

Process of Master Plan Formulation

Phase 1: Data Collection and Present Situational Analysis

- Launching Seminar in Ghana
- UEMOA Commission Monitoring Meeting
- JTMC-National Meetings
- T/C Meeting in Ghana



Phase 2: Consideration of Alternative Scenarios for Sub-Regional Development Strategies and Individual Countries' Development Plans

- Study Tour in Japan
- JTMC-National Meetings
- T/C Meeting
- S/C Meeting

Phase 3: Formulation of Sub-Regional Development Strategies and Individual Countries' Corridor Development Plans

- JTMC-National Meetings
- T/C Meeting
- JTMC-Regional Meeting (Ouagadougou)
- Stakeholder Meetings
- JTMC-National Meetings
- T/C Meeting
- UEMOA Commission Monitoring Meeting
- S/C Meeting
- JTMC-Regional (Lomé)
- Joint Steering Committee (Abidjan)
- International Seminar (Abidjan)
- Final Seminar (Accra)



UEMOA Commission Monitoring Meeting



Stakeholder Meeting in Burkina Faso



Joint Steering Committee Meeting in Abidjan



Launching Seminar in Ghana



Stakeholder Meeting in Togo



Steering Committee Meeting for Ghana



National-Level Joint Technical and Monitoring Committee Meeting for Côte d'Ivoire



Visiting Wholesale Market in Nagano, Japan during Study Tour in Japan



Regional-Level Joint Technical and Monitoring Committee Meeting in Lomé

The Project's management structure has two lines. The one is for Burkina Faso, Côte d'Ivoire and Togo under the management of the Department of Community Territorial Administration and Transport (DATC), the UEMOA Commission. The other is for Ghana under the management of Ghana's National Development Planning Commission (NDPC) and Ghana's Ministry of Roads and Highways (MRH).

Technical Cooperation Project
Sponsored by Japan International Cooperation Agency (JICA)

Oriental Consultants Global Co., Ltd.
CTI Engineering International Co., Ltd.
CTI Engineering Co., Ltd.



Japan International Cooperation Agency



West Africa Growth Ring Corridor Development Master Plan

Burkina Faso
Côte d'Ivoire
Ghana
Togo
UEMOA Commission



WEST AFRICA GROWTH RING - GHANA

What is WAGRIC Master Plan?

WAGRIC Master Plan

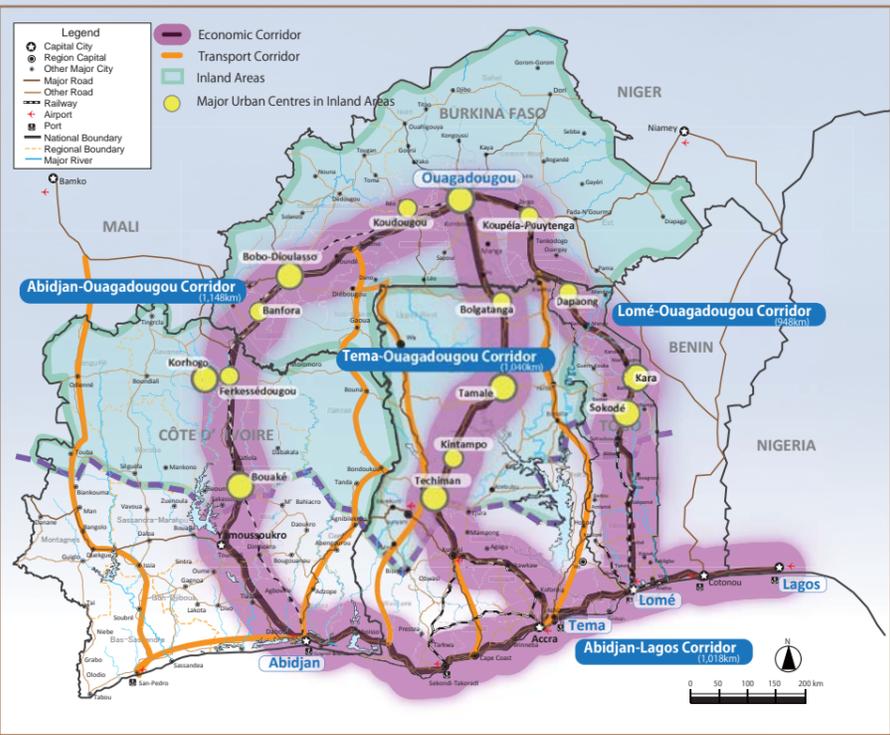
The WAGRIC Master Plan is a master plan on sub-regional development connecting four countries by "West Africa Growth Ring Corridors" based on sub-regional economic integration for seeking development of economic sectors oriented to sub-regional markets.

It is composed of the following two levels of development strategies and plans:

- Sub-Regional Development Strategies
- Individual Countries' Corridor Development Plans

Background

The project to formulate WAGRIC Master Plan was conducted between the period of June 2015 and March 2018, based on the respective requests to the Japanese Government from the UEMOA Commission (West African Economic and Monetary Union) and the Government of Ghana.



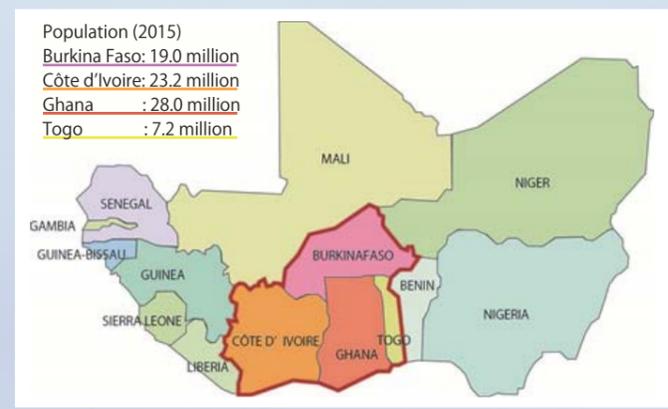
Target Years



WAGRIC Countries

Burkina Faso, Côte d'Ivoire, Ghana and Togo

These four countries are referred to as WAGRIC countries or WAGRIC Sub-Region.



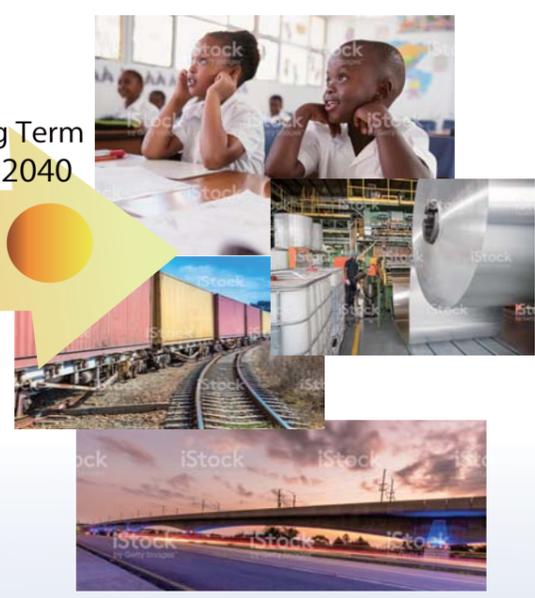
Major Target Corridors of the Master Plan

The WAGRIC Master Plan covers not only the following four major corridors of West Africa's Growth Ring Corridors but also other corridors:

- Abidjan-Ouagadougou Corridor
- Tema-Ouagadougou Corridor
- Lomé-Ouagadougou Corridor
- Abidjan-Lagos Corridor

Future Vision for WAGRIC Sub-Region

Inclusive and sustainable development is attained by developing competitive economic sectors and by attracting investment through sub-regional economic and spatial integration.



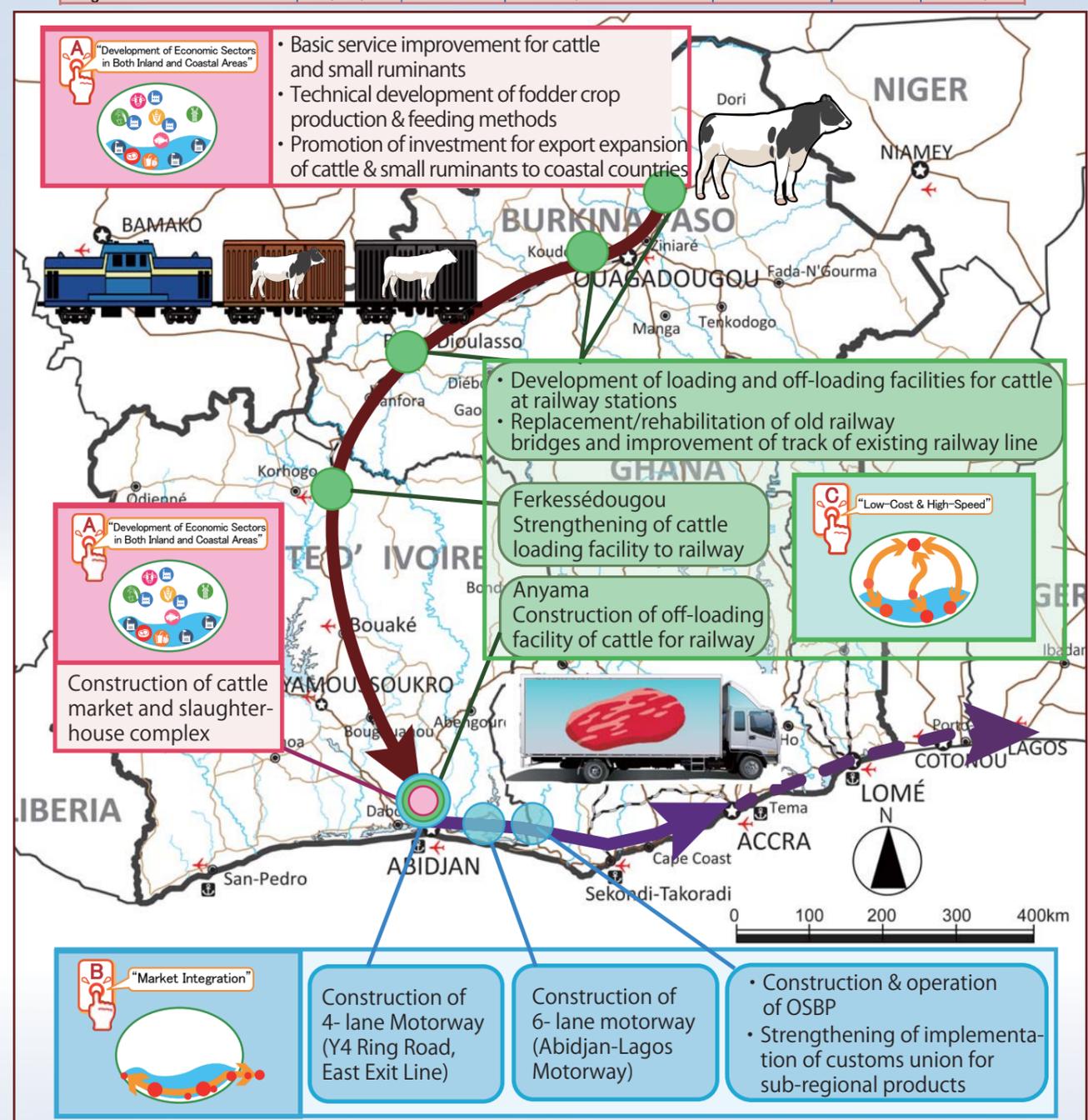
Development of Value Chains over the Sub-Region

Case of Value Chain of Cattle and Small Ruminants Crossing National Borders

In West Africa, major production areas of cattle and small ruminants are inland countries, such as Burkina Faso, Niger and Mali. Those traditional livestock producers are transhumant moving between inland countries and coastal countries. However, this livestock production system cannot supply a sufficient volume of animals to satisfy the increasing demand for meat in coastal areas. As a result, the coastal countries have imported an increasing volume of meat from the overseas, as shown in the table below. In this context, it is recommended that inland countries should develop a modern value chain on livestock crossing national borders by utilizing feed and railway. The priority projects for this purpose are shown in the figure below, while they should make effort at developing their own modern slaughterhouses and cold chains to supply fresh meat to coastal areas.

Imported Meat by Country in 2013 (Net Weight in Tonnes/Trade Value in USD)

	Beef		Sheep & Goat		Pork		Poultry Meat	
	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Burkina Faso	22	177,493	0	0	13	28,122	52	156,907
Côte d'Ivoire	1,329	5,444,048	1,087	3,183,000	18,593	15,973,438	112	323,982
Ghana	2,319	5,316,388	3,947	6,285,000	1,259	1,271,254	1,460	1,300,194
Togo	50	40,391	0	0	31	31,416	44	30,830
Benin	48	64,424	17	30,000	63	24,969	1,523	2,274,266
Nigeria	8	1,757,455	44	545,000	NA	NA	42	47,196

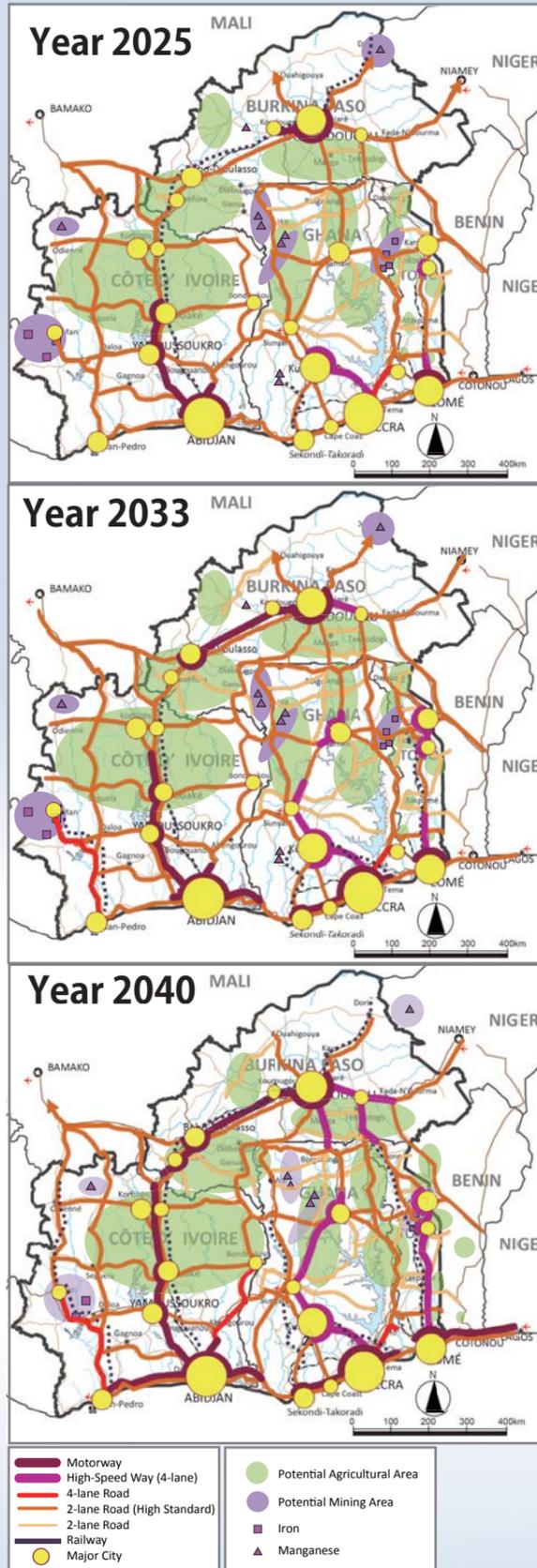


* WAGRIC is an English abbreviation for the Project on Corridor Development for West Africa Growth Ring Master Plan. CACAO is a French abbreviation for Le Projet du Plan Directeur de l'Aménagement des Corridors pour l'Anneau de Croissance en Afrique de l'Ouest.

Individual Countries' Corridor Development Plans

Phased Corridor Development

Corridor development plans are composed of strategies and priority projects for a variety of economic sectors and infrastructure sectors. Over 350 priority projects are identified for implementing the essential strategies in accordance with the selected growth scenario. Individual countries' corridor development plans are formulated for phased corridor development covering three phases (Short Term: 2018-2025, Medium Term: 2026-2033, and Long Term: 2034-2040).



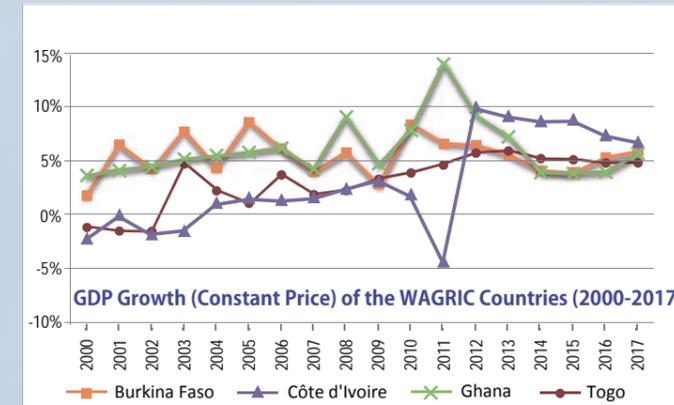
Key Points for Individual Countries' Corridor Development Plans

- Burkina Faso**
 - Improvement of road access to potential agricultural areas by improving east-west roads from north-south transport corridors.
 - Development of irrigation infrastructure to expand agricultural development.
 - Development of multi-modal dry ports for combining rail and truck transport in Ouagadougou and Bobo-Dioulasso.
 - Phased development of a motorway in the Abidjan-Ouagadougou Corridor and four-lane high-speed ways for north-south corridors toward Tema and Lomé.
- Côte d'Ivoire**
 - Investment promotion in economic sectors of inland areas, especially agriculture and agro-processing.
 - Improvement of road access to agricultural potential areas in inland areas.
 - In addition to the existing highway to the east through Grand Bassam, a motorway should be constructed from the north-east of Greater Abidjan eastward to Bonoua in order to securely connect Greater Abidjan with Abidjan-Lagos Coastal Corridor.
 - Extension of motorway of the north-south corridor from Yamoussoukro to the north.
- Ghana**
 - Strengthen east-west road access from the central corridor.
 - Develop cities like Tamale, which are not only to play a role of service centres for agricultural development, but also to be a centre for the manufacturing sector.
 - Priority and selective development of the motorway of Abidjan-Lagos Corridor for building an industrial and urban coastal belt.
 - Formulation of urban transport master plan of Greater Accra considering the establishment of an access road to the new container terminal at Tema Port and how to accommodate the motorways of Abidjan-Lagos Corridor within Greater Accra.
 - Restoration of inland water transport of the Volta Lake by developing a railway between Tema and Akosombo, and rehabilitating the pipelines.
 - Development of long-distance railways in the medium and long terms.
 - Accelerate upgrading to a high-standard four-lane road or motorway between Accra and Kumasi, and to extend it to the north beyond Kumasi.
- Togo**
 - Development for Oti Agropole, Kara Agropole and Mono Agropole should be started by constructing access roads from the road of Lomé-Ouagadougou Corridor to these agropoles.
 - Construction of the motorway of Abidjan-Lagos Corridor should be started with the east-west section within Greater Lomé in order to strengthen goods transport function around Lomé Port.
 - Upgrading of existing roads of the Lomé-Ouagadougou Corridor into four-lane high-speed way.
 - Development of north-south railway by taking advantage of expansion opportunities of iron ore mining in Banjeli.

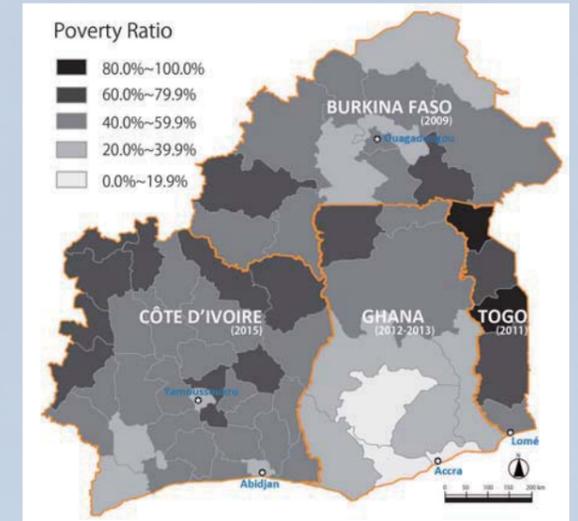
Present Situation of WAGRIC Sub-Region

High Economic Growth in WAGRIC Countries but Still High Regional Disparity

Despite high economic growth driven by production and export of primary commodities, national economies of these countries are still underdeveloped. Regional disparity is also still high with higher poverty ratio in the inland areas of coastal countries and outside Ouagadougou in Burkina Faso.

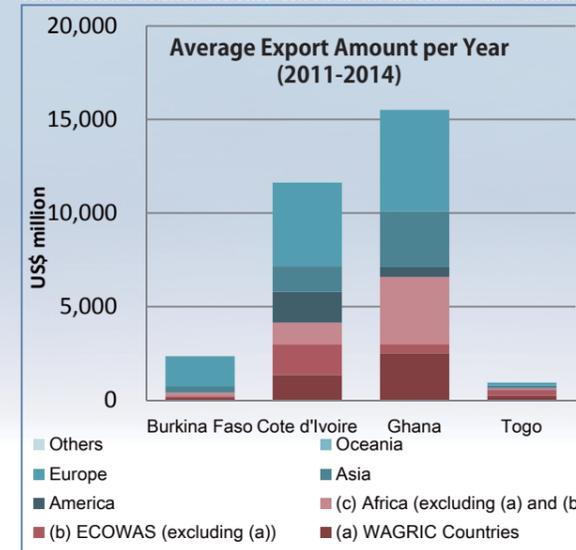


Note: IMF Estimates the Data of 2016-2017 of Ghana and 2015-2017 of Burkina Faso, Côte d'Ivoire and Togo. Source: International Monetary Fund (IMF), World Economic Outlook Database, April 2017

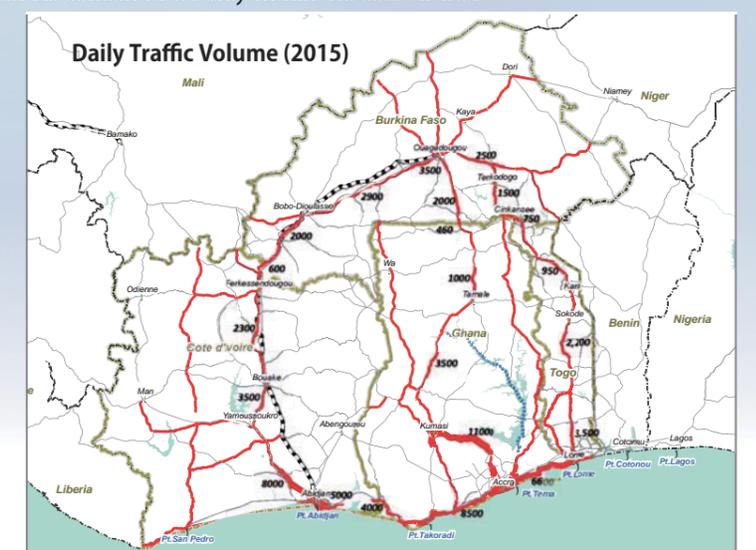


Limited Intra-Sub-Regional Trade and Traffic Volume in WAGRIC Countries

Largest trading partner for the WAGRIC countries is Europe and trade amount among the four WAGRIC countries is relatively small. The traffic volume within the four countries is also limited and is concentrated only within the coastal area.



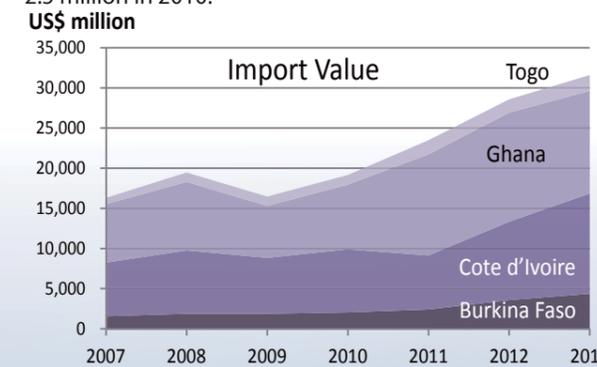
Source: JICA Study Team based on International Trade Centre (ITC) Database



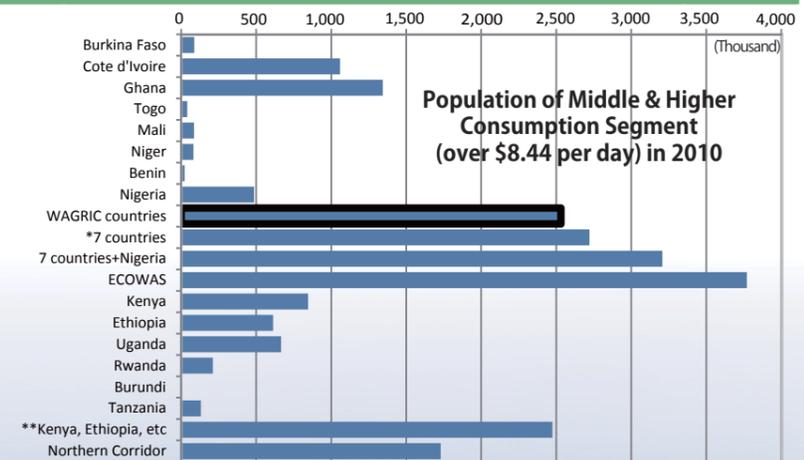
Source: JICA Study Team based on traffic survey conducted in 2015

Increasing Imported Values and Relatively Large Size of Middle Income Population in WAGRIC Countries

The import value in the WAGRIC countries has more than doubled in the last decade. In the WAGRIC countries, the population who could spend over \$8.44 per day reached 2.5 million in 2010.



Source: UN Comtrade Database

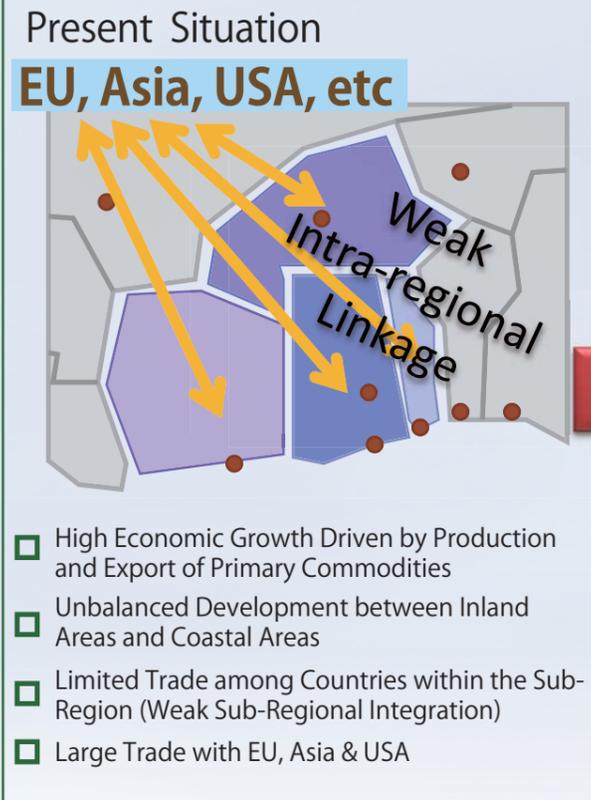


*WAGRIC countries, Mali, Niger, Benin **Kenya, Ethiopia, Uganda, Rwanda, Burundi, Tanzania. Source: Global Consumption Database (World Bank estimates based on national household consumption or expenditure surveys)

Sub-Regional Development Strategies

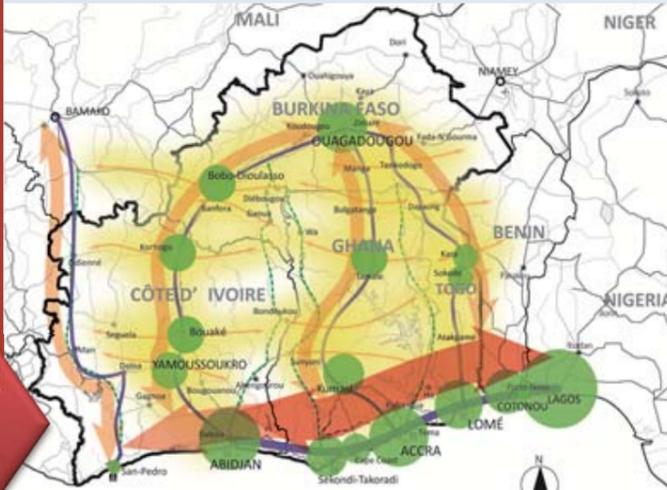
Growth Scenario for WAGRIC Sub-Region

WAGRIC Master Plan is intended to transform the economic and spatial structures of WAGRIC countries by committing to the selected growth scenario.



Selected Growth Scenario

The selected growth scenario is to seek "Sub-Regional Market oriented Corridor Development" by strengthening of sub-regional economic integration and development of economic sectors targeting sub-regional markets.



The selected growth scenario has the following four characteristics:

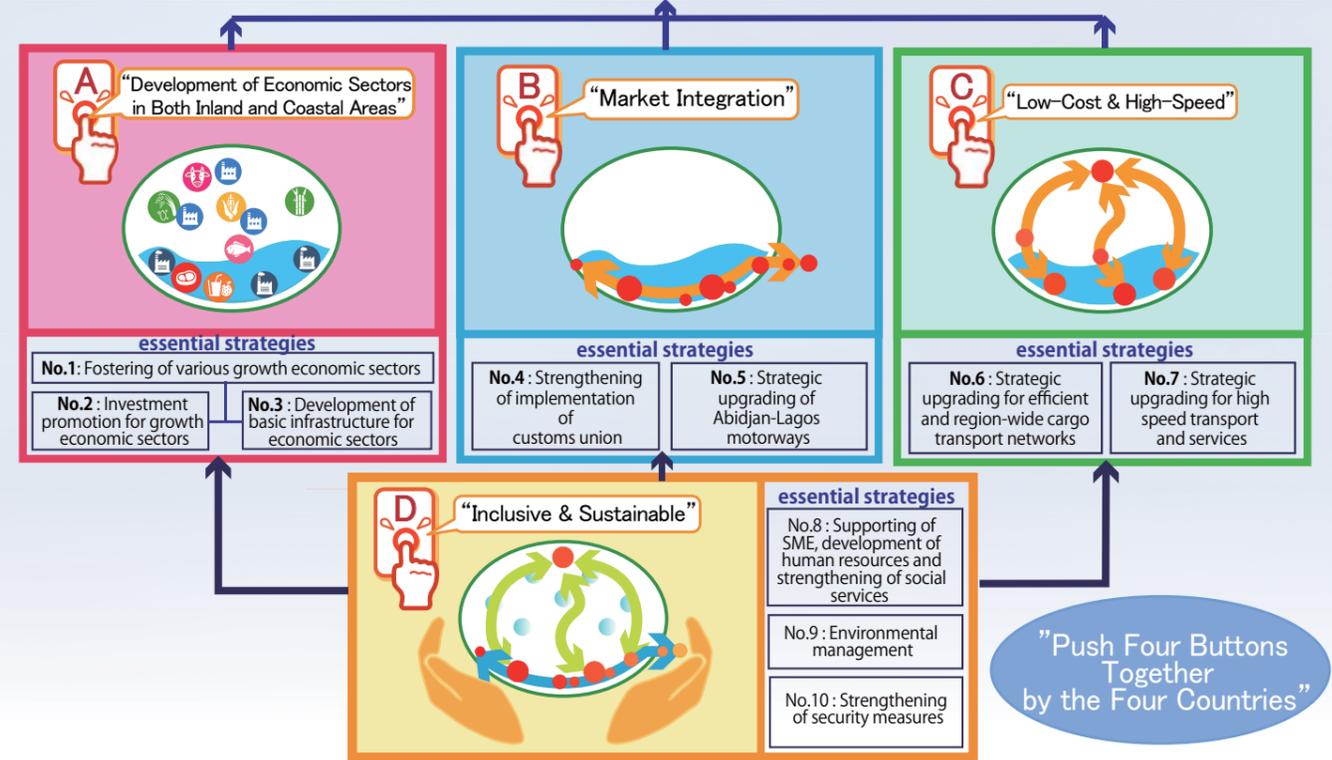
- Development of Economic Sectors targeting Sub-Regional Markets, as well as Production of Primary Commodities → **Button A**
- Integration and Expansion of Sub-Regional Markets → **Button B**
- Strengthening of North-South Connectivity → **Button C**
- Securing of Inclusive and Sustainable Development → **Button D**

Four Buttons and Ten Essential Strategies

Ten essential strategies are formulated in order to implement the selected growth scenario. These essential strategies are categorized into the following four groups (four buttons of necessary actions):

- [Button A]** Development of economic sectors oriented toward sub-regional market: By utilizing the potential of the economic sectors and by targeting sub-regional markets.
- [Button B]** Expansion of the size of coastal markets: By strengthening of implementation of a customs union and by promoting economic sector development.
- [Button C]** Strengthening of north-south connectivity: By establishment of less costly and high-speed transport systems to connect inland production areas with coastal market areas for enhancing competitiveness of economic sectors located in inland areas
- [Button D]** Securing of inclusive and sustainable development: By paying attention to social, environmental and security aspects of corridor development.

Goal: Balanced Economic Development between Inland Areas and Coastal Areas within WAGRIC Sub Region



Why Sub-Regional Markets?

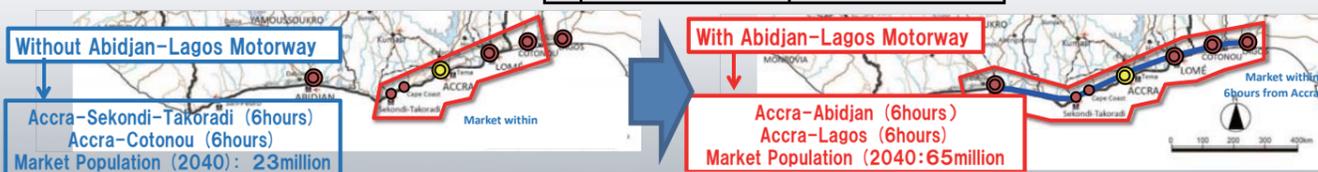
Abidjan-Lagos Corridor is composed of enormous urban centres with urban population having purchasing power. By strengthening of implementation of customs union, it is possible to expand the market size as follows:

- Côte d'Ivoire: 5.6 times larger
- Ghana: 5.1 times larger
- Togo: 14.9 times larger

Furthermore, due to the strengthening of implementation of Customs Union and development of Abidjan-Lagos Coastal Motorway, an integrated consumer market of 65 million urban populations would emerge by 2040.

	Major Cities along Abidjan-Lagos Corridor	Pop. by City 2015 (thou.)	Urban Pop. by Country 2015 (thou.)
CI	San-Pédro	172	5,176
CI	Greater Abidjan	5,004	
GN	Sekondi-Takoradi	756	5,716
GN	Cape Coast	210	
GN	Greater Accra	4,750	1,950
TG	Greater Lomé	1,950	
BN	Greater Cotonou	1,542	2,351
BN	Port Nouvo	809	
NG	Greater Lagos and Surrounding Cities	13,777	13,777
Total		28,970	

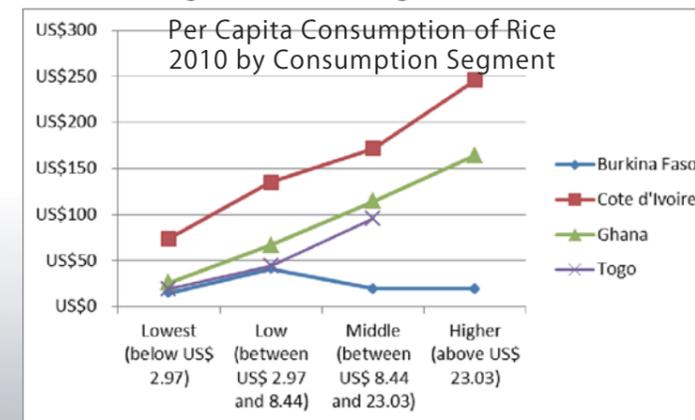
Cote d'Ivoire: 5.6 Times Larger
Ghana: 5.1 Times Larger
Togo: 14.9 Times Larger



Economic Sectors targeting Sub-Regional Markets: Case of Rice

Approximately USD 4,900 million worth of commodities imported by the WAGRIC countries are commodities which can be produced within the WAGRIC countries including rice.

The value of rice consumed in the WAGRIC Sub-Region is estimated to be US\$ 4 billion/year in 2015. This amount of value is considered to become 3-4 times larger by 2040. The size of the rice consumption market will become US\$ 15 billion in 2040 through economic integration.



The amount of US\$ 15 billion (the value of rice consumed for 2040) is equivalent of the total export value of gold and cocoa beans by WAGRIC countries in 2015-2016.

