Report

Barriers to trade in food staples in West Africa: an analytical review

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Key messages

- Facilitating intra-regional trade in inputs and food staples could address high trade costs and large price differentials between producing and consuming regions and in turn improve food security and sensitivity to shocks.
- Recent increases in international food prices and volatility, paired with domestic pressure and the mixed impact on food security of past liberalisation reforms, has led many West African governments to adopt trade restrictions.
- For regional integration to support enhanced food security, supply- and demand-side bottlenecks should be identified and addressed jointly. This requires coherence between national and regional agriculture and trade policies, as well as safety net policies to address adverse consequences.
- Trade reforms need to be viewed as multi-stage dynamic processes and their sustainability differs by country and depends on achieving a durable consensus among political elites, the private sector, and urban consumers.
- Further research should prioritise i) mapping regional agricultural trade flows and assessing the impact of trade barriers, ii) the politics of regional and national agricultural trade policy development and implementation and iii) examining the impact of non-tariff trade barriers on selected food staples and input value chains.

Acknowledgements

This report was commissioned by the World Bank as an Input to Phase 1 of *Integrating Regional Markets in Food Staples in West Africa* and authored by Jakob Engel and Marie-Agnès Jouanjean. The authors gratefully acknowledge detailed comments on an earlier draft from Jean-Christophe Maur and Stephen Mink.

The findings and conclusions contained within are those of the authors and do not necessarily reflect the positions or policies of the World Bank Group.

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1 Introduction

The West African region faces many challenges to exploiting the potential contribution of increased intra-regional trade in food staples to food security. This problem is all the more pressing as the nature of trade and agricultural production in the region is in a process of great flux. "In the medium term," Josserand (2013, p. 8) argues, "population growth, urbanisation and the transformation of West African agriculture will redefine regional trade flows of basic foods -the increase in trade is expected to far outpace the tripling in regional food production." Addressing these changes will require a better understanding both of the barriers to and drivers of regional trade in food staples.

The *World Bank* is in the process of launching an ambitious three-year research programme, "Integrating Regional Markets in Food Staples in West Africa," that aims to fill knowledge gaps on trade in food staples in the West African region. It aims to provide a better understanding of the current realities of regional food staples trade in West Africa and explore regional policy responses and institutional modalities to better promote responses to food crises.[1]

This Analytical Review is part of Phase 1 of this programme, and aims to support the identification of research priorities for the programme moving forward. Specifically it reviews the existing literature on regional food staples trade in West Africa (Section 2), and identifies gaps in the literature and in on-going research that could usefully be addressed through the project (Section 3).

The review is desk-based, relying on available literature, including peer-reviewed articles and volumes, as well as consultancy reports. Where possible, it aims to analyse trade in food staples through the lens of the commodity value chain, from inputs to final products (see, e.g. Keyser 2012, World Bank 2012).

In addition to the two regional economic communities, ECOWAS and UEMOA, we defined the West African region as consisting of the following countries: Benin, Burkina Faso, Cape Verde, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. We identify the following food staples as the most important in the region: maize, rice, sorghum, millet, cassava, yam, cowpea and livestock.

This report is structured as follows: Section 2 provides a brief overview of the literature, surveying:

i) Regional agricultural trade policies and institutions in West Africa;
ii) Transparency and predictability of national agricultural trade policies;
iii) Drivers of trade in food staples in Western Africa;
iv) Non-tariff barriers (NTBs) to trade in food staples;
v) Non-Tariff Barriers (NTBs) to accessing inputs in the food staples value chain
vi) Existing value chain analysis;

[1] Based on Concept Note 'Integrating Regional Markets in Food Staples in West Africa: An Agenda for Evidence Based Policy Analysis' written by Jean-Christophe Maur, 18 December 2012.

Section 3 provides a brief overview of current existing donor-funded research projects relating to trade in food staples in Western Africa. Section 4 assesses gaps in the literature and discusses how a World Bank research programme on regional trade in food staples could address existing gaps in the literature and complement existing projects and work-streams. These are broadly:

i) Adapting existing empirical methodologies to markets and products in West Africa that have received less attention,
ii) Identifying how institutional and political economy research could add value to better understanding the nature of formal and informal barriers to trade,
iii) Further evidence from value chain analyses.

Section 5 concludes by summarising some of the overarching policy recommendations emerging from the literature.

2 Review of current state of knowledge

2.1. Regional agricultural trade policies and institutions in West Africa

Both regional economic communities, ECOWAS and UEMOA, have developed comprehensive agricultural and trade policy frameworks with the objective of improving coordination and increasing trade integration between their member states. This process is further advanced in UEMOA, where a surveillance mechanism for macroeconomic convergence has been established, along with a customs union and the abolition of tariffs or quotas on intraregional trade in domestic products. Non-UEMOA ECOWAS member states agreed in 2006 to join the existing UEMOA Common External Tariff (CET) and a fifth tariff band (at 35 per cent) was added in 2009 at the behest of Nigeria. However, the CET has not yet been adopted throughout the ECOWAS region.[2] However, in practice many countries se the CET as providing insufficient protection for strategic priority commodities, driving unpredictable tariff and non-tariff barriers (Rolland, 2011).

Both ECOWAS and UEMOA have prioritised food security as a policy objective. UEMOA adopted an agricultural policy, the *Politique Agricole de l'UEMOA* (PAU), in 2002. Based on the principles and priorities of the Comprehensive Africa Agriculture Development Programme (CAADP), ECOWAS adopted the ECOWAS Agricultural Policy (ECOWAP) in 2005 with the main objectives of boosting agricultural productivity and exports, attaining food security in member states and promoting sustainable livelihoods for farmers. The implementation of both the PAU and of ECOWAP has largely been limited to putting in place institutions and regulations, with little analysis thus far to examine the degree of implementation, the impact, or the coherence between both agreements (Savadago 2009). Along a similar vein, Bromley et al (2011, p. x) argue, regional agricultural trade policy in Western Africa is often just 'a patchwork of rules implemented unevenly and enforced inconsistently, leading to an opaque business environment that severely limits the economic growth potential that agriculture possesses and significantly affects competitive access to food."[3]

Further, at the regional level there is only limited agricultural planning, and initiatives to reform policies to improve food security (such as the establishment of a regional food stock to overcome short-term seasonal food shortages) have struggled to get off the ground (Chambers et al 2012, p. 10). As such, regional cooperation has generally been sporadic and driven by short-term national interests. Bromley et al (2011) and many other authors point to the need for better regional collaboration on food security. However, at the regional level,

[2] After ten years of negotiation, ECOWAS finance ministers endorsed the CET in March 2013, removing an essential barrier to its adoption.

[3] The PAU has resulted in a regional programme called the *Programme National d'Investissement Agricole et de Sécurité Alimentaire* (PNIASA), which focuses on strengthening staple food production, the market environment and access of vulnerable populations to food. To the knowledge of the authors, only Togo has officially implemented the PNIASA in 2012.

there has thus far only been limited agricultural planning and efforts to overcome short-term seasonal food shortages. For example, recent efforts by UEMOA to set up a regional exchange market for sensitive food products have not advanced very rapidly even though the UEMOA members of the *Comité permanent Inter-état de Lutte contre la Sécheresse au Sahel* (CILSS) are largely in agreement over the initiative. In 2011, G-20 Finance Ministers furthermore commissioned the World Food Programme (WFP) to look into the development of a system to give food deficit countries rapid access to sufficient food for distribution through schemes of targeted assistance, such as safety nets (WFP 2011). However, beyond a feasibility study and proposal for a pilot programme it is not clear how much further this has advanced.

There have been some efforts to improve and harmonise regional regulations on seed production and marketing,[4] including through the West Africa Seed Programme implemented by the Agricultural Research Council of Nigeria. Further, ECOWAS members are party to the Abuja Declaration on Fertilisers to increase fertiliser use, harmonise policies and regulations and promote national and regional fertiliser production and intra-regional trade. While West Africa lags behind other African regions in implementation, the 2009 launch of the five-year MIR-Plus project aiming to facilitate the development of a regional agricultural input market has aimed to improve harmonisation across the region.[5]

At the regional level, there are moreover few non-governmental institutions to promote greater integration. Pannhausen and Untied (2010) provide an overview of some of the existing organisations, including the *Réseau des Organisations Paysannes et des Producteurs Agricoles de L'Afrique de l'Ouest* (ROPPA), *Réseau des Chambres d'Agriculture de l'Afrique de l'Ouest* (RECAO) and *Réseau des Opérateurs Economiques du Secteur agroalimentaire de l'Afrique de l'Ouest* (ROESAO) and *Afrique Verte International*. Finally, the *Alliance Globale pour l'Initiative Résilience – Sahel* (*AGIR*,), first proposed in 2012 aims at uniting the international community around the West African agenda of food security and nutrition .However, little information exists on the role, membership or effectiveness of these. Further, as low private sector awareness of the ETLS appears to be a recurring theme throughout the ETLS gap analysis (USAID 2011 in Harris et al 2012), the linkages between RECs, transnational agricultural interest groups and producers and traders is a pertinent area for further analysis.

2.2. Transparency and predictability of national agricultural trade policies – impact on food security and food price volatility.

Analytical studies of trade and food security in West Africa often approach agricultural trade as a domestic price and supply stabilisation tool in the event of food crises. The mixed results of past regional and multilateral trade liberalisation on incentives to trade and on food security, paired with an increase in international food prices and volatility, supported the decision of various countries in ECOWAS to adopt temporary trade measures and to reinstate self-sufficiency objectives in their agricultural policy. Rolland and Alpha (2008) list some of the temporary export restrictions or prohibitions, including Guinea's export ban on all food to neighbouring countries, Burkina Faso decision to control or restrict exports of local cereals, and Senegal's prohibition of rice exports.

Galtier (2012) discriminates among three main causes of food price volatility:

[4] See ECOWAS Regulation C/REG.3/05/2008 on the Harmonization of Rules Governing Quality Control, Certification and Marketing of Plant Seeds and Seedlings in ECOWAS Region. In the UEMOA region there is moreover a Regional Programme for Biosafety, supported by the World Bank that aims to institute and implement a common institutional and legal framework for the whole region to facilitate member countries to honour the Cartagena Protocol on Biosafety.

[5] See http://www.nepad.org/system/files/Abuja%20Declaration.pdf

1. "Natural instability" stemming from harvest concentration in time and sensitivity to natural hazards such as rainfall, disease and attacks by pests;
2. "Imported instability" caused by international price instability being passed on through imports and exports;
3. "Endogenous instability" caused by the dysfunction of domestic markets.

Since the international food price spikes and food shortages in 2008/09, a wealth of literature has tried to understand the drivers of food price volatility in Africa and the impact of various strategies and policies on price stabilisation and food security. Conclusions about the reality of "imported" instability vary according to analysis and the food products being analysed, and in particular whether studies look at traded or untraded food products. However, according to studies by Staatz et al. 2008 and Neven and Demont 2010, among others, the 2008/2009 crises and subsequent general increase in food price volatility provided evidence that international price spikes could be transferred to African markets.[6]

Contrary to this, a recent IFPRI analysis – while not specific to just West Africa – provides new evidence about the relatively small magnitude of transmission of international food prices volatility to food staples market in Africa (Minot, 2012). The study concludes that higher price volatility in international markets doesn't increase food price volatility in the African countries he examined, therefore ruling out the "imported" component of food price volatility and that domestic factors (endogenous instability) may contribute more to African price volatility than do international price fluctuations.

However, the tendency towards protectionism is also grounded in the mixed success, in terms of providing increased food security, of past reform efforts (Abdulateer et al 2010 and Oyejide et al 2006 on Nigeria; Oduro and Kwadzo 2006 on Ghana, Diagne et al. 2006 on Senegal). For example, using a CGE model examining the impact of the end of export duties and exchange rate liberalisation on total quantity of food requirement and food utilization, Abdullateef and Ijaiya (2010) find that liberalisation did not impact the development of the agriculture sector. Instead, these major policy efforts had the tendency to further reinforce food insecurity while not addressing the fundamental problem of food production. Along a similar vein, Wodon and Zaman (2010) argue that from a distributional perspective, the benefits from reduced import tariffs on food staples in Africa are likely to accrue largely to the non-poor. This is also mirrored in the systematic review on this topic by McCorriston et al (2013), which finds that a key explanation for the mixed results of liberalisation reforms on food security globally is the role of price transmission, ie. how prices adjust following trade reform and, in turn how these price changes impact on different groups.

A further strand of literature on agricultural trade looks in greater depth at the political economy behind trade reforms and trade barriers. While not West Africa-specific, of particular relevance in this regard is work on East African cash crops by Aksoy and Onal (2011) that examines nine case studies of commodities that were liberalised, and argues that the key variable affecting the sustainability of supply responses was the degree of stakeholder consensus on the distribution of sector-specific rents. In cases where the initial consensus on the distribution of rents was weak, shocks led to reform reversals in some cases or an inability to design necessary support institutions in others. This points to the importance of domestic agricultural chambers and producer associations - an area thus far

[6] Nonetheless, Minot emphasises that food price volatility in Africa remains quite high and much higher than in other regions of the world with an average volatility of grain prices in the African countries examined of about twice the volatility of international grain prices. In general, with international prices more stable than African prices, the results of Minot's study suggest that African food prices are more stable for processed and highly tradable foods (cooking oil, bread, wheat, and rice for which imports represent a large percentage of supply) than for less traded foods for which African countries are more or less self-sufficient (cowpeas, maize, beans, sorghum and millet). He concludes that international trade can play a useful role in stabilizing food prices, and that food self-sufficiency is not a promising strategy for reducing food price volatility therefore casting doubt on the effectiveness of traditional food price stabilization programs.

largely underexplored in the literature.[7] In one comparative case study Johnson (2011) examines the response of Cameroonian, Senegalese and Ghanaian poultry producers to competition from frozen poultry imports. They find that Cameroonian and to a lesser extent Senegalese producers were better able to influence government policy because they faced fewer barriers to collective action and built alliances with consumers before lobbying government. This highlights the importance of urban consumers in public policy-making in Africa – an insight already made prominent in the work of Robert Bates in the early 1980s.

2.3. Drivers of trade in food staples in Western Africa

Analysing regional trade flows within West Africa is challenging. Not only are trade flows poorly reported, with many inconsistencies, but also a non-negligible amount of trade occurs informally and therefore is not recorded in usual databases. This difference between declared and observed trade flows is highlighted by Josserand (2013), who provides detailed trade flow data on livestock, onion, coarse grains (millet, sorghum, maize) and rice along selected corridors linking Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, Nigeria, Senegal, and Togo as part of the USAID Agribusiness and Trade Promotion (ATP) project and the Expanded ATP (EATP) project. He finds that official statistics probably capture on average about one third of actual transactions of livestock in value. His findings are less precise for other analysed food staples, but still highlight that actual trade flows are greater and more diverse than generally recognized.

In order to circumvent the unreliability of official data in the analysis of food staples trade flows in Western Africa, various studies choose to adopt other methodologies based on the analysis of production and trade basins. Haggblade et al. (2012) combine data on the spatial distribution of rural and urban population, maps of differing food staples zones, crop production data and consumption patterns as described by an array of recent households' surveys, in order to map major urban food markets as well as principal surplus zones. Accordingly, they are able to identify the geographic extent of major staple food market sheds in West Africa and the major trade corridors linking surplus and deficit areas.

Using spatial analysis to examine surplus and deficit production areas is particularly relevant to the analysis of trade in food staples in West Africa. Countries in this region appear as natural partners for food staples trade, as different sub-regions have comparative advantages in complementary food staples, with diverse ecosystems yielding a wide range of produce. West Africa is therefore often divided into three agro-ecological zones relating to various farming systems and consumption patterns. In addition to the north-south movement of particular commodities for export, three basins are identified based on their trade flows in cereals: the West, Central, and East basins.[8] However, as highlighted by Haggblade et al (2012), surplus food producing zones in Africa, unlike many regions of the world, lie across the border from the markets they serve, with political borders often separating surplus food production zones from deficit markets they would normally serve.

One important element of the approach in Haggblade et al. (2012) is the inclusion of demand emanating in urban areas. It is very likely that urban areas will have an increasing impact on patterns of trade flows within and between West African countries. This is also supported by Romainik (2007) and more recently Josserand (2013) who both see urbanisation as a key driver of change on agricultural production and trade.

[7] An overview of these is provided in some depth in Pannhausen and Untied (2010, p. 13-14).

[8] West Africa can be divided into three agro-ecological zones relating to various farming systems and consumption patterns: the Sahelian, the Sudanese and the Coastal zones where production and consumption can be easily classified. The West basin refers to Mauritania, Senegal, western Mali, Sierra Leone, Guinea, Liberia, and The Gambia where rice is most heavily traded. The Central basin consists of Côte d'Ivoire, central and eastern Mali, Burkina Faso, Ghana, and Togo, where maize is commonly traded. The East basin refers to Niger, Nigeria, Chad, and Benin where millet is traded most frequently (FEWSNET, 2012).Therefore, all other things equal, there is a natural incentive to trade in food staples in Western Africa. Understanding how those agro-ecological and trade basins interact can allow for a better understanding market behaviour and dynamics.

Aker et al. (2010) add a further dimension to the spatial determinants of trade flows. Looking at market price dispersion for both grain and cash crops between and within Nigeria and Niger, they find that ethnic differences can act as a significant intra-national border between markets and suggest that ethnic similarities diminishing international border effects could enhance international market integration. They provide evidence that the primary mechanism behind the internal border effect is related to the role of ethnicity in facilitating access to credit in agricultural markets.

Rising incomes in the region are also impacting agricultural production and are influencing dietary habits in West Africa, in particular in urban areas, with a shift towards an increasing preference for variety. The increasing demand for meat, poultry, and dairy products is likely to have a non-negligible impact on coarse grain demand, prices and direction of trade through increased demand for animal feeds. In order to fulfil this increasing demand for food, due to increases in population and changes in diets, the region will not only have to address supply-driven food security issues and the constraints to an increase in productivity and production, but also the demand-driven necessity to increase the capacity of intermediaries, including truckers, wholesalers and retailers (Romanik 2007), FEWSNET (2009) highlight the importance of exchange rate fluctuations between UEMAO and non-UEMOA countries in the region on the direction of trade flows. Appreciating values of non-CFA currencies are likely to increase demand for cereals from UEMOA countries.

2.4. Non-tariff barriers (NTBs) to trade in food staples

Successful regional integration experiences elsewhere in the world highlight that tackling tariff barriers is a necessary but not sufficient to enhance trade. NTBs, whether protectionist in intent or not, raise trade costs and inhibit regional trade. Western Africa is no exception and efforts to facilitate trade in the region must also aim to address NTBs. While Cissoko et al (2012) argue that the impact of NTBs in West Africa is less harmful to agricultural trade than they are outside of the region, the prevalence of particularly non-formal measures is large and widely discussed in the literature. Therefore, even if NTBs are less important in Western Africa than in other regions of the world, they remain difficult to address.

A growing literature provides evidence about the nature and the extent of non-tariff barriers in agricultural trade in West Africa. At the country-level, many of these, as captured by the USAID Gap Analysis of the ECOWAS Trade Liberalisation Scheme, are presented in Annex 2. As summarised in Harris et al (2011, 3-4) these include gaps between regional agreements, national legislation and implementation; limited private sector knowledge of free trade protocols; strong incentives for informal trade; non-compliance with existing tariffs; the widespread imposition of non-tariff barriers (NTBs); the non-functioning of the *Inter-States Road Transit* (ISRT) regime; non-recognition of certificates or origin and non-compliance with truck axle loads; and the challenges of joint membership for members of both ECOWAS and UEMOA. For example, Ghana imposes bans and restrictions, often for months at a time on unprocessed agricultural times, Burkina Faso imposes seasonal restrictions on maize, and Senegal and Togo mandate escort services for transit goods. Harris et al (2011) argue that this is in part driven by the pace of liberalisation and integration: fears of inadequate protection for local producers has facilitated the proliferation of NTBs in the region.[9]

One of the overarching problems in this regard is the prevalence of informal practices that exacerbate transport and shipping costs [10] There are numerous studies that point to the

[9] Along a similar vein, Alpha and Broutin (2008) argue that the pace of multilateral and regional liberalisation further exacerbates the scale of NTBs.

[10] While not directly relevant to intra-regional trade, analyses of maritime transport challenges in the region in Pálsson et al. (2007) also indicates that the state of port facilities also presents a barrier. This creates a "vicious cycle where exports from [West and Central Africa] remain weak because of current high maritime transport tariffs (and additional constraints) which induce low traffic and therefore raise tariffs" (Pálsson et al. 2007, p. xiii).

widespread nature of bribery in the region. Bromley et al (2011), in their analysis of regional agricultural transport and trade policy, examine in greater depth the prevalence of road corruption at checkpoints throughout the region. In their survey of transport prices and costs throughout Africa, Teravaninthorn and Raballand (henceforth T&R, 2008, p. 8) cite as their overarching recommendation the need to reform cartels in trucking: "*Deregulating the trucking industry in West and Central Africa is less a technical than a political and social issue. The main concern is that under a liberalized, competitive market, the demand could be served efficiently by a much smaller number of trucks*."

In the area of sanitary and phyto-sanitary standards (SPS), Deeb and Humado (2007) have analysed the state of implementation in this area across the region. They raise concerns about inadequate inspection systems, as well as the need for an integrated strategy to develop testing capacity and eliminate redundancies and greater commitments for regional standardisation, harmonisation and participation. The UEMOA Agricultural Policy has identified the issue of SPS harmonization as one of the key areas of action. However, there is no evidence of any concrete engagement and action to increase capacity in this area.

Zerelli and Coo (2010), in a more detailed study of freight transport along 11 corridors in West Africa largely endorse the general tenor of T&R's findings, though they see distortions as not quite as substantial as T&R and they furthermore find significant variation in the scale of distortion. Although for some corridors, particularly those leading to Niger, trucking market structures are oligopolistic, in other cases, corridors emanating from Abidjan and Tema, these problems have a more limited impact. At the national level, this is supported by a survey carried out by Cissokho et al. (2012) which found the cost of police shakedowns at checkpoints for trucks travelling internationally amounting to about 2% of the value of the cargo transported.

2.5. Non-Tariff Barriers (NTBs) to accessing inputs in the food staples value chain

The constraints facing farmers seeking access to inputs throughout the continent is summarised in, *Africa Can Help Feed Africa* (World Bank 2012) and includes long delays to access new seed varieties, high barriers to trade (and in turn high prices) for fertilisers, and the relative absence of institutions that reduce transaction costs (such as the enforcement of fertiliser laws). Producers in Nigeria and Senegal face among the highest prices for nitrogen-based fertilisers paying more than three times as much as those in Kenya or India (*ibid*.).

However, the literature on policies regulating trade in inputs – including fertilisers and seeds – specific to West Africa is rather limited. The most detailed study of inputs markets for staple foods is by Bumb et al (2011), who examine key constraints and bottlenecks along the fertilizer supply chain and provide an overview of trends in fertiliser consumption, production and trade. Focusing on Ghana, Mali, Nigeria and Senegal, the authors map out the relevant supply chains and argue that regional markets in fertilizers have not emerged partly because individual countries usually specify their own fertilizer blend and specialty products. This is complicated by country-specific subsidy programmes: for example In Senegal farmers face uncertainty about whether they will in fact receive the half of their fertiliser requirement promised by the government; in Nigeria subsides impede the development of an efficient supply chain. Finally, there is the risk of market disruptions when there is a change in policy.

While focusing more on cash corps, Porto et al (2012) examine the 'market power' of farmers along the supply chain, with particularly emphasis on uncompetitive input markets. By examining 12 commodity supply chains throughout African countries (including four in West Africa) they analyse the distributive impact of different competitive structures. The authors find that in general more competition among firms providing inputs, as well as

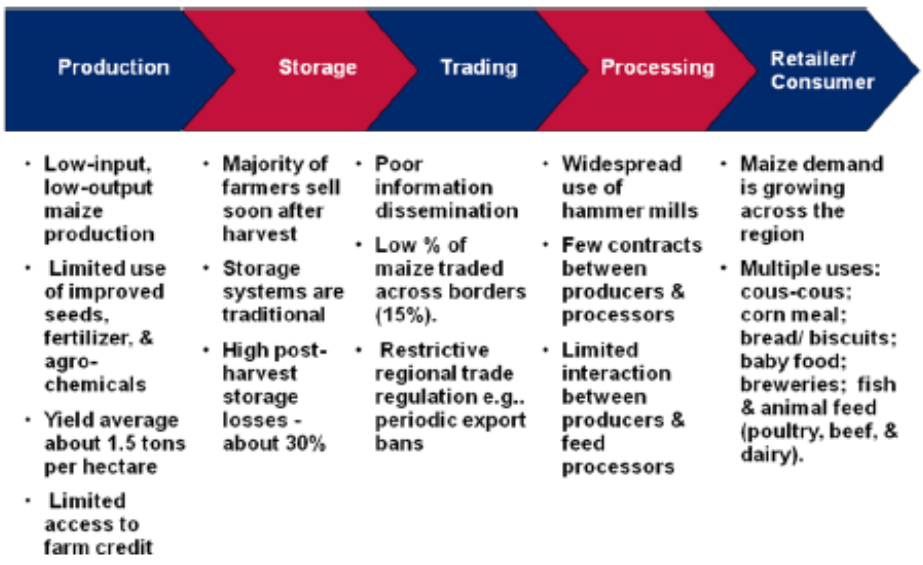
processing and exporting tends to be beneficial for smallholders. Porto et al (2012) point to the potential utility of out-grower contracts, whereby firms provide inputs on loan at the beginning of the season and recover these at harvest time.

Pray et al (2011, 2012) examine both the potential benefits and the barriers to innovation in seeds and other inputs throughout sub-Saharan Africa, with a specific country focus on Senegal, among other countries. The authors moreover discuss – in general terms – barriers to trade in inputs, focusing on the degree of openness to private firms and foreign technology, taxation and restrictions on exports; and public sector support for agricultural research. There have also been some country-level studies carried out (see e.g. Babatunde 2012 or World Bank 2012 on Nigeria) examining the interface between trade policy and access to inputs, as well as the country's subsidy policy.

2.6. Existing value chain analysis

The vast majority of existing value chain analyses of staple goods have been carried out through USAID-funded work under the West Africa Trade Hub, and the ATP/E-ATP projects. Project background papers and case studies include, among others, a VCA of rice regionally (Kokou 2010) and in Burkina-Faso (Zotogolo 2010), maize (Wanzie 2009), millet and sorghum (Mamadou 2010). These tend to be quite detailed analyses examining barriers within the value chain, as well as detailing on how linkages among producers, suppliers, distributors and processors can be strengthened. To provide one example, the main barriers along the maize value chain are shown in Figure 1 below.

Figure 1: Maize value chain situation in West Africa, 2008



Source: Wanzie 2009

Analysis has been carried out in work examining market structures and systems through spatial mapping. CILSS et al. 2010, for example, examine trade flow maps for palm oil, livestock, cashew nuts and groundnuts, coarse grains, rice, and cowpea across the Gambia, Guinea, Guinea-Bissau, Mali, Mauritania, and Senegal, analysing the performance of cereal markets and illustrating the impact of shock on the trading system. Haggblade et al. (2012) have analysed data on the spatial distribution of rural and urban population, maps of differing food staple zones, crop production data and consumption patterns as described in an array of recent household surveys to map major urban food markets as well as principal surplus production zones for staple commodities, including sorghum, millet and rice.

Bromley et al (2011) examine the spatial distribution of prices for staples, highlighting the steepest price gradients between major producing areas and population centres to assess how bottlenecks in key corridors could be addressed (esp Bobo Dioulasso to Niamey, Sikasso to Dakar, Ouagadougou to coastal Ghana, and Kaduna to Niamey). For the cereals value chain, the main problems diminishing the competitiveness of regional suppliers tend to relate to informality, scale, adequacy of trade information systems, product quality, access to credit, and availability of appropriate storage. For livestock, competitiveness is affected by informality and multiple intermediaries, product quality, absence of holding areas in coastal countries, lack of a competitive meat trade and limited access to finance.

Neven and Demont (2010), in their study on the impact of the global recession and food crisis on rice markets, analyse the broader governance of markets within the rice value chain analysis. Odozi and Omonona (2012) examine the grain value chain in Nigeria. Finally, previously mentioned work by Porto et al. examines in great depth the value chains for select cash crops (including cotton in Burkina Faso, Cote d'Ivoire and Benin; cocoa in Cote d'Ivoire and Ghana and coffee in Cote d'Ivoire) through a game theory model of oligopsonistic supply chains (many smallholders, few exporters). They explore numerous scenarios (firms split or merge, a new entrant joins the market, etc.) that may affect equilibrium and use household surveys to then assess the poverty impacts of changes along the value chain.

3 Existing projects

Compared to other regions in Africa, West Africa benefits from relatively little ongoing research on trade in food staples, though this has been changing. The main projects focused specifically on regional trade in food staples in this area are funded by USAID, under the West Africa Trade Hub (since 2009). The ATP and E-ATP projects under this programme aim to increase value and volume of intra-regional agricultural trade by reducing trade barriers and enhancing linkages among producers, suppliers, distributors and processors as well as improve the efficiency in transactions through improved information systems.

The EU, GIZ, DFID, AFD, CIDA and other donor agencies also all have programmes focused on agriculture, trade and regional integration in the region. The €600m 10th EDF Regional Programme for West Africa (2008-13) is primarily targeted towards deepening regional cooperation, increasing competitiveness, and EPA negotiations support. GIZ's Support Programme for the ECOWAS Commission has a targeted focus on ETLS implementation. Finally, the World Bank's $197m 'West Africa Transport and Transit Facilitation Project' is improving road and rail infrastructure and implementing transit and transport facilitation measures along the Tema-Ouagadougou-Bamako corridor.

DFID's Support to West African Regional Integration Programme (SWARIP, 2006-15) is focused on reinforcing the regional integration process and reduce the cost of doing business in the region, including through expanding knowledge and policy dialogue on regional integration, increasing private sector and civil society advocacy for regional integration and trade, improving coordination of regional transport infrastructure and trade facilitation programmes and assessing the effectiveness of the ECOWAS Commission. Finally, the African Union Trade Observatory (jointly with the African Development Bank and UNECA) is being established in 2013, and will focus on researching trends in trade, and specifically on regional trade, through studies and technical support to RECs and member states.

Numerous regionally-based and international research institutes also carry out analysis of food staples trade in the region. This includes IFPRI, FEWSNET, and others. This is supported by academic institutions, such as the Food Security Group at Michigan State University. Finally, through its country programmes, the World Bank also provides analytical work on agricultural trade. For example, in Nigeria the World Bank is considering supporting the Nigerian government through economic analysis to assess the supply competitiveness and consumer trade-offs under different configurations of policies (World Bank 2012).

4 Gaps in the literature

This section lists some of the main gaps in the literature identified on the basis of the survey of the literature carried out in Section 2. As these are intended to inform work under the *World Bank*'s "Integrating Regional Markets in Food Staples in West Africa" programme, they were prioritised and ranked. Criteria in assessing the suitability of potential research programmes were:

1. Topics represent a clear gap in the literature that would contribute to the programme achieving its objectives of increasing the region's food security through increased food staples regional integration;
2. Research has the potential to have high impact, in terms of its economic relevance and/or its ability to catalyse reform;
3. It is feasible given the timeframe set out for the project and its financial resources (though with some flexibility as research could also be addressed through other current and future WB-led initiatives);

The availability of relevant data and/or a clear method for data collection was also considered, though this will need to be further assessed in the project design stages.

For each topic we provide a short **explanation of the research gap it fills** (including what existing research and studies it draws on); its **relevance for the project aims**; and an indicative assessment of what **methodological approach** or approaches would be most promising in addressing these questions.

Research topics/questions were grouped under three broad methodological clusters with two feasible sub-topics for each. The first aims to support project objectives through more quantitatively focused empirical work aiming to broaden existing research on West Africa and also draw on comparable research carried out in East Africa. The second complementary cluster is more qualitative in nature and focused on the analysis of institutional and political economy analysis of trade barriers. The third cluster draws on substantive and methodological aspects of Cluster 1 and 2 to examine the nature and impact of NTBs on select food staples and input value chains.

Cluster 1: Mapping regional agricultural trade flows and assessing the impact of trade barriers

1. Spatial mapping of trade corridors and of consumption and production basins
2. Identifying the impact of domestic policies on food staple price levels and volatility

Cluster 2: The politics of regional and national agricultural trade policy development and implementation

1. Assessing progress in and barriers to the implementation of ECOWAP and the PAU

2. Understanding the role, incentives and impact in select import-competing food staple industries

Cluster 3: Examining the impact of non-tariff trade barriers on selected food staples and input value chains

1. Understanding constraints to the trade and use of inputs
2. How to increase the efficiency of the value chain as well as product quality through the provision of key logistic infrastructure

While each research cluster, and each of the six identified workstreams, can be carried out in isolation, there are potential benefits and synergies in combining components and aspects of each of these to advance project objectives.

4.1 Cluster 1: Mapping regional agricultural trade flows and assessing the impact of trade barriers

4.1.1 Spatial mapping of trade corridors and of consumption and production basins

Nature of the research gap

Unreliable official trade data prevents the comprehensive analysis of barriers to trade and determinants of trade flows using usual econometric methodologies. To address this Haggblade et al. (2012) combine data on the spatial distribution of rural and urban population, maps of differing food staples zones, crop production data and consumption patterns such as described by an array of recent households' surveys in order to map major urban food markets as well as principal surplus zones. Bromley et al (2011) examine the spatial distribution of prices for food staples to determine where price gradients between major producing areas and population centres are the steepest. Related work has been carried out by Nin-Pratt et al (2009), integrating spatial analysis to identify yield gaps as well as by Rashid and Minot (2010) on COMESA countries to assess spatial price variation using household survey data in COMESA countries.

We would propose extending existing methods used in the spatial analysis of price differentials to investigate this for further food staples (e.g. cassava, yam, beans, etc) and corridors. This could inform subsequent analysis to assess the nature of these barriers as well as the role of transport and marketing costs.

Relevance to project aims

Central to the project aims is providing 'a better understanding of the current realities of regional food staples trade in West Africa.' The proposed research would allow for far more detailed analysis of one of the most apparent manifestations of the slow pace of trade integration in the area of food staples: namely, the substantial differences in prices that consumers pay.

Methodological approach

In consultation with policy-makers in ECOWAS countries, researchers would select commodities for which there was local demand for more information on and carry out a mapping of production and consumption zones, as well as prices. Data will draw on recent efforts by the World Bank, FEWSNET and others to collect more up-to-date and accurate price information. Taking a comparative approach between more and less integrated

regions, as well as assessing the scale of the border effect (building, for example, on Aker et al. 2010), would further be central to this.

4.1.2 Identifying the impact of domestic policies on food staple price levels and volatility

Nature of the research gap

Following the increase in international food prices and volatility since 2008, various countries in ECOWAS reinstated self-sufficiency objectives in their agricultural policy. However, analyses show that endogenous instability is more significant than imported instability for food staple price volatility in many African countries. But more information is necessary on the importance of endogenous causes of food price volatility (Galtier, 2012).

Thus, research under this workstream could investigate what the short term impacts of price spikes and price volatility mitigation measures (export/import bans, buffer stocks, investment in private storage infrastructure, etc.) on prices are, as well as what the longer-term impact on private sector involvement in marketing channels is (incentives to produce, participate to the market, and provide marketing services). While studies have examined the impact of the 2008 food crisis on prices in West Africa (e.g. Aker et al 2011, Neven and Demont 2010) analysis of current volatility in West Africa, as well as the impact of volatility mitigation measures that are currently in place, represents an apparent gap in the research.[11]

Relevance to project aims

Central to this workstream is understanding the endogenous drivers of food price levels and their volatility in Western Africa in order to address bottlenecks in the development of regional food staples value chains. The project concept note points to various policies being implemented by West African governments (e.g. Nigeria's decision to increase border taxation on rice). A corollary of this would be to assess potential complementary policies to cushion adverse impacts of trade reforms and in particular to identify what kind of safety net programmes could cushion households most vulnerable to food insecurity, particularly in the case of food price spikes. Having improved analysis and evidence on current policies may provide clearer evidence on potential paths for action.

Methodological approach

Work under this workstream would draw on studies such as Ihle, Cramon-Traubadel and Zorya (2010) estimating the border effect of NTMs from untapped price-arbitrage opportunities and Cadot and Gourdon (2012), estimating the price-raising effect of NTMs, and applying these methodologies to Western Africa markets.

[11] Trends are being watched carefully in, for example, the World Bank's Africa Pulse as well as in USAID and FEWSNET studies, as well as other regularly updated analyses of commodity prices.

4.2 Cluster 2: The politics of regional and national agricultural trade policy development and implementation

4.2.1 Assessing progress in and barriers to the implementation of ECOWAP and the PAU

Nature of the research gap

Both the ECOWAP and the PAU are intended to support greater harmonisation of agricultural policies and increased cooperation and regional coordination. However, numerous sources discuss the incomplete implementation of the two regional agricultural policies (for example Savodogo 2009, Rolland and Alpha 2011), and no evaluation of either the extent of their implementation or their impact has been conducted thus far. It is unclear who has benefited and what the impact on investment, production and trade has been.

There has also been no comprehensive assessment of the compatibility and coherence between the two agricultural frameworks, between these and formal domestic policies, and with the ETLS. Thus, it is central to understand first how compatible regional and domestic legal frameworks are. Secondly, it would be important to determine what the political and institutional barriers to their implementation within selected countries are.

Relevance to project aims

Understanding the political drivers of greater integration as well as the institutional (and capacity-related) barriers to this process could help improve understanding of potential duplication of efforts within already over-burdened RECs, and as Chambers et al. (2011) argue, "prevent the sort of policy incoherence that can result from overlapping mandates and memberships."

Methodological approach

Central to this workstream would be assessing how far advanced countries are in implementing these policies, and determining what the primary gaps are. Thus, drawing on the model of the USAID ETLS gap analysis, a central dimension would be to assess the state of *de jure* ECOWAP/PAU implementation and carrying out interviews about the scale of actual adherence to these.

This could be furthered by examining specific issue areas or important elements of the two agreements, such as SPS harmonisation, to better understand how SPS measures are integrated into the legal framework, drawing on an analysis last carried out over six years ago (see Deeb and Humado 2007).[12]

A related and under-researched aspect of this could be gaining a better understanding of regional-level agricultural organisations and farmers associations. However, other than very general surveys there is thus far very little analysis on the composition, mandate and legitimacy of different regional agricultural organisations and farmers associations, as discussed in Section 2.2.1. These organisations can be important means of increasing awareness of regional integration and policies such as the ETLS and the ECOWAP/PAU. They can also provide a means for farmers' associations in the countries themselves to engage with the regional integration process.

[12] For example, according to the USAID West Africa trade hub program, phytosanitary certificates are necessary to export to Ghana, Benin, Togo, and Mali. Not much information is available on veterinary certificates for trade in livestock and meat. But some bans have been observed based on more or less accurate risks of avian flu and foot and mouth disease

4.2.2 Understanding the role, incentives and impact in select import-competing food staple industries

Nature of the research gap

While somewhat comparable to the previous topic, this workstream is focused in greater depth on understanding what drives national-level trade and agricultural policy. Politicians and officials throughout the region continue making very bold and ambitious plans towards greater regional integration in ECOWAS and/or UEMOA, but adherence – particularly when faced with crises or shocks – lags behind. While it appears clear that the national interest supersedes regional integration goals for most decision-makers, country-case study work examining when regional agreements and integration processes have been seen as binding and when not would contribute to ensuring a more predictable process and greater trust across the region.

This could also draw on some of the insights from Aksoy and Onal (2011) on liberalisation and integration processes in East Africa to assess the rent distribution within particular commodity markets, assessing how likely policy-makers are to sustain trade reforms. A key aspect of this could also be to look at the lobby groups and associations representing producers of particular commodities, and their interests and levels of influence (drawing, for example, on the work carried out by Johnson 2011 on the poultry sector in three West African countries).

Relevance to project aims

This workstream aims to build on the intention expressed in the concept note for detailed analytical work looking at the political economy of reform, including an examination of "the beneficiaries of restrictions" and "constituencies that may benefit from lack of liberalization." As such it would allow for potentially high-impact analysis to best understand actors that are currently barriers to reform, and the incentives they face.

Methodological approach

Methodologically it would make most sense to select individual sectors that are facing high levels of protection (either relative to other sectors of the economy or comparator countries in the region) and draw on existing frameworks of problem-focused political economy analysis to map out and understand the incentives faced by key actors and institutions in the sector under the status quo and proposed reforms.

4.3 Cluster 3: Examining the impact of non-tariff trade barriers on selected food staples and input value chains

4.3.1 Understanding constraints to the trade and use of inputs

Nature of the research gap

The literature provides some evidence about lack of access to fertiliser and seed markets, high prices and low access to extension services (including limited knowledge about production technologies and about the use of inputs), as well as an unpredictable and incoherent policy framework (see Bumb et al 2011, Cissokho et al 2012, Porto et al 2012, among others).

More analysis on the determinants of the adoption of new production technologies, the impacts of various domestic policies on access to credit, input subsidies, contract farming schemes, extension services, agricultural infrastructure investments (storage, roads, etc.), and on the determinants of stakeholders' concentration in the input markets could be useful to understand some of the bottlenecks and constraints to the increase in agricultural productivity and to farmers' decision to participate in the market rather than adopt more self-sufficient strategies. Finally, given high barriers to investment in agricultural R&D (Pray et al. 2011, 2012), there is considerable scope for related research on how barriers to regional cooperation on agricultural R&D could be overcome (Nin-Pratt et al 2010).

Relevance to project aims

Understanding the barriers and differential outcomes among input supply chains is central to yields, prices and the current realities of food staples trade. This workstream would further contribute to providing a better understanding of the types of institutional modalities that could improve responsiveness in crises and improve food security outcomes.

Methodological approach

There is great variation among countries in the region in use of inputs due for instance to differences in policies facilitating farmers' access to credit (see, for example, the difference in input use and productivity in two agro-ecologically similar areas in Niger and Nigeria) and the implementation of various contract farming schemes. Therefore research on how to improve these policies in order to increase production in staple goods would be useful.

Work under this topic would assess what kinds of incentives (and subsidies) are most effective at encouraging use of fertilisers and new seed varieties, including the identification of key logistic services (e.g. storage facilities) and their impact on trade and the use of inputs. Similarly, it could draw on experimental research by Duflo et al (2010) and Takeshima et al. (2010) to assess the primary constraints to the use of fertiliser and inputs. Another option would be to provide a more detailed mapping of the R&D landscape, as well as potential synergies and options to scale up successful pilots. Building on country-level research already being planned by the World Bank in Nigeria and elsewhere, there could be scope for further analytical work on the determinants of technology adoption among farmers.

4.3.2 How to increase the efficiency of the value chain as well as product quality through the provision of key logistic infrastructure

Nature of the research gap

More analysis is necessary in order to understand how to increase the efficiency of food staple commodity value chains as well as product quality through the provision of key

logistic infrastructure such as transport services, storage facilities and SPS inspection infrastructure at the borders but also to increase agricultural productivity and incentives to participate in the market through the provision of extension services and post-harvest management infrastructure.

While work by USAID (through the West Africa Trade Hub) on the poor supply and quality of hard (roads, communication and energy infrastructure) and logistic infrastructure and services has covered some commodities in some countries, there is much that is not known yet. More information is necessary about the drivers of investments and competition in infrastructure and services. This includes, for instance, information about the impact of access to credit on wholesalers' decisions to invest in storage facilities or a more detailed analysis about the determinants of the supply and quality of transport services.

Research under this workstream could also address, for example, the issue of access to transport services in low productivity/demand areas where there is insufficient margin to create a competitive service, as well as how regulations influence trucking and transport services organisation. Drawing on Teravaninthorn and Raballand (2008), as well as analysis by Zerelli & Cook (2010), further research could deepen understanding of the functioning of trucking cartels, as well as assessing how potential compensation mechanisms to dismantle these could function (again drawing on experiences in other regions)

Relevance to project aims

This workstream would allow the project to build on existing methodologies and analyses to provide targeted analysis along some of the most important value chains, in order to identify bottlenecks and identify potential means of mitigating these.

Methodological approach

Research here could entail extending value chain analysis to identify key stakeholders and key efficiency-loss bottlenecks for other food staples following USAID (2013) as well as adapting the work by Porto et al (2012), to examine the impact of different competitive scenarios within the supply chain of food staples.

5 Conclusion

The World Bank's focus on examining regional trade in food staples in the West African region is highly timely and contributes to a growing body of work that is, however, still rather small considering the size of the region in terms of population and product diversity. In addition to the research priorities identified in the previous section, tentative recommendations emerging from this review include the following:

1. **Prioritising intra-regional trade as an alternative to national self-sufficiency**– Given the small size of domestic markets in many West African countries and the great variation in production, focusing on achieving similar objectives at the regional or sub-regional level is more realistically attainable and less likely to result in shortages than pursuing this at the national level.

2. **Cross-border planning and integration of prioritised food staple value chains** – A corollary of this is that countries will need support (including from donors) to identify barriers and foster value chain development for key food staples. This approach will require coordination at the regional level, as prioritised value chains should aim for some degree of complementarity with those of neighbouring countries.

3. **Greater focus on implementation** – It is not the absence of formal regional trade integration but rather its too superficial and instable implementation, as well as formal and informal nontariff barriers that have prevented the development of regional food staples value chains. Thus, the political and economic factors influencing the level of implementation of regional agreements is of central relevance and should be assessed before further ambitious region-wide commitments are made.

4. **Focus on environmental and demographic trends** - It is important to address changing climatic and demographic trends that will inevitably affect both the supply and demand for food staples. Urban consumers have long been the drivers of agricultural policy formulation with the aim to provide cheap food to large cities. With the increase in urban population, this trend is unlikely to change. Yet, policies will have to both enable an increase in supply as well as to support better connections to surplus areas in order to continue to supply domestic food to urban areas rather than fully relying on imports to address the increase in demand. Modelling the changing nature of demand and how trade and agricultural policy will likely need to respond would therefore be of great utility, particularly in predicting future shortages as well as in recognising which corridors connect surplus agricultural production areas with urban and peri-urban areas.

5. **Recognising how regional integration impacts on the distribution of rents** – As past World Bank work on trade reforms in East Africa has shown (Aksoy and Onal

2011), the success and sustainability of such reforms differs from country to country and depends on having a degree of consensus among political elites, the private sector and other leading stakeholders. This requires looking at reforms as multi-stage dynamic processes and analysing in detail the incentives different actors are likely to face under different scenarios.

6. **Focus on recognition rather than harmonisation** – Addressing the prevalence of NTBs should be a priority, but in many cases taking smaller steps to mitigate their impact may be more easily feasible than large-scale reforms. For example, moving towards mutual recognition (for example in the case of SPS) may be more promising than pressing for regional harmonisation (see Bromley et al 2011).

7. **A holistic approach to removing barriers** –In order for regional integration to be a tool for enhanced food security, both supply and demand side bottlenecks should be identified and addressed jointly. Developing agricultural trade-related services, increase competition and reduce marketing prices, require that agricultural production reaches a minimum threshold. At the same time, producers' decision to participate to the market depends both on access to higher productivity agricultural production technologies facilitated by an access to extension services and to inputs as well as on access and incentives to participate to output markets, with the profitability of selling agricultural outputs depending on the availability of various value chain logistic services, from post-harvest to transport services.

8. **Integration of complementary policies** – As numerous studies have shown, the food security impact of regional and multilateral trade reforms (including liberalisation and regional integration) depends greatly on how prices are transmitted through the economy (see McCorriston et al 2013). As such, ensuring coherence between agricultural and trade policies and planning in advance how social protection and safety net policies can shield against negative consequences for adversely affected groups and individual is essential.

9. **Better data** – While significant efforts have been made in recent years, particularly led and financed by donors, to improve the collection and quality of data on prices, food production and other key variables in this area, we still face substantial data gaps that limit the ability to devise evidence based trade and agricultural policies.

10. **Promoting private sector involvement in R&D** – Currently the West African region lags behind others in providing incentives for agricultural research. While donors and foundations are providing much of this support, it still remains very sporadic and the lack of consistent policies or clear promotion of public-private partnerships provides disincentives for private sector actors to engage.

This topic is an area that is becoming of growing relevance and in need of improved analysis and understanding. This analytical review has aimed to provide an overview of the main issues and some of the key studies in this area, and identify potential gaps for future research and analytical work under the World Bank's *Integrating Regional Markets in Food Staples in West Africa* programme.

Annex 1: Annotated bibliography of key sources

	Reference	Topic/Argument/Methodology	Specific countries/commodities?
1.	Abdullateef U, Ijaiya AT (2010) Agricultural trade liberalization and food security in Nigeria. *Journal of Economics and International Finance* 2(12): 299–307.	- Ex post CGE model examining end of export duties and liberalisation of exchange rate on total quantity of food requirement, food utilization - Liberalisation did not impact development of the agriculture sector, and major policy efforts did not address the fundamental problem of food production, and hence food requirement and utilization. - Impact on food security was negative - Conclusion: Open trade encourages export of food from a net food importer, and has the tendency to further reinforce food insecurity.	- Nigeria
2.	Aker, J. et al (2010) "Are Borders Barriers? The Impact of International and Internal Ethnic Borders on Agricultural Markets in West Africa." CGD Working Paper 208. Washington, D.C.: Center for Global Development.	- Examining border effects of price dispersion (do borders impact trade) - Monthly price data over 8 year period - Examines role of common ethnicity in mitigating border effect to examine effect of ethno-linguistic fragmentation (across borders and within countries) - Data on monthly prices across 42 markets and on covariates that partially explain dispersion (road distances, transport costs, mobile phone coverage,	- Niger & Nigeria - Millet and cowpea

			rainfall, ethnicity of traders, framers and transporters - Use regression based on market pairs and fond that border increases price dispersion by 2.5-3%. - Use regression discontinuity design and find that border effect is 20%+ - Important role of ethnicity as a source of market integration and segmentation		
3.	Aker, J. et al (2011) 'West African Experience with the World Rice Crisis, 2007-2008' Center for Global Development Working Paper 242.	-	Examines impact of price spike in rice on import-dependent West Africa. - Reviews trends in WA rice sector - Examines response to high prices by WA governments - Examines impact of high world prices on domestic prices	-	Rice - Most of WA
4.	Aksoy, Ataman and Anil Onal (2011). "Consensus, Institutions, and Supply Response: The Political Economy of Agricultural Reforms in Sub-Saharan Africa." Policy Research Working Paper 5782, World Bank.	-	Examines 9 country/commodity case studies of agricultural reforms to increase competition and eliminate export taxes and restrictions. - In 8/9 output responded positively in the short run but was not sustained. - Stakeholder consensus on the distribution of sector-specific rents is a key variable affecting the sustainability of supply responses. - In cases where the initial consensus on the distribution of rents is weak, shocks lead to reform reversals in some cases or an inability to design necessary support institutions in others. - Important to look at reforms as multi-stage processes that are tested by shocks with the key variable being the degree of political and social consensus.	-	Examines cash crops in East Africa
5.	Alpha, Alpha and Cecile Broutin (2008) "Refining trade regulation to support and stabilise local agricultural production in Africa"	-	Low yields for rice in WA compared to SSA paired with quality problems and high processing costs → is increasingly net importer of rice - Rice CET is 10% in UEMOOA zone – too low to boost local production - Nigeria had import ban to boost local production, but production collapsed when tariff was lifted - 20% tariff for sugar under UEMOA CET with production monopolies in Senegal and Cd'I	-	Esp Nigeria, Guinea, SL and Mali for rice - Cote d'Ivoire, Senegal and BF for sugar - Rice and sugar

		- ECOWAS has introduced 5th tariff band at 35% - Move towards openness and harmonisation has gone to far – adherence to WTO rules is secondary.	
6.	Babatunde, R. (2012) 'The role of Nigerian agriculture in West African food security' Nigeria Strategy Support Program. IFPRI.	- Discusses the implications of Nigeria's agricultural production, the potentials for Nigerian export of agricultural products to enhance regional food security, and the role that the Comprehensive Africa Agriculture Development Program (CAADP) could play in supporting agricultural research and development (R&D) efforts in the region. - Examines how low mechanization, inadequate access to improved inputs, poor markets, insufficient access to credit, policy inconsistency, and inadequate infrastructure inhibit Nigeria from contributing to regional food security. - ECOWAS common agricultural policy could focus more on the interface between it and regional food production hubs such as Nigeria in fulfilling its mandate - Contains examination of Nigeria's role in intra-regoinal trade in agricultural commodities.	- Nigeria - Esp. cereals, root and tubers, legumes, and livestock
7.	Blein R. B. G. Soule ,Faivre Dupraigre B., B. Yémira, (2008), Les potentialités agricoles de l'Afrique de l'Ouest (CEDEAO)	- The first challenge facing ECOWAS agricultural sector is to provide this economic function more efficiently by increasing productivity and supplying raw materials to both small-scale and agro-food industries. Meeting this challenge is crucial for ECOWAS countries to reduce food dependency on the rest of the world and improve the current unfavourable terms of trade, by processing products and increasing value-added. - Another challenge facing ECOWAS agriculture is to increase remuneration of agricultural workers, notably by improving productivity. - Strength and weaknesses of ECOWAS: The strength lies in the complementarity of ecosystems and agro-ecological regions in terms of agricultural production. The weakness has to do with constraints on natural	- ECOWAS

		and human resources. - The key question underlying this study is to determine whether the region indeed has sufficient production potential to meet the growth in demand between now and 2030.	
8.	Bricas, N., M-C. Thirion, B. Zoungrana, (2009), Bassins de production et de consommation des cultures vivrières en Afrique de l'Ouest et du Centre, AFD, CIRAD, CILSS, IFA	- Looks at food staples trends in production, availability and distribution examining rural and urban food consumption patterns. - Paper suggests various scenarios for future production patterns.	- Countries: West Africa plus Chad and Cameroon. - Products: Cereals: mil, sorghum, maize, rice - Tuber : manioc, igname - Leguminous plants
9.	Bromley et al. (2011) *Regional Agricultural Transport and Trade Policy*, West Africa Trade Hub Technical Report No #41	- Examines regional transport and agricultural trade policy bassed on 100 interviews and review of 130 studies. - evaluates the relative ease of implementing 10 recommended interventions to address the constraints to regional agricultural trade—and enhance regional food security and improve livelihoods. - Examines spatial distribution of prices for staples and looks at steepest price gradients between major producing areas and population centres to assess how bottlenecks in key corridors could be addressed (esp Bobo Dioulasso to Niamey, Sikasso to Dakar, Ouagadougou to coastal Ghana, and Kaduna to Niamey. - Main problems for cereals value chain are related to informality, scale, adequacy of trade information systems, product quality, access to credit and availability of appropriate storage all diminish the competitiveness of regional suppliers. - Livestock: livestock, competitiveness is significantly affected by informality and multiple intermediaries, product quality, absence of holding areas in coastal countries, lack of a competitive meat trade and limited access to finance. - Problem is trade policy: regional and national policy are incongruous –	- Alsmost all staples, but esp maize, sorghum, millet and livestock. - All of West Africa

		"regional agricultural trade policy is a patchwork of rules implemented unevenly and enforced inconsistently, leading to an opaque business environment that severely limits the economic growth potential that agriculture possesses and significantly affects competitive access to food." – includes import/export bans on cereals, tariffs and NTBs, lack of awareness of rules. - Other main problem is transport – mainly due to informality in the sector, road corruption at numerous checkpoints, excessive regulation of trucking and structural imbalance of freight. - 10 recommendations: addressing constraints in select value chains eg through regional warehouse scheme or improving storage infrastructure and credit to storage, improve competitiveness of trucking market, improve collaboration on FS, assisting trader compliance, reducing delays at borders, trade promotion centres.	
10. Bumb, B. et al (2011) "Policy Options for Improving Regional Fertilizer Markets in West Africa" IFPRI Discussion Paper	- Examines key constraints and bottlenecks along fertilizer supply chain - Provides overview of trends in fertiliser consumption, production and trade - Lists key policies and supply chains in case study countries as well as functioning of fertiliser markets.	- All of West Africa with focus on Ghana, Mali, Nigeria and Senegal - Fertilisers
11. CEDEAO, UEMOA, CILSS, & CSAO (2012) - Document de position de la CEDEAO, de l'UEMOA et de leur bras technique le CILSS pour la préparation et la mise en oeuvre, (2012) Issu d'une consultation entre la CEDEAO, l'UEMOA et le CILSS facilitée par le Secrétariat du. Club du Sahel et de l'Afrique de l'Ouest (CSAO)	- Description of AGIR program	- West Africa (esp Sahel)
12. Chambers, Vikki, Marta Foresti and Daniel Harris (2012) "Final	- Lists priorities for future political economy work within WA through review of literature on RI in WA and key informant interviews. These include:	- Entire region - Limited focus on agriculture

report: Political Economy of Regionalism in West Africa – Scoping Study and Prioritisation" London: ODI	- Informal trade along Nigeria-Benin border as paradigmatic example of better understanding scope and causes of illegal flows. - Governance of primary road corridors to examine why transaction costs are so high - Politics of ECOWAS and UEMOA and efforts to move towards consolidation - Role of Ghana as potential driver of greater regional integration - Port efficiency – understanding informal practices undermining efficiency - Section on agriculture and food security points to limited agriculture planning and coordination as well as poor price information. - Discusses UEMOA very slow effort to set up address seasonal food shortages - Differential impact of food insecurity on different regions has led to ad-hoc arrangements and sub-regional blocks to overcome barriers - "nationalistic responses to food shortages are a wider illustration of the limited commitment that national countries in the region have to regional integration processes."	
13. CILSS, CSAO, FEWS NET, OCHA, RESIMAO, PAM, UNICEF (2006). *Sécurité Alimentaire et Echanges Transfrontaliers dans la Zone de Kano Katsina et Maradi* (K2M).	- Sort of value chain analysis - Provides information about trade patterns between Niger and Nigeria according to season and various constraints. Provides information about the way those markets work. Information on informal trade between Niger and Nigeria (cereal exports prohibited from Niger to Nigeria) Importance of various stakeholders and policies (credit)	- Benin, Niger and Nigeria - Sorghum, maize, rice, cowpea, groundnut. (affected because of lack of fertilizers, - Other crops: Cassava, cocoyam, yams and soybeans less affected. - Millet
14. CILSS, FAO, WFP and FEWS NET (2010) 'Cross-border Trade and Food Security in West Africa: The Western Basin'.	- Analysis of commercial market system and structure between countries in Western Basin - Examines trade flow maps for commodities, analysis of the performance of cereal markets and illustrates impact of shock on the trading system. Specific focus on market efficiency as examined by structure, conduct, trader constraints and capacities and market integration.	- Gambia, Guinea, Guinea-Bissau, Mali, Mauritania, Senegal - Especially palm oil, livestock, cashew nuts and groundnuts, livestock, coarse grains, rice,

	- "The widespread influence of commercial networks in the wholesale trade is a sign of restrictive entry in that market segment. However, strong social links between retailers and consumers favor food security" – esp focus on credit sysmte - Examines impact of recent economic and political shocks -		cowpea
15. Cissokho, L. et al. (2012) "Why is Agricultural Trade within ECOWAS So High?" *Journal of African Economies* 0(0)	- Examines whether NTBs are stunting agricultural trade within ECOWAS - Uses survey of truckers in Senegal to examine extent of bribery - Uses structural gravity model of agricultural trade for 135 countries - Finds that agricultural trade within ECOWAs is higher than one would expect; NTBs are less harmful in ECOWAS than in rest of the world. - African countries are not averse to agricultural trade, and local traders have been effective at exploiting trade opportunities.	- ECOWAS - Focus on NTBs
16. Daviron B., M. Aubert, N. Bricas, H. David-Benz, S. Dury, J. Egg, F. Lançon, V. Meuriot, (2010), Les mécanismes de transmission de la hausse des prix internationaux des produits Agricoles dans les pays africains, FARM	- Examines share of international price fluctuations transmitted to African markets and assesses whether this transmission affects producers and consumers the same way. - Finally assesses how long it takes for variations to be transmitted and whether increases and decreases are transmitted the same way.	- All of SSA
17. Deeb, T. and Humado, K. (2007) "SPS Synthesis Report" WATH/Accra Technical Report No. 20.	- Summarises SPS performance across region - In general there was high government awareness of SPS; some activity in this area though quite fragmented between animal, plant and food safety; inadequate inspection systems; need for an integrated strategy to develop testing capacity and eliminate redundancies; need for regional standardisation, harmonisation and participation as well as a certified regional metrology lab; need for training in border inspection, quality systems, facility certification - Also summary of all non-UEMOA countries	- SL, Liberia, Guinea, CV, Gambia, Ghana and Nigeria

18. Diagne A, Cabral FJ, Ndiaye BO, Danskh M, Sane M (2006) Senegal. In: Thomas H (ed) *Trade-related reforms and food security: country case studies.* Rome: Food and Agriculture Organization of the United Nations, pages 539–558.	- Examines impact of reduction of input and production subsidies and liberalization of agricultural markets through a before/after analysis - Found that food-insecure households declined from 42.5% in 1992 to 34.3% in 1995. Food balance improved between 1988-90 and 1998-2000. Daily per capita consumption of calories increased by 1.96%. Local production contribution to cereal requirements was 59% in 1980-1983 but 50% in 1994-2000. 1% increase in proportion undernourished from 1992-2001 - Growth of supply not met growth in demand created by population growth (25% in 1992- 2001). Changes in domestic marketing systems and inputs complicate analysis of TL effects. - Rural households more food-insecure, as are households headed by women	- Senegal
19. Duflo E, M. Kremer, J. Robinson, (2010), Nudging Farmers to Use Fertilizer	- On farmers decision to invest in fertilizer	- Kenya
20. ECOWAS (2008) "ECOWAP at a Glance" ECOWAS Commission	- Overview of ECOWAP (context, challenges, vision, objectives and orientations) - Short presentation of the regional offensive for food production against hunger after food crisis.	- ECOWAS
21. Faivre Dupraigre B., P. Alary, R. Blein, B. G. Soule, (2008), Améliorer le fonctionnement des marchés agricoles en Afrique de l'Ouest, FARM	- The assumption is that the priority should be given to the support of market stakeholders and instruments: access to credit, risk management, market organizations, agricultural trading firms, market information, wholesale markets, standardization. - Those themes are frameworks for public-private partnerships and represent areas of investment for both public and privates sectors, covering all stages of the supply chain from the producer to the consumer. Each of them should be reinforced and institutional innovations should be thought through such systemic/holistic framework.	- ECOWAS

22. FEWS NET (2009) "Potential Food Security Impacts of Rising Commodity Prices in the Sahel: 2008-2009"	- Examines current thinking about key determinants of recent cereal price trends and what they imply for future trends; - Provides a description of the policy and program options available for mitigating the negative food security impacts of rising prices; - Examines why current price increases are different to past	- Sahelian countries
23. FEWSNET (2012) "High cereal prices in West Africa likely to fall as October harvests approach" West Africa Special Report	- Examines current prices and likely trends for cereals prices - Lists potential threats driving price increases	- West Africa
24. FEWSNET (2012) "Senegal Price Bulletin"	- Overview of agricultural prices and recent developments in Senegal.	- Senegal
25. FEWSNET (2012) "West Africa Price Bulletin"	- Examines current prices for cereals in West Africa	- West Afcia - Maize, cowpea, rice, sorghum, yams, millet
26. Galtier, F., (2012), Gérer l'instabilité des prix alimentaires dans les pays en développement, CIRAD, AFD, Collection "A Savoir",	- Late 1980s, a specific doctrine has dominated both in academic and political circles and inside countries and internationally: it is preferable to reduce the effects of price instability without impeding price fluctuations. This can be achieved by encouraging trade, managing price risk (through private insurance instruments) and managing crises (through emergency aid). But this doctrine was called into question in the 2000s - The author highlights various alternative strategies based on whether countries aim to manage food price instability by stabilizing prices or by reducing the effects of price instability. This is differentiated according to different causes of price instability: natural, imported and endogenous. The author suggests various combinations of strategies according to the causes of price instability.	- Not specific to West Africa

27. Gillson, I. (2011), Non-Tariff Barriers to Sub-Saharan African Trade in Food Staples: Opening Regional Markets to Promote Food Security and Price Stabilization; Washington: The World Bank, 2011.	- This paper summarizes a number of new studies that identify the most restrictive NTBs in Southern Africa.	- Southern Africa
28. Gourdon, J. and O. Cadot (forthcoming). "Quantifying the Effects of Non-Tariff Measures in Africa." World Bank, Washington, D.C..	- Examines NTMs impact on price - Broadened to look at Kenya household survey to look at impact on households – NTMs act as a regressive tax (esp SPS meaures' impact on food prices)	- Covers all of Africa - Focuses on all types of NTMs
29. Haggblade, S. et al. (2012) "Staple Food Market Sheds in West Africa" MSU International Development Working Paper	- Uses spatial analysis to examine geographic extent of major food staple food market sheds and major trade corridors linking surplus and deficit areas. - combines data on the spatial distribution of rural and urban population, maps of differing food staple zones, crop production data and consumption patterns as described in an array of recent household surveys to map major urban food markets as well as principal surplus production zones. - Allows for identification of major commodity flows with supply zones	- West Africa - Sorghum, millet and rice
30. Harris, D., V. Chambers and M. Foresti (2011) "The Political Economy of Regional Integration and Regionalism in West Africa: A Scoping Exercise" Draft Literature Review.	- Reviews literature on West African regionalism to examine formal integration agenda, under-provision of regional public goods, and regionalism as it is experienced. - Common themes in ETLS implementation include gap between legislation and implementation, limited private sector knowledge of free trade protocols, strong incentives for informal trade, widespread imposition of NTBs, non-compliance with duty tariffs, non-functioning of inter-state road transit documentation, inconsistent application of ETLS policies and procedures, and challenges of double-membership to UEMOA/ECOWAS - Under-provision of public goods	-

	- Discussion of agriculture and food security as well as regional policies for these(p.23) - Discussion of liberalisation in UEMOA leading to inadequate protection to local production so that many countries impose tariff ands and NTBs	
31. Hazell, P. and C. Poulton (2008) "All-Africa Review of Experiences with Commercial Agriculture: Case Study on Food Staples" Background paper for the Competitive Commercial Agriculture in Sub-Saharan Africa Study	- Overview of food staples throughout Africa - Has sections on performance of staples, factors influencing staples production, actors involved in production, trade and lessons from successes	- Cereals and Cassava - All of Africa
32. Ihle, R.; S. von Cramon-Traubadel, & S. Zorya (2010), ―Country and Border Effects in the Transmission of Maize Prices in Eastern Africa: Evidence from a Semi-Parametric Regression Model‖; Paper prepared to the Joint Conference of the African Association of Agricultural Economists and the Agricultural Economists Association of South Africa, Cape Town.	- Analyze the factors determining national and cross-national maize price transmission - First, it assesses the magnitude of price transmission, instead of analyzing trade flows or price variability. Second, distance is shown to have a significant impact on price transmission in the region and to be of nonlinear nature, which is modeled using a semi parametric partially linear model. Third, the border effect is found to be heterogeneous, that is, it matters which national border is crossed.	- Kenya, Tanzanian and Uganda
33. Johson, M. (2011) 'Lobbying for trade barriers: a comparison of poultry producers' success in Cameroon, Senegal and Ghana' *Journal of Modern African Studies* 49(4), pp 575-599.	- Flood of frozen poultry imports in the late 1990s and early 2000s threatened domestic poultry producers – producers demanded government protection. - Examines why the Cameroonian and Senegalese governments responded to these demands while the Ghanaian government did not. - Cameroonian, and to a lesser extent Senegalese, producers were able to influence government policy because they faced few barriers to collective	- Poultry - Cameroon, Senegal, Ghana

		action and built alliances with consumers before lobbying government.	
34.	Josserand, H (2013) 'Assessment of volumes and value of regionally traded staple commodities' Paper prepared for the Food Across Borders Conference, Accra – 29-31 January 2013	- Examines trade patterns, looking at volume and value of regionally traded commodities - Trade flows of basic foods are more diverse and greater than commonly recognized - Great variation in barriers and obstacles over time and space - Examines main barriers, including roadways, condition of infrastructure, attitudes towards foreign traders and transporters, and for informal trade bans. - "In the medium-term, population growth, urbanization and the transformation of West African agriculture will redefine regional trade flows of basic foods --the increase in trade is expected to far outpace the tripling in regional food production."	- West Africa - Livestock, maize, millet and sorghum, rice, onions
35.	Karugia, J. et al (2009) "The impact of non-tariff barriers on maize and beef trade in East Africa	- identifies the existing NTBs on maize and beef trade in East Africa and quantifies their impact on trade and the welfare of EAC citizens using a Spatial Equilibrium Model (SEM). - NTBs include administrative requirements (mainly licenses, municipal and council permits), taxes/duties (mainly excise and cess duty), roadblocks, customs barriers, weighbridges, licensing, corruption (e.g., through bribes) and transiting. - Abolition of NTBs would lead to substantially more intra-regional trade and net welfare gains in sub-sectors. - Recommends taking a regional approach to eliminating the existing NTBs since they are similar across the member countries and across commodities so as to exploit economies of scale.	- East Africa - Maize & beef
36.	Keyser, J. (2012) 'Africa can feed Africa: Removing Barriers to Regional Trade in Food Staples" Working Paper	- Part of a larger World Bank study on removing barriers to regional trade of food staples in Africa aiming to assess where policy interventions to remove barriers to trade in food staples are most appropriate at the country and regional levels.	- All in Southern and East Africa

		- Reviews value chain concepts to show how the costs of trade can affect farmer incomes; - Provides an overview of main trade requirements for staple food and crop inputs in East and Southern Africa. - Describes 3 SPS instruments – harmonisation, mutual recognition, and equivalence – that can promote regional trade. - Case study examples in EAC.	
37.	Magalhaes, J. (2010). "Regional Sanitary and Phytosanitary Frameworks and Strategies in Africa." Report for the Standards and Trade Development Facility.	Not Reviewed	-
38.	McCorriston S, Hemming DJ, Lamontagne-Godwin, JD, Parr, MJ, Osborn J, Roberts PD (2013) *What is the evidence of the impact of agricultural trade liberalisation on food security in developing countries? A systematic review.* London: EPPICentre, Social Science Research Unit, Institute of Education, University of London.	- Systematic review examining evidence for links between agr trade liberalisation and food security in developing countries, with in-depth appraisal of 34 studies. - Evidence indicates no consistent outcome (13 suggest improvement, 10 decline, 11 mixed). - Key issues to explain ambiguous results are importance of context of liberalisation, how food security is measured, and methods used for assessing link. - Points to importance of prices and price transmission: How prices adjust following trade reform and how these price changes impact on different groups and, in particular, the most vulnerable feature prominently in the empirical studies. - Therefore need to extend the research agenda to include how trade and price volatility impact on vulnerability and risk, and how these issues may be affected by exposure to volatile commodity markets.	- Nigeria, Senegal, Ghana
39.	Meyer, N. *et al.* (2010), "Bilateral and Regional Trade Agreements	- Has annex of legal provision in SSA RTAs, including ECOWAS and UEMOA.	- WA, and Nigeria specifically

	and Technical Barriers to Trade: An African Perspective", *OECD Trade Policy Working Papers*, No. 96, OECD Publishing.	- Examines TBT provisions in ECOWAS and UEMOA	
40.	Minot, N. (2011) 'Transmission of World Food Price Changes to Markets in Sub-Saharan Africa' IFPRI Discussion Paper	- Impact of world food markets on price of staple foods in SSA for 11 countries. - Results show that only 13 of 62 prices had long-term relationship between world prices and African prices (more for rice than maize) - Recommends diversification, agricultural research, and grain trade facilitation.	- Sample of SSA - Sample of commodities but esp rice and maize)
41.	Minot, N. (2012), Food price volatility in Africa – Has it Really Increased?, IFPRI Discussion Paper 01239, December.	- International grain prices have become more volatile in recent years (2007–2010) but no evidence that food price volatility has increased in the region. Examines causes and consequences of food price volatility in international food markets and the developing world, particularly in Africa south of the Sahara using an unusually rich database of African staple food prices. - The results suggest that price volatility is - lower for processed and tradable foods than for nontradable foods - lower in the largest (usually the capital) cities than in secondary cities - higher for maize in countries with the most active intervention to stabilize maize prices - These findings suggest that greater attention should be given to the (high) level of food prices in the region rather than volatility per se, that regional and international trade can play a useful role in reducing food price volatility, and that traditional food price stabilization efforts may be counterproductive.	- For the analysis of changes in volatility over time, the dataset includes prices for 6 staple foods (beans, cooking oil, maize, millet, rice, and sorghum) in 11 countries (Chad, Kenya, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Tanzania, Uganda, and Zambia) - For the analysis of patterns of volatility between, for example, commodities and countries, the dataset includes prices for 10 staple foods (beans, bread, cooking oil, cowpeas, maize, millet, rice, sorghum, teff, and wheat) in 15 countries (Chad, Ethiopia,

			Guinea, Kenya, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Tanzania, Uganda, Zambia, and Zimbabwe)
42. Neven, D. and M. Demont (2010) 'The Impact of the Financial and Food Crisis on West African Rice Markets: Value Chain and Consumer Perspectives on Response Strategies"	- 2 studies to assess impact of global recession and food crisis on rice markets - Study 1: value chain approach to analyse supply side - Study 2: Demand side based on consumer experiments - Results: competition not solely driven by price, West African rice is less competitive than imported rice, value chains have failed to achieve potential, poor governance of quality, and most responses have focused on production at exclusion of processing and marketing	- West Africa (Ghana, Liberia, Nigeria, Senegal, Benin, CdI, Mali) - Rice
43. Nin-Pratt, A. et al (2009) 'Priorities for Realizing the Potential to Increase Agricultural Productivity and Growth in Western and Central Africa'	- Analyses potential to increase productivity within different agro-ecological and socioeconomic environments in West Africa, depending on the current yield gaps for each crop and unique environment and on the potential demand to absorb increased production resulting from increased productivity. - Simulations to determine strategic options for stimulating agricultural growth: integration of spatial analysis to identify yield gaps determining growth potential of different agricultural activities for areas with similar conditions and an economy-wide multimarket model to simulate *ex ante* the economic effects of closing these yield gaps - Results indicate that the greatest agriculture-led growth opportunities in West Africa reside in staple crops (cereals as well as roots and tubers) and livestock production. Rice is the commodity with the highest potential for growth and the one that could generate the greatest benefits for many countries. - results point to following priorities: development of opportunities for regional cooperation on technology adaptation and diffusion, strengthening of regional agricultural markets exploiting opportunities for greater regional	- West Africa - All staples

	cooperation and harmonization, diversification of traditional markets, and enhancement of linkages between agricultural and non-agricultural sectors.	
44. Nkonya E. N. Gerber, J. von Braun, A. De Pinto. 2011. Economics of land degradation, The Costs of Action versus Inaction, IFPRI Issue Brief 6, September	- Reducing transaction costs and linking farmers to the market, rural services – rural roads, extension services, communication infrastructure, markets etc. – increase the returns to investment and as a consequence influence farmers' decisions to adopt and invest in better land management technologies.	- Example of improved access to roads and markets in Machakos, Kenya
45. Odozi, J. and B. Omonona (2012) 'Governance options for price instability: A review of the food grain commodity in Nigeria'	- Reviews nature of grain commodity flow in Nigeria and examines typologies of price instability. - Examines governance options to address this	- Nigeria - Grain
46. Oduro AD, Kwadzo GTM (2006) Ghana. In: Thomas H (ed) *Trade-related reforms and food security: country case studies.* Rome: Food and Agriculture Organization of the United Nations, pages 223–264.	- Examines impact of tariff reduction via a before/after analysis - Finds that food security improved, then declined - National level FS improved - food imports declined as a share of total exports between 1992 and 1996, but then reversed, though remaining below the 1992 level. Decline in underweight children, increased in 5 regions. - Poverty declined from 51.9% in 1991/92 to 39.5% in 1998/99, but not all regions benefited. Proportion undernourished down 23% 1992- 2001, calorie availability up 26%. - Liberalisation failed to improve price incentives for food crop farmers.	- Ghana
47. Okoboi G., M. Barungi. 2012. Constraints to Fertilizer Use in Uganda: Insights from Uganda Census of Agriculture 2008/9, Journal of Sustainable Development; Vol. 5, No. 10; 2012	- Low access to credit and constrained access to input and output markets due to distance are key constraints to fertilizer use.	- Uganda

48.	Oyejide TA, Ogunkola EO, Alaba OB (2006) Nigeria. In: Thomas H (ed) *Trade-related reforms and food security: country case studies.* Rome: Food and Agriculture Organization of the United Nations, pages 465–501	- Before/after analysis of import tariff reduction. - Although FS has improved, impact of higher prices on production and investment has been limited, as has application of new technologies - Undernourished declined from ~25 million in 1979-80 to ~ 7 million in 1998-2000. Daily calorie intake increased. 2000 kcal, before reform, and nearly 2800 after. Decline in the proportion of undernourished from 39% in 1979- 80 to 13% in 1990-92 and further to 7% in 1998- 2000. Food import dependence fell from 13% of total imports during 1980-82 to 6% during 1989- 91, but then rose to 12% 1998-2000. However, domestic food production meets most needs.	- Nigeria
49.	Pálsson, G., Harding, A., and Raballand, G. (2007) 'Port and Maritime Transport Challenges in West and Central Africa'. SSATP Working Paper No. 84. Washington DC: World Bank	- Overview of trends in maritime transport and ports - Trends in WCA maritime transport include gradual reorientation of trade towards US and Asia from EU; increasing ship size; declining transport tariffs; higher port concentration for container traffic; development of regional feeder services; facilitated transport between ports and hinterland; limited number of regional hubs instead of 8-10; improvements in port security; increased private sector participation in management - Improvement of port management is a prerequisite for further development of the maritime sector in West Africa - Vicious cycle where exports from WCA remain weak because of current high maritime transport tariffs4 (and additional constraints), which induce low traffic and therefore raise tariffs. - Need to reform port management, foster private sector particiaptoin, facilitate procedures and controls, increase competition, develop knowledge-sharing across region…	- West Africa - Not specific to agriculture
50.	Pannhausen, C. and B. Untied (2010) ' Regional Agricultural Trade in West Africa A focus on the Sahel region' GTZ	- Examines main regional trade flows; relevant institutions, policies and strategies; and barriers to trade as well as possible solutions - Detailed analysis of main institutions and supra-national policies - Examines 3 countries (BF, Mali, Niger) - Very good summary of main barriers	- Sahel countries - Agricultural trade

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51. Perakis, S. (2012) 'Changing Spatial Maize Price Relationships in West Africa'	- Draws on recent advances by Myers and Jayne (2011) in spatial price analysis methods are applied to a unique database spanning the post market liberalization period of 1994- 2010 to study the evolution of spatial price relationships along existing and emerging grain marketing corridors in West Africa. - Overview of WA maize market performance in recent decades	- Maize - Mali, Senegal, BF, Niger
52. Porto, G. et al (2012) 'Supply Chains in Export Agriculture, Competition, and Poverty in Sub-Saharan Africa' World Bank and CEPR	- Focuses on the 'market power' of farmers along the supply chain esp in regard to uncompetitive input markets. - Book shows significant effects of market power on income distribution – role of competition in export agriculture supply chain - Based on game theory model of supply chains in agriculture between many smallholders and few exporters (oligopsony) - Explores numerous scenarios (firms split, merge, new entrant) that may affect equilibrium - Using household surveys they assess impact poverty impacts of changes along value chain - Carried out for 12 case studies	- Focus on export crops (coffee, cotton, cocoa, and tobacco) - Includes cotton in BF, CdI and Benin; cocoa in CdI and Ghana and coffee in CdI
53. Pray, C. D. Gisselquist and L. Nagarajan (2011) 'Private Investment in Agricultural Research and Technology Transfer in Africa' Conference Working Paper 13 Prepared for the ASTI/IFPRI-FARA Conference. Accra, Ghana, December 5-7, 2011. And 54. Pray, C., D. Gisselquist and L.	- Surveys of private sector innovation and research throughout Africa. - R&D is growing rapidly, esp in seed industry - Discusses recent policies that encouraged R&D in agriculture - Some discussion of barriers to trade in inputs, but very superficial	- Seeds and other inputs - All of SSA but focus on Senegal among WA countries

	Nagarajan (2012) “Policies to Facilitate Private Agricultural Innovation and R&D”		
55.	Rashid, S., & Minot, N. (2010). "Are staple food markets efficient in Africa? Spatial price analysis and beyond." Prepared for the COMESA policy seminar on 'Variation in staple food prices: Causes, consequence, and policy options,' Maputo, Mozambique 25–26 January 2010.	- Assesses efficiency of staple food markets (i.e. degree of market integration) in Africa by examining spatial price variation through recent surveys. - Good summary of past studies on food market integration in WA - Concludes that least integrated markets are most remote ones; speed of adjustment varies significantly; no consumes on the symmetry of price transmission; and significant evidence of improved market integtratoin after liberalisation reforms. - Efficiency of markets impacted by trade barriers, degree of competition in transport sector, access to information, effectiveness of legal system, quality of transport infrastructure, regulation o transport sector, government interventions in food markets, trade and macro policy. - Suggestions for future research include more information on transport and marketing costs, better data on cross-border food grain trade, wider availability of price data, capacity building in price and market integration analysis.	- Covers all of Africa but has section reviewing literature on West Africa
56.	Roberts, D., T. Josling, and D. Orden (1999) “A Framework for Analysing Technical Trade Barriers in Agricultural Markets” Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture. Technical Bulletin No. 1876.	- Classifies barriers by policy instrument, by the scope of the measure, and by the regulatory goals. - Provides a modelling framework for economic analysis of the trade effects of TBTs	- Examines all types of barriers (not specific to staples or countries) -

57. Rolland J-P, A. Alpha (2011) Analyse de la cohérence des politiques commerciales en Afrique de l'Ouest	- Coherence between national and regional trade policies – some case studies of incoherencies preventing trade within ECOWAS & UEMOA- Political will issues - Examines prohibitions and bans during food crisis in 2008	- Across West Africa
58. Romanik, C. (2007) "An Urban-Rural Focus on Food Markets in Africa" The Urban Institute	- Argues for a greater focus on urban consumers due to increasing urbanisations: "The growing numbers of very poor urban dwellers mean that policymakers need to consider how to keep food prices affordable without recreating the subsidies that stifled economic growth in the past." - Examines differences in urban and rural food markets - Looks at evidence that African cities are mainly fed by imports and then focuses on role of peri-urban farmers, urban agriculture and food processers in supplying urban food markets.	- Examines all of SSA including West African countries and cities - Not focused on any specific commodity
59. Savadogo, K. (2009) 'La Politique agricole de l'UEMOA: Etat de mise en œuvre et défis' Papier présenté au Colloque Régional UEMOA/CRDI sur « Intégration régionale et stratégie de réduction de la pauvreté ». Ouagadougou, 8-10 décembre 2009.	- Examines the UEMOA common agricultural policy to review the content and examine its implementation - Has overview of agriculture overlap between UEMOA and ECOWAS.	- Focus on UEMOA - Overview of agricultural policies
60. Senahoun, J. (2008)- Acro S p e c i a l r e p o r t Markets, prices, food situation and prospects for Benin, Niger and Nigeria CILSS/FAO/FEWSNET/SIMA/WFP Joint Market Assessment Mission to Benin, Niger and Nigeria	- Impact of early food cessation in 2007 and lack of access to fertilizer in Nigeria. - Assess the current stock and price levels as well as trade flows within and between countries, and analyses the food security implications in more vulnerable countries.	- Benin, Niger and Nigeria

61. Soule, B. G. (2001) 'Prospects for Trade Between Nigeria and its Neighbours' OECD	- Examines current trade between Nigeria and neighbours with focus on retrospective account of this, Nigeria's trade in petroleum, Nigeria's recent policy changes, Nigeria's monetary policy, the role of trading networks in regional trade, constraints to trade between Nigeria and neighbours, and prospective analysis	- Nigeria - Doesn't examine any commodities specifically
62. Soulé, Bio Goura and Sanni Gansari. 2010. *La dynamique des échanges régionaux des céréales en Afrique de l'Ouest.* Bamako: Syngenta Foundation	- Useful and recent summary of cross-border trade in food staple volumes	-
63. Staatz, J. N. Dembele, V. Kelly, and R. Adjao (2008) 'Agricultural Globalisation in Reverse: the Impact of the Food Crisis in West Africa' Background Paper for the Geneva Trade and Development Forum. **	- Focuses on impact of food crisis on West African food security strategies - Lists different strategies available to governments to ensure greater food security.	- West Africa - Focus on all agricultural products and specifically barriers
64. Takeshima H., A. I. Adeoti, S. Salau. 2010. Measuring the Effect of Transaction Costs for Investment in Irrigation Pumps: Application of Unobserved Stochastic Threshold Model to the Case of Nigeria, Nigeria Strategy Support Program (NSSP), NSSP Working Paper No. 0015	- Looks at farmer's investment decisions in high transactions risks environments. - Household characteristics affect the level of those transaction costs directly related to the action of investing in irrigation pumps. - But those characteristics may not affect the expected profitability once the investment has been made. This suggests large foregone agricultural productivity increase in Nigeria from the single irrigation pump purchase transaction costs	- Nigeria
65. Teravaninthorn, S., and Raballand, G. (2008) 'Transport Prices and	- Focuses on 4 international corridors to analyse transport costs and prices, based on infrastructure, factor costs and market economics (regulation,	- Includes Ghana, Niger, BF, Togo corridor

	Costs in Africa: A Review of the Main International Corridors'. Africa Infrastructure Country Diagnostic (AICD) Working Paper 14. Washington DC: World Bank.	organisation and transport and trade procedures) using clear empirical evidence - first attempt of its kind in Africa and worldwide to disaggregate input factors into three tiers of costs and prices: (i) transport prices or tariffs incurred by end users, (ii) transport costs incurred by commercial transport providers, and (iii) vehicle operating costs (VOCs). - Main recommendation for West and Central Africa: decrease fuel costs, improve road consideration and then reduce border-crossing delays. - However, need to first reform cartels in trucking : "Deregulating the trucking industry in West and Central Africa is less a technical than a political and social issue. The main concern is that under a liberalized, competitive market, the demand could be served efficiently by a much smaller number of trucks." - Recommendations: shifting tax burden from fuel to registration; incentivise the importing of newer trucks; provide direct compensation to truckers losing work after deregulation - Recommendations for donors: support deregulation, data collection of trucking industry data through surveys (also to inform road maintenance strategies), review of the effect of fiscal policies on transport,	- No discussion of food staples
66.	Terpend, N. (2006) 'An Assessment of Knowledge about Trade and Markets related to Food Security in West Africa' World Food Programme	- Examination of existing knowledge of markets and cross border commodity flows in West Africa in order to clarify the role, and strengthen the monitoring, of markets as they affect food security. - Factors affecting markets and cross-border commodity flows include agricultural production in different countries, organization of markets and cross border commodity flows, gaps in prices in different zones, fiscal and trade systems and socio-political events. - A large amount of information needed to do a good monitoring of food security and markets already exists, but it is not adequately used.	- Covers entire WA region - No focus on specific commodities, but broad range of food staples
67.	Trémolières, M., and Abdoul, M. (2007) 'Cross-border area	- Examines regional distinctive characteristic of the Maradi-Katsina-Kano micro-region is the promotion of regional trade beyond the borders of Niger	- Niger & Nigeria -

cooperation between Niger and Nigeria: The case of the Maradi Micro-region', in: Soderbaum, F., and Taylor, I. eds. (2007) *Micro-Regionalism in West Africa Evidence from Two Case Studies*, Discussion Paper 34. Uppsala: Nordiska Afrikainstitutet.	and Nigeria thanks to a cross-border junction structured around the Hausa network. - Highlights incongruence and potential tensions between the national and local levels of government in the case of cross-border cooperation between Niger and Nigeria in the Maradi micro-region. - A range of informal practices have emerged, with local officials often involved in much the same way as other local actors in border areas. - Dialogue and *de facto* cooperation have contributed to improved cross-border cooperation in the micro-region. - The authors suggest that 'the task for the official post-colonial state is surely to recognize these and harness such impulses for a more broad-based development strategy that takes advantage of what the citizenry is already engaged in'.	
68. USAID (2009). "Global Food Security Response: West Africa Rice Value Chain Analysis." Report No. 161, United States Agency for International Development.	- Examines donor and government response to 'rice crisis' – tripling in prices in 2008 during food crisis. - Advocates food security strategy of rice with 3 components: 1. Development of national value chain competitiveness strategies based on creation of commercial networks. - 2. Development of national rural rice food security strategies focused on access to food are needed to improve productivity for the majority of more widely dispersed subsistence rice producers, mainly operating under rain-fed production systems - 3. Development of regional food security strategy focused on distribution to facilitate rice flows.	- Entire region
69. USAID (2012) "Annual Report FY 2011 for ATP and E-ATP 70. USAID (2011), Agribusiness and trade Promotion (USAID ATP) &	- Projects aim to increase value and volume of intra-regional agricultural trade - ATP outcomes: reduction in barriers to trade; enhancing linkages among producers, suppliers, distributors and processors; more effective advocacy by private sector and other actors for increased trade; improved efficiency in	- Benin, BF, CdI, Ghana, Mali, Niger, Nigeria, Senegal, Togo - Maize, livestock, onion/shallots (ATP) and rice, millet/sorghum and poultry

	Expanded agribusiness and trade promotion (USAID EATP) annual progress report October 2010 – September 2011	transactions through market information system - E-ATP outcomes: reducing barriers to trade esp from surplus to deficit areas; enhancing linkages among producers, suppliers, distributors and processors; more effective advocacy by private sector and other actors for increased trade; improved efficiency in transactions through market information system; enhanced capacity of poultry and animal health sectors to reduce risks of AI outbreaks and transmissions	(E-ATP)
71.	USAID (2013), opportunities missed or Seized in ECOWAS: trade Barrier effects on Agribusiness investment Agribusiness and trade promotion (ATP) project.	- Examines manifestations and impact of trade barriers for different market actors and reports on efforts to address this gap. - Interviews conducted with informants from 40 companies working on maize, millet-sorghum, riche and livestock value chains to gain private sector views on regional integration in WA and determine what opportunities were being foregone in current environment. - Main constraint is shortage of primary materials and inputs in maize VC. Caused by lack of effective common market, lack of uniform seed certification, weak quality standards across ECOWAS and inadequate access to packing materials. - Millet and sorghum are generally in low demand and not traded extensively (except from Nigeria to Niger) - Rice VC likely to grow given high levels of demand. Barriers include inconsistent policies, unofficial costs, import tariffs and market-size related diseconomies of scale. - Livestock-meat VC: barriers include bribes at borders, and too many points of intermediation. - Failure to take advantage of opportunities to increase efficiency through freer flow of goods across borders. Failure to impose CET and uncertain internal tariffs reinforce business tendencies to think in national terms. - Thus, impact on private sector of foregone opportunities include lack of investment to realize scale economies, avoidance of company involvement in procurement and marketing across borders (perpetuating informal trade), disincentive to invest in capital goods for value-added processing and	- West Africa - Maize, millet – sorghum, rice, livestock

	regional warehousing for larger markets.	
72. Wodon and Zaman (2010) 'Higher Food Prices in Sub-Saharan Africa: Poverty Impact and Policy Responses' *World Bank Research Observer* 25(1).	- Review of the evidence on the potential impact of higher food prices on poverty, focusing on Sub-Saharan Africa, - Examines the extent to which policy responses are able to protect the poor. - Most common policy response was reducing taxes on food but countries also have many food-based safety net programmes that were scaled up. - Benefits from reducing import tariffs on staples are likely to accrue largely to the non-poor. - If well targeted, safety net programmes can also be quite effective.	- SSA - No specific commodity
73. NOT EXAMINED: World Bank (2008) 'Regional Trade in Food Staples: Prospects for Stimulating Agricultural Growth and Moderating Short-Term Food Security Crises in Eastern and Southern Africa.	- Focuses exclusively on S&E Africa.	-
74. World Bank (2009b). *Awakening Africa's Sleeping Giant: Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond*. World Bank, Washington.	- Examines agricultural potential of Guinea Savannah zone drawing parallels to Brazil's Cerrado region and Northeast of Thailand. - Supply chain analysis of 3 African case study countries to assess competitiveness. - also assessed the potential social and environmental impacts of agricultural commercialization in the three African case study countries (Moz, Nigeria and Zambia) - Value chain analysis suggests large-scale farming most likely if following 3 circumstances are achieved: economies of scale, need to compete in overseas market with strict quality requirements, and when relatively fertile land must be developed in very low population-density areas - Five factors explain positive outlook: rapid economic growth and strong	- cassava, cotton, maize, soybeans, rice, and sugar - Focuses on Mozambique, Nigeria and Zambia

		demand, favourable domestic policy environments, improved business climate, increased incentives to invest in agriculture, new technologies - Top constraints are: growth in international competition, exogenous shocks, weak national commitment, weak donor commitment, lack of social cohesion and political stability - Requires continuation of macro policy reforms, land policy reforms, scaling up public investments, incentivising private investments, institutional reforms to make markets function better, public sector reforms, managing social & environmental impacts.	
75. World Bank (2012) 'Federal Republic of Nigeria: Agricultural Transformation Development Policy Operation' Identification Mission: June 1-16, 2012. Aide Memoire.	- Nigeria seems to be focusing on priority food staples and traditional export crops, and wants to drive those hard for growth and employment creation, with the expectation that the rest of the sector will subsequently follow. - This is comparable to Green Revolution strategy but Nigeria is investing far less (5% instead of 15%) - Given the high levels of subsidy built into the ATA policies for fertilizers, seeds, credit, machinery, special processing zones, guaranteed minimum prices, etc. and the significant trade protection provided through tariffs and import embargoes, it would be useful to assess whether there is any scope for scaling back on some of these incentives. - Provides an overview of trade barriers on staple goods - Lists several implementation problems in area of inputs; weak regulatory enforcement, inadequate seed cleaning capacity, need for analytical work on technology adoption among farmers. - WB is considering supporting GoN through economic analysis (CGE or multi-makret models) to assess these supply competitiveness and consumer trade-offs under different configurations of policies.	- Nigeria - Focuses on almost all staple commodities but esp on cassava, rice and wheat VCs
76. World Bank (2012) *Africa Can Help Feed Africa*. Washington, DC: World Bank	- Regional trade in staples, which offers the potential to advance food security and growth, is not being exploited. Removing barriers to regional trade presents benefits to farmers, consumers, and governments. Farmers gain the	- All of SSA

		incentives to meet the rising regional demand for food; and new jobs would be created along the activities of the staples value chain. - *Regulatory barriers to trade and competition along the whole value chain must be removed for Africa to reach its potential in regional food trade.* Two key issues must be addressed: (a) establishing a consistent and stable policy environment for regional trade in fertilizers; and (b) investing in institutions that reduce the transaction costs of coordination failures - *High transport costs:* Transport cartels are still common across Africa, and the incentives to invest in modern trucks and logistics services are weak. Roadblocks, as well as being a nuisance, add considerably to the costs and time to transport, undermining the efficiency of transport operations - *Build and reform institutions and invest in their capacity to make staples markets efficient and stable:* Market-based agricultural production and distribution, especially when based on integrated regional markets, require institutions that aid exchange. - Political economy issues constrain open regional trade: Opening up food staples to regional trade will create winners and losers. For example, where reform reduces the gap between producer and consumer prices, farmers and poor consumers will gain; intermediaries earning rents, both in public sector agencies and well-connected private sector interests will lose.	
77.	World Food Programme (2011) "Emergency Humanitarian Food Reserves Feasibility Study, Cost-Benefit Analysis and Proposal for Pilot Programme"	- Response to request of G20 Finance Ministers and developed thorough collaborative process involving governments, RECs and DPs, sets out detailed recommendations for the operation, financing and management of a five-year pilot Pre-Positioning for Predictable Access and Resilience (PREPARE) system. - PREPARE system would give poor food deficit countries rapid access to sufficient physical food for distribution through schemes of targeted assistance, such as safety nets. - Aims to build national and regional capacity to manage food stocks and to	- ECOWAS region - Maize, millet, sorghum and rice

	design and deploy effective safety net systems - Would make maize, millet, sorghum and rice sufficient to meet up to 90 days of projected needs for the most vulnerable available to participating countries through a small physical stock of 67,000 MT and a portfolio of virtual procurement tools. - Sell or lend food to participating countries when clear, transparent and pre-determined trigger criteria have been met.	
78. Zerelli, S. and A. Cook (2010). "Trucking to West Africa's Landlocked Countries: Market Structure and Conduct, USAID West Africa Trade Hub." Technical Report No. 32, March 2010: p.9.	- Prices of freight transport far exceed underlying costs suggesting rents and cartels. - Study documents trucking procedures along a sample of transit corridor linking ports to destinations in landlocked countries. - Interviews with private and public sector in prots of Abidjan, Tema, Lome and Cotonou and along 11 transit corridors. - Although some corridors, particularly those leading to Niger, suffered from oligopolies, in other cases, particularly corridors emanating from Abidjan and Tema, the problems had limited impact. - Regional organizations and governments should prioritize removing them. They should also simultaneously change other regulations that underpin the oligopolies. - Enterprising truckers and freight forwarders already resist the oligopolistic and bureaucratic strictures. In different degrees, varying by port and destination, they seek directly negotiated alternatives. - Freight forwarders have some freedom to refuse poor-quality vehicles - Recommends bilateral renegotiation of IST agreements as well as revision of ECOWAS' Inter-State Transportation Convention would more efficiently liberate West African trucking. - Oligiopoly is largest problem in Cotonou-Lome-Niamey corridor - Other policies could include harmonization and simplification of customs procedures and documents, the construction of joint border facilities and the implementation of ECOWAS' transport and transit facilitation strategy.	- Mali, BF, Niger

Annex 2: Findings from USAID Gap analysis of the ECOWAS Free Trade Area

From Harris et al. 2011

Country	Non-Implementation of ECOWAS Trade Liberalization Scheme (ETLS)
Burkina Faso	**Application of non-tariff barriers at borders and on transport routes**: In addition to seasonal restrictions listed separately below, illegal road stops and demands for bribes constituted common non-tariff barriers persisting along main transport corridors. Refusal to pay the money demanded could result in significant delays.
Burkina Faso	**Improper Charging of Duty to Value-added Goods:** Despite ETLS provisions that goods with 30% value added are to enter duty free provided they are accompanied by a certificate of origin, half of the private sector respondents reported being required to pay duty on such products. Such practices reduce incentives for value addition in the region and increase costs for manufacturers and processors. Higher costs reduce the competitiveness of West African products in both external and intra-regional markets.
Burkina Faso	**Application of Seasonal Restrictions:** The application by Burkina Faso of seasonal restrictions on certain products, most notably maize, has multiple negative impacts, including the reduction of farmers' income. The seasonal restrictions imposed also compromise regional food availability and security during the off-season. Respondents highlighted the fact that by paying bribes, exports are still possible in spite of these restrictions.
Burkina Faso	**Limits on truck axle loads are not being followed:** ECOWAS protocols limit axle loads to 11.5 tonnes per axle. Inconsistent application of this limit increases transport costs, exacerbates and accelerates road destruction, causes more frequent accidents when trucks are structurally unsound, and encourages unofficial payments.
Benin	**Gap between Legislation and Implementation:** The Gap Analysis research team was unable to find updated legislation, regulation or procedures addressing many of the ETLS protocols. As in many countries, there is a lack of enforcement and consistency in application of national or regional laws at the borders. In addition, unofficial non-tariff barriers (NTBs) are also sometimes imposed at borders.
Benin	**Low Private-Sector Awareness of ETLS:** Private-sector traders indicated they had limited, detailed information on ETLS protocols, their rights, where to find information and documents needed for transit across borders, and the normal fees for processing.

Benin	**Inter-State Road Transit (ISRT) Guarantee Bond and Logbook are not functioning:** Use of a uniform customs transit, declaration and bond system such as the ISRT is necessary for facilitating regional trade and increasing competitiveness of regional industries, but the public sector in Benin identified the ISRT Guarantee Bond and Logbook (also widely known by its French name: Carnet TRIE) documents as defunct. At the same time, two out of three private-sector respondents said they use the ISRT Logbook because it is necessary for cross-border trade, so they are using it in other countries. When traders must pay bonds at every border and then struggle to get the money returned, they become more likely to offer informal payments for passage, which ultimately reduces income to the government, producer, and driver and increases the costs of the goods to consumers.
Benin	**NTBs:** Traders of a variety of goods are exposed to unofficial, unrecorded and arbitrary bans, quotas, and quantitative and seasonal restrictions, which are all in violation of ETLS protocols. Officially, there is also an obligatory escort service for transit goods despite a well functioning container-seal system and a trucking syndicate that reduces competitive pricing for transport operations. Finally, road harassment is considerable in Benin, as private sector respondents indicate that a significant amount of fees are collected.
Benin	**Certificate of Origin:** Both public- and private-sector respondents noted the lack of confidence in Certificates of Origin from ECOWAS Member States. Applications for Certificates of Origin are not uniform across borders – different organizations issue different certificates of origin in different countries, they said. The issue of fake Certificates of Origin also complicates the entire process. Nigeria, for example, sometimes questions Certificates of Origin emanating from Benin, according to respondents, even from an ETLS-approved company. In such cases, Nigeria conducts separate investigations on the products before approving passage of trucks, immediately slowing passage, contradictin the processes and purposes of the ETLS-approved company scheme, and retarding regional integration.
Côte d'Ivoire	**Public sector officials have insufficient or inconsistent information on the ETLS:** The public sector in Côte d'Ivoire was generally knowledgeable about ECOWAS protocols on the movement of persons, goods and transport, however, more emphasis was placed on UEMOA rules and procedures.
Côte d'Ivoire	**The private sector is sceptical of the ETLS and burdened by high and unpredictable trading costs:** Businesses in Côte d'Ivoire stated that many meetings are planned regarding the free movement of goods and vehicles, yet no progress has been made to that effect. The political will to resolve these issues is still lacking.
Côte d'Ivoire	**Incomplete implementation of the ETLS causes significant barriers to increased trade:** The Côte d'Ivoire study found significant gaps between official reported policy and traders' experience of bringing goods across the country's borders. Inconsistent application of policies and procedures makes trading costs unpredictable, and discourages investment and business expansion.
Ghana	**Application of Duty by Customs on ECOWAS Originating Goods:** The most important area of non-compliance with ETLS protocols involves the application of duties to ECOWAS originating goods as reported by the private sector. Ghana applies a host of other legal fees and taxes which add substantial costs to the conduct of trade. These additional taxes and fees are not part of the ETLS but they do affect the competitiveness of West African goods and the cost of goods to consumers.

Ghana	**Non-tariff Barriers including Seasonal and Quota Restrictions:** The second most significant area of non-implementation of ETLS protocols which merits attention relates to merchandise that is banned from importation or restricted by quotas.2 Only a few items are subject to these restrictions but they tend to be unprocessed agricultural items, which are exported from other Member States which could have a positive impact on their respective economies if allowed to be traded freely. Moreover, these items are often restricted for many months at a time and often treated inconsistently by customs officials. Other areas where lack of implementation of the ETLS has an impact is in transportation and the movement of goods.
Ghana	**Three overarching challenges prevent the full operation of ETLS protocols in Ghana:** 1. The private sector is aware of the protocols but dissatisfied with the pace of implementation and has an attitude that informality may be less costly in time and money than strict adherence to the rules. 2. Complex and duplicative border procedures encourage incentives for informal trade. 3. Low earnings for public servants in trade and transport along with broader implementation of Ghana's newly established integrity program. The integrity program was designed to provide incentives to customs officers for trade facilitation and respect within the public sector to act as a role model for wiping out corruption.
Mali	**Streamlining trading procedures and paperwork at each ECOWAS border:** Streamlining procedures and paperwork will lower import and export costs for domestic traders and consumers. As economists have shown, the bureaucratic costs can have similar effects to formal tariffs. Were the ETLS programs for cross-border trade of goods, transit and guarantees to function as envisaged, for example, they would improve Mali's access to regional markets by promoting freer and less-encumbered trade while mitigating insurance risks.
Mali	**Specialized training for government and private sector officials on how to assess and clear merchandise that might qualify for preferential access under ECOWAS protocols:** Trainings should cover a summary of the benefits of a free trade agreement as well as a thorough explanation of how to implement different ETLS protocols. Efforts, such as the USAID West African Trade Hub's road transport corruption reports and this Gap Analysis, inform ECOWAS countries about the impediments to free trade within the region. Regular and thorough monitoring of the region's trade and transportation barriers will highlight progress as it is made.
Mali	**Harmonization of UEMOA and ECOWAS Rules or Protocols:** It is unclear whether UEMOA or ECOWAS rules or protocols supersede one another. Currently, UEMOA rules are being followed. To encourage implementation of ECOWAS protocols, it is necessary to simplify ECOWAS protocols to help make them more applicable and relevant to the realities on the ground. A simple document summarizing selected ECOWAS/UEMOA protocols could also show samples of important documents. For dissemination at border points, a large billboard or a radio program summarizing requirements for illiterate truck drivers and travelers would be very useful.
Nigeria	**Quantity, quota and seasonal restrictions:** While public sector trade officials deny there are any restrictions, the private sector reports they do exist, and have a significant impact on trade.
Nigeria	**Non-tariff barriers:** These include non-reciprocity for standards/certifications; road harassment; and unofficial fees and delays, which were reported by private sector traders.
Nigeria	**Duty charged on duty free goods:** Goods in transit are not supposed to be charged duty under ETLS protocols, which greatly increases costs.
Nigeria	**Improper use of transit documents and procedures:** The ISRT Logbook, vehicle inspections, customs bonds and permits are all used improperly in Nigeria, and add to time, cost and risk for traders.

Nigeria	**There are three cross-cutting issues preventing the full operation of ETLS protocols in Nigeria, and which have a direct impact on all aspects of intra-regional trade:** 1. The gap between legislation and implementation—many ETLS protocols are codified in legislation, but there is a lack of enforcement and consistency in application at the borders. 2. Lack of awareness—private sector traders indicated they had limited, detailed information on ETLS protocols. 3. Incentives for informal trade—complex and duplicative border procedures that involve a significant level of harassment, which encourages informal methods of trade.
Senegal	**There are two cross-cutting issues preventing the full operation of ETLS protocols in Senegal and directly impacting all aspects of intra-regional trade:**1. Gap between Legislation and Implementation: Many ETLS protocols are codified in legislation, but there is a lack of enforcement and consistency in application at the borders. In addition, unofficial non-tariff barriers are occasionally imposed at borders.2. Low Private Sector Awareness of ETLS: Private sector traders indicated they had limited detailed information on ETLS protocols.
Senegal	**ISRT Guarantee Bond and Logbook are not functioning:** Private sector respondents requested that these protocols be re-instituted in Senegal. Currently, they need to pay for bank guarantee bonds, which are much more expensive than the ISRT Guarantee Bond.
Senegal	**Non-Tariff Barriers:** Traders of a variety of agricultural goods are exposed to unofficial, unrecorded, seemingly arbitrary bans, quotas, and quantitative and seasonal restrictions, which are all in violation of ETLS protocols. In addition, there is an obligatory escort service for transit goods despite a well-functioning container seal system. Finally, road harassment is a noteworthy concern in Senegal, as private sector respondents indicated that significant amounts of fees are collected.
Togo	**There are two cross-cutting issues preventing the full operation of ETLS protocols in Togo, and which have a direct impact on all aspects of intra-regional trade:** 1. Gap between Legislation and Implementation: The Team was unable to find updated legislation, regulation or procedures that addressed many of the ETLS protocol. As in many countries there is a lack of enforcement and consistency in application at the borders. In addition, there are instances where unofficial non-tariff barriers are imposed at the borders. 2. Low Private Sector Awareness of ETLS: Private sector traders indicated they had limited, detailed information on ETLS protocols, their rights where to find information related to documents that should be needed for transit across borders and the normal fees for processing.
Togo	**ISRT Guarantee Bond and Log Book are not functioning:** Although two out of three Private sector respondents said they use the log book and it is necessary for cross border trade, it is probably for trade in other countries since the public sector in Togo identified these documents as defunct. ECOWAS must have a uniform customs transit, declaration and bond system such as the ISRT to function properly and increase the competitiveness of their industries.
Togo	**Non-tariff barriers:** Traders of a variety of goods are exposed to arbitrary bans, quotas, quantitative and seasonal restrictions, which are all in violation of ETLS protocols, but are unofficial, and not recorded. In addition, there is an obligatory escort service for transit goods despite a well-functioning container seal system and the trucking syndicate reduces competitive pricing for transport operations. Finally, road harassment is a noteworthy concern in Togo, as private sector respondents indicate that a significant amount of fees are collected.

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ISSN: 2052-7209

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