

Date: March 16, 2015

Environmental and Social Considerations in Detailed Planning Survey
(Technical Cooperation for Development Planning)

1. Full title of the Project

THE PROJECT ON THE CORRIDOR DEVELOPMENT FOR WEST AFRICA GROWTH RING MASTER PLAN

2. Type of the study (e.g. Master Plan, Feasibility Study, Detailed Design, etc.)

Master Plan

3. Categorization and its reason

Categorization: Category B.

The project is not likely to have significant adverse impact on the environment under the JICA guidelines for environmental and social considerations (April 2010) in terms of its sectors, characteristics and areas.

4. Agency or institution responsible for the implementation of the project

4-1. Ghana

Ministry of Roads and Highways (hereinafter referred to as "MRH"), main counterpart to Japan International Cooperation Agency (hereinafter referred to as "JICA"), will be responsible for the implementation of the Project in cooperation with JICA. The National Development Planning Commission (hereinafter referred to as "NDPC") will assume the coordination of the Project with the participation of other relevant organizations to ensure the self-reliant operation of the Project during and after the implementation period.

4-2. Commission de l'Union Economique et Monétaire Ouest Africaine (UEMOA)

The Département de l'Aménagement du Territoire Communautaire et des Transports (hereinafter referred to as "DATC") of Commission de l'Union Economique et Monétaire Ouest Africaine (hereinafter referred to as "UEMOA Commission"), main counterparts to JICA, will be responsible for the implementation and coordination of the Project with the participation of other relevant organizations of the Governments of Burkina Faso, Cote d'Ivoire and Togo to ensure the self-reliant operation of the Project during and after the

implementation period.

In this way, the Project contributes toward social and economic development of the region along the corridors concerned by the Project.

5. Outline of the Project (objectives, justification, location, proposed activities, and scope of the study)

5-1. Objectives

Expected Goals which will be attained after the Project Completion are as follows:

- (1) The objective of the Project is to propose the strategies and plans to promote investment and development along the project corridors within the context of a national development framework.
- (2) The proposed development strategies and plans are approved and implemented by each Government.
- (3) These strategies and plans are to enable regional development, reinforce economic growth and promote foreign investment by making most of the development potential and resources of the countries along the Project Corridors, including the Abidjan-Lagos corridor.

5-2. Justification

The Project complies with the Government of Japan's cooperation policy, which aims to stimulate regional and local economies and align with the JICA's cooperation program. In addition, the Project is based on one of the initiatives in the Yokohama Declaration as a result of the TICAD V held in Yokohama, Japan in June 2013.

5-3. Location

The West Africa Growth Ring consists of four corridors, namely Abidjan-Ouagadougou corridor, Accra-Ouagadougou corridor, Lomé-Ouagadougou corridor and Abidjan-Lagos corridor. The Project concerns principally Abidjan-Ouagadougou corridor, Accra-Ouagadougou corridor and Lomé-Ouagadougou corridor, connecting four countries in West Africa (Burkina Faso, Cote d'Ivoire, Ghana and Togo), (Annex 1).

5-4. Scope to the Study

The outputs of the Project are as follows:

- (1) Integrated development plans consistent with sub-regional development plans and

national development plans.

(2) Database of various sectors attracting investment at national, regional and international levels.

(3) Transportation data based on the Origin-Destination (OD) survey.

5-5. Activities

The principal activities to be undertaken within the framework of the Project are as follows;

(1) Review of existing development plans, development projects, studies, and public and private investments

(2) Collection of available data and information concerning the area under the direct influence of the Project and its surroundings.

(3) OD Survey for cargo transportation

(4) Corridor diagnostic analysis

(5) Socio-economic study

(6) Multi-sector surveys concerning the Project Corridors

(7) Identification and analysis of constraints, promoting factors and potential for development

(8) Proposition of establishment of social economic framework for the Project

(9) Analysis and proposition on the alternative development scenarios

(10) Strategic environmental assessment of alternative development scenarios

(11) Formulation of integrated development strategies

(12) Recommendation of measures to complement on-going and planned development projects

(13) Proposition of projects in selected sectors in accordance with the integrated development strategies

(14) Prioritization of the development projects which will be proposed at national and sub-regional level

(15) Holding of international seminars to share the progress and results of the Project

6. Description of the project site

6-1. Population

The population, Land area and Population density of each country are as Table 1. Total population in this area is 72.3 million. Population density of this area is 81 persons per km².

Table 1 Population, Land area and Population density

Country	Population (millions)	Land area (km ²)	Population density (persons per km ²)
Cote d'Ivoire	22.7	322,463	70
Ghana	25.9	238,533	109
Togo	6.8	56,785	120
Burkina Faso	16.9	272,967	62
Total	72.3	890,748	81

Source: United Nations Demographic Yearbook 2013, Population Census, Human Development Report 2014.

6-2. Gross national income (GNI) per capita and population below Income Poverty Line

GNI per capita and population below Income Poverty Line are as Table 2. GNI per capita is in ranges from \$3,532 in Ghana to \$1,129 in Togo. Population ratio below Income Poverty Line is the highest in Burkina Faso (44.6%) and the lowest in Cote d'Ivoire (23.8%).

Table 2 Gross national income per capita and population below Income Poverty Line

Country	Gross national income per capita (2011 PPP \$), PPP : Purchasing Power Parity	population below Income Poverty Line (PPP \$1.25 a Day)	
		%	Year
Cote d'Ivoire	2,774	23.8	2011/2012
Ghana	3,532	28.6	2011
Togo	1,129	28.2	2010
Burkina Faso	1,602	44.6	2010

Source: Human Development Report 2014, UNDP.

6-3. Condition of the Environment

Carbon dioxide emissions per capita is the highest in Cote d'Ivoire (0.3 ton per capita) and the lowest in Burkina Faso (0.1 ton per capita). Forest area is 32.7% of total land area in Cote d'Ivoire, and only 4.9% in Togo. All countries except Cote d'Ivoire have reduced forest

area. Population living on degraded land shows the highest in Burkina Faso (73.2%).

Table 3 Condition of the Environment

Country	Carbon dioxide emissions per capita	Forest area		Population living on degraded land
	ton. (2010)	% of total land area (2011)	% change (1990/2011)	% (2010)
Cote d'Ivoire	0.3	32.7	1.8	1.3
Ghana	0.4	21.2	-35.2	1.4
Togo	0.2	4.9	-61.0	5.1
Burkina Faso	0.1	20.4	-18.4	73.2

Source: Human Development Report 2014, UNDP.

7. Legal Framework of Environmental and Social Considerations

7-1. Laws, regulations and standards related to environmental and social issues

Cote d'Ivoire, Ghana, Togo and Burkina Faso have their own Laws, regulations and standards related to environmental and social issues. The principle of policy on environmental and social considerations is similar among four countries. They have their own regulations for EIA. They all emphasize the importance to ensure stakeholder participation, information disclosure, transparency and accountability in the course of the development project.

7-2. Relative agencies and institutions

In Cote d'Ivoire, National Agency of the Environment under the Ministry of the Environment plays major role on environmental management.

In Ghana, Environmental Protection Agency plays major role on environmental management.

In Togo, National Agency of Management of the Environment under Ministry of the Environment and Forest Resources plays major role on environmental management.

In Burkina Faso, Office of Environmental Assessment under Ministry of the Environment and Sustainable Development plays major role on environmental management.

8. Provisional Scoping

Provisional Scoping is as following table.

Table 4 Provisional Scoping

Environmental Item	Main Check Items	Reason	Rating※
Pollution			
1. Air pollution	<ul style="list-style-type: none"> Do air pollutants, (such as sulfur oxides (SOx), nitrogen oxides (NOx), and soot and dust) emitted from the proposed infrastructure facilities and ancillary facilities comply with the country's emission standards and ambient air quality standards? Are any mitigating measures taken? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
2. Water pollution	<ul style="list-style-type: none"> Do effluents or leachates from various facilities, such as infrastructure facilities and the ancillary facilities comply with the country's effluent standards and ambient water quality standards? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
3. Wastes	<ul style="list-style-type: none"> Are wastes from the infrastructure facilities and ancillary facilities properly treated and disposed of in accordance with the country's regulations? 	<ul style="list-style-type: none"> It is not clear at this moment. However, proper solid waste management shall be made when draft infrastructure plan is proposed. 	C
4. Soil Contamination	<ul style="list-style-type: none"> Are adequate measures taken to prevent contamination of soil and groundwater by the effluents or leachates from the infrastructure facilities and the ancillary facilities? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
5. Noise and Vibration	<ul style="list-style-type: none"> Do noise and vibrations comply with the country's standards? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
6. Subsidence	<ul style="list-style-type: none"> In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C

Environmental Item	Main Check Items	Reason	Rating※
7. Offensive Odor	<ul style="list-style-type: none"> Are there any odor sources? Are adequate odor control measures taken? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
8. Bottom sediment	<ul style="list-style-type: none"> Are adequate measures taken to prevent contamination of sediments by discharges or dumping of hazardous materials from the ships and related facilities? 	<ul style="list-style-type: none"> It is not clear at this moment. However, environmental management and monitoring plan shall be studied when draft infrastructure plan is proposed. 	C
Natural Environment			
9. Protected Areas	<ul style="list-style-type: none"> Is the project site or discharge area located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas? 	<ul style="list-style-type: none"> Negative impacts could be avoided if infrastructure plans proposed through the master plan stage will not be designed neither in national parks nor designated sites by each country. 	C
10. Ecosystem/Bio diversity	<ul style="list-style-type: none"> Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? 	<ul style="list-style-type: none"> Negative impacts could be avoided if infrastructure plans proposed through the master plan stage will not be designed neither in national parks nor designated sites by each country. 	C
11. Hydrology	<ul style="list-style-type: none"> Is there a possibility that hydrologic changes due to the project will adversely affect surface water and groundwater flows? 	<ul style="list-style-type: none"> It is not clear at this moment. However, it is necessary that Infrastructure plans should not cause any hydrologic changes. 	C
12. Topography and Geology	<ul style="list-style-type: none"> Is there a possibility the project will cause large-scale alteration of the topographic features and geologic structures in the project site and surrounding areas? 	<ul style="list-style-type: none"> It is not clear at this moment. However, development along riverside and coastline is likely occur both erosion and sedimentation. Therefore, Infrastructure plans with lesser change of topography need to be proposed. 	C
Social Environment			
13. Resettlement	<ul style="list-style-type: none"> Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? 	<ul style="list-style-type: none"> It is not clear at this moment. However, needs to propose draft infrastructure plan which will not cause involuntary resettlement. 	C

Environmental Item	Main Check Items	Reason	Rating✖
14. Poor	<ul style="list-style-type: none"> Is there a possibility that the project will adversely affect to poor? Are measurements made to avoid and minimize negative impacts? 	<ul style="list-style-type: none"> It is not clear at this moment. However, enough considerations need to be paid. Because, unemployment and decrease of job opportunity are likely occurring among women those who maintain their livelihood by selling goods after establishing Cross Border Transport Infrastructure such as One Stop Border Post. 	C
15. Ethnic Minorities and Indigenous Peoples	<ul style="list-style-type: none"> Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples? 	<ul style="list-style-type: none"> It is not clear at this moment. However, enough considerations need to be paid. For example, both side of border between Burkina Faso and Ghana are same ethnic, and they usually commute freely. Therefore, consideration is necessary making sure that their livelihood will not be split by Cross Border Transport Infrastructure. 	C
16. Local economies, such as employment, livelihood	<ul style="list-style-type: none"> Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary? 	<ul style="list-style-type: none"> It is not clear at this moment. Since increasing job opportunity is issue to solve, therefore study will be necessary to consider through the master plan phase. 	C
17. Land use and utilization of local resources	<ul style="list-style-type: none"> Is there a possibility that the project will cause impacts, such as change of existing land uses, and local economy? 	<ul style="list-style-type: none"> Land use is likely to be changed due to infrastructure project. 	B
18. Water usage	<ul style="list-style-type: none"> Is there a possibility that conflicts due to water usage occur? 	<ul style="list-style-type: none"> It is not clear at this moment. However, any information related to the infrastructure plan need to be shared among stakeholders. 	C
19. Existing social infrastructures and services	<ul style="list-style-type: none"> Is there a possibility that the project will cause negative impacts to school, hospital and religious facilities? 	<ul style="list-style-type: none"> It is not clear at this moment. However, need to avoid negative impacts to school, hospital and religious facilities when infrastructure project is planned. 	C
20. Social institutions such as social infrastructure and local decision-making institutions	<ul style="list-style-type: none"> Is any measurement made in order to avoid split between and among community? Is traditional local decision-making institutions respected? 	<ul style="list-style-type: none"> It is not clear at this moment. However, need to explain the necessity of infrastructure project to land owners when infrastructure project is planned. 	C
21. Misdistribution of benefits and damages	<ul style="list-style-type: none"> Is there a possibility that the misdistribution of benefits and damages will occur? Is any measurement made in order to avoid it? 	<ul style="list-style-type: none"> It is not clear at this moment. However, outputs of the master plan need to be less misdistribution of benefits and damages. 	C

Environmental Item	Main Check Items	Reason	Rating※
22. Local conflicts of interest	<ul style="list-style-type: none"> Is there a possibility that the conflicts between national, local and community level will occur due to infrastructure plan? Is any measurement made in order to avoid conflicts? 	<ul style="list-style-type: none"> It is not clear at this moment. However, outputs of the master plan need to contribute better relationship among countries as well as communities. 	C
23. Cultural heritage	<ul style="list-style-type: none"> Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage? Are adequate measures considered to protect these sites in accordance with the country's laws? 	<ul style="list-style-type: none"> It is not clear at this moment. However, enough considerations need to pay. 	C
24. Landscape	<ul style="list-style-type: none"> Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken? 	<ul style="list-style-type: none"> It is not clear at this moment. However, need to propose draft infrastructure plan which is harmonized with landscape. 	C
25. Gender	<ul style="list-style-type: none"> Is there any possibility that gender gap and discrimination will occur. 	<ul style="list-style-type: none"> Negative impact is not likely to occur. However participation of women is necessary at the time of stakeholder meetings and consultation meetings. 	C
26. Children's rights	<ul style="list-style-type: none"> Is there any possibility that unfavorable matter for children will occur? 	<ul style="list-style-type: none"> It is not clear at this moment. However, considerations have to be paid that no children will be involved as workforce during project implementation stage. 	C
27. Infectious diseases such as HIV/AIDS	<ul style="list-style-type: none"> Is there any possibility that diseases, including infectious diseases, such as HIV will be brought due to immigration of workers associated with the project? 	<p>Increase of international traffic volume by corridor development means increase number of people and goods. Therefore, organizations concerned still need to continue prevention measurements which are conducted at the borders, against HIV/AIDS. At the same time, measurement to prevent the Eboza hemorrhagic fever needs to be considered.</p>	B
28. Public Health	<ul style="list-style-type: none"> Is there any possibility that sanitation problem will occur due to immigration of workers associated with the project? 	It is not clear at this moment.	C
Others			
29. Accidents	<ul style="list-style-type: none"> Is there any possibility that the project will adversely affect road traffic in the surrounding areas (e.g., increase of traffic congestion and traffic accidents)? 	It is not clear at this moment. However, increase of traffic accidents is likely to be at risk due to increase of traffic volume by corridor development.	B

Environmental Item	Main Check Items	Reason	Rating※
30. Global warming, Climate Change, etc.	<ul style="list-style-type: none"> The impacts to trans-boundary or global issues. 	<ul style="list-style-type: none"> It is not clear at this moment. Study shall be needed through the master plan stage to mitigate trans-boundary or global issues such as trans-boundary waste treatment, acid rain, destruction of the ozone layer, or global warming. 	C

※Rating

A : Significant negative impact is expected.

B : Some negative impact is expected.

C : Extent of impact is unknown at this stage (Extent of impact may become clear as study progresses).

9. Alternatives to the project activities including 'without project' option.

Alternatives to the project activities including 'without project' option will be studied at Master Plan Study Stage.

10. Result of the consultation with recipient government on environmental and social consideration including roles and responsibilities.

The Detailed Planning Survey Team explained 'JICA Guidelines for Environmental and Social Considerations, April 2010', and it shall be applied to the Project. Recipient country sides agreed to apply both national environmental guidelines and 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

The Team also explained that Strategic Environmental Assessment (SEA) is an assessment to be implemented at the policy, planning and program levels in order to ensure environmental and social considerations from the early stage of policy/planning/program formulation with the involvement of related stakeholders. SEA is required in the course of the Project.

11. Terms of Reference for Environmental and Social Considerations

The project should include Terms of Reference (TOR) for Environmental and Social Considerations in line with the JICA Guidelines and national environmental guidelines as follows;

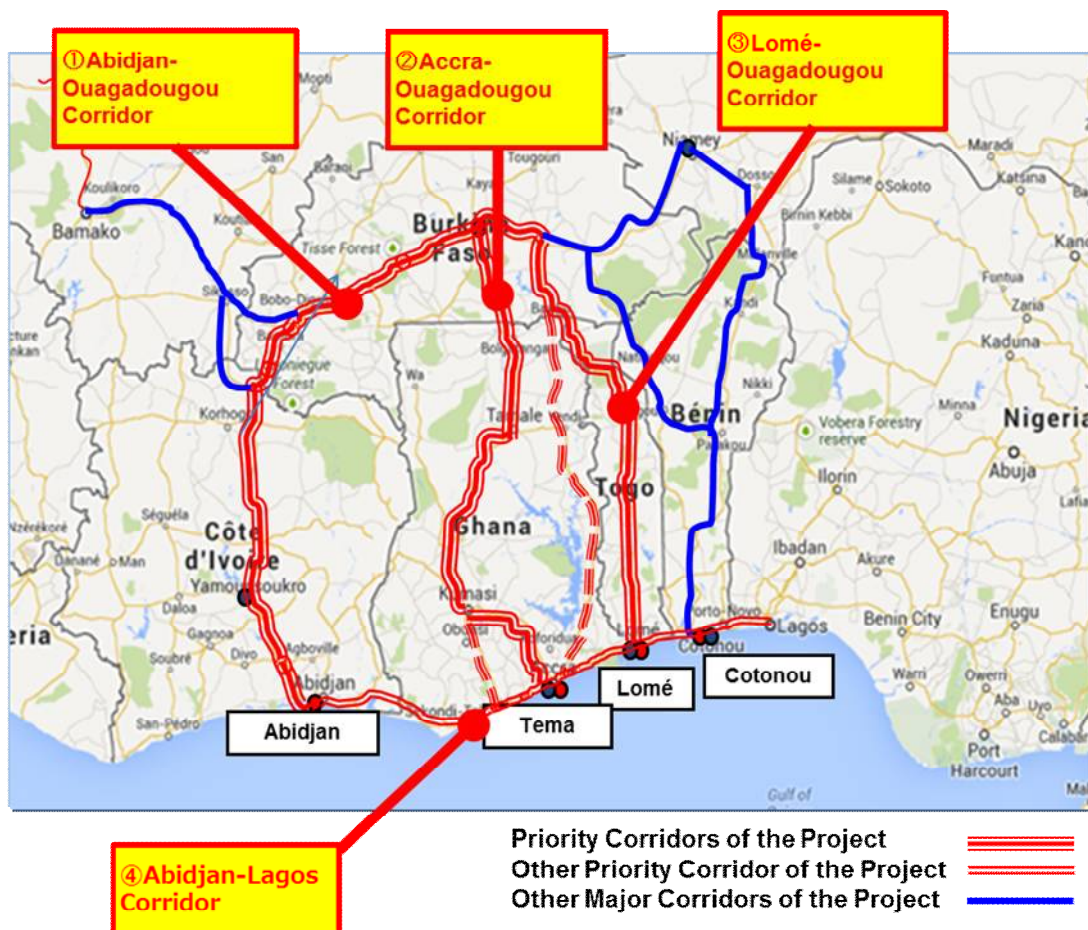
- 1) Consideration of alternatives for achieving the goals of the Project,
- 2) Consideration of contents of the developed policy and plans,

- 3) Definition of the field of the impact study or framework of the Project (scoping),
- 4) Confirmation of environment and social situation,
- 5) Confirmation of system and regulation for environment and social consideration,
- 6) Identification of the environmental impact,
- 7) Evaluation of the environmental impact and examination of alternatives,
- 8) Proposition of mitigation measures,
- 9) Establishment of monitoring method, and
- 10) Assistance of stakeholder meetings.

12. Other relevant information

For the purpose of promoting support for the Project, each government will take appropriate measures to make the Project widely known to the people of each country.

End



Project site