to producers (outgrowers) and producers commit to produce to the company's specifications. Several companies' experiences (captured by VCA4D studies in Sierra Leone and Ghana) seem to prove that the outgrower model is feasible and commercially profitable for the company, especially when the company is primarily targeting export. Benefits for producers can include increased crop yields due to extension support and input supply, and reduced dependence on informal sources of credit.

commercial-scale farmers /entrepreneurs. Aggregator-farmer linkages can be mutually beneficial arrangements as the aggregator can grow his/her business through assured supply of quality produce, while farmers can get a range of benefits such as certified seeds, tractor services, low-cost finance, fertilisers etc. Most of these services are provided to farmers on credit. Costs of ploughing, certified seed and fertilisers are paid by farmers based on agreed terms of portion of the harvest (number of bags). It is a fair system even though not cash based as the farmers are also supported through training and guidance to achieve right plant populations, proper agronomy of the crop.

- Land acquisition patterns in high-value VCs can have indirect impacts on staple food VCs – both by reducing tenure security within a production area and by geographically displacing food crop production to other areas. These impacts need careful monitoring to avoid disruption to food VCs and negative effects on equity. The VC studies (such as Oil palm in Sierra Leone) suggest that the formula for division of annual compensation or proceeds from land-lease leads to a very small actual compensation currently in the hands of the landowners who are parting away with their lands and livelihoods.
- There is a need, especially in export-oriented VCs, to define a leasing system for land generically in a country's land policy as well as in specific VCs. Equitable principles for establishing annual compensation or proceeds from large-scale land-leases would need to be devised according to returns from different industrial models in different VCs. In several countries in Africa, framing a law relating to contractual relations between private investors (non-nationals) and small landholders (under customary tenure or with land titles) is important for achieving better trade-offs between economic growth and land tenure security.
- Knowledge of and adherence to the VGGT among stakeholders is deficient. While large-scale land acquisition (which in practice is what the VGGT mostly concern) is not a significant present threat in most of the countries covered, the VC studies support the need for a general effort to increase knowledge of and practical adherence to the VGGT.²⁵
- Virtually all the VCA4D studies show high levels of gender inequality in women's secure access to land and decision-making power over it. The fact that producers and processors (and traders) in some VCs are predominantly women does not mean that gender inequality is not an issue that has to be addressed.

Value Chain Governance

- Where organisations have an important role in VC governance or coordination (this can include marketing parastatals, major commercial investors²⁶, and apex farmer organisations), they can and should concern themselves in strengthening institutions for land access and land governance that contribute to environmental sustainability, inclusivity, and equity.
- Such initiatives may need to include building institutions for the management and resolution of conflicts over land access within or between value chains.

²⁵ This finding accords with those of Anseeuw et al. (2022) from a survey of 23 African countries, that 78% of LSLA deals “show unsatisfactory levels of VGGT uptake and implementation”, and 20% show no compliance at all.

²⁶ The Oxfam document *Doing Business on Uneven Ground (2022)* sets out recommendations for businesses wishing to invest responsibly in agricultural land.

- Efforts to raise awareness of the VGGT should be directed to such value chain actors as well as to land policy actors.
- Action on land tenure within value chain development is likely to involve multi-stakeholder partnerships and linkages to parts of government responsible for land policy. Partnerships so established may be sources of innovation in institutions for land access and governance, as well as coordinating policy on issues that create linkages and indirect impacts across value chains.

ANNEX 1 References

VCA4D studies cited

Fok, M., Meier, M., Nicolay, G., Balarabe, O., Calaque, R. 2019. Analyse de la chaîne de coton au Cameroun. Rapport pour l'Union Européenne, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 150 p + annexes.

Bessou, C., Roda, J-M., Kumar, R. n.d Analysis of the palm oil value chain in Sierra Leone. Unpublished report for the Report for the European Commission, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804).

Ruben, R., Allen, C., Boureima, F., Mhando, D., Dijkxhoorn, Y. 2018. Southern Highlands Coffee value chain analysis in Tanzania. Report for the European Commission, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 124p + annexes.

Wane, A., Boureima, F., Ndlovu, F. Morton, J.; 2018. Beef Value Chain Analysis in eSwatini. Report for the European Union, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 136 pages.

Mendez del Villar, P., Adaye, A., Tran, T., Allagba, K., Bancal, V. 2017. Analyse de la chaîne de Manioc en Côte d'Ivoire. Rapport pour l'Union Européenne, DGDEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 150p + annexes.

Onumah, G., Plaisier, C., Villani, R., Komlaga, G., 2020, Sorghum Value Chain Analysis in Ghana. Report for the European Union, DG-DEVCO. Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 167 p + annexes.

Laçon F., Habonimana B., Nimenya N., Niragira S., Morton J., Vigne M., 2022. Analyse de la chaîne du lait au Burundi. Rapport pour l'Union Européenne, DG-INTPA. Value Chain Analysis for Development Project (VCA4D CTR 2017/392-416) et Assistance Technique Agrinatura au Burundi, 112 p + annexes.

Fusillier J-L, Sutherland A., Villani R., Chapoto A., 2021. Maize Value Chain Analysis in Zambia. Report for the European Union, DG-INTPA Value Chain Analysis for Development Project (VCA4D CTR 2016/375-804), 222p + annexes.

These reports, and the broader body of 37 reports used for the Overview Analysis, are available at <https://europa.eu/capacity4dev/value-chain-analysis-for-development-vca4d->

Other references cited

ActionAid Burundi (2016) Parallel Report to the United Nations Committee on the Elimination of Discrimination against Women.

Anseeuw W., Bourgoin, J. and Harding, A. (2022) Little change in land governance practice. *Rural 21*, 04.07.22.

Baxter, J. and Schäfter, E. (2013) Who is benefitting: the social and economic impact of three large-scale land investments in Sierra Leone. Report commissioned by Action for Large-scale Land Acquisition Transparency (ALLAT) http://greenscenery.org/wp-content/uploads/2020/07/J.Baxter_who-is-benefitting_July-2013.pdf

Chapoto, A. and Subukanya, M. (2019) Rural Agricultural Livelihoods Survey. 2019 Report. December 2019. Indaba Agricultural Policy Research Institute, Lusaka., Zambia <https://www.iapri.org.zm/rural-agricultural-livelihoods-survey-2019-report>

Cotula, L. (ed.) (2007) Changes in “Customary” Land Tenure Systems in Africa. International Institute for Environment and Development.

DanChurchAid (no date) New models of securing customary land piloted in Zambia. <https://www.danchurchaid.org/articles/new-models-of-securing-customary-land-piloted-in-zambia>

EU Support to Responsible and Inclusive Land Governance State of Play 2021. In preparation, INTPA, Commission of the European Union.

Flyvbjerg, B. (2006) Five misunderstandings about case-study research. *Qualitative Inquiry* 12(2), 219-245.

Green, E. & Norberg, M. (2018) Traditional landholding certificates in Zambia: Preventing or reinforcing commodification and inequality? *Journal of Southern African Studies*, 44:4, 613-628, DOI: 10.1080/03057070.2018.1461490 <https://www.tandfonline.com/doi/full/10.1080/03057070.2018.1461490H.M>.

Hall, R., Scoones, I., & Tsikata, D. (2017). Plantations, outgrowers and commercial farming in Africa: agricultural commercialisation and implications for agrarian change. *The Journal of Peasant Studies*, 44(3), 515-537.

LANDac (2012) Ghana Food Security and Land Governance Factsheet <http://landgovernance.org/assets/2014/09/Ghana-Factsheet-20121.pdf>

Oxfam (2022) *Doing Business on Uneven Ground* <https://www.landcoalition.org/en/resources/doing-business-on-uneven-ground/>

Quan, J. & Dyer, N. (2008). *Climate Change and Land Tenure: The implications of climate change for land tenure and land policy* (Land Tenure Working Paper 2). IIED, London.

Serwat, L (2019) A Feminist Perspective on Burundi's Land Reform. MSc Dissertation, London School of Economics.

Sitko, N. & Chamberlin, J. (2016) The geography of Zambia's customary land: Assessing the prospects for smallholder development. *Land Use Policy*. Vol 55, <https://www.researchgate.net/publication/299586496>

Annex 2: Biographical Information

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