

# **Potential of E-Commerce for the Expansion of Intra-West African Trade**

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## Summary

1. One of the objectives of regional integration in West Africa was to dismantle the tariff and non-tariff barriers with a view to boosting intra-regional trade and accelerating individual and collective socio-economic development of the countries of the sub-region. And yet, despite the commendable efforts at trade liberalization in the framework of both ECOWAS and WAEMU, intra-west-African trade remains weak around 10% and 11% of total exports and total imports respectively in ECOWAS. As a result, co-operating economies have not been able to make major strides in market integration, nor have they achieved and sustained adequate growth rates. The lack of market knowledge, poor communication, cumbersome procedures, weak production base coupled with poor quality and irregularity of output, political instability, and payment problems are among the main obstacles to market integration in the sub-region. A large regional market share goes to foreign firms.

2. This study shows that e-commerce can help overcome some of these obstacles. Defined as the buying, selling, marketing, and servicing of products or services over computer networks, e-commerce has the potential to drive sub-regional trade and integration and improve global competitiveness within the West Africa sub-region. Potential benefits include online communication integrated with information systems of business partners, which may lead to customized products and services, a more diversified regional or global market; better understanding of customer needs, accurate real-time information exchange, and cost-efficient productivity. E-commerce provides effective and efficient ways in which customers can gather information rapidly about available products and services, evaluate and negotiate with manufacturers over communications links. Suppliers can also easily access customer's needs and other market variables including prices applied by competitors. However, these benefits would not materialize unless there exists an adequate ICT infrastructure coupled with a sound regulatory framework in member countries.

3. In West Africa, though both ECOWAS and WAEMU are in the process of developing region wide ICT policies, e-Commerce is still not considered a significant market driving force. Practically none of the member states have substantive policy or legislation in place to stimulate and regulate its development. Existing connections mostly target western markets and interconnections between West African countries face significant obstacles namely the high cost of equipment, the lack of awareness of what electronic commerce is, the lack of legal framework conducive to e-commerce, the lack of skilled personnel and the uncertainty of the bank regulations.

4. Addressing these obstacles would require that policies for the effectiveness of e-commerce in West Africa should focus, as a matter of priority, on the implementation of measures to extend the underlying ICT infrastructure and to ensure broad network access. This strategy should be based on open market to competition and the deregulation of those infrastructures and services, which are still under monopoly. Also, member states will need to establish legislations and regulations that facilitate e-payment in the sub-region. Particular attention should be paid to the opportunities for e-payment solutions to facilitate trade integration. E-money solutions have the potential to ease the difficulty of currency exchange for cross-border commerce within ECOWAS even without major monetary policy elements such as a common currency.

5. However, harnessing the full potential of e-commerce to promote intra-west African trade requires that the member States and the business community address the fundament

questions of the weak production base, poor quality and irregularity of output, through strategies aimed at moving away from primary commodities to diversification into non-traditional (manufactured products) production sub-sector.

## Introduction and Background for the Study

6. Efforts to promote trade among African countries go back to the late 1950s and early 1960s as a mean to reduce the dependence on external markets and to enhance diversification of African exports beyond primary commodities. The rationale for the promotion of intra-African trade emanated from the conviction that African countries needed to pursue a policy of rapid industrialization in order to overcome their economic backwardness. Since the small size of individual domestic markets limited the scope for industrialization through import substitution, efforts were made to create trade preference areas and to promote subregional co-operation and integration among countries.

7. In West Africa, following the successful lead given by the European Union, measures were taken to strengthen regional and subregional economic co-operation arrangements. By the end of the 1970s, virtually all West African countries belonged to one or more subregional groupings. While many of these arrangements experienced set-backs in the early 1980s, new efforts have been made over the last ten years to revive regionalism in West Africa. The major assumption underpinning these efforts suggests that the ECOWAS countries would not benefit from the ongoing globalization process unless they strengthen their own trading bloc. The global trading system could even become more unfavourable in the wake of the conclusion of the Uruguay Round of multilateral trade negotiations for one main reason: the erosion of trade preferences extended by the industrialized countries to Sub-Saharan Africa (SSA) economies under bilateral and multilateral accords. In fact, two developments in the Uruguay Round (UR) contributed to reduce the SSA countries' competitiveness in the international market:

- The « single undertaking » nature of the agreement that requires all members to abide by the same rules. This means, for example that the preferential market access of African products in the European Union (EU) is no longer allowed. These preferences have to be taken away and given to all trading partners on a More Favour Nation (MFN) basis.
- The generalized reduction in tariff barriers. Because of the special and differentiated treatment, most African products entered the EU and other OECD countries were low or zero tariff rate. The reduction in the tariff facing Africa's competitors means that the competitive advantage is reduced.

8. In West Africa as a whole, the need for internal trade is also reinforced by the large coverage of non-tariff barriers (NTB) faced by countries in the OECD and EU markets (Njinkeu, 1999).

9. However, in a historical context there have on the whole been limited successes in achieving the immediate objective of increasing the level of intra-regional trade in West Africa. In general, co-operating economies have neither achieved reasonable growth rates, nor made major strides in market integration. The major causes of that persistent failure are related to policy as well as natural barriers.

10. This study explores the modalities for using e-commerce to overcome obstacles to intra-regional trade in West African economies. It attempts to develop an understanding of the mechanisms of trade among West African countries and highlights the way in which participation in the e-commerce affects consumers, businesses, and the economies of the sub-

region. The work provides policy makers with an analysis of intra-West African trade by relating the topic to the conditions in West Africa, the potential contribution of e-commerce, the role of new ICT in e-commerce, the experience of e-commerce in West Africa and the policies for the effectiveness of e-commerce in the sub-region. It is divided into three chapters with each divided into sections. Chapter one presents the importance of regional trade and e-commerce for West African economies. Chapter two covers the West African experience in e-commerce in the light of the world and chapter three suggests some policies for the effectiveness of e-commerce in West Africa.

## **Chapter I: Importance of Regional Trade and E-commerce for West African Economies**

11. Regional groupings are a major feature of the global economic system. In Africa, the basic purpose of these organizations, recognized within the framework of the United Nations, is to make use of deliberate governmental and private efforts to strengthen South-South trade and economic links more rapidly than would be the case if such links were to be created only by market forces (Ajibewa, 2002). In regions that have successfully integrated their economies, for example, European Union countries, North American Free Trade Area (NAFTA), the benefits of integration are numerous and are self-evident.

### **1. Status and obstacles to intra - West African trade.**

12. In West Africa, intra-regional trade liberalization can help overcome constraints arising from small domestic markets of Member countries, allowing them to reap the benefits of scale economies, stronger competition, and more domestic and foreign investment. Subsequently, increased investment, particularly foreign direct investment can promote knowledge and technology transfers and spillovers. These benefits can improve productivity and diversify production and exports. Because of the low level of domestic capital, foreign direct investment (FDI) is a good complement to local investment, and managerial know-how.

#### **1.1. Trade reforms in West Africa**

13. Bearing in mind the benefits of trade liberalization, almost all the economies of West Africa engaged in the economic reforms in the context of Structural Adjustment Programmes (SAP) based on the unilateral liberalization of key sectors of the economies right from the second half of the 1980s. The medium term objective of SAP was to arrive at an open trade system characterized by the absence of quantitative restrictions and other NTB, at a low relatively uniform protection tariff level, applied in a transparent manner. Thus, in the trade sector, the reforms contributed to a considerable reduction of tariff and non-tariff barriers. For Jebuni (1997), the policies contained in SAP had more influence in the reduction of distortions in trade between member countries of ECOWAS than the regional integration accords signed in the framework of the grouping. In summary, the unilateral reforms were articulated around three main points:

- replacement of quotas and other quantitative restrictions by lower tariffs;
- reduction of prohibitive tariffs to an acceptable range;
- application of low tariffs on formerly exonerated import goods.

14. In Ghana for instance all quantitative restrictions and licenses on exports and imports were suppressed in January 1989 (Jebuni et al, 1994).

15. The combination of these measures have modified the structure of incentives by opening West African economies to international trade, at the same time increasing the relative importance of the private sector with respect to the public sector (Stryker, 1994). Government monopolies were abolished as well.

16. In Togo for instance, the TOGOGRAIN, the government Board in charge of the commercialization of cereals and particularly corn, was dismantled in 1987. During the same

year, the price control of cereal prices and the prohibition of export of cereals were all abolished.

17. With respect to tariff reforms the absence of a common external tariff (CET) in ECOWAS led the member countries deploy individual efforts for the reduction of their protection tariff. In fact, the creation of a free trade zone that entered into force on 1<sup>st</sup> January 1990 was to be followed by the adoption of a common external tariff starting on 1<sup>st</sup> January 2000. However, after more than a decade, the ECOWAS common external tariff system has not been activated.

18. As a whole, the efforts in eliminating and reducing tariff barriers have evolved as shown in the table below.

**Tableau 1:** Elimination and reduction of tariff protection in West Africa.

	Export taxes (in % of GDP)					Import taxes (in % of GDP)				
	1975	1980	1985	1990	1995	1975	1980	1985	1990	1995
BurkinaFaso	0,32	0,45	0,30	0,11	-	5,01	5,94	4,53	-	-
Côted'Ivoire	-	2,37	2,84	0,81	0,81	-	7,41	6,38	6,17	6,17
Gambie	2.05	2.53	0.69	0.04	0.04	7.26	12.56	10.42	8.76	8.76
Ghana	5.41	2.16	2.67	1.34	0.91	2.63	0.84	1.92	3.11	3.37
Mali	0.77	0.43	1.65	-	-	2.93	1.73	1.69	-	-
Niger	-	0.59	-	-	-	-	4.54	-	-	-
Nigeria	-	-	0.02	-	-	3.14	-	1.43	-	-
Sénégal	0.89	0.23	0.02	-	-	6.02	4.98	4.42	5,03	4.81
Togo	-	1.39	0.28	-	-	-	7.05	7,45	-	-

Source: Ebrill, and Stotsky (1998)

19. The table shows that West African countries have greatly reduced export taxes with the beginning of the application of the reforms. In 1995, these taxes represented less than 1% of the GDP in each of these economies. However, the reduction of import taxes that constituted the main source of government revenue was not very sensitive during the same period. Until 1995, Mali and Cote d'Ivoire still had high tariff barriers. In Cote d'Ivoire, Ghana, Senegal, and Togo, tariff protection against imports rather increased from 1985. This was due to the fact that following the suppression of quantitative and other NTB restrictions, these countries increased import tariffs with the aim of compensating for the short term, the revenue loss related to the elimination of non-tariff barriers. A second reason was relative to the tariffication of imports initially exonerated from taxes.

20. As a whole, the individual efforts of tariff liberalization observed in West Africa, paved the way for preferential tariff and trade reforms in the framework of regional integration.

## 1.2. Preferential reforms in ECOWAS and WAEMU

21. The Member countries of ECOWAS also engaged in the implementation of reforms relative to the reduction of tariff barriers on intra-regional trade with the aim of becoming a Free trade Area (FTA) and a customs union. The Conference of Heads of State and Government of ECOWAS even envisaged in December 2000 the extension to the entire sub-region of the WAEMU Common External Tariff (CET). The national CET coordinating committees were established in all seven non-WAEMU member states. It was envisaged that by the end of 2007, goods entering the ECOWAS customs territory from nations outside the regional bloc should face a standard package of import duties with four rate bands:

- 0% for essential social commodities, seedlings, inputs and agricultural equipment;
- 5% for essential commodities, basic raw materials, capital, capital goods, specific inputs;
- 10% for intermediate goods and inputs;
- 20% for finished consumer goods.

22. However, the application of this programme did not yield much results. Apart from circulation of unprocessed goods and traditional handicrafts in some cases, most of the member states of ECOWAS continue to adopt protectionist policies that hinder the establishment of a free trade zone in the sub-region particularly as regards industrial products. Sierra Leone is the only country to adjust tariff levels for about 800 product categories to align with the ECOWAS Common External Tariff. In January 2005, import duties on 713 products fell from 30% to 20%.

23. In WAEMU, on the contrary, considerable efforts were put in the framework of preferential liberalization of trade. In 1994, the Member States of the West African Economic Community (WAEC) that were at the same time members of the West African Monetary Union (WAMU) decided to fuse these two bodies of real and monetary integrations respectively to create the West African Economic and Monetary Union (WAEMU). The union benefited from some important achievements of the WAEC that was the most advanced grouping in Sub-Saharan Africa in terms of market integration. It also took advantage of the common currency, which was already in use in the economies of the grouping. As such, the member countries saw it needful to continue the integration process started in the WAEC. In May 1996 a transitory preferential regime of trade within WAEMU was instituted. This regime proposed the lifting of all quantitative restrictions, non-tariff barriers, prohibitions or other measures of equivalent effect on import or export of products originating or manufactured in member states. An advalorem community preferential tax (CPT) applicable to approved and equivalent products of the same origin, at 30% of entrance duties levied on imported products from third countries was also instituted. Finally a community solidarity levy of 0.5% on the customs value of imported goods from third countries was instituted. To move into a customs union, the authorities of WAEMU engaged in harmonization of external trade statistics and in the uniformisation of customs` declaration system. In January 1998 the common external tariff (CET) was adopted.

24. In 2001 the move towards a common market continued and was articulated around the free movement of persons, services and capitals and the right of establishment and elaboration of a community investment code.

25. The unilateral and preferential reforms described above were reinforced from 1994 by the devaluation of the CFA franc. This was designed to improve the external competitiveness of exports of the sub-region.

26. The unilateral as well as the preferential trade liberalization carried out by the economies of ECOWAS and WAEMU are the prerequisite for trade creation among integrating markets (Elbadawi, 1997; Jebuni, 1997). As pointed out by Collier and Gunning (1993), regional integration and unilateral trade liberalization are complementary in that regionalism strengthens unilateral liberalization through its threat-making capacity. There's also a good case for arguing that complementarity can work in the other direction. Unilateral trade liberalization makes regionalism-promoting trade policy more feasible. Jebuni (1997) argued that non-discriminatory reform is a fundamental stepping-stone to intensify regional trade in Africa.

27. The reforms described above were expected to boost trade within the sub-region. Also, if this increase in intra-regional transactions does not come at the expense of trade of the integrating area with the rest of the world, the welfare conditions of the member countries will be improved (Kemp and Wan, 1976).

28. In fact, three main direct and indirect positive outcomes of the economic reforms are highlighted in the area of intra-regional trade; (i)the cost reduction effect;(ii) the demand expansion effect; and (iii)the external tariff effect. The first, the cost-reduction effect comes from tariff reduction within the region, which leads to specialization, replacing high cost domestic products with low-cost imports from the member countries. Therefore, tariff reduction leads to specialization and cost reduction, boosting the possibilities of intra-regional trade. This process results in substantial trade creation effects (Viner, 1958). The second effect, the demand-expansion effect, occurs in the post-reform tariff reduction regime through a chain reaction of macroeconomic effects of cost reduction leading to higher output, income and employment, which in turn increases the region's demand for goods from member countries. Increase in demand in member countries stimulates investment activities and greater specialization in the entire community. Resultant output and income effects in an environment of intra-regional economic interdependence substantially enhances the potential for trade creation, and welfare (Kemp and Wan, 1976). With respect to the external effect, lower external tariffs on imports in the post-reform regime will stimulate extra-regional trade and minimize any negative "Trade diversion" effect. Reduction in external tariff will further boost domestic production through technology transfer and increase imports of capital goods and industrial raw material from outside the region.

29. The net effect of the outcomes mentioned above is expected to reflect either "Trade creation" with shifts of production to locations with comparative advantage, or "trade diversion" with a shift from low-cost producers in the rest of the world to higher cost producers in the Member countries.

### **1.3. Outcomes of Reforms**

30. In addition to the withdrawal of the NTB among West African countries, the reduction of tariff levels was also very sensitive. In Ghana for instance, the liberalization of the trade sector was very deep and this country considerably approached the results of the economies considered as most open, following the reforms (Sharer, 1998). The induced positive effects are already evident in this nation, with the growth of GDP of 4% and an increase of exports of 10% in the second half of the year (Idem). In Cote d'Ivoire, there was also a considerable lowering of tariff levels (Ebrill and Stotsky, 1998).

31. However, though bold and imaginative efforts towards meaningful regional market integration came with the advent of reforms in ECOWAS and in WAEMU, intra-west African trade figures are still far from expectations as evidenced in the table below.

**Table 2:** Intra-community trade as a percentage of total trade

	1980	1990	1998	2003
EECOWAS (exports)	10.6	8.9	11.1	10.1
WAEMU(exports)	12.6	15.3	13.0	16.2
ECOWAS(imports)	10.2	14.9	12.9	11.5
WAEMU(imports)	7.6	14.8	9.8	13.3

Source: Yang and Gupta (2005) P.17

32. Between 1980 and 2003, intra-ECOWAS exports as a proportion of the total exports by Member countries decreased from 10.6 % to 10.1 %. Within the same time period, the figures in WAEMU increased from 12.6 % to 16.2 %. This low level of trade within West African states is frequently mentioned as an explanation of the lack of success of integration.

33. The general observation is that more than 30 years after its creation, ECOWAS is still some way from being a customs union because market integration remains a distant and difficult aspect. WAEMU is a customs union, but is still far from being a common market because free movement of labor remains a problem after 35 years of existence. Despite the progress recorded in WAEMU, there are indications that the common external tariff is not evenly implemented in all member states. With respect to this observation, a consensus has emerged that the integration arrangements in West Africa have failed to date to substantially increase trade and economic growth within the sub-region. The lack of market knowledge, poor communication, cumbersome procedures, delays and uncertainties in supply, political instability, institutional and natural bottlenecks, and divergent monetary policy are cited as being among the main obstacles that justify market integration failure. This study assumes that e-commerce can help overcome some of these obstacles.

**2. Contribution of E-commerce**

34. “E-commerce” consists of the buying, selling, marketing, and servicing of products or services over computer networks. The World Trade Organization (WTO, 1998) defines it as the production, advertising, sale and distribution of products via telecommunications. An alternative definition suggests that e-commerce is the conduct of business commercial transactions and management through electronic methods, such as electronic data interchange and automated data collection systems. Electronic commerce may also involve the electronic payments and transfer of information between businesses.

35. Electronic commerce looms large worldwide, and has transformed trade and industry in an unprecedented manner. Its potential is huge and its impact is expected to go far beyond commerce to affect the lives of millions of consumers, workers and producers. As it will continue to affect the economic relations between and within countries and companies it is considered as a key tool for business transaction and development. This is why it is important to have a basic understanding and appreciation of its potential, the framework for its operation and the possible impact it could have on the economy, in general and trade, and firms in particular.

36. The potential benefits of e-commerce include online communication integrated with information systems of business partners, which may lead to customized products and

services, a more diversified regional or global market; better understanding of customer needs; accurate real-time information exchange; and, cost-efficient productivity. E-commerce influences the supply chain systems in various ways. It can be used as a fast and efficient means of communication between companies in the whole value chain. It facilitates customer orders, order confirmation, transport booking and invoicing. The same applies to planning information, sales forecasts, production plans, up-to-date sales figures, and stock levels (Skjoett-Larsen, 2000).

37. Lucking-Reiley and Spulber (2000) suggest that expectations about productivity gains from e-commerce can be usefully divided into four areas:

- possible efficiencies from automation of transactions;
- potential economic advantages of new market intermediaries;
- consolidation of demand and supply through organized exchanges; and,
- changes in vertical integration of companies.

38. On the first area, e-commerce enhances supply chain efficiency by providing real-time information regarding to product availability, inventory levels, shipment status, and production requirements. It may have a vast potential to facilitate collaborative planning among supply chain partners by sharing information on demand forecasts and production schedules that dictate supply chain activities. E-commerce also helps achieve efficiency in communicating the needs of the manufacturers' production lines to the suppliers of component parts.

39. On the second area, the power of e-commerce is that it allows a manufacturer to reduce costs, and more importantly, gathers information from all sectors of the chain to exploit growth opportunities (Keefe, 2001). It brings about a number of benefits to the industry, including improved manufacturing supply chain, increased productivity, improved product quality, enhanced customer service, and a movement towards lower inventory requirements as manufacturers moved towards just-in-time production. Through this industry cooperation, individual companies are placed in a better position to compete for regional or overseas contracts to supply parts to other than their local customers, thus gaining a competitive advantage directly from the adoption of e-commerce.

40. On the third area, e-commerce effectively links customer demand information to upstream supply chain functions such as manufacturing, distribution and sourcing and subsequently facilitates demand-driven supply chain operations in the shifting environment from mass production to mass customization.

41. In Africa in general and in West Africa in particular, the adoption of electronic commerce represents an opportunity for SMEs to compensate for their inherent weaknesses in areas such as: access to new markets and information gathering and disseminating on a regional scale. There is therefore a strong rationale for West African governments and institutions to address the issues that promote and assist SMEs to embrace and use electronic commerce in their efforts to intensify business transactions in general and intra-West African trade in particular.

42. As a new channel for business transactions within West Africa e-commerce will contribute to new sources of revenue and opportunities for manufacturers. It offers direct links between a manufacturer, its supplier and its customer, and supports business transactions, processes and information exchange. It enables a manufacturer to bypass other middlemen and shorten the length of distribution channel. Another prominent feature of e-commerce in West Africa will be to provide a channel to develop new products and services for both existing and

new customers. This in turn may allow him to move away from a production-oriented culture to customer-oriented ones. Such focus may remove the need for a manufacturer to hold a large stock of finished goods, thus avoiding the problem of being left with obsolete stock in an environment of fast-changing consumer products.

43. In general, e-commerce in West Africa will particularly help:

- reduce the transactions costs within the sub-region;
- ease the difficulty of road blocks;
- reduce the delivery time;
- overcome the weak air link among West African countries;
- create a business network;
- ease the knowledge of the sub-regional market by SMEs that will take a better stand to face foreign competition.

44. In addition to the internet, other electronic technologies, namely credit cards, automatic teller machines, telephone banking, electronic data interchange (EDI), are also forms of electronic commerce, and all will change the West African market in sometimes radical ways.

45. However, the e-commerce revolution is dependent on several key prerequisites including the availability of the supporting ICT and a legal and regulatory framework.

### **3. E-commerce and the New ICT**

46. For e-Commerce to be a truly regional and global tool for trade and development, an information infrastructure, which makes electronic transactions possible is necessary. In other words, it requires the availability of the Internet, defined as a vast network of computers interconnected over telecommunication networks. The internet alone has the potential to deliver what the notion of electronic commerce has always implied. It is a social and economic fabric, ostensibly created for the sake of human communication and interaction. It provides new areas for cultural expression and experimentation in a global socio-economic environment. Basically it allows for an innovative ways for people to interact in real time. Thus the Internet is but an extension of human ingenuity and creativity, "the most precise mirror of people as a whole that we've yet had" (Lanier, 1998: 60). In the history of trade and electronics, the Internet is a technology that gives direct access and control over buying and selling transactions to just about everyone from the individual investor to the casual shopper. Its usefulness extends beyond the transaction itself to everything that comes before and after, from marketing and product display to order-tracking and delivery. Unlike the commercial online services, which reserve their services for their subscribers and selected merchants, the Internet is open to everyone.

47. While the Internet has grown fast worldwide over the past years, its distribution across the globe is uneven. It basically remains concentrated in the developed world since the developing countries that represent more than half of the global population share 5-10% of its contents. This is an evidence of how far the Internet is from reflecting the global cultural diversity. This is a serious issue, in view of the potential importance of the Internet for all spheres of life everywhere, and because of the trend for the facility to be increasingly dominated by a few countries and private companies in the western world.

48. In spite of the digital divide between the south and the north in the Internet area in particular, e-Commerce today remains mostly a US and Western based activity, though connectivity has significantly improved in many parts of the developing world. For example,

nearly every capital city in West Africa enjoys some level of Internet access nowadays. However, there are still significant disparities in the level of Internet penetration across regions, which can have profound implications for individual countries ability to participate in the regional electronic market place. An attractive business climate is considered as a good way to attract investment into the ICT sector in West African countries. A country open to electronic commerce and new information technologies is likely to attract more foreign investors. Communications and distance are among the factors that discourage foreign companies from establishing in West Africa. E-Commerce may lessen these physical constraints. Given its potential for the expansion of market, active promotion of electronic commerce would, provide incentives for investment in a variety of sectors, including telecommunications, Internet service provision, professional services and agro-industries.

49. A policy and regulatory environment that favors the development of E-Commerce and harmonizes national approaches in diverse areas including telecommunications, trade, competition, intellectual property, privacy and security is another pre-requisite. The International Telecommunication Union (ITU) is bringing various partners together to undertake pilot projects in developing countries to demonstrate the benefits of electronic commerce to the user communities of these nations. It also seeks to serve as a forum (through workshops, conferences, and seminars) to address policy issues related to electronic commerce in developing countries. Such initiatives need to be replicated by several other international bodies that deal with trade, industry and development. Involvement of the developing countries and assistance to them for improving their expertise and infrastructure are some of the key requirements of the future.

50 Overall, e-commerce has the potential to radically change the economic activities and the surrounding social environment in West Africa. However, this potential may be limited by the availability of a regional information infrastructure and a regulatory framework. The next chapter highlights the gap between West Africa and the World in the area of e-commerce and the policy package and actions that need to be put in place by all the stakeholders to reap its benefits in the market integration process.

## **Chapter II: West African Experience in E-commerce**

51. The analysis of e-commerce data provides the evidence on the extent of the distribution and use of this toll worldwide. In the United States, the country with the longest e-commerce experience, a recent e-commerce study found that in 2003, about 200 million people (75% of the population) used the Internet (Nielsen/Net Ratings, 2003). However, the study estimated that only 26% of the US population made online purchases in 2003, though it was estimated that number would expand to 50% by 2007.

52. In West Africa, despite the progress underway, e-Commerce is still not a significant market driving force. Due to its relative novelty, the member states of ECOWAS have to put in place substantive policies or legislations to stimulate and regulate its development. Only some entrepreneurial risk-takers or big corporate entities dedicated to a long-term investment are currently involved. Connections mostly target western markets with little regard to intra-west African links. They are mostly for business-to-business rather than business-to-consumer transactions and have generated few success stories.

53. Nonetheless, some fledgling e-commerce activities are occurring within member states of ECOWAS, even in the absence of proper legislation. Senegal with its focus on the development of telecentres has gone farthest in integrating aspects of IT and e-commerce into its development strategy (ECA/IDRC, 2001). Many Small and Medium Enterprises (SMEs) have begun to use electronic-commerce as a means of communication and transactions. However, they face significant obstacles related to:

- the high cost of equipment, integration and connectivity;
- the lack of awareness of what electronic commerce is;
- the lack of legal framework conducive to e-commerce;
- the lack of skilled personnel;
- the uncertainty of the bank regulations.

### **1. Unavailability and High Cost of Equipment**

54. West African countries and their SMEs lag far behind developed country markets in the availability of the technical pre-requisites for conducting electronic commerce. The gaps in the two main requirements for Internet that are telephone and computer availability highlight the difference. For example, 65 per cent of households in the world have no telephone, whereas 90 per cent of households in high-income countries have a telephone (ILO, 2000). The personal computer ratio per 100 inhabitants is 18 for high-income countries, 2.3 for medium-income nations and just 0.1 for low-income countries to which ECOWAS member states belong (ILO, 2000). In the United States, roughly one in three persons uses the Internet, compared to only one in every 10,000 in developing countries. Teledensity (main lines per 100 inhabitants) is 48 for developed countries, 10 for middle income and 1.5 for the least developed countries (LDCs) among which the vast majority of ECOWAS nations. Furthermore, in West African countries telecommunications services are often unreliable, high cost or both. There are also enormous differences in access to telecommunications both between and within countries. For instance, while in West Africa a considerable proportion

and sometimes the majority of the population lives in rural areas, over 80 per cent of the main telephone lines are located in urban areas.

## **2. Awareness about E-commerce.**

55. As far as user awareness is concerned, the successful experience in other parts of the world may help in formulating policies to foster electronic commerce. In this regard, trade associations and chambers of commerce, together with governments, can be good vehicles to promote the use of electronic commerce through awareness campaigns including the organization of “information days”, multimedia demonstrations and the production of information brochure aimed at the general public (Wilson, 1998).

## **3. Legal and Regulatory Framework**

56. Another critical issue that West African states need to address is how to make their legal framework conducive to e-commerce transactions. This is important because the creation and adoption of a responsive policy and regulatory framework would stimulate the rapid development of e-commerce in the region, with attendant benefits for the economies and citizens of ECOWAS. It would also have the advantage of clarifying rules and removing some of the barriers set by existing laws that are now rendered anachronistic by modern technological developments. Finally, it would help settle the issues of thrust and abuses in electronic transactions.

57. The absence of legacy e-commerce legislations at the individual member state level provides an opportunity for ECOWAS and WAEMU to jump-start the process by creating model of e-commerce legislation that can be implemented without the extensive harmonization efforts that would be required if legislation existed in one or more member countries. The sub-regional policy and legislation would also have the advantage of being cost-effective as a single undertaking to be extended and adapted to individual nations. This would also permit efficient capacity building both at the RECs and national levels, to ensure that there is the requisite knowledge among the parties responsible for policy making, legislation and implementation.

## **4. Human Resource**

58. Electronic commerce is progressively changing the way businesses are done. The world have moved from an industrial economy where machines dominated productivity, to an information-based economy where intellectual content is the dominant source of value added and which knows no geographic boundaries. In this new environment, education and continuous learning will be essential not only for managers and workers but for all. As industry, commerce, and services are transformed by technology, many skills need to be improved or acquired.

59. If West African countries are to benefit from this new technological and economic boom that the growth of e-Commerce represents, they will need to have the most important component in place, the human resource. Today's knowledge revolution largely depends on human capital. Some developing countries and some sections of most developing countries in Asia have this in abundance and opportunities of the new economy could provide them with excellent results (ILO, 2000). On the other hand, there are many countries mainly in Africa that are far behind in this area and therefore need very proactive policies and investment in education (especially technical) to realize the potential. After all to be e-literate, citizens first need to be literate.

60. As e-Commerce develops and the more advanced stages of commercial exchange (contracting, payment reconciliation and auditing) are carried out electronically, more specific skills are going to be required. Even for surfing the Internet for a product or service, basic familiarity with the computer and knowledge of the Internet is needed. Moreover, extensive language knowledge may be an additional requirement if foreign Internet sites are to be browsed. From website design, to electronic credit management and software and hardware maintenance, all require skills that may not be so easily available in several West African countries. Capacity building in the field of information technology, in the knowledge of the existence of a regional and global market for such skills, is therefore crucial. The development of electronic commerce puts a premium on the development of education and training policies, to ensure that training institutions' curricula meet with the needs of industry.

61. The training needs should firstly focus on activities in the area of human resource development for electronic commerce, in particular through the training of trainers. Three main targets could be focused upon initially, namely:

- Policy makers and negotiators;
- Small and medium-sized enterprise managers and trade practitioners;
- Technicians and workers, including specialists in electronic data interchange and the Internet.

62. However building the human resource goes far beyond training. It is a continuous learning process. For West Africa, the process should begin with sensitization as well as web design and development of commercial applications. Governments should take the initiative to then pass it on to the private sector. Here the state could pursue its efforts in building partnerships with civil society in order to offer proper training tools in the area of electronic commerce. Similarly international organizations such as UNECA, UNDP, WTO also have a responsibility to assist countries in this crucial area of advocacy and human resource development for this new technology<sup>1</sup>. Several of these organizations are in fact working towards this and therefore collaboration and common programmes with countries would be beneficial for the sub-region as a whole.

## **5. Financial Framework**

63. In order to encourage e-Commerce development as a support to regional integration in West Africa, banking procedures within the sub-region need also to be aligned and made compatible with digital trade transactions, so that consumers and buyers can easily make purchases locally through the Internet. The higher the development of electronic connections within the region, the higher will be the purchases from within. Along these changes, e-Commerce would also require a financial and banking framework that allows for electronic payments and transfers. This would include requirements for certification of documents, electronic signatures, confidentiality and privacy. Therefore West African countries will need to put in place an electronic network (between financial institutions) in addition to the legal framework to allow for such transactions. Banking laws and regulations thus need to be adjusted to the new formats and requirements.

64. However, one of the concerns of West African countries is the perceived danger of foreign exchange outflow on account of e-Commerce through the purchase of goods abroad.

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<sup>1</sup> UNECA assisted Burkina Faso in 2006 to establish an electronic system of tracing exports to and imports from the world.

There may be many things that these countries might want to regulate on the Internet. These include content such as pornography and incitement to racial hatred, as well as consumer protection, the defense of intellectual-property rights and taxation. These are all issues on which national regulations already exist. The existing regulations and laws should apply to the Internet and e-Commerce. But the problem is how to regulate it. This is both a policy and research issue.

65. With respect to taxation, its ramifications are regional and affect the very concept and development of e-Commerce, as well as the policy that each West Africa country would need to adopt regarding its foreign trade. This is of importance as for many countries, domestic taxes and import and export duties continue to be a primary source of revenue. The most contentious problem with e-Commerce arises when the transaction has taken place purely in a digitized format, where all parts of the transaction have been completed 'on-line' in digital or computerized format and no goods have directly passed through a recognized customs or domestic tax point. When e-Commerce is used only to communicate and set up a transaction and the actual delivery is by regular means, the existing tax and duty regulations and procedures continue to apply and can be monitored. For digital supplies the problem for the authorities is to monitor or even be aware that a transaction has taken place. One possible response would be to introduce the so-called "bit tax" (a tax on the "bits" of information zooming around computer networks) (ILO, 2000). The basic problem with a 'bit tax' is that it is indiscriminate. It taxes not just on-line transactions but all digital communications, from e-mail to information gathering (Idem). Also the question of valuation would be difficult to determine. More important, it is argued that such taxation will crush the development of e-Commerce and stunt its growth. If implemented in some countries, it would simply drive business off-shore and on-line transactions would take place in a state or country where there is no such tax (Idem). In coming years, governments will probably be forced to shift further their existing tax base or find ways to monitor and tax e-Commerce transactions from outside the regional integration groupings. Within the RECs (ECOWAS, WAEMU), the tariff-free environment for goods and services delivered by the Internet and other electronic channels should be made permanent on the basis of the requirement of a Free Trade Area (FTA). But this does not extend to physical goods purchased through the Internet and delivered by traditional methods, from third countries where it is suggested that existing Common External Tariff rules (mainly in WAEMU) should continue to apply.

66. In general, for many West African countries and SMEs in this sub-region, e-Commerce remains a dream they would like to realize. But neither are they convinced of the need to divert scarce resources to its development nor are they sure of what they need to do to realize it. The answer to the first issue requires policy research and sharing of examples of success between West African countries and other developing countries. International agencies and NGOs must help them in both regards (UNCTAD, 2000). But it is important to emphasize that e-commerce is a crucial factor of market integration. The compulsions of cohesion in the sub-region and the fears of being continuously marginalized from the world market impel member states of ECOWAS and WAEMU to address the second issue of engaging and promoting e-Commerce. To do so, they will need to address some of the following key issues.

- Conceptual and quantitative analyses of the impact of electronic commerce on trade and development in West Africa.
- Organization of regional seminars to raise the level of awareness of member countries, trade and industry associations and labour unions about the possibilities and challenges of electronic commerce.
- Production and dissemination of training packages for electronic commerce.

- The use of modern interactive techniques, including internet-based techniques, as well as of distance learning packages should be encouraged, taking into account local cultural and language specificity.

## **Chapter III: Policies for the Effectiveness of E-commerce in West Africa**

67. The analyses in the two chapters that precede establish that e-commerce has potential to drive sub-regional trade and integration and improve global competitiveness within the West Africa sub-region. However, these benefits will not come effortlessly. Member states will first of all have to implement policies that extend the underlying ICT infrastructure and ensure broad network access. Secondly, they will need to establish legislations and regulations that ease the difficulty of e-payment.

### **1. Expansion of the ICT Infrastructure.**

68. ICT Infrastructure constitutes a threshold requirement for e-commerce adoption. Without the networks and systems on which to conduct electronic transactions, there can be no electronic commerce. Further, as it is well established that the volume of e-commerce increases proportionately with Internet use and penetration, there is need for widespread and affordable Internet connectivity for businesses and individuals alike, if e-commerce is to really take off in West Africa (ECOWAS, 2005). The Internet can support a mixture of information and communication technologies, thereby vastly increasing the capacity and flexibility of the current communications system while reducing the cost of traditional modes of transmission (Idem). However because of the nature of Internet technology, which forces convergence across a number of products, for example communication, computing, broadcasting, it becomes difficult to distinguish what constitutes the infrastructure supporting e-commerce. In West Africa, it is noted that electronic Commerce requires a substantial hardware, software and networks IT services (Idem).

69. In ECOWAS as well as in WAEMU, the general observations are that activity relating to E-commerce policy and legislation development is much lower than that related to telecommunications infrastructure or ICT (Idem). In fact, virtually no work has been done at the RECs or national levels on e-commerce and there is a serious disconnection between the policy-making process on infrastructure, ICT generally, and applications such as e-commerce. While significant awareness has been raised and progress made on the necessity and modalities of regional harmonization of telecommunications infrastructure, less success has been attained on ICT policy generally, and virtually nothing has been done on e-commerce policy (Idem).

70. However, both ECOWAS and WAEMU are in the process of developing region wide ICT policies. While there seems to be significant capacity constraints in this regard in the two organizations, there appears to be a strong level of awareness about the strategic importance of ICT to regional development. This is likely related to the fact that, with the assistance of the UNECA, significant progress has been made on national e-strategies in many ECOWAS countries (UNCTAD, 2002). However, little or no attention has been devoted to e-commerce and related legislative issues, perhaps because competencies and accomplishments at the general ICT level are still being consolidated.

71. In general, the strategy to adopt in building the information infrastructure in West Africa should be based on open markets to competition and the deregulation of those infrastructures and services, which are still under monopoly. The objective of such action being to accelerate the ICT infrastructure and service markets so as to achieve a critical mass. In this regard, voluntary business associations should:

- continue to press for the liberalization of the telecommunications sector;
- promote private sector investment in ICT;
- bring together customers, operators and industry to promote interconnectivity and interoperability;
- help promote ICT diffusion to create a whole network of businesses.

72. In addition, governments should:

- promote private sector investment through incentives schemes
- act as a catalyst to promote technological innovations.
- support feasibility studies, pilot projects and development or adoption of common standards;
- encourage wide spread use of new technologies at schools;

## **2. Establishment of Electronic Payments**

73. For West African countries, SMEs and citizens to reap the benefits of the reduction of the costs of conducting commercial transactions electronically, it is necessary that e-commerce participants be able to complete a crucial aspect of the transaction process, the electronic payment. On a practical front, effective e-payment systems could obviate or at least reduce the need for e-signature legislation with respect to e-commerce, as many of the important purposes that an e-signature serves in a transaction, authenticity/identity, binding indication of intent, and integrity are largely rendered moot once a payment has been completed (UNCTAD, 2002). However, within West Africa, electronic payments will raise a number of issues, namely fiscal and monetary policy implications (from taxation of online transactions to currency convertibility and controls), and practical issues surrounding availability of and access to electronic payment platforms (Idem). On these wide range of issues, e-commerce policy-makers will clearly have to closely consult and collaborate with a variety of stakeholders from central banks, financial services institutions and regulators, to economic policymakers and law enforcement, if e-payment systems are to be successfully deployed in ways that facilitate e-commerce adoption in the sub-region (Idem).

### **2.1. Fiscal and Monetary Policy**

74. Policymakers within ECOWAS and WAEMU must take note of how various e-payment options affect the fiscal and monetary policies of member states. Attention must be paid to the opportunities for e-payment solutions to facilitate trade integration, especially since the adoption of the regional currency has been postponed until 2009 (ECOWAS, 2005). E-money solutions have the potential to ease the difficulty of currency exchange for cross-border commerce within ECOWAS even without major monetary policy elements, such as a common currency, in place.

75. In this regard, efforts should be made to see how the West African Monetary Institute could incorporate e-payment solutions in its current programmes, including the West African Unit Account (WAUA), in order to further facilitate trade (Idem). Presently, the unwieldy

bureaucracy associated with the process of making use of the WAUA reduces the efficacy of the WAUA scheme. E-payment enables the process of utilizing the WAUA. It is therefore a logical step that would deliver value to ECOWAS citizens and therefore help stimulate trade (Idem). Some bridge-gapping efforts should be made in this regard on an institutional basis between WAEMU and ECOWAS. Finally, some of the fiscal issues implicated by the use of electronic payments made in the course of intra-regional trade, from "point-of-sale" and other e-commerce taxation implementation options to the levying of custom and excise duties, need to be given some consideration.

## **2.2. Platform Availability and Access**

76. Beyond the fiscal and monetary implications of e-payment, it is also important to note that there is a wide disparity among ECOWAS and WAEMU states in terms of capabilities to handle electronic payments. Many member states have relatively few effective payment mechanisms or platforms suited to e-commerce. For instance, the use of credit and debit cards is still in fledgling stages in many countries, Nigeria, Ghana, Sierra Leone and Liberia, for example (ECOWAS, 2005). Even in states, like Senegal, where credit and debit card use is generally more widespread, the extent of penetration in rural areas and among less affluent citizens leave a lot to be desired (Idem). This situation, though it should be understood in the context of a general problem of under-banking in West Africa, nevertheless poses a challenge for the popularization of e-commerce, and for consumer-focused.

77. While this fact should not slow down the adoption of e-commerce legislation, it must be recognized that effective e-payment systems, with associated legislation and regulation, are crucial to the successful adoption of e-commerce. Such laws would work in conjunction with existing banking and consumer credit legislation and regulations. E-payment legislation could provide compelling means for ensuring participant confidence and trust in electronic transactions. Solutions to the specific challenges presented by consumer-oriented e-commerce could be located in the regulatory and legislative framework for e-payment systems (UNCTAD, 2002). For instance, policymakers could efficiently allocate risks among e-commerce participants by making payment facilitators responsible for authentication and security (Idem). Further, consumer protections could be tied into e-payment legislation while augmentations and amendments to existing consumer protection legislation are considered (Idem).

78. In formulating e-payment regulations, there will be a need to review existing financial sector legislation and regulation and consider best practices in other jurisdictions. In particular, policymakers must consider creating or augmenting electronic fund transfer legislation, which typically covers liability and risk allocation between financial institutions and consumers for the use of automatic teller machines, point-of-sales terminals, as well as some other forms of electronic payments (Idem).

79. As many "developed" countries have longstanding electronic payment regulations as well as consumer protection for both credit and debit card services, there probably would be a need to adopt and modify legislative approaches taken by advanced economies in order to address the practical realities of electronic payment system in West Africa (Idem). First, there must be an audit of the existing regulatory and legislative frameworks for banks and financial institutions, followed by a gap analysis based on specific policy objectives.

80. Finally, it must also be recognized that commercial entities in the financial services sector have a critical role to play in the deployment of e-payment systems and therefore the success of e-commerce. Indeed, it should be noted that many banks in the region have

deployed not just e-banking applications but e-payment systems including some based on the use of mobile phones. Given the cost of computers, and the rate by which the adoption of mobile telephony is outpacing Internet penetration, mobile payment systems may well be the first frontier in bringing e-commerce to a mass-market in West Africa (ECOWAS, 2005).

81. In general for e-commerce to be effective in West Africa, business entities should assist governments in member countries in the elaboration of policies that take into account the practical realities of the sub-region. In this regard, business entities should:

- build their own expertise in the area of e-business to be able to assist the private sector articulate its needs,
- publicize the internet to SMEs, the opportunities for expanded business,
- Carry out work (technical, financial, marketing) to support actions by SMEs to take up e-commerce,
- identify obstacles and barriers for greater participation by small and medium enterprises in the regional e-commerce,
- outline what is being done and what needs to be done to promote e-business and inform public authorities,
- support initiatives for pilot e-commerce businesses,

82. Governments should on their sides:

- actively support and participate in promoting the potentials of e-payment so as to ease the difficulty of e-commerce.
- follow closely the evolution of e-commerce and its impact on the economy, by collecting and analysing data relevant to e-commerce;
- provide support to SMEs in providing information and training to encourage e-commerce;
- initiate the use of electronic means to deliver public services using current infrastructure.

## Conclusion

83. Most West African countries are small, both in terms of population and per capita incomes. As a consequence of limited markets, they do not offer attractive returns to potential investors, while progress in diversifying production and exports is retarded. This limits investment in essential infrastructure that depends on economies of scale for viability. These economic limitations point to the need for West African countries to pool their resources and enhance regional integration in the sub-region.

84. In this regard, regional integration in West Africa has been giving rise to concomitant hope of accelerated intra-regional trade and economic development. However, optimism accompanying birth waned over time as regional groupings repeatedly proved impotent to fulfill hopes vested in them. In general, co-operating economies have neither achieved reasonable growth rates, nor made major strides in market integration. The major causes of that persistent failure are related to policy as well as natural barriers. It is observed that more than 30 years after its creation, ECOWAS is still some way from being a customs union because market integration remains a distant and difficult aspect. WAEMU is a customs union, but is still far from being a common market because free movement of labor remains a problem after 35 years of existence. The lack of market knowledge, poor communication, cumbersome procedures, delays and uncertainties in supply, political instability, and divergent monetary policy are cited as being among the main obstacles that justify market integration failure.

85. This study explores the way in which participation in the e-commerce helps overcome some of the obstacles enumerated above. Analyses reveal that, e-commerce defined as the buying, selling, marketing, and servicing of products or services over computer networks has potential to drive regional trade and integration and improve global competitiveness within the West Africa sub-region. Potential benefits include online communication integrated with information systems of business partners, which may lead to customized products and services, a more diversified regional or global market, better understanding of customer needs, accurate real-time information exchange; and cost-efficient productivity. However, these benefits depend on a number of preconditions, among which the widespread availability of the Internet.

86. In West Africa, e-Commerce is still not considered a significant market driving force. Practically none of the member states of ECOWAS have substantive policy or legislation in place to stimulate its development and regulate aspects of its use. Existing connections mostly target western markets and interconnections between West African countries face significant obstacles namely the high cost of equipment, the lack of awareness of what electronic commerce is, the lack of legal framework conducive to e-commerce, the lack of skilled personnel and the uncertainty of the bank regulations.

87. With respect to the developments above, it is recommended that policies for the effectiveness of e-commerce in West Africa should focus first of all to the implementation of policies that extend the underlying ICT infrastructure and ensure broad network access. Also, member states will need to establish legislations and regulations that ease the difficulty of e-payment in the sub-region.

88. However, even with the adoption of e-commerce, intra-regional trade in West Africa won't undergo a significant increase if member countries continue to be largely dependent on primary exports. Analyses in this study have shown that the principal beneficiaries of e-

commerce will be the Small and Medium Enterprises (SMEs). The reason for this include the fact that e-commerce can be the bridge to overcoming the drawback of distance between Member States and therefore has the potential for providing regional-wide presence for SMEs. There is therefore a need for diversification since intra-West African exports consist mainly of manufactured products while extra-regional exports are mainly primary commodities. This calls for ensuring a regional sound and conducive environment for private sector activities, with particular emphasis on West African micro-entrepreneurs.

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