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# **Commodity Development Strategies in the Integrated Framework**

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## Contents

Acronyms.....	iii
Acknowledgements.....	iv
<b>Executive Summary.....</b>	<b>1</b>
<b>1. Introduction.....</b>	<b>8</b>
<b>2. Analytical Framework.....</b>	<b>9</b>
2.1 Objective of the review.....	9
2.2 Scope of the analysis.....	9
2.3 Methodology.....	9
2.4 Criteria and rationale.....	11
A) Supply chain analysis.....	11
B) Value chain analysis.....	11
C) Levels of intervention.....	14
2.5 Data analysis.....	14
<b>3. Main Findings.....</b>	<b>20</b>
3.1 Heterogeneous in-country approach to commodity development.....	20
3.2 Heterogeneous between-country approach to commodity development.....	21
3.3 Policy-oriented bias.....	23
<b>4. Main Implications.....</b>	<b>25</b>
4.1 Supply chain.....	26
4.2 Value chain.....	29
4.3 Summing up.....	40
<b>5. Recommendations for Follow Up.....</b>	<b>43</b>
5.1 Commodity development strategy of LDCs.....	43
5.2 Policy recommendations.....	43
5.3 Recommendations on institutional arrangements.....	45
5.4 Recommendations on enterprise participation.....	46
5.5 Preparation of future DTISs.....	47
References.....	48

## Tables

Table 1: Generic Commodity Development Matrix used for comparative analysis by commodity and country.....	10
Table 2: Country Commodity Development Strategy Map based on Benin's DTIS.....	15
Table 3: Summary overview of the 29 DTIS notations by country and criteria (no weighting).....	17
Table 4: Total number of occurrences by supply and value chain across all DTISs.....	21
Table 5: Total number of references by occurrence in the DTISs by country.....	22
Table 6: Total number of references made at different levels of intervention within DTIS.....	23

## Annexes

Annex I: List of commodities surveyed.....	50
Annex II: List of countries.....	51
Annex III: Detailed methodology.....	52
Annex IV: Country Commodity Development Analysis Matrices based on corresponding DTIS and Action Matrix.....	63
Annex V: Country Commodity Development Strategy Maps.....	65

## Executive Summary

**P**rimarily commodities, including agricultural and mineral commodities, are the major source of income and employment for a number of developing countries (DCs) and least developed countries (LDCs). Development of this sector offers hope for reducing poverty in an LDC country especially amongst marginalized groups like small farm producers and women. For a large number of commodity-dependent LDCs, their journey out of poverty is linked to the development of their commodity sector and to their

successful transition up the production ladder. The prospect of achieving a more developed stage of their economies, however, waxes and wanes with the volatility of commodity prices and changes in demand. In recent years, the demand for commodities has experienced an upswing owing to demand from large commodity consuming countries like China and India. But the gains from a rise in demand and prices have not been shared equitably across countries or even across commodities.<sup>1</sup> For a more equitable distribution of benefits from commodities production and trade there is a need to address supply side and value chain issues, which are essential to any commodity development strategy. Commodity-dependent countries need the necessary factor conditions, such as resources and additional financial aid, to capitalize on their natural endowments through diversification of their economies which would result in greater economic growth and poverty reduction.

In the last few years, the commodities issue has occupied centre stage due to the demand and supply uncertainties that often hamper commodity markets, resulting in price volatility, which has a direct impact on the country's financial stability. The impact is particularly pronounced on smaller and poorer countries that are dependent on a single or at most two commodities as the main source of income generation and trade. Countries that are dependent solely on primary agricultural commodities also rank low on the Human Development Index.<sup>2</sup> The causes for the persistence of commodity dependence and vulnerability to crisis are many and have been analyzed and discussed at length in

the economic literature. However, it is widely understood that there is need to address the root causes of the crisis in commodities, which includes supply capacity constraints as well as inadequate diversification of production. Greater emphasis on trade in primary commodities has come at the cost of industrial development which is the basic building block for economic development.

### The study

In order to address this problem, endemic to LDCs, an analysis was conducted of the existing Diagnostic Trade Integration Studies (DTISs) that were carried out under the Integrated Framework for Trade-related Technical Assistance to Least Developed Countries (IF). The objective of this analysis was to assess whether, and to what extent, the DTISs provide concrete recommendations and actions which can support a more comprehensive global strategy for promoting, upgrading, diversification and value addition in manufacturing and industrial development activities associated with commodity production.

The present analysis focuses on the 29 DTISs available as of October 2008, completed under the IF, with specific reference to the commodities surveyed therein. The commodities examined in this analysis include all agro-products (including cash crops), livestock, forestry, horticulture and floriculture products, as well as minerals and ores.

In this report, the concept of commodity chains, including the supply and value chains as well as the

1 UNCTAD reports that 'the impact on developing countries exporting agricultural products varies, with some benefiting over the period (e.g., coffee exporters) and others recording a deterioration between 2003 and 2005 (cotton or soybean exporting countries)'. UNCTAD/PRESS/IN/2007/015, 27/04/07.

2 Human Development is a development paradigm that is about much more than the rise or fall of national incomes. It is about creating an environment in which people can develop their full potential and lead productive, creative lives in accord with their needs and interests. This is captured by the Human Development Index (HDI), first introduced in 1990 in the Human Development Report. The HDI represents a new way of measuring development by combining indicators of life expectancy, educational attainment and income into a composite single statistic, which serves as a frame for social and economic development. (UNDP, accessed on 02/06/09 at <http://hdr.undp.org/en/humandev/hdi/>).

linkages between the two, has been applied to analyze the whole process of value creation of a product from primary processing to consumption. Analyzing the different stages of the commodity chain and focusing on the necessary functions of actors at each stage will help policy makers, institutions and entrepreneurs pinpoint competitive disadvantages and identify areas for further action to upgrade processing know-how, capacities and trading potentials; and ultimately to attain more equitable and pro-poor growth.

### Analytical framework

This study analyzed DTISs according to criteria spanning supply side and value chain issues, in order to assess how supply side constraints, pathways to diversification, value chain creation and backward and forward linkages for industrial development have been addressed. These criteria were then integrated into a Commodity Development Matrix, in which relevant information from each DTIS was recorded and analyzed. Data has been generated on a per country basis and the commodities featured in the DTIS have been listed separately at three different levels of intervention, namely policy, institutional actors and enterprise development, and in accordance with the criteria used for this study. Results are depicted in the form of Country Matrices (see annex IV in attached CD Rom). There are 29 matrices in all, featuring the commodities surveyed in their respective DTISs and accompanying Action Matrices. Data analysis based on these Country Matrices has resulted in 29 Country Commodity Strategy Maps (annex V). A cross-country comparison was also performed regarding the general thrust of DTISs in commodity development (table 3). Details of the nature and depth of the analyses and recommendations made within each country DTIS can be seen at a glance by the reader.

Through this visualization of data, it becomes evident that the following characteristics exist across 29 DTISs concerning commodity development:

1. heterogeneous in-country approach to commodity development, across commodities
2. heterogeneous between-country approach to commodity development, across countries

3. policy-oriented policy bias, which is long on policy recommendations and short on implementable actions.

### Main findings

Admittedly, the DTISs have not been designed to develop commodities, nor to craft an integrated, coherent and focused strategy towards enhancing productivity, diversification and industrial development in the LDCs. It is therefore not surprising that the DTISs, to a great extent, do not respond well to the criteria selected for this commodity sector development oriented study. The DTISs do, however, perform an extremely useful function by providing a comprehensive macroeconomic overview and by putting the commodity *problématique* into perspective. Some of the DTISs contain useful pointers on using a more focused strategy for commodities with considerable potential but which are hampered by policy, institutional and infrastructural constraints. The following issues were identified in the DTISs:

1. Insufficient attention has been given to the adequacy of the existing physical infrastructure for each commodity profiled in the DTIS.
2. Supply side issues including production of primary commodities, which form the crux of commodity development strategies, lack in depth analysis. Commodities have been treated more from a macro perspective, and thus the details essential to adequately addressing broader supply side issues remain absent.
3. Details about gender participation are limited at best.
4. Processing of primary commodities through primary and secondary production processes has not been linked to a comprehensive strategy for commodity development and diversification. The relationships between investment climate, adequacy of production capacities, distribution networks and business linkages at each step of the value chain have not been clearly articulated.
5. Quality control issues with respect to commodities are mentioned only in a general manner in the DTISs. A systematic approach to building a quality culture

which is supported by quality standard setting establishments and control mechanisms is missing. In addition, investment in appropriate (hardware) infrastructure is lacking. These elements have, however, only been mentioned in a small number of cases without any detailed analysis. Without significant investment and improvement in this domain, it is hard to see how the LDCs could actually increase their export earnings and acquire higher values from their commodities. And it is equally difficult to imagine that LDCs can compete in the already highly competitive semi-processed or manufactured market where advanced developing countries dominate.

6. The need for personnel training and skill development either through domestic investment or technical assistance for some commodities has been broadly indicated in some of the DTISs. Technical assistance projects, wherever ongoing, have also been indicated in the DTISs.

7. Feedback and monitoring mechanism to provide oversight on the implementation of the Action Matrix has not been included in the DTISs. Such a mechanism would make it possible to assess whether a country's policy implementation or capacity-building effort is on track according to agreed objectives listed in the Action Matrix, and whether the assumptions that underline the DTIS and action plan need to be adjusted once a better understanding of the actual commercial system emerges that may contradict or invalidate the operational assumptions used.

LDCs need to have such a monitoring system to scan and track their own actions in order to be truly in the driver's seat by taking ownership and being accountable as agreed in the Paris Declaration. Similarly, at the global level, without ongoing monitoring and feedback, financial support for capacity-building and other interventions tend to suffer delays, lack of responsiveness, insufficient participation and inadequate accountability.

Similarly, it will also be difficult to facilitate institutional learning without a stable information management system based on a standardized monitoring procedure. The absence of such a system is often due

to the lack of systematic scanning on the ground of operational processes, or proper data collection and recording. Without such an information management system, it will not be possible to identify local innovations and disseminate them through global knowledge exchanges with international agencies and actors.

## Recommendations

This study concludes with a set of recommendations to follow up on DTISs already undertaken, and suggestions for including additional elements and a more commodity-centric perspective in future DTISs. These recommendations have broadly been grouped into a set of actions that call for policy makers, institutional actors and enterprises to develop an integrated commodity development strategy that will reverse the present trend of industrial stagnation and deindustrialization in LDCs and move primary commodity producers up the value chain. Even though neoliberal economic theory recommends a hands-off approach to policy makers, the authors of this study nonetheless advise that governments and the international community need to provide much needed infrastructure, an enabling regulatory environment that encourages investments in productive sectors as well as efficient tax and energy policies.

Institutions such as banks and trade associations are key players in implementing governmental policies, such as prioritizing specific commodity-related action, through pricing mechanisms, providing safety nets through appropriate financing schemes and easing credit crunches in times of volatility. Dynamic enterprises and cooperatives are also increasingly viewed as the engine that powers growth and development by linking the local supply capacities to the global value chain. Another significant factor in developing a coherent global initiative for commodities is the supporting role that needs to be played by regional policy makers in integrating regional production clusters which promote industrial growth, thus providing opportunities for exports and creating jobs.



The DTISs were not intended to provide recommendations for a comprehensive national strategy for commodities diversification and value addition through manufacturing and industrial development. Thus, policies and interventions which ensure more equitable development and environmental sustainability tend to be absent from many DTISs. The general recommendations in all DTISs are directed towards increasing exports, which are expected to result in increased incomes and hence in a reduction of poverty. However, factors of supply production such as processing, marketing and different stages of the value chain have not been given adequate attention. Thus, strategies are required which direct LDCs towards a concomitant development of manufacturing and industry, and a proper integration of supply and value chain activities with their commodities. Research is needed to understand and map the 'binding constraints' in the value chain that keep LDCs from harvesting their productive potential, from the seeds and fertilizer stage, transport and storage, limitations to processing, value addition and diversification, and finally to market information and market opening negotiations in the WTO.

Transforming their natural resources (i.e., commodities) into export products through labour intensive industrial development is the most viable path to generating sustainable jobs and creating wealth in LDCs. In light of the present food, fuel and financial crises, enhanced aid with greater effectiveness is essential to build the productive and trade capacities so that LDCs can achieve economic resilience and continue their march towards development.

## 1. POLICY RECOMMENDATIONS

*On the supply side there is need for:*

- sensitizing relevant ministries and departments in LDC governments about the need to develop integrated national policy frameworks for commodity-led growth strategies. At a general level, this would mean integrated infrastructure development in strategic areas as a priority for national investment. Investment needs to be made also in other

supportive secondary processes, such as workforce development and developing quality culture and practices at the enterprise level.

- developing a proactive agenda to overcome supply constraints by upgrading infrastructure like roads, ports and storage facilities, and enhancing inputs like irrigation, electricity, seeds and other appropriate raw material.
- implementing policies to improve productivity, employ appropriate technology in production, develop new skills for cultivation and farm management techniques, promote innovation to boost productivity and to create linkages between farming community, enterprises with universities and research entities.
- enhancing capacity-building initiatives and developing a viable programme for R&D to employ newer technologies (e.g., biotechnology) for increased productivity, and new product development (e.g., use of tobacco leaf in the pharma sector, and tobacco seed oil in soaps and detergents) to build competitiveness.
- acknowledging the contribution made by the female workforce and actively promoting their skills development to ensure sustainable economic and welfare gains for women, who in general have a smaller share of the national wealth and suffer more from poverty. Skill development and training for women have to be institutionalized as a national policy to be integrated with the commodity development strategy.

*On the value chain side there is need for:*

- creating a suitable policy framework and institutional structure to facilitate development of backward and forward linkages in commodity production, processing, value addition and marketing.
- supporting local economic development and cluster initiatives through horizontal linkages of enterprises within a territory which are at the same stage of production, to encourage competitiveness.
- making quality a national priority and investing in the creation of quality culture and corresponding quality infrastructure. Quality standards for goods



and services need to include skill-based standards as well as quality management systems for training and education such as ISO 10015<sup>3</sup> and EFQM.<sup>4</sup>

- introducing brand or quality labels, which helps promote products and develop niche markets, making them attractive for the collaborator or consumer, both domestically and across borders.
- developing effective implementation and monitoring mechanisms for sanitary and phytosanitary (SPS) standards and technical barriers to trade (TBT) by establishing a sufficient number of laboratories and accreditation facilities.
- increasing outreach for international development assistance and building national agencies with strong policy coordination and monitoring instruments for efficient and effective use of aid funding.
- creating sustainable regional partnerships and competitive regional clusters for economies of scale, and complementary linkages which could result in reduced transaction costs, extended supply and value chains and potential product and process innovations.
- consulting with and involving the private sector through public-private partnerships, transparency and accountability.
- encouraging the organization of fairs showcasing products produced locally while also promoting regional and international participation in these fairs to apprise producers of consumer requirements. In other words, providing a suitable platform to produce for the markets.
- undertaking programme impact assessment by LDC governments to ensure that commodity development objectives are met. This also has the advantage of enabling policy makers to learn and to improve their programmes continuously.

## 2. RECOMMENDATIONS ON INSTITUTIONAL ARRANGEMENTS

### *On the supply side there is need for:*

- a supportive institutional framework comprising banks, commodity boards, donors and a dynamic public sector. This is necessary for the implementation of national commodity development and diversification strategies.
- institutions that are key players in implementing and monitoring government policies on infrastructure development, and improving productivity by informing, training and reinforcing international quality standards for operational management and delivery.
- the development of cooperatives to achieve economies of scale and mobilization of non-traditional resources. Cooperatives can also facilitate access to inputs, production, harvesting, first stage processing, marketing and certification in some cases. They can also lead to better bargaining power for producers vis-à-vis traders and multinationals.
- regional funding mechanisms to encourage entrepreneurship and business creation. It makes sense for the production of certain products to be encouraged in areas where comparative advantage is present.

### *On the value chain side there is need for:*

- innovative institutional arrangements to improve coordination among all actors along the commodity chain. Hence the need for developing functioning market information systems to encourage domestic, intra-regional and international trade.
- institutions in charge of competition policy, small and medium enterprise (SME) development, import-export finance, etc. These agencies have an important role in prioritizing specific commodity related action in terms of pricing mechanisms, providing safety nets through appropriate financing

3 ISO 10015 is an international quality standard focusing on the training quality management system. It provides a process map to guide the process of making training investment decisions by an organization and of managing the training operations through monitoring and evaluation. More information is available at [www.iso.org](http://www.iso.org), or at [www.adequate.org](http://www.adequate.org)

4 EFQM (European Foundation for Quality Management) offers an assessment tool, The EFQM Excellence Model, to "deliver a picture of how well the organization compares to similar or very different kinds of organization. Used as a management model it can be used to define aspirations for the organization's capability and performance". (EFQM, accessed on 02/06/09 at <http://www1.efqm.org/en/Home/aboutEFQM/Ourmodels/TheEFQMExcellenceModel/tabid/170/Default.aspx>)

schemes and easing credit constraints in times of commodity price volatility. Social safety nets can be based on domestic commodity production as well as higher value-added crops which generate more income per hectare.

- commodity exchanges to facilitate transactions between producers, processors, traders, consumers, aid agencies and state agencies in a low-cost environment. This lowering of costs benefits all stakeholders as they receive higher prices for their products.
- a monitoring mechanism to steer the policy implementation by the institutional actors and national authority in charge of development strategy and provide timely feedback to beneficiaries, donors and experts alike.

In addition to these institutional arrangements, it is also necessary for governments to keep in mind the general conditions and mechanisms for good governance, which include improved inter-ministerial policy coordination and regular channels for communication and consultation between government actors and the private and social sector stakeholders. These channels are essential to building trust, in order to develop and implement integrated commodity strategies.

### **3. RECOMMENDATIONS ON ENTERPRISE PARTICIPATION**

*On the supply side there is need for:*

- strengthening producers' organizations that can interface with policy makers and institutions and working with them to develop a cogent commodity development strategy.
- devising vertical and horizontal consultative strategies to inform government of the most efficient allocation of development resources to develop robust supply side capacity and responsiveness to changes in domestic and international agricultural conditions.
- supporting and strengthening SMEs' productive capacities and market competitiveness.

*On the value chain side there is need for:*

- mobilizing enterprise inputs to identify areas of value addition and further processing of commodities.
- increasing the use of producer organizations to disseminate a variety of information, be it related to pricing mechanisms, early warning systems or in establishing business linkages with domestic industry and foreign buyers.
- encouraging participation of individual enterprises and growers even in policy dialogues, standard setting and quality control.
- involving enterprises in the governance of commodity exchanges and futures trading to put in place pricing mechanisms and to gather inputs for market development.
- raising awareness of the enterprises of their social and environmental impact and engaging in benchmark exercises to introduce process innovations resulting in improved competitiveness. This encourages institutional learning through analytical research, checking underlying assumptions and modification of policies and actions in case of conflict between various interests and priorities.

LDCs cannot afford to remain primary commodity producers. A detailed commodity analysis needs to be carried out to strengthen the place of primary producers in the value chain, which would entail their diversification and development. This is imperative to reverse the trend of de-industrialization witnessed in many of the LDCs, and create sustainable growth for poverty reduction.

## Conclusions

This report concludes that while the DTISs deal sufficiently with sector-related issues like policy, regulatory and institutional constraints, they do not adequately highlight the cross-linkages between different elements in the supply and value chains of commodity development, thus making suggested policies and recommended interventions fragmented and difficult to achieve. The present study makes an attempt to bridge this gap. It also shows a disparity among the DTIS reports in terms of quality and comprehensiveness of their analysis of commodity development. Therefore, it is recommended that selected country DTISs should be updated based on the Explanatory Notes to the DTIS Template (May2008)<sup>5</sup> and pay more attention to small-scale producers and poverty reduction impacts.

When the poorest countries are able to realize their potential for adding value to their raw materials, they would see higher profit margins, greater employment and potentially more backward linkages (through supplying raw materials) and forward linkages (through technological and quality requirements) with the rest of the local economy and the global system. For these reasons, this study points to the gap that exists in the DTISs and calls for the identification of viable options and sequencing of policy interventions for value addition of commodity-related output expansion and upgrading in the LDCs.

<sup>5</sup> The EIF Board has adopted a template to guide countries and agencies carrying out the DTISs. It lists the issues and areas that need to be taken into account when undertaking the DTIS.

**TABLE 3: SUMMARY OVERVIEW OF THE 29 DTIS NOTATIONS BY COUNTRY AND CRITERIA (NO WEIGHTING)**

Criteria	SUPPLY CHAIN ANALYSIS						VALUE CHAIN ANALYSIS								
	Level of intervention	Warehousing and storage	Electricity	IT and Telecom	Transportation	Production inputs	Processing	Standard setting	Quality culture	Quality Infrastructure	Distribution System	Business linkages	Pricing mechanisms	Investment climate	Social and environmental sustainability
Benin (4)	P	2	1		2	4		2		1	1		1	3	2
	I					2	1						1		
	E					1								1	1
Burkina Faso (6)	P	2			2	6		2		4	5		2	2	3
	I	1				1							1		
	E					2	1		1				1		
Burundi (3)	P					3		3	1	1	3		2	2	3
	I					1	1				1	1	2	1	
	E										1			1	
Cambodia (2)	P	1	1	1	2	2	2	1	1	2	2	1	1	2	2
	I		1		2	2	1	1			1	1	1	1	
	E				2	1		1			2	2		1	
Central African Republic (3)	P	1			2	3	3	1		2	3	2	2	2	2
	I					3	1	1					1	1	
	E				1	3	2								
Chad (6)	P	3	1		3	6	5	1		1	4		2	4	4
	I	1			1	3	1	2		1		1		2	
	E	1				3	3	1		1				2	
Comoros (4)	P	1			1	4	3	3	1	2	2	4	4	1	2
	I					4		1			3				2
	E					4				3		1			1
Djibouti (3)	P	2	1		3	3	2	3	1	1	3		1	1	2
	I					2		1		1	2				
	E					2	1				1				
Ethiopia (5)	P				1	5	1	3	1	1	3		1	1	3
	I					1	2	1		1	1			1	
	E									2			1		
The Gambia (5)	P	1	2		3	5	1	2	1	3	4	2	1		3
	I					1		1			1				2
	E					2	1				3	1			1

**Key:**

P= Policy, I= Institutional actors, E= Enterprise development

Note 1: The bracketed number next to each country designation represents the number of commodities that were treated in the respective country DTIS. For instance, in the case of Benin, the number of commodities addressed in its DTIS is four.

Note 2: The figure in each cell after the country designation represents the number of occurrences recorded in the DTIS for each country according to the level of intervention, regardless of the commodities it addresses. A differentiated charting by country and by commodity is presented in annex V.

Note 3: A blank cell denotes no correspondence with the criteria used in the analysis.

Criteria	SUPPLY CHAIN ANALYSIS						VALUE CHAIN ANALYSIS								
	Level of intervention	Warehousing and storage	Electricity	IT and Telecom	Transportation	Production inputs	Processing	Standard setting	Quality culture	Quality Infrastructure	Distribution System	Business linkages	Pricing mechanisms	Investment climate	Social and environmental sustainability
Guinea (9)	P				5	8	1	1			7		2	2	3
	I					1									
	E					2				1					
Lao PDR (2)	P			1		2	2	1	1		2	1	2		2
	I					1				1					1
	E					1				1					1
Liberia (7)	P	3	1		5	7	3	2	1		6	2	4	3	7
	I	1				1	1			1		1			2
	E				1	4	1			2		1	1		3
Madagascar(6)	P				2	6	1	1			4		4	3	5
	I					1	1			1		2			
	E					1					1	1			
Malawi (6)	P				1	6	1	4	2	1	6	2	3	2	4
	I				1	4		1			2	1			2
	E					3					2				1
Maldives (1)	P	1			1	1	1	1	1	1	1	1	1	1	1
	I					1	1	1		1	1				1
	E									1					1
Mali (6)	P	1			2	6	3	3			5	2	2	1	3
	I					1									
	E									1					
Mauritania (3)	P	2	1		2	3	2	2		2	3	2	2	3	1
	I	1				2					2	1	1		
	E	1			1	2	1			1		1		1	
Mozambique (7)	P				3	7	4	2		1	5	3	4	4	7
	I					1				1	1	1			1
	E				1	3	3	1			2				2
Nepal (1)	P				1	1				1	1	1		1	1
	I									1		1			1
	E														1

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Note 1: The bracketed number next to each country designation represents the number of commodities that were treated in the respective country DTIS. For instance, in the case of Benin, the number of commodities addressed in its DTIS is four.

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Criteria	SUPPLY CHAIN ANALYSIS						VALUE CHAIN ANALYSIS								
	Level of intervention	Warehousing and storage	Electricity	IT and Telecom	Transportation	Production inputs	Processing	Standard setting	Quality culture	Quality Infrastructure	Distribution System	Business linkages	Pricing mechanisms	Investment climate	Social and environmental sustainability
Rwanda (2)	P		1		1	1	2	1	1	1	2	1	2	1	2
	I									1			1		1
	E					1				1					
São Tome e Príncipe (3)	P				3	2					2			1	3
	I									1					1
	E													1	1
Senegal (4)	P	2	1		3	4	3	3	2	2	3		2	2	3
	I					2	1	1		1		1	1	1	1
	E					2		1	1	2					3
Sierra Leone (10)	P		1		2	8	7	2	2	2	7	2	1	1	2
	I				1	3			1	1					1
	E					3	3			1	2				
Tanzania (7)	P	1			2	7	3	2	3	2	7	4	3	2	6
	I					4	2	2		2	3		2		
	E				2	5	4			1	3		1		
Uganda (5)	P				3	4	3	4	2	1	4		3	2	5
	I					3					2				1
	E					4	1	1			1				
Vanuatu (7)	P					7	4	3		2	4		2	1	5
	I					1	1						1	1	1
	E					6	1	1							2
Yemen (2)	P	1			1	2				1	1		1		2
	I					1				1			1		1
	E														1
Zambia (6)	P				1	5	2	1		1	6	1	1	1	5
	I					2		1			2	1			2
	E					2					1				

**Key:**

P= Policy, I= Institutional actors, E= Enterprise development

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