



AFRICAN CONTINENTAL FREE TRADE AREA: Developing and strengthening Regional Value Chains in Agricultural Commodities and Processed Food Products



UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

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Regional Value Chains In Agricultural
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List of abbreviations and acronyms

ACP	African, Caribbean and Pacific Group of States
AFD	French Agency for Development
AIDA	Action Plan for Accelerated Industrial Development of Africa
AU	African union
CAADP	Comprehensive Africa Agricultural Development Program
CFC	Common Fund for Commodities
CFTA	Continental Free Trade Area
CGIAR	Global Agricultural Research Partnership
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
EAC	East African Community
EU	European Union
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GVC	Global Value Chain
HS	Harmonized System
ITC	International Trade Centre
KTDA	Kenya Tea Development Agency
LDC	Least Developed Countries
LLDC	Landlocked Developing Countries
MDG	Millennium Development Goals
NEPAD	New Partnership for Africa's Development
OECD	Organization for Economic Cooperation and Development
R&D	Research and Development
REC	Regional Economic Communities
ReSAKSS	Regional Strategic Analysis and Knowledge Support System
ROPPA	Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest
RVC	Regional Value Chain
SADC	Southern African Development Community
SSA	Sub-Saharan Africa
SIDS	Small Islands Developing States
SPS	Sanitary and Phytosanitary
TNC	Transnational Corporations
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
USD	United States Dollars
VA	Value Added
VC	Value Chain
VCA	Value Chain Analysis
WB	World Bank
WTO	World Trade Organization

INTRODUCTION

A: Background

The African Union Assembly decided in 2012 during its 18th Ordinary Session to boost intra-African trade and to fast track the Continental Free Trade Area (CFTA). This CFTA is expected to boost intra-African trade expansion, stimulate sustained economic growth and foster inclusive development. The CFTA is more than a free trade agreement. It is perceived as a platform that would facilitate a process of inclusive structural transformation of African countries, contributing to meeting Africa's 2063 Vision. In this process, the CFTA would also help Africa to make progress in implementing the 2030 Agenda and Sustainable Development Goals.

The present study aims to enhance knowledge among policy-makers, experts and private sector on requisite policies and measures for fostering the development and strengthening of regional supply and value chains in agricultural commodities and processed food products. This would contribute to the development of intra-African trade in agricultural and food products including through the setting up and strengthening of regional agro-food supply chains.

B: Focus on regional value chains in agricultural commodities and processed food products

The focus on regional value chains in agricultural commodities and processed food products comes at a crossroads between different focus of the development community positively impacting the role of agriculture in the African economy. Agriculture has been highlighted as an effective means to fight poverty¹. This is particularly noticeable in 2014, which was observed as the International Year of Family Farming by the UN². It is also celebrated as the Year of Agriculture and Food Security by the African Union. For the regional organization, it is the opportunity to emphasize the central role of agriculture in Africa's economic growth³.

Such renewed focus comes with an increased awareness of the benefits and drawbacks of the sector for the development of Africa. If agriculture is a unique vector for development, as an economic activity, as a livelihood and as a provider of environmental services⁴, the heavy dependence of many African countries to a restricted number of agricultural commodities and products⁵ has to be taken into account. For many decades, African countries had been planning to diversify from commodities; now they have come again at the centre of economic preoccupations, because of their socio-economic importance, illustrated *inter alia* by the relevance of the sector for food security.

Nonetheless, according to regional institutions, Africa's agriculture is characterized by low input, low output and low value added, and ample opportunities exist for increased value addition in agriculture and regional trade in Africa⁶. This is one of the reasons why agriculture and agri-food products are considered under the prism of linkages development and upgrading, and against the paradigm of value chain development. It is expected that, by moving up the value chain and developing backward and forward linkages to the commodity sector, African countries can maximize direct and indirect effects, such as job creation, environmental sustainability and social progress⁷.

The value chain concept has gained significant interest in the recent years, and is now broadly used as a synonym of sector analysis and development⁸. The notion of "Global Value Chains" – GVC – has recently served as a focus of some flagship events and publications in the trade and development community, being the core issue of the Organization for Economic Cooperation and Development (OECD) and World Trade Organization (WTO) Aid for Trade Review in 2013⁹, and the central topic of the World Investment Report of UNCTAD that same year¹⁰. However, for an improved and accelerated continental development, it is now largely accepted that developing regional value chains for strategic agricultural commodities is essential¹¹. Developing regional value chains could exploit scale economies, lower production and marketing costs, and help removing non-tariff barriers¹². As most countries export primary commodities, some of them selling packaged and processed goods and other involved in marketing and branding¹³, there seems to be room to develop synergies and ultimately stimulate intra-African trade.

The subject of agricultural regional value chains in Africa is thus at the turning point of the renewed focus on agriculture, the concept of value chains and the relevance of the regional approach. Furthermore, it is backed up by the existence of continental frameworks supporting agri-food development.

C: Continental mechanisms linked to agriculture development

Many regional frameworks exist on regional coordination in agriculture and development in Africa. In 2003, member States of the African Union committed to the Maputo Declaration. They pledged to engage 10% of their national budgets to agriculture and reach a 6% annual agricultural growth by 2008¹⁴. In the aftermath of the meeting, the Comprehensive Africa Agricultural Development Program (CAADP) was created. It is a programme of the New Partnership for Africa's Development (NEPAD) and it provides a vehicle for implementing the Maputo commitments through country-owned agricultural development programs involving multiple stakeholders (i.e. technical experts, farmer organizations, agribusiness companies, and governments)¹⁵. In December 2013, forty countries were involved in the programme¹⁶.

In 2006, the African Union Abuja Food Security Summit validated the selection of twelve commodities, identified as vital for enhancing food production at continental and sub-regional levels¹⁷. In 2007, the Conference of African Ministers of Industry endorsed the Action Plan for Accelerated Industrial Development of Africa (AIDA). The Plan and its strategy for implementation adopted in 2008 has an impact on agriculture, as it recognizes the scope for increased participation by Africa in commodity-based GVCs and proposes tracks for improvement¹⁸. In 2012, the African Union Summit decided to fast track the establishment of the CFTA by the indicative date of 2017, which would include liberalizing trade in agriculture and commodities. These visionary and policy documents set the scene for the underlying focus of the influence of the CFTA on the development of agriculture in Africa.

D: Experience in regional free trade areas impacting agriculture

Intra-regional trade flows among African countries remain low: between 6 and 12% according to sources. When narrowing the focus on the sub-Saharan Africa agricultural market, figures amount from 1 to 6%¹⁹. For the African Union, one of the main reasons lies in the slow progress by the Regional Economic Communities (RECs) in becoming customs unions²⁰. In this regard, the experience gained by the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and the Southern African Development Community (SADC) is particularly interesting. They set up a Tripartite Free Trade Agreement (FTA) which could pave the way for an Africa-wide elimination of trade barriers. Since agriculture represents a large share of the three REC's GDP, the experience can be of particular relevance to assess the impact of a regional free trade area on agricultural commodities and processed goods, with the objective of scaling it up to the continental level.

E: Objectives and methodology of the report

The report aims at presenting key modalities for fostering or adding value in regional supply chains in agricultural commodities and processed food products, in relation to helping to establish the CFTA and boosting intra-African trade. The target audience is African policy-makers, experts of the African Union Commission, the regional economic communities and AU member States. It is intended to propose guidelines on establishing regional value chains in agricultural commodities and processed food products. The focus of this report is as follows:

- To provide a literature review on the many methodologies on value chain analysis and development, particularly in the sector of agri-food products and in the African region, recapping the definitions of the concepts used in the value chain paradigm (Chapter 1)
- To give an overview of the regional agriculture value chains of specific commodities existing at the regional level, including mapping, presentation of actors and focus on special issues such as trade barriers (Chapter 2)
- To suggest methods for prioritization of regional agricultural value chains to be further developed, and to test this approach with the analysis of two priority commodities, the potential development of regional value chains in these sectors, with a view on value addition (Chapter 3)
- To draw conclusions and policy recommendations for fostering and establishing regional value chains in agricultural commodities and processed food products in Africa (Conclusion chapter).

The report is based on analysis of existing documentation (including books, reports, best practices, etc.) and consultation of trade databases. The study was made out of secondary data review. No "fresh" data – e.g. through interviews of stakeholders – was collected for this assignment. Furthermore, the fixed length of the report (forty pages plus annexes) contained the scope. The study cannot be considered as an

exhaustive value chain analysis of determined agricultural sectors in Africa. It is aimed at examining the concept of regional value chains, applied to agricultural commodities in Africa, for policy-makers willing to quickly grasp the issues at stake and to understand the main features of value chain prioritization.

CHAPTER 1

LITERATURE REVIEW OF REGIONAL VALUE CHAINS IN AGRICULTURAL COMMODITIES AND PROCESSED FOOD PRODUCTS IN AFRICA

Prior to entering into a recapitulation of publications, reports and other documents concerning value chains in agriculture, it is helpful to provide a brief review of the concepts considered in this study and their relative importance in recent economic analysis.

A: SOME KEY NOTIONS

1. Defining the value chain concept

The recent growing interest for “chains” and the multiplication of publications on the matter highlights the need for this study to set up a clear definition of the kind of chains that it will be scrutinize. Indeed, the literature often talks about productive chains, value chains, marketing chains, supply chains, distribution chains²¹, without giving the boundaries existing between these different approaches. It appears that in the end, all these concepts tend to describe the same reality.

A value chain can be defined as the full range of activities which are required to bring a product or a service from conception to delivery to final consumer and final disposal after use through different phases of production²². It therefore includes primary production, transformation, marketing and final consumption.

A value chain does not necessarily mean that activities are constrained within one country. The trends in global economy from the 1960's, with globalization leading to an increasing fragmentation of production processes, has led to an international dispersion of production activities that have seen the emergence of borderless production systems²³. When at least two countries are involved into production networks, this characterises a global value chain²⁴ (GVC). *When placing the scope on agriculture, an agricultural value chain can be defined as the set of actors and activities that bring a basic agricultural product from the field to final consumption, and add value at each stage of the production process²⁵.* Here lies a fundamental difference between the value chain concept and other well-known notion: a value chain focuses on how value is created and added along the way, while a supply chain, for instance, highlights logistics and procedures in order to maximize efficiency²⁶. The ultimate goal of a value chain would be to analyse and understand how incremental value can be created and distributed in the different segments of a production chain, involving different actors and, in the case of a transnational chain, different countries. Thus, the concept of value chain brings along other notions such as value addition, participation, linkages, competitive advantage, and upgrading.

2. Key notions in the value chain approach

When considering transnational chains, value can be added at the domestic level or in another country. Foreign value added measures the share of inputs that have been produced in other countries, and which does not add to the country's GDP. Domestic value added is the part of exports created in-country, contributing to its GDP²⁷. The role that countries or regions play in international production networks is called GVC participation. Even if it is often considered by policy-makers as less important than domestic value added, it is a useful indicator of how the exports of a country are integrated in the global economy.

It is underlying in the value chain approach that the concept of value chain is all about relations, interactions and links. Here the notion of linkages is useful, as it is broadly used in the value chain literature. Linkages can be defined as proactive approaches to connect producers (often it is implied that they are smallholders) to consumers²⁸.

The notion of competitive advantage is first a concept to use at company level. The competitive advantage can be defined as the elements a company uses to provide customers with a product of equivalent value compared with competitors, but a lower cost (strategy of cost reduction) or for which customers are willing to pay a higher price (strategy of differentiation)²⁹. At country level, the competitive advantage in a given commodity is a result of interrelationships among activities involved in the production and delivery of the product³⁰.

Such concepts are useful when coming to the end objective of a value chain: the allocation of incremental value all along the process. In the end, analysing a value chain is made to achieve a desirable development outcome. It will allow identifying gaps, shortages and actors experiencing difficulties; all of these leading to a less important domestic value added, and to a lesser contribution to GDP. It will eventually segment the chain and highlight the most sustainable segments, where most countries want to stay because they generate higher value added. This process is called upgrading³¹, or moving up. Countries want to move up in the value chain, because capturing value added can mean gains for producers (wages), for asset owners (return on investment), for consumers (better quality), and for governments (tax revenues).

Upgrading relies on the combination of several factors: a policy component (trade policies to improve productivity and quality); and a “progressive” component (testing the approach by selling final products with higher value added to developing countries, before trying to comply with Northern markets’ requirements)³². This is where the regional approach in value chains can be of particular interest.

3. Applications at the regional level

(a) Regional value chains in agriculture

Recent GVC research has identified the growing importance of value chains organized at the regional, rather than global, level³³. Value chains are qualified as regional when their activities are spread beyond national borders³⁴, in the same region or, in the case of Africa, in the same continent. Regional value chains (RVC) can cover two realities:

- when production is regional, and intended for regional consumption
- When production is regional, and supplies global markets³⁵.

The latter is quite close to the global value chain concept.

In recent literature, despite their being relatively less numerous than global value chains, regional value chains have been praised as the source of many benefits, especially for least developed and developing countries. In agricultural commodities, they build on the competitive advantages offered by two or more countries in a given agro-economic zone. Thus they could compensate the drawbacks of raw products (perishability, bulkiness, quality variability and seasonality)³⁶. They could enhance productivity and competitiveness, *inter alia*, by fostering innovation and allowing economies of scale³⁷. Then, they could help countries to expand markets, through investment (considered as more viable at regional level³⁸) and regain power towards transnational corporations (TNC), which coordinate most of the GVC and are said to be involved in 80% of global trade³⁹. Ultimately, they could lead to an increase in value added, thereby resulting in a growth of GDP. In a continent like Africa, benefitting from a great variety of conditions and geographic basins, having unified regional governance with the African Union, it becomes particularly relevant to analyse the mechanisms to stimulate the establishment of RVC.

(b) Current situation in the African region

Africa is composed of 54 countries. The Regional Strategic Analysis and Knowledge Support System (ReSAKSS)⁴⁰ provides a convenient classification of countries, according to income groups (mineral-rich countries (LI-1), countries with more favourable agricultural conditions (LI-2), countries with less favourable agricultural conditions (LI-3), and middle-income countries (MI)) and Regional Economic Communities, 8 of them being recognized by the African Union⁴¹. Africa can also be divided into five geographic regions: Central, Eastern, Northern, Southern, and Western.

There are other distinctions qualifying African countries, and potentially giving them special benefits or programmes, such as the UN-led classification of Least Developed Countries (LDC), Landlocked Developing Countries (LLDC) and Small Islands Developing States (SIDS)⁴².

The following table recapitulates the different memberships, geographical and policy classifications of the 54 countries of the African continent.

Table 1: Countries and geographic regions, income groups, AU-recognized REC, UN classification, and other inter-governmental organizations in Africa

		Central	Northern	Southern	Eastern	Western	Middle-income	LI-1	LI-2	LI-3	CEH-SAD	COMESA	EAC	ECCAS	ECOWAS	IGAD	SADC	UMA	LDC	LLDC	SIDS	CEMAC	CLSS	CMR	CEPGL	ICGLR	IOC	MIRU	SACU	VAEMU	VAIZ		
		Geographic region					Income group			Regional economic community									UN classification				Other regional (inter-governmental) organizations										
1	Algeria		X				X											X															
2	Angola			X			X							X			X			X							X						
3	Benin					X			X		X				X					X				X							X		
4	Botswana			X			X										X				X								X				
5	Burkina Faso					X			X		X				X					X	X			X							X		
6	Burundi	X								X		X	X	X						X	X					X	X						
7	Cameroon	X					X							X									X										
8	Cape Verde					X	X															X		X									
9	Central African Republic	X						X			X			X						X	X		X				X						
10	Chad	X								X	X			X						X	X		X	X									
11	Comoros				X					X	X	X								X		X						X					
12	Congo	X					X							X									X				X						
13	Congo Democratic Republic of	X						X				X		X			X			X						X	X						
14	Côte d'Ivoire					X	X				X				X									X					X		X		
15	Djibouti				X		X				X	X				X				X													
16	Egypt		X				X				X	X																					
17	Equatorial Guinea	X					X							X						X			X										
18	Eritrea				X					X		X				X				X													
19	Ethiopia				X				X			X				X				X	X												
20	Gabon	X					X							X									X										
21	Gambia					X			X		X				X					X				X								X	
22	Ghana					X	X				X			X																			X
23	Guinea					X		X			X			X						X			X					X				X	
24	Guinea Bissau					X			X		X			X						X		X	X								X		
25	Kenya				X				X		X	X	X			X											X						
26	Lesotho			X			X										X			X	X				X				X				
27	Liberia					X		X			X				X					X								X				X	
28	Libya		X				X				X	X							X														
29	Madagascar				X				X			X					X			X								X					

		Central	Northern	Southern	Eastern	Western	Middle-income	LI-1	LI-2	LI-3	CEH-SAD	COMESA	EAC	ECCAS	ECOWAS	IGAD	SADC	UMA	LDC	LLDC	SOS	CEMAC	CILSS	CMA	CEPGL	ICGLR	IOC	MRU	SACU	WAEMU	WANZ		
		Geographic region					Income group			Regional economic community									UII classification			Other regional (inter-governmental) organizations											
30	Malawi			X				X			X						X		X	X													
31	Mali					X			X	X					X				X	X			X								X		
32	Mauritania		X							X	X							X		X			X										
33	Mauritius				X		X					X					X				X						X						
34	Morocco		X				X				X							X															
35	Mozambique			X					X								X		X														
36	Namibia			X			X										X							X						X			
37	Niger					X				X	X				X				X	X			X								X		
38	Nigeria					X	X				X				X																		X
39	Rwanda				X					X		X	X	X					X	X					X	X							
40	Sao Tome and Principe	X					X				X			X					X		X												
41	Senegal					X	X				X				X				X				X								X		
42	Seychelles				X		X					X					X				X						X						
43	Sierra Leone					X		X			X				X				X									X				X	
44	Somalia				X					X	X					X			X														
45	South Africa			X			X										X						X						X				
46	South Sudan																		X							X							
47	Sudan				X		X				X	X				X			X							X							
48	Swaziland			X			X					X						X			X			X					X				
49	Tanzania				X				X				X					X		X						X							
50	Togo					X			X		X				X				X				X								X		
51	Tunisia		X				X				X							X															
52	Uganda				X				X			X	X			X			X	X						X							
53	Zambia			X			X					X					X		X	X						X							
54	Zimbabwe			X					X			X					X			X													
TOTAL		9	6	10	13	15	25	6	13	9	27	19	5	11	15	7	15	5	34	15	6	6	13	4	3	12	4(+FR)	4	5	8	6		

Source: Author, adapted from ReSAKSS and UNOHRLLS.

This table shows the existing mechanisms and inter-relations between countries of the continent, and highlights the potential of setting up the CFTA. Realizing the potential of intra-African trade requires overcoming a number of challenges⁴³, including overlapping memberships⁴⁴; but if the continent could eliminate barriers and constraints to regional trade, by setting up real RVCs, regional markets might be instrumental in exploiting economies of scale and in selling the intermediate and final goods that have value added locally and regionally.

4. Limitations of the value chain concept

The value chain approach is broadly accepted by the development community as an approach to promoting development. It is the cornerstone of this study. Yet it has certain limitations. Hence it is useful to keep in mind that developing value chains is not the only way to boost trade, development and productive capacities in a given country or region.

One major limitation of the value chain approach concerns its methodology: it is said to be quite donor and agency-led, with few tools to foster ownership. It is linked to another drawback, which is the lack of unification of the concept: for instance, UN agencies – which are strong promoters of the concept – do not have clear and unique definitions of the various notions, which would be largely communicated internally or with partner institutions⁴⁵. No international task force is working on VC⁴⁶, to develop a coherent set of concepts to be used by the development community and allow effective comparisons. As a result, there are different methodologies to analyse a value chain or prioritize sectors⁴⁷.

Another disadvantage lies in the fact that a value chain analysis is a snapshot⁴⁸ of a certain sector, at a given time; and it cannot capture the variation of one sector overtime. It is sector-specific and does not take into account, to a certain extent, the influences that other segments of the economy can have over the chain. Furthermore, to prepare a fully-fledged value chain analysis, the authors need time, relevant and up-to-date documentation, field visits and sustained contacts with all the chain stakeholders, including with government authorities. These features are often incompatible with the work of the development agencies, constrained with time and financial limits. Therefore, many times agencies commissioning VC analysis often find that such analyses cannot be used as a guide to make informed decisions⁴⁹.

B: LITERATURE REVIEW

To prepare this study, a number of publications have been consulted. They can be classified into several categories:

- General literature about the value chain approach and its methodologies, including in the agricultural sector;
- Value chains in Africa; and
- Continental integration in Africa.

The most important are briefly described below⁵⁰.

1. The value chain approaches

M4P (2008) Making Value Chains Work Better for the Poor: A Toolkit for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International. Phnom Penh.

The M4P tool book is a useful and practical guide, clearly written and with a number of figures and tables to facilitate the understanding of sometimes complex economic concepts, aimed at clarifying the main concepts of the value chain approach and providing clear tools to undertake an analysis of determined value chains. It has a determined pro-poor bias, oriented towards smallholders but mainly towards analysing the contribution to value chains of the poorest actors. It places a strong focus on stakeholders and governance mechanisms.

ITC (2008). Sector Analysis for Value Chain Development. Geneva, June.

The International Trade Centre (ITC) methodology is addressed to national consultants assigned to collect data for a value chain analysis. Thus it gives pertinent indications on the sort of information needed to prepare a comprehensive report. It also provides a structure for value chain analysis, and illustrates with examples the economic indicators that should be included in such a report.

Springer-Heinze, Andreas and Elligmann, Alfons (2009). Value links: training seminar.

The ValueLinks methodology is used by the German Development Agency (GIZ). The ValueLinks manual provides definition of the main concepts and details the main tools for value chain analysis, especially on mapping, segmenting, chain design, partnerships and impact. It describes the mechanisms of chain governance as well.

UNIDO (2009). Agro-value chain analysis and development. The UNIDO Approach. A staff working paper. Vienna.

The working paper provides a hands-on approach to agricultural value chain. It gives to policy-makers and value chain practitioners' quick tools for the prioritization of agricultural sectors, including assessment score sheets. It considers the various components of sustainable development, including the impact of value chain development on poverty reduction and employment in rural areas. It provides figures on agricultural development and examples on value chain prioritization.

Webber, C. Martin (2010). Agriculture and Rural Development: Building Competitiveness in Africa's Agriculture: A Guide to Value Chain Concepts and Applications. World Bank Publications. Washington DC

The report gives a progressive and comprehensive overview of key concepts of the value chain. It gives a methodology with tools essential to value chain analysis, development and upgrading. Furthermore, it gives pertinent indications, steps and case studies to design prioritization methods for value chain interventions. It provides concrete cases on agricultural sectors in different countries to illustrate the value chain tools.

UNCTAD (2013). World Investment Report. Geneva.

The UNCTAD report focuses on Global Value Chains and provides data on international trade. Its interest for this study lies in its review of crucial concepts – value added, GVC participation, etc. – and its analysis of the allocation of incremental value added following policy interventions and economic interactions.

OECD, World Trade Organization (2013). Aid For Trade 2013: Connecting to value chains.

The background report of the this AidForTrade review is mainly based on a large survey addressed to trade partners: policy-makers, entrepreneurs, etc. As a result, it highlights concerns and preoccupations of different stakeholders facing the many challenges of developing value chains in all sectors. It thus gives a reliable image of the reality of value chains today.

FAO (2014). Developing sustainable food value chains – Guiding principles. Rome.

This publication focus on food sectors and designs a hands-on and convenient method to choose and develop value chains. It functions as a cycle, with three stages and ten steps – guiding principles, based on sustainable development. All the interactions and segments of value chains are covered: economic, social and environmental impacts, systems, governance and market orientation, vision, upgrading mechanisms, scale and multilateral interventions.

Table 2: Recap of the main features of principal VC methodologies

Name	Institution	Date	Sector-specific	Region-specific	Providing methodological tools	Case studies
Making Value Chains Work Better for the Poor	M4P, DFID	2008	No	No	Yes	No
Sector Analysis for Value Chain Development	ITC	2008	No	No	Yes	No
Value Links	GIZ	2008	No	No	Yes	No
Agro-value chain analysis and development	UNIDO	2009	Yes	No	Yes	Yes
Agriculture and Rural Development : Building Competitiveness in Africa's Agriculture : A Guide to Value Chain Concepts and Applications	WB	2010	Yes	Yes	Yes	Yes
Developing sustainable food value chains – Guiding principles	FAO	2014	Yes	No	Yes	Yes

Source: Author, based on: M4P (2008) *Making Value Chains Work Better for the Poor: A Toolkit for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International. Phnom Penh; ITC (2008). Sector Analysis for Value Chain Development. Geneva, June; Springer-Heinze, Andreas and Eilgmann, Alfons (2009). Value links: training seminar; Webber, C. Martin (2010). Agriculture and Rural Development : Building Competitiveness in Africa's Agriculture : A Guide to Value Chain Concepts and Applications. World Bank Publications. Washington DC; FAO (2014). Developing sustainable food value chains – Guiding principles. Rome.*

2. Value chains in Africa

Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009. Developing African Agriculture Through Regional Value Chains. Addis Ababa.

The Economic Commission for Africa (ECA) and AU annual report in 2009, fully develops the concepts of agricultural value chains in Africa. It puts into perspective the different steps of regional integration in agriculture, such as the Abuja Food Security Summit (2006). It analyses the different gaps that countries have to face to develop RVCs, like tariff, trade facilitation and ICT low coverage. It reviews major constraints to VC development and provides a number of relevant policy recommendations.

Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

The CTA (Technical Centre for Agriculture and Rural Cooperation between African, Caribbean and Pacific Countries (ACP) and the European Union (EU)) provides many reports on agriculture development. This report provides an overview of the state of the art on value chain development, including the limitations of the VCA approach, and it evaluates the situation in each of the main geographical regions. It provides indications on policy orientations by the regional economic communities, data on intra-regional trade, and policy recommendations differentiated for each area. It is of interest for all the stakeholders directly and indirectly involved in VC development – Parliamentarians, research institutes, business associations.

Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executives briefs

The CTA publishes these briefs focussing on one sector and analysing the most recent trends and figures. Even if they are not in principle region-specific, the analysis of a region depends on the sectors; for instance, the brief on the tea sector is oriented towards eastern Africa and the role of Kenya and neighbouring countries.

3. Database: ITC Trade Map

Trade Map is a database developed by ITC to provide users with indicators and data of export performance. It aims at facilitating strategic market research, reveal comparative and competitive advantage and enabling identification of products with potential. It is based on trade data communicated by countries. It uses the Harmonized System (HS), the international product classification protocol used by customs officials which serves as a foundation for the international import and export classification systems. The consequence is that the correspondence is not total between the agricultural products chosen by policy-makers and the results in Trade Map (HS codes often more specific, or sometimes overlapping). Furthermore, trade data are never complete, mirror data is sometimes used, and the phenomenon of double counting (countries counting re-exports in export statistics, though only domestic VA contributes to GDP) cannot be avoided.

4. Websites

The ReSAKSS website, along with 8 AU-recognized REC websites, are instrumental in giving policy background, trends and figures. However, sometimes, they are not the most up-to-date.

5. Continental integration in Africa

African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade. Issues Affecting Intra-African Trade, Proposed Action Plan for boosting Intra-African Trade and Framework for the fast tracking of a Continental Free Trade Area. Addis Ababa.

The report comes back on the different steps to set up a CFTA, including since the Abuja Treaty in 1991, and draws on the experience of the Tripartite Free Trade Area to formulate policy recommendations. It highlights the roles and responsibilities of the African REC in the slow process of the CFTA establishment. It details the functions of the different bodies proposed to monitor the CFTA implementation, such as the High Level African Trade Committee or the African Business Council.

Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013. Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation. Addis Ababa.

The annual report 2013, insists on the creation of forward and backward linkages between developing, commodity-exporting countries. It provides agricultural case studies (cocoa, coffee) and illustrates the barriers to trade with national examples. It presents regional initiatives on commodities, derived from the twelve products selected in 2006 by the Abuja Summit. It gives strong justification to the establishment of the CFTA.

Economic Commission for Africa, African Union and African Development Bank (2012). Assessing Regional Integration in Africa (ARIA V): Towards an African Continental Free Trade Area. Addis Ababa.

The ARIA V publication gives the case for the establishment of the CFTA, in terms of economic impact, movements of goods, current initiatives of the REC and regional financial integration. It analyses the implications of the CFTA, its potential gains and losses, while raising awareness on the possible inequalities in the distribution of these gains.

As a conclusion, it has to be noted that the literature specific to regional value chains in agriculture and processed food – especially when it comes to developing “new” value chains” – in Africa is scarce. The field of agricultural RVC in Africa is vast, every publishing entity (international or regional organizations, technical cooperation bodies, etc.) has its own focus. Information has to be collected from different sources, policy reports, technical briefs, etc., and is sometimes hard to compare.

CHAPTER 2

EXISTING AGRICULTURAL REGIONAL VALUE CHAINS IN AFRICA

This chapter presents the existing value chains in agricultural commodities and processed food products. As the scope is large, it will be narrowed based on the priorities identified by the African regional institutions. The chapter starts, firstly, with an introduction on the methodology and the selected value chains; secondly, some main elements for the value chain analysis of agriculture in Africa are discussed; and finally, a review is provided of the structures of the value chain in the selected sectors.

A: METHODOLOGY AND SELECTION OF SECTORS

1. Outline of the value chain analysis

In most of the cases, an exhaustive value chain analysis for a given sector requires the constitution of a team to collect first-hand information, organize field visits and interviews, gather the relevant literature and set up a plan to prepare the report. It is a work of several months and the result – often amounting to more than 100 pages – has to be discussed with the concerned stakeholders, to draw conclusions and policy interventions. The requests for value chain analysis addressed to international organizations are submitted by member States, partner institutions or donor agencies⁵¹, but they are generally broadly accepted and backed-up by the stakeholders at the national level (if the VC is national).

Preparing a proper value chain analysis for each regional value chain existing on the African continent would not have been possible in this report. Nonetheless, the value chain approach as defined in the first chapter has been followed in its main features. Based on the main methodologies presented in the first chapter⁵² and on the requirements, a framework for the value chain overview has been defined.

Table 3: Outline of the analysis of the agricultural sector

Macroeconomic profile
Macroeconomic indicators
Contribution to GDP
Export value / market value
Export destinations
Value added
Socioeconomic indicators
Workforce including number of smallholders
% of women in total workforce
Level of skills of labour force and management
Mapping
Type of products sold
Segments
Surface
Issues (seasonality, environmental risks)
Competitiveness
Production costs
Productivity
Labour costs
Exchange rates
Access to facilities
Existing infrastructure (roads, etc.)
Energy supply
Access to technology / research / innovation / information
Investment
Domestic investment
FDI
Incentives to investors
Market access
Tariffs
Non-tariff measures
Certification and standards
Trade facilitation
Business environment
Business actors
Competition framework
Intellectual property

Source: Author

The table above shows a perfect image of information that would be required in order to present a fully-fledged value chain analysis. The following parts of the study will display information corresponding to most of the sections of the table; in some occasions, secondary data could not be obtained.

2. Existing value chains

In Africa, agriculture accounts for approximately 25% of GDP and more or less 70% of the labour force⁵³, depending on various sources. The sector could be worth 313 billion USD in 2013⁵⁴. Regional value chains exist in the sense that demand exist in some African countries that can be satisfied by supply existing in other African countries.

In 2006 during the African Union Food Security Summit in Abuja, twelve commodities were recognized as vital for enhancing food production at continental and sub regional levels⁵⁵. Nine of them were considered as continental. They are:

- Rice
- Legumes
- Maize
- Cotton
- Palm oil
- Beef
- Dairy
- Poultry
- Fisheries.

Three of them were considered as regional. They are:

- Cassava
- Sorghum
- Millet.

The table below provides data on trade in the nine continental commodities in terms of intra-African trade and global trade covering both exports and imports. It shows the existence of exchanges (supply and demand) and potential for growth in intra-African trade. As the commodities selected by the Abuja Summit cover often a bunch of different products, the collection of data was made out of specific Harmonized System (HS) codes at four or two digits⁵⁶.

Table 4: Overview of intra-African and worldwide trade flows for the nine (9) Abuja commodities

Abuja commodities	Rice	Legumes	Maize	Cotton	Oil palm	Beef/ livestock	Dairy	Poultry	Fisheries
HS code in Trade Map	1006 Rice	07 Edible vegetables and certain roots and tubers	1005 Maize - Corn	52	1511 Palm oil & its fraction	0202 Meat of bovine animals, frozen	04 Dairy products, eggs, honey, edible animal product nes	0207Meat & edible offal of poultry meat	03Fish, crustaceans, molluscs, aquatic invertebrates nes
Exports to Africa	249765	465,219	495,053	239,679	198,598	87,750	626,866	88,026	704,450
Export to World (total)	409416	3, 008,684	983,009	2, 103,184	240,235	145,507	1, 064,977	91,266	3, 967,569
Imports from Africa	250,271	438,975	429,820	207,677	215,976	77,770	601,235	73,692	766,395
Imports from world (total)	5, 166,860	2, 134,713	4, 361,271	425133	3, 744,034	1, 540,749	5, 442,940	2, 158,434	3, 571,313
African exporters to Africa	South Africa, Egypt, Uganda, Tanzania, Botswana, Rwanda, Benin, Liberia, Côte d'Ivoire, Malawi	South Africa, Zambia, Uganda, Morocco, Tanzania, Burkina Faso, Rwanda, Benin, Kenya, Malawi	South Africa, Zambia, Uganda, Morocco, Tanzania, Burkina, Rwanda, Kenya, Benin, Malawi	Zimbabwe, Zambia, Burkina Faso, Benin, Sudan, Mozambique, South Africa, Malawi, Togo, Swaziland	Côte d'Ivoire, Togo, Uganda, Kenya, Ghana, South Africa, DRC, Congo, Benin, Egypt	Botswana, South Africa, Namibia, Kenya, Zambia, Uganda, Rwanda, Malawi, Senegal, Burundi	South Africa, Egypt, Tunisia, Morocco, Senegal, Uganda, Rwanda, Togo, Kenya	South Africa, Namibia, Tunisia, Malawi, Ghana, Morocco, Kenya, Uganda Zambia, Seychelles	Namibia, Senegal, South Africa, Seychelles, Morocco, Guinea Bissau, Ghana, Mauritania, Mozambique, Zimbabwe
African importers from Africa	Libya, DRC, Zimbabwe, Botswana, Swaziland, Senegal, Sudan, Nigeria, Morocco, Kenya	Libya, Botswana, Algeria, Angola, Namibia, South Africa, Lesotho, Mozambique, Sudan, Zimbabwe	Zimbabwe, Namibia, Botswana, Tanzania, Kenya, Swaziland, Malawi, Lesotho, Mozambique, Rwanda	South Africa, Mauritius, Egypt, Lesotho, Morocco, Algeria, Zimbabwe, Tunisia, Swaziland, Kenya	Senegal, Niger, Rwanda, Zambia, DRC, Tanzania, Ghana, Burundi, Burkina Faso, Zimbabwe	South Africa, Angola, Mozambique, Nigeria, Lesotho, Tanzania, DRC, Swaziland, Egypt, Zambia	Libya, Botswana, Namibia, Angola, Zimbabwe, Mozambique, DRC, Swaziland, Lesotho, Kenya	Lesotho, DRC Namibia, Botswana, Zimbabwe, Mozambique, , Swaziland, Libya, Angola, Malawi	DRC, South Africa, Mozambique, Côte d'Ivoire, Mauritius, Angola, Zambia, Cameroon, Benin, Togo
African exporters to world	Egypt, South Africa, Uganda, Niger, Tanzania, Botswana, Rwanda, Benin, Liberia, Côte d'Ivoire	Egypt, Morocco, Kenya, South Africa, Ethiopia, Tanzania, Tunisia, Senegal, Ghana, Madagascar	South Africa, Zambia, Uganda, Morocco, Tanzania, Burkina, Rwanda, Kenya, Benin, Malawi	Burkina Faso, Mali, Benin, Côte d'Ivoire, Egypt, Tanzania, Mozambique, Zimbabwe, Zambia Cameroon,	Côte d'Ivoire, Togo, Uganda, Ghana, Kenya, Niger, Egypt, South Africa, DRC, Congo	Botswana, Namibia, South Africa, Swaziland, Kenya, Senegal, Zambia, Uganda, Egypt	Egypt, South Africa, Morocco, Tunisia, Senegal, Uganda, Rwanda, Togo, Kenya, Ghana	South Africa, Namibia, Tunisia, Malawi, Morocco, Egypt, Ghana, Kenya, Uganda, Zambia	Morocco, Namibia, South Africa, Uganda, Mauritania, Senegal, Seychelles, Tunisia, Tanzania, , Madagascar

African importers from world	South Africa, Benin, Senegal, Côte d'Ivoire, Cameroon, Ghana, Mozambique, Kenya, Niger, Madagascar	Egypt, Algeria, South Africa, Angola, Libya, Sudan, Morocco, Senegal, Kenya, Côte d'Ivoire	Egypt, Algeria, Morocco, Tunisia, Libya, Zimbabwe, Namibia, Botswana, Nigeria, Senegal	Egypt, South Africa, Morocco, Mauritius, Tunisia, Lesotho, Algeria, Zimbabwe, Swaziland, Ethiopia, Kenya	Egypt, South Africa, Djibouti, Angola, Ghana, Uganda, Kenya, Tanzania, Nigeria, Algeria	Egypt, Angola, Algeria, South Africa, Libya, Morocco, Gabon, Congo, Ghana, Equatorial Guinea	Algeria, Egypt, Nigeria, Libya, Morocco, Angola, South Africa, Ghana, Sudan, Mauritius	Angola, South Africa, Benin, Ghana, Libya, Egypt, DRC, Gabon, Congo, Equatorial Guinea	Nigeria, Egypt, Mauritius, South Africa, Côte d'Ivoire, Cameroon, DRC, Morocco, Angola, Seychelles
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Source: Trade Map, accessed on 27 November 2014

It also presents the first ten African suppliers or importers for each commodity. For the beef sector, many HS codes were potentially matching. In order to keep the same criteria than the other sectors (one single HS code), the HS code corresponding to frozen beef has been chosen, as it was the most important in terms of value. Units are in thousands of US dollars (USD).

The following remarks can be highlighted:

- *10 countries out of 54 never appear in the importers or suppliers of commodities. It can be an indication of the size or structure of their economy (resource-based or service-oriented), or of their lesser participation in commodity GVCs. They are: Cape Verde, Central African Republic, Chad, Comoros, Eritrea, Gambia, Guinea, Sao Tomé and Príncipe, Sierra Leone and Somalia; and*
- *There is continental demand in all of these sectors, and a continental supply base exists. Therefore, it is logical that these sectors are analysed as regional value chains.*

B: AGRICULTURE IN AFRICA: OVERVIEW OF THE VALUE CHAIN

1. Macroeconomic profile

(a) Macroeconomic indicators

Figures vary from one report to another, but remain in the same gross proportion. In terms of contribution to GDP, agriculture is said to be worth 25% in most countries⁵⁷. It can amount to 35% in some countries and great variations are seen in the different RECs: for instance in SADC, the share of agriculture in countries' GDP is between 4 to 27%⁵⁸. The share of total agricultural GDP per region is as follows: 36.4% for Western Africa, 5.3% for Central Africa, 23.6% for Eastern Africa, 26.7% for Northern Africa and 8% for Southern Africa⁵⁹.

As for export value, figures vary. It is estimated to amount to approximately 68 billion USD annually⁶⁰ (to be compared to the total value of Africa's exports to the world of 581,8 billion USD in 2013⁶¹), and was considered to be 2% of the global agricultural exports in 2006⁶². The phenomenon of double counting exist – as we can see in table 4, some countries are importers and exporters for the same product, meaning for instance that they have imported a product, processed it and re-exported it. It is though less important than in other countries, because many countries export natural resources or commodities with little foreign input⁶³.

Agricultural African exports go mainly to Europe and the Americas. The main importers of African agri-food products are South Africa, Libya, Democratic Republic of Congo, Zimbabwe, Botswana, Namibia, Mozambique, Angola, Lesotho and Mauritius.

In terms of value added, it is quite challenging to obtain an absolute value or a proportion. Authors generally agree on the fact that VA in agriculture in Africa is low⁶⁴, and has contracted or marginally increased in most of the countries⁶⁵. Although two thirds of agricultural value is added in developing countries, it is worth 4.5 times less than value added in industrialized countries. *Another striking figure is that developing countries process only 38% of their agricultural products, compared to 98% in developed countries⁶⁶*. However, measuring value added is a key indicator of the performance of a value chain⁶⁷. Efforts have to be put on measuring VA and on preparing strategies for higher VA products. Most reports highlight that *more VA can be obtained by more processing⁶⁸*; and that space exist for more processing since a large share of agricultural exports in Africa are primary products and raw material.

(b) Socioeconomic indicators

Agriculture provides jobs to approximately 70% of the labour force in most countries⁶⁹, and a continental average gives the figure of 60% of the total workforce employed in the sector⁷⁰. As for the level of employment of the rural workforce, it is evaluated between 75% and 90%⁷¹. The proportion of women in this workforce is high; they are said to produce more than 70% of food in most countries, and they are generally considered as the dominant producers, traders and nutrition providers⁷².

Calculating income generation without having access to producers is arduous. Sources converge on the fact that 70% to 80%⁷³ of population living in rural areas, depends on agriculture for food, employment and income.

The skills level of agri-food producers in general in Africa is assessed as low. One of the main challenges is the lack of market information and marketing skills. Other shortages concern management tools and a bias towards production techniques⁷⁴. Training in fields such as certification, SPS regulations, production

techniques, is needed. Awareness around these issues has risen in the recent years. The development community and partner countries are willing to raise the profile of agricultural workers, and the development of skills to increase productivity is now embedded in most of the development initiatives in agriculture⁷⁵.

2. Gross mapping of the agricultural value chain

The products sold by African suppliers are diversified. Apart from the nine commodities identified during the Abuja 2006 Summit, which will be scrutinized in the next section, the main agricultural commodities and agri-food products exported by Africa to the world and to Africa are described in the following tables.

Table 5: List of the first ten agricultural products exported by Africa

HS group	Product	Export value in 2013
18	Cocoa and cocoa preparations	8,716,337
08	Edible fruit, nuts, peel of citrus fruit, melons	6,717,259
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	3,967,569
09	Coffee, tea, mate and spices	3,581,151
07	Edible vegetables and certain roots and tubers	3,008,684
24	Tobacco and manufactured tobacco substitutes	2,999,244
17	Sugars and sugar confectionery	2,988,207
52	Cotton	2,890,413
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	2,421,699
22	Beverages, spirits and vinegar	2,335,350

Source: Trade Map, accessed on 23 November 2014

Table 6: List of the first ten agricultural products exported by Africa to Africa

HS group	Product	Export value in 2013
24	Tobacco and manufactured tobacco substitutes	1,713,156
17	Sugars and sugar confectionery	1,497,272
33	Essential oils, perfumes, cosmetics, toileteries	1,281,881
22	Beverages, spirits and vinegar	1,120,022
09	Coffee, tea, mate and spices	997,120
10	Cereals	899,894
15	Animal,vegetable fats and oils, cleavage products, etc	864,282
03	Fish, crustaceans, molluscs, aquatic invertebrates nes	704,450
11	Milling products, malt, starches, inulin, wheat gluten	639,076
04	Dairy products, eggs, honey, edible animal product nes	626,866

Source: Trade Map, accessed on 23 November 2014

There are some variations between regions: for instance, in COMESA starchy staples, pulses, fresh fruits and vegetables, meat, fish and dairy products account for nearly 75% of the value of all regional

agricultural production; and in general, domestic markets for food staples dominate agricultural markets in Africa⁷⁶.

To produce these stocks, several functions are needed. They can be divided into several occupations:

- Input suppliers (seeds, fertilizers, etc.)
- Farmers
- Processing industries
- Service providers
- Traders
- Retailers
- Etc.

Generally, it is considered that a local supply base (such as pesticide manufacturers or seedling suppliers) contributes to secure access to inputs for exporting firms⁷⁷. Thus it is crucial, for an agricultural sector willing to be export-oriented, to have an easy access to such segments of the VC. It is usually mentioned that most of African agriculture is characterized by low input.

No detailed description of each segment will be made in this section; however, a common assertion about the processing segment, in the specialized literature, says that African manufacturers mainly concentrate on light consumer goods and agro-processing, generally with a limited size and scope, though, according to OECD the industries and services linked to agriculture in value chains often account for more than 30% of GDP in emerging and urbanized countries⁷⁸. African agro-processors are said to be vulnerable to the end or erosion of trade preferences as trade liberalization goes further⁷⁹.

The farming segment of the agriculture VC is one of the most studied parts. Generic figures concerning arable land in Africa, turn around 733 million hectares⁸⁰, with Sub-Saharan Africa accounting for 12% of the world arable land⁸¹. Authors usually agree on the fact that the surface of arable land is enough to feed the African population, if efficiently farmed⁸².

It is underlying in many of the publications, that most of the stakeholders – at least for the farming segment – are smallholders, most of them with poor vertical or horizontal linkages to other segments of the VC. This aspect will be further explained in the specific description of the commodities.

Concerning cross-sector issues linked to the different segments – such the effects of climate change – there is a broad bunch of aspects to be covered; they will just be mentioned here. Climate change is an issue; it may cause losses of 25% of agricultural output in Africa⁸³, but forecasts by 2100 predict a loss of 6 to 47% of agricultural revenue in Africa⁸⁴ because of climate change. As the sector heavily depends on rain-fed production, especially in Eastern and Southern Africa⁸⁵, the question is particularly striking. Agriculture as a sector is not exempt of criticism, as it is the larger user of water (70% of the world consumption) and one of the main contributors to greenhouse gas emissions (30%). But the awareness on environmental issues is growing; and today, trends in agro ecology and agro-forestry seek to enhance yield, quality of production and soil regeneration⁸⁶. It has to be mentioned as well that the sector is also a provider of environmental services – which is generally unrecognized, and non-remunerated sequestering carbon, managing watersheds, and preserving biodiversity⁸⁷.

3. Competitiveness

(a) Production costs

Production costs are major aspects to deal with in agricultural value chain. They are the main decision factors for sourcing and investing in value chains, as they represent a comparative advantage. Figures vary, but in general there is agreement around the fact that agricultural productivity in Africa is inferior to the world average. More details will be provided in the sections on specific commodities. Some authors advance the fact that agricultural productivity is the lowest of the world, with 335 USD of VA per worker⁸⁸. Labour productivity highly depends on education, and access to education has increased in rural areas thanks – inter alia – to the context of the Millennium Development Goals⁸⁹. Therefore a movement in labour productivity is expected in the near future.

There is growth in yield – 6 to 9% on average – but at a slower path than for other regions of the world, and for some sectors, prospects of yield growth are negative because of climate change⁹⁰. Minor variations between RECs exist in yield growth. Yield enhancing practices are still rare, especially in Sub-Saharan Africa⁹¹.

Labour costs are challenging to calculate. The circulation of workers remains an issue, as the free mobility of persons in Africa is not attained yet, except for some groups in some RECs. Most of the RECs – at least

CEMAC, CEN-SAD, COMESA, EAC, ECCAS, ECOWAS, SACD, UEMOA and UMA have protocols and regulations on the free movement of people, labour, services, right of establishment and right of residence⁹². There are variations among on the concrete implementation of mobility of workers: in general, protocols on FTAs often allow for the temporary entry of business people into the territory of the trading partners and they also permit movement of labour to take up work⁹³. However, a large share of labour migrations in agriculture is informal and non-declared.

Exchange rates variability is a crucial factor to take into account, as multiple and different national currencies almost all of which are non-convertible also raise trade costs⁹⁴. Some RECs are already monetary unions (UEMOA, CEMAC). Others are making progress to address currency convertibility in their regions, such as COMESA and ECOWAS⁹⁵

(b) Access to facilities

A common assertion when tackling the issue of agriculture in Africa – especially in Sub-Saharan Africa – is to point out the lack of infrastructure, especially when it comes to transportation. In Sub-Saharan Africa, the lowest coverage in road density is 31 km for 1000 km², though the average road density is 137 km for 1000 km²⁹⁶. Furthermore, unpaved road are impassable during the wet season or violent rain episodes. Bad transport conditions are major explanations for food waste: they can result in inadequate storage, rupture of the cold chain and increase maintenance costs for trucks and transports companies. Inadequate infrastructure, especially for road, is often quoted by donor countries and partner countries as a major barrier for firms⁹⁷. A project exists for a trans-African road network, connecting cities of more than 500000 inhabitants⁹⁸.

Africa produces approximately 3% of the world electricity⁹⁹. Power outages are frequent and are a threat to the development of a modern agriculture. But developments are under implementation in the energy sector: RECs have evolved towards establishing regional power pools, interconnected electricity grids, formulating master plans for regional power development, and developing environmentally benign power sources. SADC, UEMOA, ECOWAS and EAC have launched pools¹⁰⁰. Other transnational electricity supply initiatives exist, not necessarily involving the RECs; but efforts on the development of a coherent, efficient energy supply have to be boosted.

As for the access to research, technology, innovation and generic information, the lack of ambition and thus investment in research and development (R&D) is a subject of concern. Worldwide, developing countries have usually a higher percentage of total agriculture spending in research than developed countries: 2.5% versus 1%. In Africa, this figure is 0.7%. If analysed as a share gross national product, R&D expenditures amount to 0.28% in Sub-Saharan Africa, compared to 0.39% on average in developing countries, and 0.72% in Asia¹⁰¹. Furthermore, the private sector is not committed enough to R&D, amounting for only 2% of total agricultural research¹⁰². R&D investments are necessary to maintain and expand the presence of a country in global markets¹⁰³, and are vital to enhance yield. Geographical areas facing this limited access to technology are mainly Western, Eastern and Southern Africa¹⁰⁴. However, it does not impede some interesting initiatives to be implemented, especially in soil (interactions soil / plant) and production systems in the context of agro ecology¹⁰⁵. There are a number of research centres on agriculture operating in Africa, some Africa-originated, others from a global origin.

Table 7: List of research centres and institutes on agriculture

Research centres and institutes	
CGIAR	Global Agricultural Research Partnership
IFPRI	International Food Policy Research Institute
ASARECA	Association for strengthening Agricultural Research in Eastern and Central Africa
CORAF / WECARD	Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricole / West and Central African Council for Agricultural Research and Development
FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FARA	Forum for Agricultural Research in Africa (in English)
AERC	African Economic Research Consortium
IITA	International Institute for Tropical Agriculture
PRASAC-CEMAC	Pôle Régional de Recherche Appliquée au Développement des Systèmes Agricoles d'Afrique Centrale

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU); IRD (2013). *Sciences au Sud*. 72. Novembre – Décembre.

As for market information, progress has been boosted by the implementation of the CAADP, and systems are being implemented in the context of development projects, regional initiatives or private sector opportunities.

Table 8: A sample of market information systems in agriculture in Africa

Name	Regional Economic Community	Country
Regional Agricultural Trade Intelligence Network (RATIN)		
Kenya Agricultural Commodity Exchange (KACE)		Kenya
Malawi Agricultural Commodity Exchanges (MACE)		Malawi
COMESA-wide Food and Agricultural Marketing Information System (FAMIS)	COMESA	
COMESA Trade Information Network (TINET)	COMESA	
SADC Agricultural Information Management System (AIMS)	SADC	
SADC Livestock Information Management System (LIMS)	SADC	
African Agricultural Markets Programme (AAMP)		Kenya, Uganda, Tanzania, Malawi, Zambia, and Mozambique
Agricultural Information System (AGRIS)	Compact CAADP / ECOWAS	
Réseau des systèmes d'information des marchés agricoles en Afrique de l'Ouest (RESIMAO)		Benin, Burkina Faso, Côte d'Ivoire, Guinea, Niger, Mali, Senegal, Togo, Nigeria
Esoko	Africa (private SME)	
CommodAfrica		
CopHorti - Communauté de pratiques sur l'Horticulture		
Border Information Centers (BIC) project on the Ghana-Togo Aflao border	ECOWAS, UEMOA, Abidjan-Lagos Corridor Organization (ALCO) sponsored by the World Bank, the USAID-sponsored West Africa Trade Hub	Ghana, Togo
EAC information Centre in Dar-es Salaam	EAC	

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU); <http://www.sadc.int> ; <http://www.comesa.int> ; <https://esoko.com> ; <http://www.eac.int> ; <http://www.resimao.net> ; <http://www.resakss.org>

4. Investment and finance

In 2012, for the first time ever, developing economies absorbed more Foreign Direct Investment (FDI) than developed countries¹⁰⁶. This can be an opportunity for agricultural VCs. However, Africa is by far the area with less FDI: around 60 billion of USD, ¹⁰⁷stagnating in 2011 – 2012. Both domestic investment and FDI in agriculture are considered as low¹⁰⁸, and the inability to attract foreign investment is seen as a critical issue. As risks and thus income uncertainty is a major hurdle to investment – harder to overcome in agriculture, multilateral initiatives have been taken on agricultural risk management. Other initiatives to boost investment in agriculture thanks to easier connections have been launched, through platforms.

It is expected that some of these platforms foster investments. It is also expected that incentives will be developed¹⁰⁹ by countries willing to multiply FDI in their territory.

Table 9: Sample of regional-scale partnerships

Name	Countries	Partners	Sector / scope
Grow Africa	Ghana, Ethiopia, Rwanda, Tanzania, Mozambique, Burkina Faso and Kenya	AUC, WEF, NPCA, USAID, WB, FAO and others	Platform for investment
3ADI	Africa	AUC, AfDB, FAO, IFAD, UNIDO	Technical assistance on value chains
African Agriculture Fund	Africa	IFAD, UNIDO, AFD, AfDB, AECID, FISEA, DBSA, BOAD, EBID	Investment
Africa-Brazil Marketplace Initiative	Africa	FARA, Embrapa, ABC, DFID, GATES, IFAD, WB.	Partnership on innovation
Making Finance Work For Africa	Africa	AUC, GIZ, BMZ, AfDB, AFRACA	Agricultural finance
Pan African Agribusiness and Agro Industry Consortium (PanAAC)	Africa	AU, NEPAD	Platform for agribusiness partnerships
African Agricultural Growth and Investment (AAGI) Task Force	Africa	World Economic Forum, Governments of Tanzania, Mozambique, NEPAD	Platforms for public-private investment in agriculture
Platform for Agricultural Risk Management (PARM)	Africa	Afd, IFAD, FAO, WFP, World Bank	Platform on agricultural risk management
Forum for Agricultural Risk Management	Africa	SECO, WB, Dutch Ministry of Foreign Affairs	Platform on agricultural risk management

Source: OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood.

5. Market access

Measuring market access consists in examining potential barriers to the entry in a specific market: tariffs barriers, non-tariff measures¹¹⁰ including certification and standards, sanitary and phyto-sanitary measures. Trade facilitation (i.e. export procedures such as custom delays) will also be tackled in this section.

According to regional institutions, intra-African trade in agriculture faces a higher rate of protection than non-agricultural sectors. It means that, on average, African countries impose higher tariffs to agricultural products supplied by African countries than to agricultural products supplied by other countries in the world¹¹¹.

The tariffs applied by African countries to agricultural products are by no means unified. On average, they apply higher tariffs to agricultural products than to other kinds of products.

Table 10: Average tariffs on agricultural products applied by the first ten African importers of agricultural products

	Average MFN tariffs on agricultural products	Average of preferential tariffs on agricultural products
Angola	18.21	18.21
Botswana	17.39	16.53
Congo Democratic Republic of	11.76	11.76
Kenya	28.27	26.34
Lesotho	17.62	16.75
Libya	0	0
Mozambique	11.57	11.06
Namibia	17.62	16.75
South Africa	17.53	14.71
Swaziland	17.62	16.75
Zimbabwe	24.84	23.22

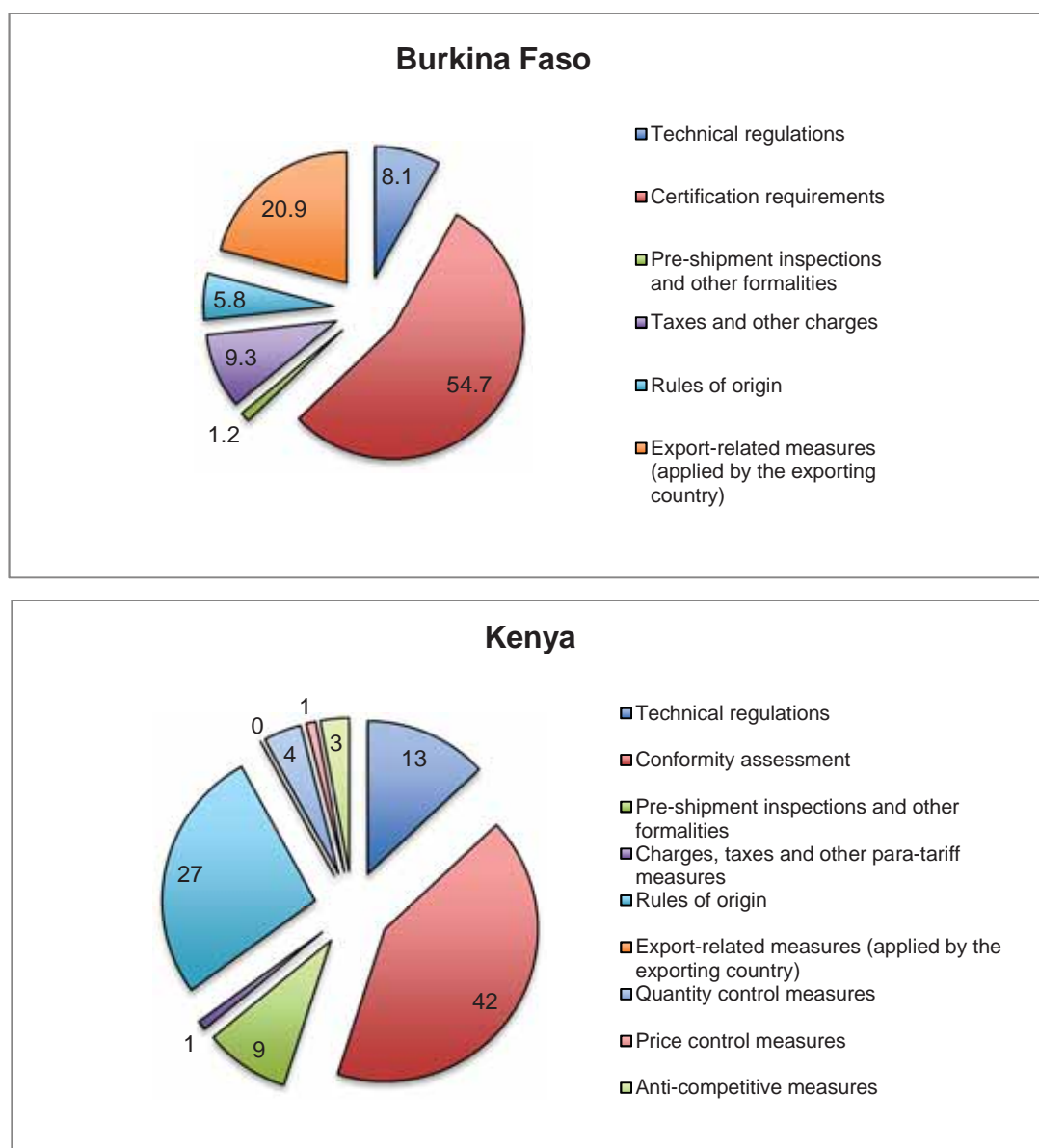
Source: Market Access Map, accessed on 27 November 2014

Generally, import tariffs increase according to the degree of processing: this is called tariff escalation. Tariff escalation dissuades countries from moving up in the commodity value chains¹¹². Furthermore, tariffs applied by African countries to have been growing in the recent years

Non-tariff measures (NTMs) are a major impediment to international trade and can prevent market access. They can be defined as policy measures, other than custom tariffs and including technical regulations, product standards and customs procedures, that may have an impact on international trade¹¹³.

It is challenging to obtain information about NTM faced by individual countries in Africa, especially in the agri-food. The International Trade Centre's Market Access Map¹¹⁴ compiles data (based on what is reported by countries) and runs surveys among exporting companies. Since 2012, the organization has published monographs on company perspectives for Burkina Faso, Morocco, Peru, Malawi, Madagascar, Mauritius, Rwanda, Kenya, Senegal, Côte d'Ivoire and Tunisia¹¹⁵. Other African countries, such as Egypt, Guinea or Tanzania, have been or are being surveyed. Figures show that a large number of African exporting companies are facing NTMs: from 38% of companies in Egypt, up to 95% in Guinea. There is a wide variation of NTMs according to the sector, but of them are technical measures including certification requirements and technical regulations. Internal barriers exist, such as national impediments (export-related measures within the exporting countries) and barriers applied to trade within regional trade agreements¹¹⁶.

Figure 1: NTMs faced by Burkina Faso and Kenya's exporters (percentage)



Source: International Trade Centre, <http://www.intracen.org/itc/market-info-tools/non-tariff-measures/>

UNCTAD also provides NTMs through its database on TRAINS NTMs. These cover official measures as reported by government authorities.

Certifications and standards are a major impediment to agri-food trade. It is often quoted by developing countries, and especially LDCs, as a barrier to enter high-end markets – for instance, Botswana unable to enter the EU beef market, or Namibia the grape market¹¹⁷. But it is also crucial in intra-African trade. In general, 60% of firms cite quality and safety standards compliance as the main factor influencing sourcing and investment decisions¹¹⁸. To meet standards and to be certified, products need to be tested in laboratories: often such structures do not exist in LDC, and products must be sent to a country where a certifying structure exist, before being shipped to the end market¹¹⁹.

In addition to compliance to mandatory regulations, voluntary sustainability standards exist, that can be an asset for sustainable production and trade. According the ITC's Standards Map, at least 49 standards exist for agriculture products supplied by African countries to African importers¹²⁰.

Trade facilitation is a very important in cross-border trade. Trade facilitation practices, like customs procedures and delays, are cumbersome and slow, and have a great impact on the final price of the

product, by increasing the cost of moving the raw, semi-finished or finished agrifood product¹²¹. Obviously, it also has an impact on the perishability of the item. For 60% of lead firms in importing agricultural products from developing countries, customs delays are the main trade problem when dealing with developing country suppliers¹²². Delays at customs amount to 12 days in Sub-Saharan Africa, compared with 7 days in Latin America and 6 days in Central and East Asia¹²³.

The problem has been identified and tackled by many institutions. The World Bank has been working on public-private partnerships to facilitate goods clearance. UNCTAD has developed the ASYCUDA¹²⁴ system, a computerised customs management system covering foreign trade procedures showing impressive efficiency gains: in Cambodia for instance, at the checkpoints served by ASYCUDA, more than 90% of import and export goods are cleared from customs within 24 hours after the presentation of customs declaration¹²⁵. African RECs, particularly COMESA, ECOWAS, EAC and SADC, together with partners, are working on harmonizing, simplifying and automating customs procedures and documentation¹²⁶. Other kinds of partnerships, like African Alliance for E-Commerce (AAEC), are facilitating exchange of information and experiences on trade facilitation, and promoting a “single window” concept¹²⁷.

6. Regional business environment

The business environment around the agriculture sector in Africa is generally described as not favourable. The regional and continental integration is weak¹²⁸. There are sector actors working on regional issues, including regional business associations, but they often lack of recognition, support and funding.

Professional networks and associations representing actors of the commodities value chains can be classified into several categories:

- Sector-specific bodies

Table 11 : Some sector associations

Sector Associations	
EAGC	East African Grain Council East Africa Grains Council Training Institute
ESADA	Eastern and Southern Africa Dairy Association
EAFCFA	Eastern Africa Fine Coffee Association
RECAO	Network of Chambers of Agriculture of West Africa

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

Table 12: A list of sector-specific bodies

Sector-specific centres	
AfricaRice	Africa Rice Centre
CIP	International Potato Centre
World Cocoa Foundation	World Cocoa Foundation
CARBAP	Africa Centre for Research on Banana and Plantain

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

- Producers' associations

Table 13: A list of some farmers' associations

Farmers' associations	
PAFO	Pan African Farmers Organization
EAFF	Eastern Africa Farmers Federation
PROPAC	Plateforme Régionale des Organisations Paysannes d'Afrique Centrale
ROPFA	Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest
SACAU	Southern African Confederation of Agricultural Unions

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

- Other actors intervening in agriculture in Africa

Table 14: A sample of other actors working on agriculture

OTHERS	
AGRA	Alliance for a Green Revolution in Africa
ATC	Agri and Co-operative Training and Consultancy Services Ltd
HubRural	
CTA	Technical Centre for Agricultural and Rural Cooperation ACP EU
CFC	Common Fund for Commodities
IFDC	International Fertilizer Development Centre
AFOMDNet	Réseau d'Analyse sur les Facteurs d'Offres Vivrières, de Marché et de Diversification
FIDAFrique-IFADAFrica	International Fund for Agricultural Development - Fonds International de Développement Agricole
ACTESA	Alliance for Common Trade in Eastern and Southern Africa
African Alliance for E-Commerce (AAEC)	Trade facilitation
Pan-African Chamber of Commerce and Industry	

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

The role of Parliamentarians has recently been highlighted by several actors and initiatives. Parliamentarians are responsible for drafting, voting and assessing trade policies conducive to a better and more integrated continental agriculture. They have to be knowledgeable of the particular issues of agriculture. Regional Parliaments exist, and are mobilized in support of sustainable agricultural sector.

Table 15 : Parliamentarians' associations and regional Parliaments interested in the development of agriculture in Africa

Parliaments	
AWEPA	Association of European Parliamentarians with Africa
EALA	East African Legislative Assembly
SADC-PF	Southern African Development Community Parliamentary Forum
PF-ICGLR	Parliamentary Forum of the International Conference on the Great Lakes Region (ICGLR)
PAP	Pan-African Parliament
CEMAC-P	Parliament of the Economic and Monetary Community of Central Africa
ECOWAS-P	Parliament of the Economic Community of West African States

Source: Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).

When it comes to competition framework and intellectual property rights, most RECs do not have regional frameworks to comply with. Some countries have not established independent competition authorities and do not possess a corpus of legislation on the matter. On the contrary, some RECs have their department on competition and in most cases, a regional competition policy, such as COMESA, CEMAC, SADC or WAEMU.

Though the general regional policy environment is described as unfavourable by regional institutions¹²⁹, it is true that such environment has been positively evolving, with continent-wide initiatives to boost the sector, and with the marked political will towards the establishment of the CFTA. However, the region will be evaluated on results. For the moment, only 9 out of 54 countries¹³⁰ have complied with the Maputo rule, edited in 2003, and has invested at least 10% of their national budget in agriculture. This is a good indicator of the long road remaining for regional institutions to encourage the development of agriculture as a part of regional policies.

7. Summary of the main features of agriculture and regional trade in Africa

Many issues have been tackled in this chapter. Precisions about the sectors defined by the Abuja Summit in 2006 will be given in the following section, mainly on export values and competitiveness issues. A table recapping the figures and trends examined in this section is useful.

Table 16: A summary of the agriculture sector in Africa

Macroeconomic profile	
Macroeconomic indicators	
Contribution to GDP	Around 25%
Export value / market value	68 billion USD
Export destinations	South Africa, Libya, Democratic Republic of Congo, Zimbabwe, Botswana, Namibia, Mozambique, Angola, Lesotho and Mauritius
Value added	Low; approx. 38% of agricultural commodities are processed
Socioeconomic indicators	
Workforce including number of smallholders	70% of the total workforce, 75 to 90% of the rural workforce, most of them smallholders
% of women in total workforce	At least 70%
Level of skills of labour force and management	Low
Mapping	
Type of products sold by African suppliers to African counterparts	Tobacco, sugar, essential oils, beverages, coffee / tea, cereals, animal and vegetal fats and oils, fish and crustaceans, milling products, dairy products
Segments	Input suppliers (seeds, fertilizers, etc.), Farmers, Processing industries, Service providers, Traders, Retailers, Etc.
Surface	733 million ha, 12% of the world arable land
Issues (seasonality, environmental risks)	Losses because of climate change: 25% on the short term, 6 to 47% on the long term
Competitiveness	
Production costs	
Productivity	335 USD of VA per worker. Growth in yield: 6-9%
Labour costs	Problems in mobility of workers
Exchange rates	Variability: some RECs are monetary unions
Access to facilities	
Existing infrastructure (roads, etc.)	137 km for 1000 km ² on average in Sub-Saharan Africa
Energy supply	3% of the world electricity production
Access to technology / research / innovation / information	0.28% of the GDPs are invested in R&D. Market information systems existing
Investment	
Domestic investment	Partnerships to boost investment
FDI	
Incentives to investors	Platforms on agricultural risk management
Market access	
Tariffs	from 0 to 26.34% for preferential treatments in the first ten African importers
No- tariff measures	Prevalent, especially technical regulations
Certification and standards	Influencing sourcing and investment
Trade facilitation	Delays at customs: 12 days in Sub-Saharan Africa
Business environment	
Business actors	Sector-specific bodies, producers' associations, Parliamentarians associations
Competition framework	Some regional competition framework existing: COMESA, CEMAC, SADC or WAEMU
Intellectual property if existing	

C: OVERVIEW OF THE VALUE CHAINS OF COMMODITIES HIGHLIGHTED BY THE ABUJA FOOD SUMMIT

Carlos Lopes, Executive Secretary of the United Nations Economic Commission for Africa (UNECA), had declared: “Africa can feed Africa”¹³¹. This assertion could be the rationale behind the selection of nine “continental” commodities and three “regional” ones, most of them being of paramount importance for RVCs. Following on the presentation of the main features of agriculture in Africa in the former chapter, this section provides a rapid overview on RVCs for these 9 + 3 commodities¹³². It is mainly an illustration of the general characteristics described earlier.

1. Macroeconomic indicators

Countries and RECs have different positions towards the 9 + 3 sectors. Most RECs have their own agricultural strategy and place emphasis on commodities, often belonging to the Abuja list. For instance, COMESA places strong emphasis on food staples, including starchy staples, pulses, fresh fruits and vegetables, livestock, fisheries and dairy¹³³. Such commodities are given special attention, from regional institutions and international cooperation, however some others are overlooked in spite of their being essential to food security, like roots and tubers. In WAEMU / UEMOA, five commodities were selected in 2006 to develop a regional approach: rice, maize, livestock and meat, poultry and cotton. Other important crops for food security and regional trade include millet, sorghum, yam, cassava and pulse crops¹³⁴.

The market value of these commodities is high. While Africa was said to produce 6.6% of the global agricultural output in 2007¹³⁵, it could be around 10% today¹³⁶, and obviously these commodities amount for a large share of this contribution. The total export value of the nine continental commodities is worth around 15 billion USD (2013)¹³⁷, but out of this sum, 12 billion USD are exported out of Africa. It has also to be compared with the import value of these commodities, around 31 billion USD in 2013, 10% of which is supplied by African countries.

A large number of African supplying countries are selling these nine commodities to African countries. The ten first African countries exporting them to other African countries are South Africa, Namibia, Egypt, Zambia, Uganda, Morocco, Senegal, Zimbabwe, Côte d’Ivoire and Togo¹³⁸.

Table 17: Supplying countries to African markets for the nine continental commodities

Supplying market	Total export value of the Abuja commodities within Africa	Number of Abuja commodities exported within Africa
Benin	30641	4
Botswana	65762	2
Burkina Faso	21292	2
Burundi	1	1
Congo	3589	1
Congo Democratic Republic of	5629	1
Côte d'Ivoire	70769	2
Egypt	280178	4
Ethiopia	16016	1
Ghana	30098	4
Guinea Bissau	16873	1
Kenya	40104	6
Liberia	3511	1
Malawi	22316	6
Mauritania	10772	1
Morocco	124311	5
Mozambique	17244	2
Namibia	318610	3
Niger	19280	1
Rwanda	39010	4
Senegal	121927	3
Seychelles	54591	2
South Africa	989150	9
South Sudan	10753	1
Sudan		
Swaziland	5017	1
Tanzania	39589	3
Togo	67704	3
Tunisia	52116	2
Uganda	145084	7
Zambia	224378	5
Zimbabwe	105430	2

Source: TradeMap, accessed on 27 November 2014 ¹³⁹

Some countries seem very well integrated in RVCs: for instance, countries selling 5 or more continental commodities on the continent.

The export values in each country vary from a commodity to another.

Table 18: Export value per country for the nine continental commodities

Abuja commodities	Rice		Legumes		Maize		Cotton		Oil palm		Beef/ livestock		Dairy		Poultry		Fisheries	
HS code in Trade Map	Rice 1006		Edible vegetables and certain roots and tubers 07		Maize - Corn 1005		Cotton 52		1511 Palm oil & its fraction		0202 Meat of bovine animals, frozen		04 Dairy products, eggs, honey, edible animal products		0207 Meat & edible offal of poultry meat		03 Fish, crustaceans, molluscs, aquatic invertebrates	
Exports to Africa	249,765		465,219		495,053		239,679		198,598		87,750		626,866		88,026		704,450	
Export to World (total)	409,416		3,008,684		983,009		210,3184		240,235		145,507		106,4977		91266		396,7569	
Imports from Africa	250,271		438975		429820		207677		215976		77,770		601,235		73,692		766,395	
Imports from world (total)	5,166,860		2,134,713		4,361,271		425,133		3,744,034		1,540,749		544,2940		2,158,434		3,571,313	
African exporters to Africa	South Africa	75,426	South Africa	164,375	South Africa	280,413	Zimbabwe	97,170	Côte d'Ivoire	67,990	Botswana	48,238	South Africa	284,437	South Africa	82,539	Namibia	341,045
	Egypt	64,701	Egypt	114,372	Zambia	153,015	Zambia	40,363	Togo	41,819	South Africa	20,354	Egypt	99,495	Namibia	2,333	Senegal	90,435
	Uganda	36,965	Zambia	29,908	Uganda	26,750	Burkina Faso	18,782	Uganda	40,344	Namibia	17,332	Tunisia	50,879	Tunisia	1,237	South Africa	66,048
	Tanzania	20,004	Morocco	21,056	Morocco	10,849	Benin	15,652	Kenya	13,131	Kenya	1,135	Morocco	47,072	Malawi	887	Seychelles	54,536
	Botswana	17,524	Uganda	20,179	Tanzania	8,857	Sudan	10,753	Ghana	11,642	Zambia	424	Senegal	37,490	Ghana	384	Morocco	45,108
	Rwanda	12,248	Niger	19,280	Burkina Faso	2,510	Mozambique	8,396	South Africa	7,501	Uganda	237	Uganda	25,514	Morocco	226	Guinea Bissau	16,873
	Benin	9,903	Ethiopia	16,016	Rwanda	2,507	South Africa	8,057	DRC	5,629	Rwanda	24	Rwanda	24,231	Kenya	134	Ghana	11,692
	Liberia	3,511	Kenya	12,473	Benin	2,429	Malawi	7,758	Congo	3,589	Malawi	2	Togo	20,027	Uganda	95	Mauritania	10,772
	Côte d'Ivoire	2,779	Tanzania	10,728	Kenya	2,338	Togo	5,858	Benin	2,657	Senegal	2	Kenya	10,893	Zambia	68	Mozambique	8,848
	Malawi	1,599	Malawi	10,370	Malawi	1,700	Swaziland	5,017	Egypt	1,610	Burundi	1	Ghana	6,380	Seychelles	55	Zimbabwe	8,260

Source: Trade Map, accessed on 27 November 2014

The first ten export destinations for the nine continental commodities supplied by African markets are South Africa, Libya, Democratic Republic of Congo, Zimbabwe, Botswana, Namibia, Mozambique, Angola, Lesotho, and Mauritius. Only seven countries source more than five commodities of the Abuja list, or more, from African counterparts.

Table 19: Importing markets sourcing the nine continental commodities from African suppliers

Importing market	Total importing value of the Abuja commodities	Number of Abuja commodities sourced from Africa
Algeria	45476	2
Angola	119396	5
Benin	26014	1
Botswana	184975	5
Burkina Faso	7688	1
Burundi	8059	1
Cameroon	31521	1
Congo Democratic Republic of	211302	6
Côte d'Ivoire	63446	1
Egypt	42005	2
Ghana	8291	1
Kenya	55688	4
Lesotho	106602	6
Libya	256477	4
Malawi	20995	2
Mauritius	98123	2
Morocco	18697	2
Mozambique	150730	6
Namibia	157816	4
Niger	28457	1
Nigeria	11422	2
Rwanda	38578	2
Senegal	68940	2
South Africa	282053	4
South Sudan	26236	2
Sudan		
Swaziland	74593	6
Tanzania, United Republic	49690	3
Togo	23759	1
Tunisia	4372	1
Zambia	56555	3
Zimbabwe	197103	7

Source: Trade Map, accessed on 27 November 2014

Value addition is often quoted by authors as a mean to effectively improve gains in commodity value chains. But most of the value in the nine continental commodities is added elsewhere. For instance, in Uganda, 80 to 90% of the VA of cotton is added by foreign ginners and textile industries, once the product exported¹⁴⁰. In West Africa, only 10% of the cotton production is locally processed into yarn and textile. In most of the countries, the industrial capacity for processing is weaker than the production¹⁴¹. The addition of value depends on the segment of the chain: in the beef sector, more value added can be obtained in primal cuts, canning and beef sides. There is also an issue about perception of the value added by African consumers. In Senegal, rice consumers consider the national cereal of lower quality, and prefer to buy more expensive imported rice from Asia¹⁴².

2: Socioeconomic indicators

The number of workers in the nine agricultural sectors is challenging to calculate and depends on the commodity: some are more labour-intensive than others. In Kenya for instance, the working population involved in the livestock sector goes beyond one million persons: at least 500000 pastoralists, 625000 dairy smallholders, 2000 employees in abattoirs, 5000 to 10000 butchers, 4000 to 6000 traders, 1000 employees in hotels and 145000 in catering directly linked with the industry¹⁴³.

Most of the workers of the nine continental commodities are smallholders. Family farming – as a system where the farm unit is owned by a family and passed from generation to generation – is the “backbone” of Africa, as FAO recently pointed out¹⁴⁴. As an illustration, in the livestock sector in SADC, 75% of the cattle is kept under smallholders traditional farming systems¹⁴⁵.

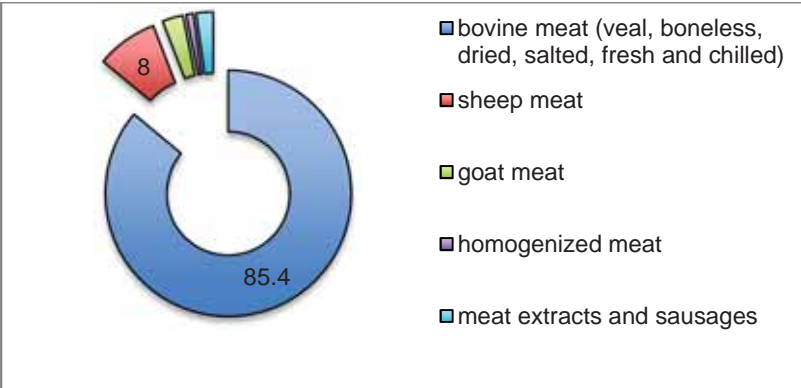
It does not impede RECs to make projections and to assess the number of workers who should be involved in a sector. For instance, WAEMU / UEMOA was foreseeing in 2003 the creation of 50000 jobs if 25% of the local production was processed in West Africa.

3: Elements about the mapping of the chains

Each commodity is an industry with various components. Cotton can serve for the textile market and for the vegetable oil market, for instance. Oil palm can be used as such or incorporated into agri-food products – it is estimated that 80% of the African production of palm oil is used in agribusiness¹⁴⁶, not only in Africa. France, for instance, incorporates 130000 tons of palm oil into agri-food products each year.

Value chains are decomposed into segments. For cotton, it can be described as cotton fibre, yarn, textile and clothing. A parallel value chain, with the same segments, can be created with organic cotton. For the beef and livestock sector, various components exist (bovine meat, sheep meat, goat meat, side products such as skins, hides and leather apparel).

Figure 2: main outputs of the meat value chain in Eastern Africa (in percentage of exports)



Source: Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009. Developing African Agriculture through Regional Value Chains. Addis Ababa.

The surface used for the nine continental commodities has increased. It is estimated that 93 million hectares on the continent are dedicated to cereals, out of which 29% serve for maize, 8.4% for rice and 23.7% for sorghum. The surface area for cotton has recently grown, especially in some countries such as Cameroon where the crop represents 30% of cultivated areas in the North of the country¹⁴⁷. Oil palm spreads over 7% of the agricultural surface in Africa, and represents 39% of the surface dedicated to vegetable oil production. For roots and tubers, cassava production is equal to 48.6% of land under root crops. But according to the specialization of the area, the land can be used for livestock farming, which is the case for 60% of total land area in SADC¹⁴⁸.

The issues linked to seasonality and climate change vary depending on the commodity. A dominance of rain-fed production is observed, especially for sectors such as cotton, cultivated in sub-humid and semi-arid areas¹⁴⁹. Climate change leads to a change in cycles: they are shortened. Oil palm production takes place in tropical humid zones, and its culture is said to affect rain forests¹⁵⁰.

4: Competitiveness

(a) Production costs

As discussed earlier, productivity has grown in Africa but it is still much weaker than in other parts of the world. For instance, growth in yield has reached more than 9% for maize, but is equal to 34% of the world average. Yield in rice is equivalent to 55% of the world average, and 69% for sorghum¹⁵¹. For oil palm, the best yield is around 3.8 tons per hectare, while in Asia it amounts to 6 tons in the best farms. Yield growth in the livestock / meat sector has reached 9%, but there is variation between RECs, especially in SADC where productivity is considered as low. Productivity in milk production has gained 10%.

In cotton, the increased productivity has recently accelerated. While it was restricted to 0.5% per hectare between 1998 and 2007, it is now worth 6.6% in Southern Africa, and 1.3 kg per hectare and per year in Cameroon for instance¹⁵². In Western and Central Africa, in order to improve yields, a ¹⁵³part of the sector has decided to turn to organic cotton.

The cost of inputs represents a large share of the incomes and costs in each sector. For instance, livestock purchasing costs: 65.5 of total chain revenue and costs. When calculating the production costs for a sector like cotton, the charges for land rent, seeds, fertilizers and chemicals, workforce for harvesting and ginning, must not be put aside. Seeds and pesticides are often costly, especially because they have to be bought from abroad.

Exchange rates variations are an interesting parameter to take into account as well¹⁵⁴.

(b): Access to facilities and infrastructures

As underlined earlier, the overall development of infrastructures in Africa is weak and it affects the continental commodities. It is particularly true for transportation: bad road conditions are affecting the export of products in good shape. Shortages in electricity impede a good deployment of processing industries, for instance in the cotton sector. But the limited access to post-harvest handling technologies (cotton) or animal disease control (livestock) is a major problem. Some technical sector actors are working on more cooperation and sharing of experiences about this, such as the SADC Livestock Technical Committee for SADC¹⁵⁵.

As for the access to services and credit, it is certainly a subject of concern. Regional sector initiatives have been implemented in order to face the lack of funding through credit. For instance, for the cotton sector, in Western and Central Africa, advance and recovery of credit, based on single-channel input and seed supply, is possible¹⁵⁶.

(c) Market access

Market access is generally a major subject of concern for African exporters when planning to export to other continents, as tariffs (even with the preferential treatment due to LDCs, or special agreements such as AGOA¹⁵⁷ or EBA) remain a barrier and NTMs are common. However, the level of protection from African importers towards African suppliers, in the nine commodities, is far from being insignificant: in general, intra-regional exports of the nine commodities face an average tariff of 21.99%¹⁵⁸.

This is maybe the aspect where the implementation of the CFTA will have more impact. When the CFTA will be operational, no tariff barriers in goods will remain. *Various scenarios have been projected by economists to assess the impact of tariff elimination thanks to a CFTA on African exports. It is expected that intra-African exports in agriculture will increase by at least 10% by 2022 (the CFTA being implemented as of 2017). This increase is much less important for exports to other destinations (barely positive, or even negative, for export to other developing countries and developed countries)*¹⁵⁹.

The experience of the Tripartite Free Trade Area is pertinent in a perspective of scaling up and paving the way for the CFTA. COMESA, EAC and SADC decided in 2005 to establish a tripartite structure, aiming, *inter alia*, at implementing a single Free Trade Area. This FTA covers 26 African countries, representing more than half of AU membership, with a combined population of 530 million persons (57% of Africa's population) and a total GDP representing 53% of Africa's total GDP¹⁶⁰. Prospects would expect a boosting effect of the Tripartite FTA on regional commerce between the 3 RECs. Few data is available on the matter. According to preliminary findings of pilot experiences separately led on livestock, rice and maize, in ECOWAS and COMESA, intra-REC export increase of 15% on average in livestock can be expected, while intra-African exports showed growth of 25%. It seems thus that continental trade is more optimal than intra-REC trade. This provides an additional incentive to accelerate the implementation of the CFTA, which should be operational by 2017.

(d) Business environment

Important characteristics of the regional and continental business environment have been provided in the previous section of this chapter, *inter alia* concerning business actors in agriculture. Other mechanisms exist, at the regional level (e.g. for dairy products, with the Eastern and Southern Africa Dairy Association (ESADA) or at the national level (Meat Board of Namibia).

As seen earlier, competition frameworks are not fully operational in all RECs.

As for marketing, the existence of RECs encourages the creation of formalized or semi-formalized regional marketing channels. This is particularly true for livestock in SADC¹⁶¹, or to a lesser extent for cotton in WAEMU / UEMOA. It is relevant to organize a marketing structure at the regional level, as it provides for economies of scale, enhanced coherence and elimination of unnecessary competition. Such marketing channels need funding and institutionalization through regional cooperation to maximize their efficiency.

The regional policy environment for the nine Abuja commodities is generally marked by the upcoming implementation of the CFTA and its impact on the other aspects of continental integration. The existence of RECs could be seen as irrelevant with the arrival of the CFTA, but it is not the case. RECs have a precious knowledge of their regional context and opportunities, which cannot be transferred to a continental degree, or with costly procedures. For instance, threatened sectors can be supported and revitalized within the context of a REC: that is the case of the cotton sector in Malawi, United Republic of Tanzania and Zambia, which experienced a revival thanks to intra-regional opportunities in COMESA¹⁶².

It is also in the context of the RECs that regional technical cooperation projects, often funded by large cooperation partners, can take place. Important agriculture partners such as the World Bank, UNIDO, the Common Fund for Commodities (CFC), the Bill and Melinda Gates Foundation, USAID, or IFAD¹⁶³ are targeting commodities belonging to the Abuja list, whether at the regional or sub-regional levels. They do not necessarily use the RECs as supporting or implementing partners, but many technical assistance programmes see the RECs as essential partners for an efficient and result-conducive approach in agriculture development in Africa.

SUMMARY

This chapter introduced a simplified methodology for the description of agricultural value chains by presenting all aspects of regional production, sales and consumption in agriculture. The subject is far too vast to be captured in a handful of pages, especially when no field investigation is undertaken to collect first-hand data from stakeholders. However, some relevant remarks can be gathered after this rapid overview of a sector employing 70 % of the African population:

- Though the share intra-African trade in agricultural products is estimated to less than 10%, there are regional value chains in agricultural products in Africa: a supply base exists and the continental demand is growing;
- There are variations in the degree of participation of countries in these chains. Some are well integrated, as importers and exporters for instance. Some others are less integrated, either

because of the structure of their economy, or because they tend to source products from other areas;

- There is space to increase value added in exported products. Opportunities exist to further develop value chains already existing but with a minimum regional component;
- Political will is needed to accelerate the development of agricultural RVCs, especially through a rapid implementation of the CFTA in order to eliminate barriers to trade and provide for economies of scale.

Chapter 3 will set up a simplified method for value chain prioritization, and thereby identifying at least two commodities, not belonging to the Abuja list, that could be further developed through RVCs in Africa.

CHAPTER 3

ESTABLISHING NEW REGIONAL VALUE CHAINS TO ENHANCE VALUE ADDED IN AGRICULTURAL COMMODITIES AND PROCESSED FOOD PRODUCTS: SOME KEY ELEMENTS

The purpose of this chapter is twofold: first, it will suggest a way to prioritize regional agricultural value chains to be further developed, based on a review of existing methods and criteria to select promising sectors in a particular area. Then, it will test this approach by screening several social, economic and environmental indicators for different commodities already cultivated in Africa (and not belonging to the list of commodities selected by the Abuja summit) and selecting two of them, while focusing on developing the addition of value in these sectors.

A: PRIORITIZATION: METHODOLOGIES

The first chapter of this study provided a quick review of publications on, *inter alia*, value chain analysis methodologies. It showed that almost each development agency has developed its own methodology to assess the degree of development of a value chain. Most of these publications assume that the sectors to be scrutinized are not pre-selected beforehand. Generally, a government or a partner institution submits a request to a specialized agency with the objective of determining the most promising sectors to be developed. Then a value chain analysis will study all the aspects of the sector in order to design interventions aimed at improving it.

Pre-selections should be avoided by governments and programmes¹⁶⁴, in order not to create bias in favour of a particular sector. But it is costly and time-consuming to analyse a large bunch of sectors. Generally, a prioritization exercise is undertaken, in order to identify chains with the most promising prospects for economic growth¹⁶⁵. Such exercise can be prepared by desk review and analysis, through national and international references. However, the ideal way is to organize the exercise with the participation of broad range of concerned stakeholders, in order to take into consideration all the different components and possible consequences of the development of a value chain¹⁶⁶.

Different methods for rapid sector prioritization are presented below. They include the VC methodologies reviewed in Chapter 1 of this study, and two other publications which provide a list of priority issues when establishing a value chain.

Table 20 Main priority criteria for the identification of value chains to be developed

Agro value chain analysis and development (UNIDO) 2009	Economic Report on Africa 2009 Economic commission for Africa and Africa Union 2009	Developing sustainable food value chain- guiding principles FAO , 2014		Making value chain work better for the poor DFID/MAP 2008	Connecting local producers in developing countries to regional and global value chains, OECD, 2013	Building Competitiveness in Africa's Agriculture : A Guide to Value Chain Concepts and Applications, World Bank, 2010
Poverty reduction	Pre requisites	Measuring performance		Potential of the value chains to improve livelihoods of the poor people	Productive capacity	Pre-requisites
Fits in the country's strategy	Refinement of definition of strategic commodities for the region	Economically sustainable (profitable) - economic impacts	Profits Jobs/incomes Tax revenues Food supply	Present integration of the poor in the market (what are they producing, selling, employment)	Human capital	Initial list: combinations and product category, target markets, and resulting VC and supply chains that could be prioritized
Potential for employment generation		2. Socially sustainable (inclusive) - social impacts	Added value distribution Cultural traditions Nutrition and health Worker rights and safety Animal welfare Institutions	Potential of the product/activity for poverty reduction	Standards and certification	Market analysis
Number of smallholders in the sector		3. Environmentally sustainable (green) - environmental	Carbon footprint Water footprint Soil conservation Biodiversity Food	Potential for labour intensive technology	Infrastructure and services	Nature of demand – size

		impacts	loss and waste Toxicity			
Required investments	Improvement of agricultural productivity and local market access by smallholders	Understanding performance		Low barriers to entry for the poor (capital, knowledge)	National systems of innovation	Tendencies, segments, potential niches due to seasonality
Entry-barrier levels for poor agro-processors	Macroeconomic stability and national economic policy coordination	4. Dynamic systems		Low risk	Transportation, ICT, energy and water	Price tendencies
Geographical location of producers	Short term regional strategy	5. Governance-centred		Poverty incidence and/or absolute poverty figures	Business environment	Customer preferences
					Macroeconomic stability and public governance	Current competitors
Economic growth	Rationalizing business and financial regulations, including eliminating trade and barriers	6. End-market driven		Market potential	Ease of opening a business and permitting / licensing	
		Improving performance		Strong domestic and/or international demand for the product	Access to finance	Domestic capacity and economic impact
Contribution to GDP - export earnings	Simplifying and harmonizing cross-borders regulations and documentation	7. Vision - strategy -driven		Growth potential of certain products/activities	Trade and investment policy	Capacity to competitively respond to opportunities
Potential for domestic / international demand	Improving regional infrastructure	8. Upgrading focused		Possibility for scaling up	Market access	
Public and private investment prospects	Standardizing consumer and industrial regulations	9. Scalable		Potential for leveraging public investment with private investment	Import tariffs	Analysis of institution
Potential for market integration of local SMESs	Long term regional strategy	10. Multilateral		Involves a large number of people	Export-import procedures	Analysis of technology
	Creating regional institutions to progress			Other criteria, such as	Border transit times	Analysis of service providers

	towards common monetary instruments				
Promotion of policy changes	Identify and develop cross border clusters that have direct dealings with strategic value chains		Value chain actors have entrepreneurial capacity to achieve improvement.	Industry-specific policies	Analysis of policies
Scaling up potential			Environmental sustainability	Industry institutionalisation industry maturity and coordination	Analysis of production conditions
Pragmatic aspect					
Extent of value adding potentials					
Production cost in comparison to competitors			Within framework of national and regional strategies	Public private coordination	
Available resources and number of operators			Social inclusion and gender	Other factors affecting chain participation of developing countries	
Availability of raw materials and other inputs				Labour cost availability and skill level	
				SPS Standards and their implementation	
				Transport cost quality and regulation in industry maturity including the presence of upstream and downstream chain.	
				Access to micro finance and micro economic stability , business environment import and export restrictions trade policy	
				Vulnerability to climate disease and natural disasters	

Table 21: Main priority criteria for the identification of value chains to be developed

<i>Agro-value chain analysis and development, UNIDO, 2009</i>	<i>Economic Report on Africa 2009, Economic Commission for Africa and African Union, 2009</i>	<i>Developing sustainable food value chains – Guiding principles, FAO, 2014</i>	<i>Making Value Chains Work Better for the Poor, DFID / M4P, 2008</i>	<i>Connecting local producers in developing countries to regional and global value chains, OECD, 2013</i>	<i>Building Competitiveness in Africa's Agriculture: A Guide to Value Chain Concepts and Applications, World Bank, 2010</i>
	Rationalizing business and financial regulations, including trade and investment barriers	6. End-market driven.	Market potential	Ease of opening a business and permitting / licensing	Market access
Economic growth		Improving performance	Strong domestic and/or international demand for the product	Access to finance	Other requirements
Contribution to GDP - export earnings	Simplifying and harmonizing cross-borders regulations and documentation	7. Vision - strategy -driven	Growth potential of certain products/activities	Trade and investment policy	Domestic capacity and economic impact
Potential for domestic / international demand	Improving regional infrastructure	8. Upgrading focused	Possibility for scaling up	Market access	Capacity to competitively respond to opportunities
Public and private investment prospects	Standardizing consumer and industrial regulations	9. Scalable	Potential for leveraging public investment with private investment	Import tariffs	Analysis of institution
Potential for market integration of local SMESs	Long term regional strategy	10. Multilateral	Involves a large number of people	Export-import procedures	Analysis of technology
	Creating regional institutions to progress towards common monetary instruments		Other criteria, such as	Border transit times	Analysis of service providers
Promotion of policy changes	Identify and develop cross-border clusters that have direct dealings with strategic value chains		Value chain actors have entrepreneurial capacity to achieve improvement.	Industry-specific policies	Analysis of policies
Scaling up potential	Developing a regional marketing strategy		Environmental sustainability	Industry institutionalization	Analysis of production conditions
Pragmatic aspects			Within framework of national and regional strategies	Industry maturity and coordination	

Source: UNIDO (2009). Agro-value chain analysis and development. The UNIDO Approach. A staff working paper. Vienna; Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009. Developing African Agriculture Through Regional Value Chains. Addis Ababa; FAO (2014). Developing sustainable food value chains – Guiding principles. Rome; M4P (2008) Making Value Chains Work Better for the Poor: A Toolkit for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International. Phnom Penh; OECD (2013). Connecting local producers in developing countries to regional and global value chains – update. OECD Trade Policy Paper (160). December. Webber, C. Martin (2010). Agriculture and Rural Development: Building Competitiveness in Africa's Agriculture: A Guide to Value Chain Concepts and Applications. World Bank Publications. Washington DC

B: BUILDING A PRIORITISATION SHEET FOR AGRICULTURAL RVCs

The particular purpose of this report, and the fact that none of the methods presented above is exact science and they can all be expanded or modified to better fit the situation or environment of the analysis¹⁶⁷, led to a decision to build a proper list of criteria. The rationale behind the choice of each criterion is explained below.

Table 22: Proposal for a customized assessment sheet to prioritize agricultural RVCs

Economic criteria
Export value in Africa
Growth of market demand in Africa
Contribution to GDP
Start-up costs
Existence of a competitive advantage
Potential for VA growth
Social criteria
Workforce
Potential for income generation
Potential for skills development
Other effects on rural life
Environmental criteria
Impact of the infrastructures needed (existing and future) on the environment
Existence of sustainable certifications and standards
Impact on biodiversity and soil conservation
Regional integration criteria
Potential impact on regional employment
Complementarities between countries
Potential for developing African infrastructures
Potential for innovation and R&D

Source: Author.

1. Economic criteria

Export value and its growth on the continent are basic indicators that can be obtained through databases such as Comtrade¹⁶⁸ or Trade Map¹⁶⁹. Learning about start-up costs consists in gathering information about the existence of the commodity chain in the area (is there a strong base? How much would it cost to create it?), including the availability of resources and inputs, and the mechanisms and efficiency assessment of the chain. This leads to the evaluation of a competitive advantage, based on the productivity, costs of production, infrastructure and business environment, if such elements are available at an early stage of analysis. As the focus of the report is about value addition, there will be a particular emphasis on VA.

2. Social criteria

Knowing about the workforce – is it a family farming system with smallholders or an extensive farming system with rural employees – and the potential for income growth can help assessing if it is worth putting resources in the VC and if it will affect the fight against poverty in the area. Other impacts, such as the prevalence of women workers and the possibility of skills development (with the existence of training centres or programmes, for instance), have to be taken into account.

3. Environmental criteria

Most of the prioritization methods put a strong emphasis on the economic and financial aspects, without considering (or only marginally) the social and environmental impacts¹⁷⁰. As the preservation of the environment is a key issue in agriculture development – e.g. in the attention given to soil regeneration, etc. – it seems evident to include environmental criteria in this assessment sheet. Moreover, many sustainable certifications and standards exist for agri-food products. They are mainly used for high end developed markets, but as the level of exigency of the African consumers will grow, they will be more and more crucial to continental trade.

4. Regional integration criteria

Most of the methodologies for prioritization methods are based on a national perspective or the objective of national integration into a GVC. For the purpose of this report, a degree of adaptation to the regional context – especially in the situation of the future CFTA – is needed. The choice is put on the synergies between countries (LDC producer vs. importer, intra-REC trade, etc.) and on the maximization of effects at the regional level (possibility to foster infrastructures at the regional level, potential to create regional innovation centres, etc.).

5. Criteria and their respective weight

The UNIDO methodology proposes to assign weight to each criterion, in order for the appraisal to be rapid and reasoned¹⁷¹. The weight attached to the indicators depends on the importance given to them by the institution or authority in charge of the prioritization. Each category (economic, social, environmental and regional) is given a weight. Each line is attributed a score (from 1 – low score – to 5 – high score), then a sub-total is calculated and changed into a percentage. A total weighted score is calculated at the end.

This methodology seems efficient and quick for a prioritization based on desk review, as it is the case in this study. The proposed weights are based on the objectives of this study (value addition, regional integration) and are described in the table below.

Table 23: Proposed weighted assessment sheet to prioritize agricultural RVCs

Weight	Categories and criteria	VC 1	VC2, etc.
	Economic criteria		
30%	Export value in Africa		
	Growth of market demand in Africa		
	Contribution to GDP		
	Start-up costs		
	Existence of a competitive advantage		
	Potential for VA growth		
	Sub-total		
	Economic impact = (30 x sub-total) / 100		
	Social criteria		
20%	Target population		
	Potential for income generation		
	Potential for skills development		
	Other effects on rural life		
	Sub-total		
Social impact = (20 x sub-total) / 100			
	Environmental criteria		
20%	Impact of the infrastructures needed on the environment		
	Existence of sustainable certifications and standards		
	Impact on biodiversity and soil conservation		
	Sub-total		
Environmental impact = (20 x sub-total) / 100			
	Regional integration criteria		
30%	Potential impact on regional employment		
	Complementarities between countries		
	Potential for developing African infrastructures		
	Potential for innovation and R&D		
	Sub-total		
Regional impact = (30 x sub-total) / 100			
	Total (sub-total+sub-total+sub-total+sub-total)		
	Total weighted score (impact+impact+impact+impact)		

Source: Author

C: SELECTION OF PROMISING COMMODITIES FOR RVCs

The approach of this chapter consists in applying the proposed methodology – assessment sheet, to a number of selected commodities presenting promising prospects for RVC development. Based on their recognized importance for the African agricultural economy, and on the emphasis put by several key publications, the following commodities or agricultural products have been chosen for testing the method:

- floriculture¹⁷²
- cashew¹⁷³
- pineapples¹⁷⁴
- avocados¹⁷⁵
- tea¹⁷⁶
- onion / shallot¹⁷⁷
- potato¹⁷⁸.

Their degree of priority for the development of RVCs is assessed and summarized in the following table. This this assessment was made out of global desk review; therefore, the information might be missing and decision bias based on the availability of information might occur. It has to be noted that the following rapid analysis of two sectors aims at illustrating the methodology and at being part of a set on decision instruments for policy-makers, and not at being the unique support in the decision to develop a commodity chain.

Table 24: Assessment of priority commodities for the development of VA-oriented RVCs

Weight	Categories and criteria	Floriculture	Cashew	Pineapples	Avocados	Tea	Onion / shallot	Potato
	HS code	HS0603	HS 0801	HS 080430	HS 080440	HS 0902	HS 0703	HS 0701
	Economic criteria							
30%	Export value in Africa	3	2	1	1	5	4	4
	Growth of market demand in Africa	3	2	4	4	5	2	4
	Contribution to GDP		3		3	5	3	2
	Start-up costs	3	3	3	3	3	3	3
	Existence of a competitive advantage	3	3	2	2	2	2	2
	Potential for VA growth	3	4	4	4	5	3	4
	Sub-total	15	17	14	17	25	17	19
	Economic impact = (30 x sub-total) / 100	4.5	5.1	4.2	5.1	7.5	5.1	5.7
	Social criteria							
20%	Target population	3	4		2	4	2	3
	Potential for income generation		3					
	Potential for skills development					2		
	Other effects on rural life		2	2				5
	Sub-total	3	9	2	2	6	2	8
	Social impact = (20 x sub-total) / 100	0.6	1.8	0.4	0.4	1.2	0.4	1.6
	Environmental criteria							
20%	Impact of the infrastructures needed on the environment							-1
	Existence of sustainable certifications and standards	3	3	3	3	3	3	3
	Impact on biodiversity and soil conservation					-2		3
	Sub-total	3	3	3	3	1	3	5
	Environmental impact = (20 x sub-total) / 100	0.6	0.6	0.6	0.6	0.2	0.6	1
	Regional integration criteria							

30%	Potential impact on regional employment	4	3	3	2	3	2	2
	Complementarities between countries	4	4	4	3	4	3	3
	Potential for developing African infrastructures	3	2	2		3	3	2
	Potential for innovation and R&D	3	3	3	3	3		4
	Sub-total	14	12	12	8	13	8	11
	Regional impact = (30 x sub-total) / 100	4.2	3.6	3.6	2.4	3.9	2.4	3.3
Total (sub-total+sub-total+sub-total+sub-total)		35	41	31	30	45	30	43
Total weighted score (impact+impact+impact+impact)		9.9	11.1	8.8	8.5	12.8	8.5	11.6

Source: Author

As a result, the following two sectors will be briefly analysed: the tea sector and the potato sector. The modalities for this analysis will follow the main lines highlighted in the quick value chain analysis as discussed previously.

1. The tea value chain: an existing RVC with growth potential at the regional and global levels

Macroeconomic profile

Tea production worldwide was worth 8.17 billion USD in 2012, with an average growth of 6% between 2008 and 2012, but at a slower pace between 2011 and 2012 (1%)¹⁷⁹. Kenya is the second largest exporting country in the world, just behind Sri Lanka, and the first for black tea¹⁸⁰. Other regional producers were in descending order Rwanda, Zimbabwe, Malawi and the United Republic of Tanzania. Burundi, Madagascar, Uganda, DRC, Mozambique, South Africa and Zimbabwe are involved as well in tea export¹⁸¹. Together, these producers account for more than 15% of the world output.

The domestic market is key, amounting to 10 to 30% of sales¹⁸². Various programmes are trying to boost consumption in Eastern African countries. As for continental demand, it is extremely important as well, with Morocco among the world top exporter¹⁸³, but also Sudan, Somalia, Djibouti, Nigeria or Egypt. Continental demand is said to be worth around 20% of sales of Kenyan tea¹⁸⁴.

Potential to boost value added is high in the tea sector – e.g. most of the tea from Eastern Africa is exported in bulk shape. Several opportunities exist:

- In packaging, more processing can be done to export smaller, branded retail packages, or packing into tea bags, instant tea and ready-to-drink beverages
- In product diversification, niche markets can be attained by producing more green tea or flavoured tea, or tea with health benefits, such as the Zimbabwe's Makoni or the South Africa's Rooibos
- In certification and standards, the interest for organic tea or Fairtrade-labelled tea is growing among domestic consumers, ready to pay a higher price.

The workforce is mostly composed of smallholders: they are approximately 450000 in Kenya¹⁸⁵. They are said to be among the small-scale tea farmers that are the highest paid in the world, with a growth in income having risen by 12.5% in 2012¹⁸⁶. The chain in Kenya is well structured, and is even seen as "one of the most successful cases of smallholder farmer inclusion in a VC"¹⁸⁷. The farmers sell their tea to buying centres (around 4000 in total in the country), which are in charge of quality control and transportation to one of the 63 tea factories in Kenya (around 60 buying centres for each factory). Committee members of the buying centres are elected from the farmers, and some members of the factory board are elected from the buying centres committee members. The factories are owned by farmers: 150000 farmers are shareholders of the Kenyan tea factories.

Then, the tea factories own the Kenya Tea Development Agency (KTDA), a private company since 2000. All tea farmers in Kenya are required to sell their output through KTDA. Most of the tea is sold in auction in Mombasa, but a growing part is sold directly to tea packers, including national ones. One of them, Kenya Tea Packers (KETEPA), is even indirectly owned by farmers, as it has KTDA as one of its major shareholders. KTDA is also responsible for providing inputs to farmers and human resources services for the factories.

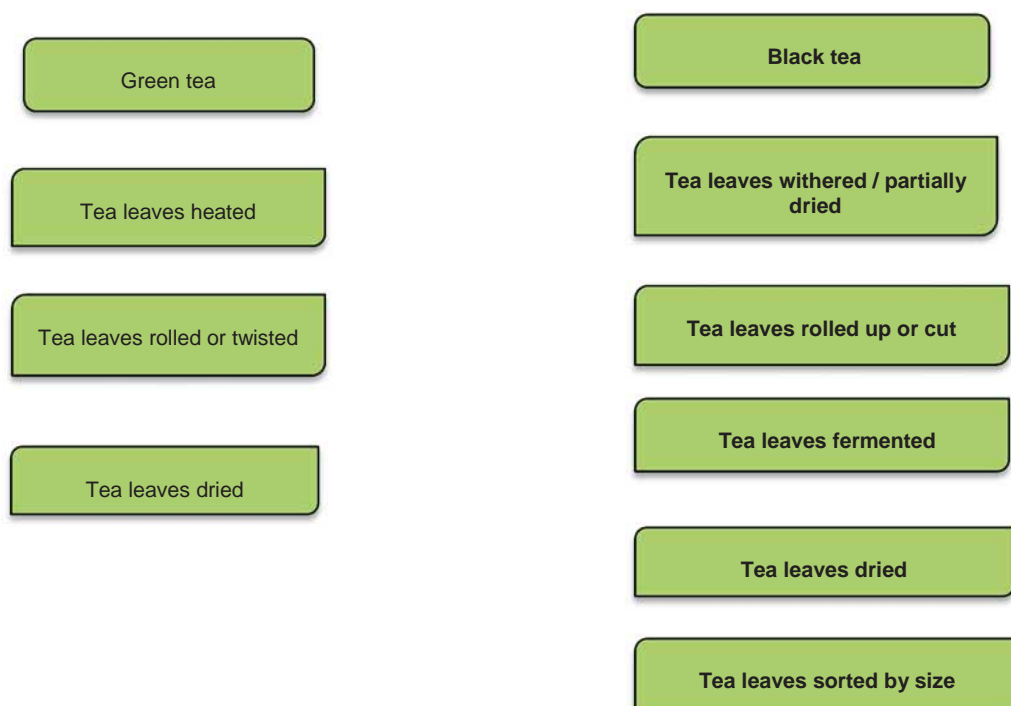
As a result, Kenyan tea growers capture around 75% of factory-gate tea price, while farmers in Rwanda, Uganda and Tanzania obtain only 25% of this price¹⁸⁸. However, the system is not exempt of problems, with small holders increasingly unsatisfied with the payment structure imposed by KTDA, its non-transparent communication and its business strategy¹⁸⁹.

The tea sector is therefore quite structured and its governance chain is well installed, at least in Kenya. Other tea boards exist, such as the Tanzania Tea Board or the *Office du Thé* in Burundi. The East African Tea Trade Association is also an actor intervening in the VC. The sector can be said to act already regional, as Kenya's auction centres market domestic tea and tea from the sub-region (mainly from Burundi, Rwanda, DRC, Uganda, Madagascar, United Republic of Tanzania, Malawi and Mozambique)¹⁹⁰.

In the tea sector, inputs and raw material are locally or regionally purchased, and there is no known issue concerning a problematic availability of inputs. However, the cost of inputs is rising¹⁹¹.

The VC segments are quite different between green tea and black tea.

Figure 3: Differences in processing green and black tea leaves



Source: Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013. Making the Most of Africa’s Commodities: Industrializing for Growth, Jobs and Economic Transformation. Addis Ababa.

2. Competitiveness

Production costs have risen in the recent year, to reach a growth of 15% in 2012. This is mainly due to energy costs, which are estimated to be at least 30% of the production costs. Improving sourcing of energy to buy a cheaper and more predictable energy (e.g. hydro-energy) would increase the producers’ margins¹⁹². When exporting to continental destinations, tariffs remain an issue.

Table 25: Tariff applied to tea exports from the 3 main African suppliers by their top 5 African markets

Kenya		Uganda		Rwanda	
Importers	Tariffs	Importers	Tariffs	Importers	Tariffs
Egypt	0	Kenya	0	Kenya	0
Sudan	0	Sudan	2	Uganda	0
Nigeria	5	DRC	20	Tanzania	0
South Africa	14.77	Chad	30	DRC	20
Somalia	n.a.	Rwanda	0	Burundi	0

Source: Trade Map, accessed on 30 November 2014

The table shows that African tea exporters are still heavily impacted by tariffs applied by their buyers. Tariffs in tea can amount to 30% and more. For instance, Morocco, the 14th largest tea importer in the world with 167.4 million USD in 2012¹⁹³ and importing 283,000 USD of black tea from Kenya in 2013, imposes to Kenyan tea a tariff of 32.5%.

Table 26: Tariffs applied by Morocco for the product 090240

MFN	32.5
Preferential tariff for AGADIR countries	0
Preferential tariff for Algeria	0
Preferential tariff for LDC	0
Preferential tariff for Libya	0
Preferential tariff for the League of Arab States	0

Source: Market Access Map, accessed on 30 November 2014

3. Potential to develop VA in the tea RVC

The tea RVC is an adequate sector for VA development: it has a strong macroeconomic profile, including a strong regional and domestic market; a regional production capacity internationally competitive; and a favourable business environment, with a governance chain well established in the leading country and replicable in other territories, and the arrival of the CFTA which will foster continental integration.

Current drawbacks are:

- the heavy tariffs imposed by some important continental buyers.
- the rather unstable international demand, which can be compensated by a faster development of continental sales.
- the high costs of production, especially due to insufficient infrastructures in energy supply.
- the threats posed by climate change, which will soon oblige to redesign the tea growing map in Eastern Africa¹⁹⁴.

According to the Economic Commission for Africa¹⁹⁵, upgrading trajectories for commodity value chains can be organized around four blocks:

- 1- processes: increasing the efficiency of internal processes.
- 2- products: introducing new products or improving existing ones.
- 3- functions: changing the mix of activities or moving to different links in the value chain.
- 4- chains: moving to a new value chain..

An analysis of VA growth potential against these four blocks seems pertinent. It could be¹⁹⁶:

- 1- Processes: in Kenya, the difficulties linked to the KTDA monopoly and methods should be solved, through consultations and dialogue supported by the government. However, the system, which gives an important place to smallholders, could be improved and scaled up at the regional levels: i.e. by creating or reinforcing national tea institutions and participatory mechanisms, and strengthening existing regional ones. A clear organizational scheme at the regional level could be proposed and sustained contacts established. Development cooperation and aid for trade mechanisms could be instrumental in this regard: aid for trade funds are often used for institutional strengthening, and examples exist in the tea sector (e.g. a programme by the French Agency for Development – AFD – to reinforce the trading capacities of the Burundi tea structure, the *Office du Thé du Burundi*¹⁹⁷). A strong regional institutional mechanism could take the lead in designing a marketing strategy, oriented towards boosting regional consumption and promoting the sector at the continental level, e.g. by campaigning for an early eradication of high tariffs in importing markets.
- 2- Products: the regional processing of new outputs could be developed. New products could include ready-made beverages, green tea, flavoured tea and better-packaged or conditioned teas. Such products should be ahead of the curve in certification and standard requirements, as transnational corporations have been pushing increasing pressure on tea factories on sustainability standards in the recent years¹⁹⁸. Seeking standards and certification opportunities is relevant at the regional level, as regional cooperation can help identify best practices to allow economies of scale. Furthermore, regional cooperation, as seen earlier, can be instrumental in the promotion of regional certification standards targeting the African consumers. It can also support

the securing of intellectual property rights and trademark protection¹⁹⁹ for specialty tea products, such as teas with particular health benefits.

- 3- **Functions:** linkage development can help maximize positive externalities derived from cooperation between firms and institutions. A linkage development strategy has to be carefully designed, after a thorough examination of the sector and its segments. At first glance, the tourism sector seems to be a value chain with which the tea sector could have benefits creating an alliance. The number of foreign visitors in East Africa has been steadily increasing in the recent years, amounting to more than 5 million²⁰⁰. The total GDP of the travel and tourism sector in Africa reached 75 billion USD in 2013²⁰¹. Tea is already marketed to tourists as a souvenir, but emphasis could be put on the local production and the sustainability certification. Tours to tea growing communities, visits to sustainable tea factories, etc., could be potential by-products providing additional income for farming communities.
- 4- **Chains:** the creation of a new VC does not seem relevant here, however, developing organic tea could be assimilated to setting up a new, parallel VC to traditional tea production.

4. The potato value chain: a promising RVC with food security benefits

Potato is “more than an ordinary food for the poor” and provides solid nutritional benefits²⁰². 2008 was celebrated as the International Year of the Potato, in a context of upheaval in international food markets, leading to a re-assessment of the crop as a source of food, employment and income²⁰³. The potato production is rapidly increasing in developing countries, with a growth of cultivated areas of 25% between 1997 and 2007²⁰⁴. In Africa, the increase over the same period has reached 50%²⁰⁵. According to Trade Map, the total export value of potato production in Africa (exports to world + exports to Africa) reached 369 million USD in 2013, with a relative increase since 2009; while at the same time, imports from world reached 432 million USD.

African main suppliers are South Africa, Ethiopia, Morocco, Namibia, Tunisia, Kenya, Egypt, Rwanda, Nigeria and Swaziland. Nonetheless, the potato value chain is often said to be promising in Western Africa, with production amounting to more than 156,000 tons a year (8% of the total production in SSA) for the five leading producing countries: Mali, Niger, Guinea, Senegal and Burkina Faso, as well as Mali accounting for more than 70% of the total production. A Central African country, Cameroon, is also a leading potato producer²⁰⁶. Potato is identified as a priority sector in National Agricultural Investment Programmes by the governments of Mali and Senegal²⁰⁷. However, it has to be noted that potatoes cultivated in West Africa are mainly sold on local markets; inter-regional trade is still weak²⁰⁸

For most of West African producers, potato is a cash crop²⁰⁹. However, its nutritive value and its importance for food security are undeniable. Thus some experts highlight the “twin role of potato”, a staple food crop for household consumption and food security and a cash crop²¹⁰. As the population is growing in the region – probably 450 million persons to feed in Sahel and West Africa by 2030²¹¹, cultivation of efficient staples crops, with potential for additional revenues if sold to other continental markets, is particularly relevant. Consumption is mainly urban; however, except The Gambia, Mauritania, Senegal, Côte d’Ivoire and Nigeria, consumption is not very well developed²¹².

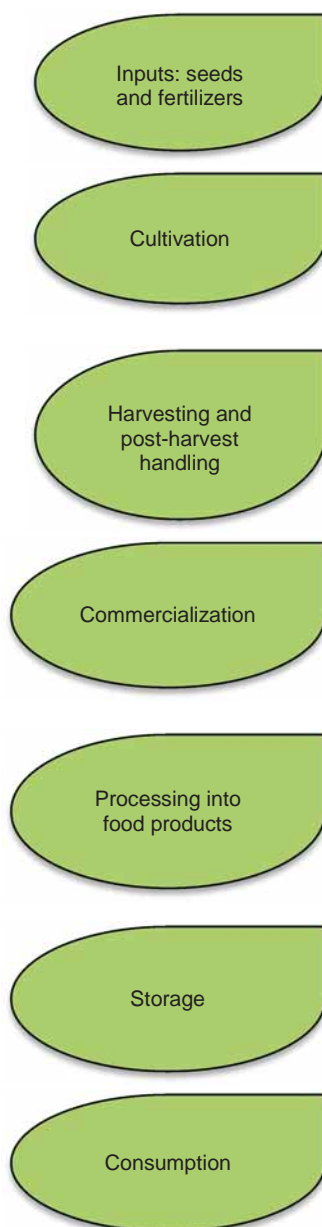
Women play an important role in the VC. They represent more than a half of the producers in Guinea, and are the most active in the commercialization process²¹³.

The potato sector in West Africa has reached a critical level of output, making processing viable. Hence the potential for adding value exist:

- In packaging and storing potato production
- In product diversification, since potato can be sold chilled, cut, prepared, or incorporated in food preparation (frozen or dehydrated potato products; chips – the main use of potato in the processing sector²¹⁴, crisps)
- In certification and standards: according to Market Access Map, 27 voluntary standards could potentially apply to the cultivation of potato in Africa, exported in Africa.

The potato VC can be decomposed as follows:

Figure 4 : basic representation of the potato value chain in West Africa



Source: Centre pour le Développement de l'Entreprise (2009). Guide technique de la culture de la pomme de terre en Afrique de l'Ouest. October; FAO and CFC (2010). Strengthening potato value chains. Technical and policy options for developing countries. Rome.

5. Competitiveness

Start-up costs are said to be quite important. It is important that the producer carefully assess the market potential before setting or extending production areas²¹⁵. It seems that production costs have been rising by 5 – 10% per year²¹⁶ in the recent period. Seeds represent the main production cost (40 – 60% total production costs).

Yields in potato production have been growing these last years. One of the main benefits of potato growing in West Africa is that the crop can be cultivated during the rainy and dry season. Average yield reach 22 tons per hectare in West Africa²¹⁷, but some varieties introduced in the sub-region could give up to 27 – 38 tons per hectare²¹⁸.

Most of the production is based on rain-fed agriculture. However, the irregularity of rain in the Sahel area remains an issue²¹⁹. Potato is the plant producing the biggest quantity of food per soil occupation day;

comparatively, it needs less work and less water²²⁰. Nonetheless, often motorized pumps are needed to pump water from streams and rivers, resulting in an increase in production costs²²¹.

The weakness and the inadequacy of infrastructure such as storage facilities, remains a problem²²²; it leads to bad conservation and quality of sold crops. Transport costs and the need for appropriate handling remain a major constraint for smallholders.

As it is the case for other commodities, access to credit is problematic. However, there are differences in prices, depending on the season and the distance for delivery. Prices are highest in August – September (inter-season), and in December – May (dry season)²²³.

As for other commodities, market access is not free of charges. For a country potentially exporting potatoes, like Mali, protection rates can reach 50% on the continent (by Angola) and are on average between 20 and 30%.

6. Potential to develop VA in the potato RVC

The potato RVC in West Africa is an interesting sector, because of its interest for food security and as a compensatory mechanism against volatile cereal prices²²⁴. It draws attention from the development cooperation sector, with technical cooperation projects being implemented by development partners such as FAO, the Common Fund for Commodities (CFC) jointly with European Co-operative for Rural Development (EUCORD), or smaller-scale NGOs. It has not been given special emphasis in the Abuja selection of commodities, and it has space to develop its potential for value addition.

Current drawbacks encompass:

- the conditions of production, largely depends on rain-fed agriculture.
- the supply of seeds and inputs.
- the technical skills of producers, especially in terms of post-harvest handling and pest management.
- the development of a regional demand.
- the lack of infrastructures for adequate storage and value-adding processing.

The same four blocks used above for the tea sector will serve as a framework for the analysis of a possible VA optimization strategy for the potato sector in West Africa.

- 1- Processes: institutional strengthening in the sector should be sought, by building or reinforcing potato growers associations and federations. Some of them exist at the local level, for instance, the Farmer Federation of Fouta-Djallon (FPFD) in Guinea. However, their existence at the national level should be fortified. Contacts and leakages with the regional structures of producers, like ROPPA, could be developed. These institutions could potentially lead changes in several segments of the chain, like fostering policy decisions on developing adequate storing or processing units, promoting policy coordination, improving transportation conditions, or designing a regional marketing channel. They should be instrumental in the development of national and regional markets, like broadcasting promotion campaigns aimed at boosting regional consumption. If there are surplus, they could provide advice on export procedures towards other countries of the continent. The regional level is also pertinent to organize training and skills development among producers and to disseminate the results of research; and research is particularly active in the potato sector, with the International Potato Centre based in Quito (Ecuador) and research programs of the Global Agricultural Research Partnership (CGIAR). Exchange of best practices with other developing countries – for instance, Latin American countries which have the strongest potato cultivation and consumption culture, or Asia where consumption is rapidly growing – could be helpful. The development of local seed production and an increase in yield are also crucial to the sector.
- 2- Products: there is space for the development of new potato products in West Africa. First, the consumption potato (with local varieties for instance) could be developed. Then, the processing into chips, potato flours, food preparations and other edible products should be developed. In Eastern Africa, potato chips are the main output of processing industries and their rapid growth is due to changes in eating habits and growing urbanization and tourism²²⁵. West Africa is likely to follow the same trends. Research programmes and households surveys could tell what could be the outputs of potato processing industries. Furthermore, these products – as well as potato crops – need packaging; a packaging industry could be further developed, along with an efficient marketing channel.

- 3- Functions: linkages with other agricultural sectors can be found. For instance, the onion sector, strong in West Africa, could benefit from a stronger packaging industry. A linkage development strategy should be carefully developed. The tourism sector (Senegal, Cape Verde) and the expatriate segment (Nigeria) could provide interesting opportunities.
- 4- Chains: moving to a new value chain does not seem necessary. However, developing a stronger sustainability certification culture – and therefore, a parallel VC – could be instrumental to tap into new high-end markets, like the tourism market or the urbanized middle class.

SUMMARY

This third chapter briefly discussed two “new” potential RVCs that could be developed. It is hoped that its logical and progressive structure will provide policy-makers with mechanisms to better understand the prioritization of value chains, a process which has to mix research, participatory assessment, field investigation and political will. The methodology presented here is only an introduction.

This chapter also presented the two potential RVCs as perfect illustrations of the benefits that the CFTA should provide. For the tea sector, the main gain could be the elimination of tariff barriers at the continental level, allowing Eastern African countries to freely sell to expanding markets out of their RECs. For the potato sector, one of the principal advantages lays in the fact that policy coordination and dialogue will be enhanced through the CFTA, providing for a better strategy towards trade development and food security. In a nutshell, chains as different as tea and potato will equally benefit from the implementation of the CFTA.

Eventually, the CFTA will support the strengthening of a coherent continental market potentially able to fulfil all its needs in food and agri-food products.

CHAPTER 4

RECOMMENDATIONS FOR FOSTERING AND ESTABLISHING REGIONAL VALUE CHAINS IN AGRICULTURAL COMMODITIES AND PROCESSED FOOD FOR AFRICA

This study was intended to provide an overview of existing value chains in agricultural commodities in Africa and to select promising ones, with a particular focus on the incremental creation of value linked to the upcoming implementation of the CFTA. As nine commodities (selected by the AU in 2006 in Abuja) plus two (prioritized through a new methodology) have been scrutinized, it is logical that the conclusion of the study provides a digest of potential policy recommendations and guidelines in order to move forward with the “scaling up” and “moving up” exercises in value chains.

A number of policy recommendations have already been provided in the study, especially in its third chapter about potential RVCs. Most of them are sector-specific and will not be repeated in this chapter. It seems useful to prepare a kind of compendium of general recommendations targeted at policy-makers willing to address the challenges to agricultural development in Africa. This compendium is mostly focused on the regional and continental levels.

As the value chain approach has been the underlying principle of this study, it is logical to use the VC methodology to organize the recommendations.

1. Interventions at the “macro” level

A VA optimization strategy in agricultural commodities and agri-food products would require interventions on a large bunch of categories and sub-categories of the VCs.

A first group of recommendations would concern productive capacities: while productivity and yield-enhancing techniques should be promoted, the protection of environment should not be ignored. The issues of degraded land, land property issues, water management and quality of fertilizers should be at the core of discussion on boosting productivity²²⁶. A steady supply of inputs, in qualitative and quantitative terms, should be secured²²⁷.

However this would be possible only if sector actors are strong, aware and capacitated. Therefore – and particularly in the context of enhanced integration with the establishment of the CFTA – the creation and strengthening of specialized structures should be developed. It is crucial to create multi stakeholders structures in sectors where none exist (like some roots and tubers)²²⁸, to strengthen farmers’ organisations and trade associations, but also to involve actors at the policy-making level. This can be done by fostering or setting up the national agriculture committees in national and regional Parliaments, and by organizing “value chains sessions” at important continental events such as meetings of the AU or UNECA²²⁹. As policy-makers are responsible for the implementation of cross-sector or sector-specific programmes, such as the AIDA, the programmes for infrastructure development or the Maputo commitments, it is crucial that they are aware of issues and evolutions, and that they are connected to professional groups. The lobbies in agriculture are often under-capacitated and in need of skills development; capacity-building activities exist but should be fostered, maybe at RECs level first, and extended then at the continental level. Exchange of best practices could be sought with other continents – Asia, and Latin America.

Capacitating professional associations will allow them to better understand policy-making decision processes, impact of the CFTA and will enhance their role in agricultural policy negotiations. Capacitating policy-makers will facilitate the comprehension of sector-specific problems and the resolution of blockages and protests at the national and regional levels.

2. Interventions impacting competitiveness

Competitiveness is the largest group of recommendations when the scope is on value chains. For instance, when asked about the most effective ways in helping developing countries to better participate in GVCs, business leaders talk about infrastructure development²³⁰, which is an important sub-category of the competitiveness aspect of value chains. Trade facilitation, barriers to investment and access to information are other decisive issues in the competitiveness pool.

The costs of production could be monitored by the concerned institutions strengthened at the national, regional and continental level. By securing a steady access to inputs and encouraging the development of local inputs (by establishing a fertilizer factory, for instance), governments or professional groups will help mastering the costs. To control the costs, free movements of goods and workers is crucial. This is where the involvement at the political level is key, and governments and RECs need now to operationalize the existing policies or protocols on free movement of people and labour migration²³¹.

Skilled labour migration is relevant if skills are largely recognized. Thus agreements on mutual recognition of qualifications and competences, oriented towards agriculture, are needed²³².

3. Access to facilities and information

Infrastructures are one of the major blocking points in developing trade, whether regionally, continentally or internationally. Many actions plans and implementation strategies for Africa have been prepared and agreed on the issue. A Programme for Infrastructure Development in Africa (PIDA) exists. Its implementation should be prioritized and operationalized²³³. Road infrastructure, energy and water supply are common constraints to producers and processors; tackling these issues at national, regional and continental level will incrementally help the addition of value in agricultural VCs.

Information is power. Almost all the actors of the agricultural VC in Africa lack adequate access to information -- either farmers, with prices or weather information; the processors, with export information; the professional associations; or the policy-makers. It should be a priority to develop or strengthen and generalize information systems. Some Market Information Systems exist but should be given attention and adequate resources (funding, staff, etc.). Alternative systems (by mobile phone, radio, etc.) should be expanded. Considering these issues at the regional or continental levels could allow economies of scale and enhanced coherence.

Macro-information on value chains is also key. Often countries and RECs depend on donors to obtain information about the value chains to be prioritized, the good practices implemented and the ones to be avoided²³⁴. An endogenous capacity on VC should be created and disseminated. Channels already exist, with networks and associations. They should be identified and fortified.

Access to information is also about access to research findings. Currently, funding on research is scarce and should be increased to 2% of agricultural GDP²³⁵. Regional centres of excellence of agricultural research could be strengthened when existing, and created where there is none²³⁶.

4. Investment and funding

Accessing to funding and investment is currently challenging, especially for smallholders. Investment should be boosted, but safeguards should be given to investors. Current initiatives on risk information and management are promising, but more needs to be done, for instance by encouraging investments through established frameworks for the strengthening of regional and continental complementarities²³⁷.

Tax and investment incentives should be created, but foreign and national investors should be assured that no non-technical barriers, such as corruption, will interfere with their investment. Tax incentives and progress towards the transparency of the regulatory environment could be promoted. In fostering large-scale investments, the promotion of public-private partnerships schemes is pertinent.

Access to credit is often denied to agricultural producers – especially smallholders. Policy-makers and professional associations should lobby for a better access to credit, to buy inputs or to modernize their production systems. RECs and governments could be instrumental in establishing finance institutions, including cross-border ones, to fund micro-credit for producers and exporters²³⁸.

5. Market access

The main immediate gain of the CFTA implementation will be the abolition of tariffs, allowing for the effective creation of a continental market. However, special attention should be given to non-tariff barriers and quantitative restrictions in food products. The creation of an Africa marketplace is feasible, given that trading interests of countries are not necessarily confined to the borders of their RECs (this was evidenced by some results of the brief value chain analysis in this report) and that tariffs will soon be part of history.

However, the eradication of tariff is a fear for many economic actors on the continent. For some of them, it is true that the establishment of the CFTA will have short-term adverse impacts²³⁹. This is the reason why adjustment mechanisms should be put in place, to address the adjustment costs such as revenue shortfalls²⁴⁰ and industry decline.

But market access is not only about tariffs. It is also about trade facilitation and custom procedures, that will not be automatically abolished by the establishment of the CFTA. Important efforts should be put at the continental level to harmonize procedures and to reduce delays, by standardizing the nature of the required documents, for instance, or promoting the use of ICT in this area with online hubs about trade procedures, transportation and custom documentation²⁴¹. The fight against illegal practices, such as road blockages or illegal fees at customs offices, could be strengthened.

Standards and certifications are part of market access issues. Regional standards, when existing, should be disseminated, explained and understood by chain stakeholders. New ones should be developed, to promote inclusiveness in productive processes and sustainability in consumption.

6. Business environment

The improvement of the business climate environment is also quoted by business leaders as one of the priorities to develop inclusive VCs²⁴². This can be done by several actions. First, securing contractual arrangements and business models, will automatically foster investment and improve levels of trust between different economic actors. But the dialogue between stakeholders, through forums, fairs, events or other mechanisms (Chambers of Commerce, Chambers of Agriculture) should be dramatically expanded.

Awareness actions among populations, on the importance of agriculture for local development and the respective roles of the VC actors, could globally contribute to a better business environment

It is also through joint marketing that the business climate will improve, if it results in an increase of sales. And the regional and continental levels are particularly relevant for that. Sector marketing strategies could be developed first at the regional, than at the continental level. Electronic vectors of communication (Internet campaigns) and traditional means (TV or poster announcements) could serve.

7. The role of international organizations

International organizations, particularly continental ones or trade-oriented ones like UNCTAD, can play an important role in supporting the African continent for the development of viable and sustainable agricultural VCs. Many organizations, including UNCTAD, have been a long-standing development partner of African countries, RECs and the African Union.

The study opened with criticism towards the capacity of development partners, and particularly UN agencies, to design and promote a single concept of value chain. This is a concrete action that international organizations could take: organizing rapidly a task force or a committee in order to harmonize views and methodologies on the VC concept. This does not mean abolishing differences and expertise of each organization. Every organization has its scope, its experience and its competence. But the growing interest for VC calls for an inter-organization standing mechanism to share knowledge, concepts and experience on the concept. It could also aimed at disseminating VC knowledge, and ensuring that VC knowledge created within the UN system is turned into concrete and efficient policy interventions²⁴³. If adequately designed and equipped, it will eventually avoid overlaps and join the voices calling for an enhanced efficiency of the UN development system.

International organizations could also be instrumental in fostering and mandating research on relevant topics. As the emergence of regional chains is a relatively new trend²⁴⁴, a better understanding of their mechanisms and benefits would require more statistical research and field investigations. This would eventually feed policy interventions and RVC development.

This list of possible policy interventions is not exhaustive, and should be customized and adapted to each commodity, each segment, or each level of focus (national, regional or continental). It however provides a basis, some food for thought. As the Economic Commission for Africa recently highlighted, developing regionally integrated VCs and markets is both feasible and important²⁴⁵, and this study is an attempt to contribute to the process.

REFERENCES

- AFD, CIRAD and FIDA (2011). Les cultures vivrières pluviales en Afrique de l'Ouest et du Centre Eléments d'analyse et propositions pour l'action. *A savoir* (06). May.
- African Development Bank (2013). Agricultural Value Chain Financing (AVCF) and Development for Enhanced Export Competitiveness. Tunis.
- African Union (2006). Resolution of the Abuja Food Security Summit. Addis Ababa.
- African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade. Issues Affecting Intra-African Trade, Proposed Action Plan for boosting Intra-African Trade and Framework for the fast tracking of a Continental Free Trade Area. Addis Ababa.
- Benin, S., Kennedy, A., Lambert, M., McBride, L. (2010). Monitoring African agricultural development processes and performance: A comparative analysis. ReSAKSS Annual Trends and Outlook Report 2010. International Food Policy Research Institute (IFPRI).
- Centre pour le Développement de l'Entreprise (2009). Guide technique de la culture de la pomme de terre en Afrique de l'Ouest. October.
- Chen, Y. (2011). Literature Review – Value Chains. George Washington University – IDS Capstone project.
- European Parliament, Directorate-General for External Policies, Policy Department (2014). African, Caribbean and Pacific (ACP) Countries' position on Economic Partnership Agreements (EPAs). Brussels.
- Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013. Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation. Addis Ababa.
- Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009. Developing African Agriculture Through Regional Value Chains. Addis Ababa.
- Economic Commission for Africa, African Union and African Development Bank (2013). Assessing Regional Integration in Africa (ARIA VI): Harmonizing Policies to Transform the Trading Environment. Addis Ababa.
- Economic Commission for Africa, African Union and African Development Bank (2012). Assessing Regional Integration in Africa (ARIA V): Towards an African Continental Free Trade Area. Addis Ababa.
- Economic Commission for Africa (2012). Livestock value chains in Eastern and Southern Africa: a regional perspective ECA-AUC-FAO. Powerpoint presentation. Addis-Ababa.
- Economic Commission for Africa, Sub-regional office for West Africa (2012). Regional Integration : agricultural value chains to integrate and transform agriculture in West Africa. Niamey.
- Economic Commission for Africa, Southern Africa Office (2010). Agricultural Input Business Development in Africa: Opportunities, Issues and Challenges.
- European Union (2013). Using trade to promote development in countries in Sub-Saharan Africa, the Caribbean & the Pacific.
- FAO (2014). Developing sustainable food value chains – Guiding principles. Rome.
- FAO (2007). Governance, coordination and distribution along commodity value chains. Commodity and Trade proceedings. Rome.
- FAO and CFC (2010). Strengthening potato value chains. Technical and policy options for developing countries. Rome.
- FAO and IFAD (2013). Rebuilding West Africa's food potential: Policies and market incentives for smallholder-inclusive food value chains. Rome.
- GTZ (2008). ValueLinks Manual. The Methodology of Value Chain Promotion. January.
- ICTSD (2013). Special Edition. Aid For Trade: Into the future. *Bridges Africa. Trade and Sustainable Development News and Analysis on Africa*. 2 (4). July. Geneva.
- ICTSD (2013). Tackling Africa's trade challenges. *Bridges Africa. Trade and Sustainable Development News and Analysis on Africa*. 2 (1). March. Geneva.

- IFAD (2010). Rural poverty report 2011. New realities, new challenges: new opportunities for tomorrow's generation. Rome.
- ITC (2013). LDCs and Global Value Chains: Using Aid for Trade to Seize New Opportunities. Technical paper. Geneva.
- ITC (2013). Improving Africa's Cotton Value Chain for Asian Markets. Technical paper. Geneva.
- ITC (2012). The participation of LDCs in value chains. Geneva.
- ITC (2012). Africa's trade potential. Export opportunities in growth markets. Technical paper. Geneva.
- ITC (2009). Medicinal plants and extracts. *Market News Service*. Geneva, December.
- ITC (2008). Sector Analysis for Value Chain Development. Geneva, June.
- ITC. Export potential assessment. Identifying priority sectors and attractive markets for better targeted export promotion actions.
- IRD (2013). *Sciences au Sud*. 72. Novembre – Décembre.
- Lavigne Delville, P., (2014). "Les Africains resteront-ils maîtres de l'aménagement de leur territoire et les paysans de leurs terres ?". *Débats et controverses* (9), 2014 (1). GRET. Nogent-sur-Marne.
- M4P (2008) Making Value Chains Work Better for the Poor: A Toolbook for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International. Phnom Penh.
- Mitchell, J., Keane, J., Coles, C. (2009). Trading Up: How a Value Chain Approach Can Benefit the Rural Poor. ODI. London, December.
- Morris, M., Kaplinsky, R., Kaplan, D. (2012). One Thing Leads To Another. Promoting Industrialisation by Making the Most of the Commodity Boom in Sub-Saharan Africa.
- OECD (2013). Connecting local producers in developing countries to regional and global value chains – update. *OECD Trade Policy Paper* (160). December.
- OECD, World Trade Organization (2013). Aid For Trade 2013: Connecting to value chains.
- OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood.
- Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).
- SADC Secretariat (2011). Regional Agricultural Policy (RAP) Country Summary Agricultural Policy Review Reports. January.
- Schaffnit-Chatterjee, C. (2014). "Agricultural value chains in Sub-Saharan Africa". *Current issues Emerging markets*, 14 April 2014. Deutsche Bank Research. Frankfurt.
- South Centre (2014). Addressing the issue of commodities. *South Bulletin* (80), 30 June 2014.
- South Centre (2014). Global value chains: unpacking the issues of concern for developing countries. *South Bulletin* (77), 4 February 2014.
- South Centre (2013). Global value chains (GVCs) from a development perspective. Analytical note. Geneva.
- Springer-Heinze, Andreas and Eilgmann, Alfons (2008). *Value links: training seminar*.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. Tea sector. *Agritrade*. October.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. Cotton sector. *Agritrade*. October.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. ACP–EU fisheries: Market access and trade. *Agritrade*. October.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. Oil crops sector. *Agritrade*. October.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. Poultry sector. *Agritrade*. September.
- Technical Centre for Agricultural and Rural Cooperation (ACP–EU) (2013). Executive brief. Rice. *Agritrade*. September.

- UNCTAD (2014). Economic Development in Africa Report 2014. Catalysing investment for transformative growth in Africa. Geneva.
- UNCTAD (2014). Trade and Development Report 2014. Global governance and policy space for development. Geneva.
- UNCTAD (2013). Global supply chains: trade and economic policies for developing countries. *Policy issues in international trade and commodities study series* (55). Geneva.
- UNCTAD (2013). Economic Development in Africa Report 2013. Intra-African trade: unlocking private sector dynamism. Geneva.
- UNCTAD (2013). Regional integration and foreign direct investment in developing and transition economies. Note by the UNCTAD secretariat. Geneva.
- UNCTAD (2013). World Investment Report. Geneva.
- UNCTAD (2013). Global Commodities Forum. 2013 Report. Recommitting to commodity sector development as an engine of economic growth and poverty reduction. Geneva.
- UNCTAD (2012). Enabling the Graduation of LDCs: Enhancing the Role of Commodities and Improving Agricultural Productivity. Geneva.
- UNCTAD (2012). Global Commodities Forum. 2012 Report. Harnessing development gains from commodities production and trade. Geneva.
- UNCTAD (2012). Economic Development in Africa Report 2012. Structural transformation and sustainable development in Africa. Geneva.
- UNCTAD (2012). Evolution of the international trading system and its trends from a development perspective. Note by the UNCTAD secretariat. Geneva.
- UNCTAD (2011). Integration of developing countries in global supply chains, including through adding value to their exports. Note by the UNCTAD secretariat. Geneva.
- UNCTAD (2011). Report of the Trade and Development Commission on its third session. Geneva.
- UNCTAD (2009). Economic Development in Africa Report 2009. Strengthening regional economic integration for Africa's development. Geneva.
- UNCTAD (2007). Trade and Development Report 2007. Regional cooperation for development. Geneva.
- UNDPI (2014). Briefing by African Regional Economic Communities to UN Member States. *Africa Renewal*. New York. October.
- UNDPI (2014). 2014 Special Edition. Agriculture is Africa's next frontier. *Africa Renewal*. New York.
- UNDPI (2014). Trade in Africa: unfinished business. *Africa Renewal*. New York, August.
- UNIDO (2009). Agro-value chain analysis and development. The UNIDO Approach. A staff working paper. Vienna.
- USAID (2008). Participatory market system development. Best practices in implementation of value chain development programs. September.
- Webber, C. Martin (2010). Agriculture and Rural Development : Building Competitiveness in Africa's Agriculture : A Guide to Value Chain Concepts and Applications. World Bank Publications. Washington DC

--- Databases and websites ---

- Eurostat, <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>
- FAOSTAT, http://faostat3.fao.org/faostat-gateway/go/to/download/G1/*/E
- Integrated Trade Intelligence Portal (World Trade Organization), <http://i-tip.wto.org>
- Market Access Map (ITC), <http://www.macmap.org>
- Regional Trade Agreements Information System (RTA-IS) (World Trade Organization), <http://rtais.wto.org/UI/PublicMaintainRTAHome.aspx>
- Statistics Database (World Trade Organization), <http://stat.wto.org/Home/WSDBHome.aspx?Language=>
- Standards Map (ITC), <http://www.standardmap.org>

Tariff Download Facility (World Trade Organization), <http://tariffdata.wto.org>
Trade Competitiveness Map (ITC), <http://legacy.intracen.org/appli1/tradecom/TPIC.aspx>
Trade Map (ITC), <http://www.trademap.org/Index.aspx>
UN Commodity Trade Database (UN Comtrade), <http://comtrade.un.org>
United States International Trade Commission, www.usitc.gov
World Customs Organization, <http://www.wcoomd.org/en.aspx>

Notes

- ¹ Webber, C. Martin (2010). Agriculture and Rural Development : Building Competitiveness in Africa's Agriculture : A Guide to Value Chain Concepts and Applications. World Bank Publications. Washington DC.
- ² <http://www.fao.org/family-farming-2014/en/>
- ³ UNDP (2014). 2014 Special Edition. Agriculture is Africa's next frontier. *Africa Renewal*. New York.
- ⁴ OECD, World Trade Organization (2013). Aid For Trade 2013: Connecting to value chains.
- ⁵ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013. Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation. Addis Ababa.
- ⁶ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009. Developing African Agriculture Through Regional Value Chains. Addis Ababa.
- ⁷ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ⁸ Please refer to Part 1 of this report.
- ⁹ OECD, World Trade Organization (2013). Aid For Trade 2013: Connecting to value chains.
- ¹⁰ UNCTAD (2013). World Investment Report. Geneva.
- ¹¹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹² *Ibid.*
- ¹³ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update. OECD Trade Policy Paper (160). December.
- ¹⁴ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ¹⁵ *Ibid.*
- ¹⁶ UNDP (2014). 2014 Special Edition, *op.cit.*
- ¹⁷ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁸ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹⁹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ²⁰ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade. Issues Affecting Intra-African Trade, Proposed Action Plan for boosting Intra-African Trade and Framework for the fast tracking of a Continental Free Trade Area. Addis Ababa.
- ²¹ Webber, C. Martin (2010), *op.cit.*
- ²² Kaplinsky and Morris (2001), quoted in Proctor, F., Lucchesi, V. (2012). Mapping Study on Value Chain Initiatives in ACP regions. Technical Centre for Agricultural and Rural Cooperation (ACP-EU).
- ²³ UNCTAD (2013). World Investment Report, *op.cit.*
- ²⁴ *Ibid.*
- ²⁵ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ²⁶ Webber, C. Martin (2010), *op.cit.*
- ²⁷ UNCTAD (2013). World Investment Report, *op.cit.*
- ²⁸ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ²⁹ M4P (2008) Making Value Chains Work Better for the Poor: A Toolkit for Practitioners of Value Chain Analysis, Version 3. Making Markets Work Better for the Poor (M4P) Project, UK Department for International Development (DFID). Agricultural Development International. Phnom Penh.
- ³⁰ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ³¹ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ³² *Ibid.*
- ³³ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ³⁴ Proctor, F., Lucchesi, V. (2012), *op.cit.*

-
- ³⁵ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ³⁶ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ³⁷ *Ibid.*
- ³⁸ *Ibid.*
- ³⁹ UNCTAD (2013). World Investment Report, *op.cit.*
- ⁴⁰ Established in 2006 under the Comprehensive Africa Agriculture Development Programme (CAADP), it supports efforts to promote evidence and outcome-based policy planning and implementation as part of the CAADP agenda. <http://www.resakss.org>
- ⁴¹ Economic Commission for Africa, African Union and African Development Bank (2012). Assessing Regional Integration in Africa (ARIA V): Towards an African Continental Free Trade Area. Addis Ababa.
- ⁴² UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States, <http://unohrrls.org>
- ⁴³ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ⁴⁴ Economic Commission for Africa, African Union and African Development Bank (2012). ARIA V, *op.cit.*
- ⁴⁵ FAO (2014). Developing sustainable food value chains – Guiding principles. Rome.
- ⁴⁶ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ⁴⁷ Please see below.
- ⁴⁸ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ⁴⁹ Webber, C. Martin (2010), *op.cit.*
- ⁵⁰ It has to be mentioned that the bibliography in annex of this report, presents a very large selection of publications on value chains, agriculture and regional integration. Not all of them have been used to prepare this document.
- ⁵¹ UNIDO (2009). Agro-value chain analysis and development. The UNIDO Approach. A staff working paper. Vienna.
- ⁵² Please refer to Table 2.
- ⁵³ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁵⁴ UNDP (2014). 2014 Special Edition, *op.cit.*
- ⁵⁵ *Ibid.*
- ⁵⁶ In the Harmonized System, the more digits are provided, the more specific the product will be. HS codes up to 6-digit level are followed internationally and are common to all countries. Because greater commodity details are needed than the 4- and 6-digit HS headings and subheadings, and to suit the national requirements, national customs usually determine an 8-digit level.
- ⁵⁷ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁵⁸ Source: <http://www.sadc.int>
- ⁵⁹ Source : <http://www.resakss.org/region/monitoring-progress/africa-wide>
- ⁶⁰ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁶¹ Source : Trade Map, accessed 2 October 2014.
- ⁶² Webber, C. Martin (2010), *op.cit.*
- ⁶³ UNCTAD (2013). World Investment Report, *op.cit.*
- ⁶⁴ *Ibid.*
- ⁶⁵ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ⁶⁶ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ⁶⁷ Webber, C. Martin (2010), *op.cit.*
- ⁶⁸ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ⁶⁹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁷⁰ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ⁷¹ *Ibid*; Webber, C. Martin (2010), *op.cit.*
- ⁷² Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁷³ Source: <http://www.sadc.int> ; <http://www.comesa.int> ; OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ⁷⁴ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ⁷⁵ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ⁷⁶ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁷⁷ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ⁷⁸ *Ibid.*
- ⁷⁹ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ⁸⁰ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁸¹ Webber, C. Martin (2010), *op.cit.*

-
- ⁸² Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁸³ *Ibid.*
- ⁸⁴ UNDP (2014). 2014 Special Edition, *op.cit.*
- ⁸⁵ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ⁸⁶ IRD (2013). *Sciences au Sud*. 72. Novembre – Décembre.
- ⁸⁷ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ⁸⁸ Webber, C. Martin (2010), *op.cit.*
- ⁸⁹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁹⁰ IRD (2013). *Sciences au Sud*, *op.cit.*
- ⁹¹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁹² Economic Commission for Africa, African Union and African Development Bank (2012). ARIA V, *op.cit.*
- ⁹³ *Ibid.*
- ⁹⁴ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ⁹⁵ *Ibid.*
- ⁹⁶ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁹⁷ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ⁹⁸ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ⁹⁹ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ¹⁰⁰ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ¹⁰¹ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹⁰² Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁰³ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ¹⁰⁴ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ¹⁰⁵ IRD (2013). *Sciences au Sud*, *op.cit.*
- ¹⁰⁶ UNCTAD (2013). World Investment Report, *op.cit.*
- ¹⁰⁷ *Ibid.*
- ¹⁰⁸ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁰⁹ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ¹¹⁰ Non-tariff measures (NTMs) are a major impediment to international trade and can prevent market access. They can be defined as policy measures, other than custom tariffs and including technical regulations, product standards and customs procedures, that may have an impact on international trade.
- ¹¹¹ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ¹¹² Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹¹³ International Trade Centre (ITC), <http://www.intracen.org>
- ¹¹⁴ <http://www.macmap.org>
- ¹¹⁵ Source: <http://www.intracen.org/itc/publications/publications-catalogue/?taxid=2267>
- ¹¹⁶ Source : http://www.intracen.org/itc/market-info-tools/non-tariff-measures/business-surveys/#summary_of_results
- ¹¹⁷ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹¹⁸ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ¹¹⁹ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ¹²⁰ Source : <http://www.standardsmap.org>, accessed on 27 November 2014
- ¹²¹ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*
- ¹²² OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ¹²³ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ¹²⁴ Automatized System for Customs Data (ASYCUDA), www.asycuda.org
- ¹²⁵ Cambodia Development Council. Cambodia Investment Board. Cambodia Special Economic Zone Board
- ¹²⁶ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ¹²⁷ http://www.aace-africa.net/nouveau_2/

-
- ¹²⁸ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹²⁹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹³⁰ UNDP (2014). 2014 Special Edition, *op.cit.*
- ¹³¹ UNDP (2014). 2014 Special Edition, *op.cit.*
- ¹³² A lot of relevant information about these sectors has already been provided in the former section; repetitions will be avoided and references to previous paragraphs will be made.
- ¹³³ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ¹³⁴ *Ibid.*
- ¹³⁵ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹³⁶ UNDP (2014). 2014 Special Edition, *op.cit.*
- ¹³⁷ Source : Author's calculation based on TradeMap.
- ¹³⁸ Source : Author's calculation based on TradeMap.
- ¹³⁹ Nota : for each commodity, only the first ten exporters have been selected.
- ¹⁴⁰ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁴¹ *Ibid.*
- ¹⁴² FAO (2014). Developing sustainable food value chains, *op.cit.*
- ¹⁴³ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁴⁴ Source : <http://www.fao.org/family-farming-2014/news/news/details-press-room/en/c/218469/>
- ¹⁴⁵ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁴⁶ *Ibid.*
- ¹⁴⁷ IRD (2013). Sciences au Sud, *op.cit.*
- ¹⁴⁸ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁴⁹ IRD (2013). Sciences au Sud, *op.cit.*
- ¹⁵⁰ *Ibid.*
- ¹⁵¹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁵² IRD (2013). Sciences au Sud, *op.cit.*
- ¹⁵³ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁵⁴ Please refer to the former section.
- ¹⁵⁵ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁵⁶ *Ibid.*
- ¹⁵⁷ African Growth and Opportunity Act (United States of America), Everything But Arms (European Union).
- ¹⁵⁸ Source : Author's calculation based on Market Access Map.
- ¹⁵⁹ Economic Commission for Africa, African Union and African Development Bank (2012). ARIA V, *op.cit.*
- ¹⁶⁰ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ¹⁶¹ Economic Commission for Africa and African Union (2009). Economic Report on Africa 2009, *op.cit.*
- ¹⁶² *Ibid.*
- ¹⁶³ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ¹⁶⁴ Webber, C. Martin (2010), *op.cit.*
- ¹⁶⁵ UNIDO (2009). Agro-value chain analysis and development, *op.cit.*
- ¹⁶⁶ *Ibid.*
- ¹⁶⁷ UNIDO (2009). Agro-value chain analysis and development, *op.cit.*
- ¹⁶⁸ <http://comtrade.un.org>
- ¹⁶⁹ <http://www.trademap.org/Index.aspx>
- ¹⁷⁰ FAO (2014). Developing sustainable food value chains, *op.cit.*
- ¹⁷¹ UNIDO (2009). Agro-value chain analysis and development, *op.cit.*
- ¹⁷² Webber, C. Martin (2010), *op.cit.*
- ¹⁷³ *Ibid.*
- ¹⁷⁴ FAO (2014). Developing sustainable food value chains, *op.cit.*; Webber, C. Martin (2010), *op.cit.*
- ¹⁷⁵ Webber, C. Martin (2010), *op.cit.*
- ¹⁷⁶ Webber, C. Martin (2010), *op.cit.*; Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*; FAO (2014). Developing sustainable food value chains, *op.cit.*; Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector. Agritrade. October.
- ¹⁷⁷ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ¹⁷⁸ *Ibid.*
- ¹⁷⁹ Source: Comtrade, <http://comtrade.un.org>
- ¹⁸⁰ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁸¹ *Ibid.*
- ¹⁸² Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹⁸³ Source: Comtrade, <http://comtrade.un.org>

-
- ¹⁸⁴ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁸⁵ FAO (2014). Developing sustainable food value chains, *op.cit.*
- ¹⁸⁶ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁸⁷ FAO (2014). Developing sustainable food value chains, *op.cit.*
- ¹⁸⁸ *Ibid.*
- ¹⁸⁹ *Ibid.*
- ¹⁹⁰ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁹¹ *Ibid.*
- ¹⁹² *Ibid.*
- ¹⁹³ Source : Comtrade, <http://comtrade.un.org>
- ¹⁹⁴ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁹⁵ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹⁹⁶ Such assessment is not exhaustive and should be discussed, designed and amplified through consultation mechanisms.
- ¹⁹⁷ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ¹⁹⁸ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ¹⁹⁹ Technical Centre for Agricultural and Rural Cooperation (ACP—EU) (2013). Executive brief. Tea sector, *op.cit.*
- ²⁰⁰ Source: EAC Statistic Portal, http://www.eac.int/statistics/index.php?option=com_content&view=frontpage&Itemid=1
- ²⁰¹ Source : World Travel and Tourism Council, <http://www.wttc.org>
- ²⁰² FAO and CFC (2010). Strengthening potato value chains. Technical and policy options for developing countries. Rome.
- ²⁰³ *Ibid.*
- ²⁰⁴ Source : International Potato Centre, <http://cipotato.org>
- ²⁰⁵ Centre pour le Développement de l'Entreprise (2009). Guide technique de la culture de la pomme de terre en Afrique de l'Ouest. October.
- ²⁰⁶ FAO and IFAD (2013). Rebuilding West Africa's food potential: Policies and market incentives for smallholder-inclusive food value chains. Rome.
- ²⁰⁷ *Ibid.*
- ²⁰⁸ FAO and CFC (2010) , *op.cit.*
- ²⁰⁹ Centre pour le Développement de l'Entreprise (2009), *op.cit.*
- ²¹⁰ FAO and CFC (2010) , *op.cit.*
- ²¹¹ FAO and IFAD (2013) , *op.cit.*
- ²¹² AFD, CIRAD and FIDA (2011). Les cultures vivrières pluviales en Afrique de l'Ouest et du Centre Eléments d'analyse et propositions pour l'action. A savoir (06). May.
- ²¹³ FAO and CFC (2010) , *op.cit.*
- ²¹⁴ *Ibid.*
- ²¹⁵ Centre pour le Développement de l'Entreprise (2009), *op.cit.*
- ²¹⁶ *Ibid.*
- ²¹⁷ *Ibid.*
- ²¹⁸ FAO and CFC (2010) , *op.cit.*
- ²¹⁹ Centre pour le Développement de l'Entreprise (2009), *op.cit.*
- ²²⁰ *Ibid.*
- ²²¹ FAO and CFC (2010) , *op.cit.*
- ²²² *Ibid.*
- ²²³ *Ibid.*
- ²²⁴ *Ibid.*
- ²²⁵ *Ibid.*
- ²²⁶ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*
- ²²⁷ Proctor, F., Lucchesi, V. (2012), *op.cit.*
- ²²⁸ *Ibid.*
- ²²⁹ *Ibid.*
- ²³⁰ OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*
- ²³¹ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*
- ²³² *Ibid.*

²³³ *Ibid.*

²³⁴ Proctor, F., Lucchesi, V. (2012), *op.cit.*

²³⁵ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*

²³⁶ Proctor, F., Lucchesi, V. (2012), *op.cit.*

²³⁷ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*

²³⁸ *Ibid.*

²³⁹ *Ibid.*

²⁴⁰ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*

²⁴¹ African Union Commission and Economic Commission for Africa (2012). Boosting Intra-African Trade, *op.cit.*

²⁴² OECD, World Trade Organization (2013). Aid for Trade and Value Chains in Agrifood, *op.cit.*

²⁴³ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*

²⁴⁴ OECD (2013). Connecting local producers in developing countries to regional and global value chains – update, *op.cit.*

²⁴⁵ Economic Commission for Africa and African Union (2013). Economic Report on Africa 2013, *op.cit.*

