

Country Name	The Large Scale Topographic Mapping Project for Sustainable Development in Conakry City and its Surrounding Area
Republic of Guinea	

I. Project Outline

Background	<p>Infrastructure development had not kept pace with the rapid population growth in Conakry City, and urban problems such as traffic congestion and deterioration of the living environment had occurred frequently. The population was also increasing in the surrounding areas outside Conakry City, and it was necessary to carry out planned urban development that integrated Conakry City and its surrounding areas.</p> <p>In order to address the above-mentioned urban problems, first, geographic information that was the basis of an infrastructure development plan was needed, however, the base map covering Conakry City was only 1/50,000 scale developed in 1951 and had not been updated for about 60 years.</p>		
Objectives of the Project	The project aimed to produce topographic maps of Conakry City and its surrounding area and to transfer techniques on map production, thereby contributing to development of the urban infrastructure.		
	Expected Goals which will be attained by utilizing the Proposed Plan ¹ : Development of the urban infrastructure in Conakry City and its surrounding area is promoted through utilization of topographic maps.		
Activities of the project	<ol style="list-style-type: none"> 1. Project site: Conakry city and its surrounding area 2. Main activities: Review of existing condition, map production, publication of the digital topographic maps and the orthoimage, technology transfer and dissemination of the final products 3. Inputs (to carry out above activities) <ul style="list-style-type: none"> Japanese Side Guinean <ol style="list-style-type: none"> 1) Mission members: 11 persons 2) Trainees received: n.a. 3) Equipment: Portable handy GPS receivers, GPS-enabled digital cameras and others <ol style="list-style-type: none"> 1) Staff allocated: 28 persons 		
Project Period	September 2012-August 2016 (Extended period: October 2014-August 2016)	Project Cost	(Ex-ante) 350 millions yen, (actual) 303 millions yen
Implementing Agency	National Institute of Geography (Institut Géographique National; IGN)		
Cooperation Agency in Japan	PASCO CORPORATION, KOKUSAI KOGYO CO., LTD.		

II. Result of the Evaluation

1 Relevance
<p><Consistency with the Development Policy of Guinea at the Time of Ex-Ante Evaluation and Project Completion></p> <p>The project was consistent with the development policy of Guinea. At the time of ex-ante evaluation, Guinea listed “infrastructure development” as one of five pillars in its priority action plan for the extended Poverty Reduction Strategy Paper 2 (Document Stratégique de Réduction de la Pauvreté) (2011-2012). At the time of project completion, the National Plan of Socio-Economic Development (Plan National Développement Économique et Social: PNDES) (2016-2020) referred to the improvement of infrastructures to in the second pillar among the four pillars.</p> <p><Consistency with the Development Needs of (Guinea) at the Time of Ex-Ante Evaluation and Project Completion ></p> <p>The project was consistent with the development needs of Guinea for the development of topographic mapping. At the time of ex-ante evaluation, Conakry City faced many urban problems mentioned above, however, the geographic information, which was the basis of an infrastructure development plan, had not been updated. At the time of project completion, the Guinean side expressed their needs in creating new topographic maps for the entire land of Guinea for the sake of national land development as well as geospatial information for the areas out of mapping range in the project, in accordance with the expansion of Conakry City.</p> <p><Consistency with Japan’s ODA Policy at the Time of Ex-Ante Evaluation></p> <p>The project was consistent with the Japan’s ODA policy to Guinea. The priority was placed on areas which improved basic living and directly benefited the people's lives².</p> <p><Evaluation Result></p> <p>In light of the above, the relevance of the project is high.</p>
2 Effectiveness/Impact
<p><Status of Achievement for the Objectives at the time of Project Completion></p> <p>At the project completion, the outputs were partially achieved. (i) The digital topographic maps of Conakry city and its surrounding area were produced, and (ii) capacity development of counterpart personnel was conducted, however, to what extent the capacity was developed was controversial. As for the latter, the Japanese expert team transferred the technologies for basic surveying and creation/revision of the digital topographic maps in order to allow the counterpart itself to maintain and update the digital topographic maps created in this project. Since the objectives specified for each of the technologies to be transferred were achieved, the Japanese expert team</p>

¹ The degree of achievement of expected goals is not to be assessed in principle at the time of ex-post evaluation, since it is defined as the medium-to-long-term goals which will be attained as a result of crystallizing the proposed plan (“output” of the project).

² Source: Ministry of Foreign Affairs, ODA Data book 2011

considered that the counterparts mostly acquired the target capacities. However, to the management of IGN, the training seems not to have been conducted effectively enough for the IGN staff to completely understand how to edit the Geographic Information System (GIS) data as it was planned in the project. Since the outbreak of the Ebola hemorrhagic fever, the training schedule had been interrupted although its contents were not much affected. This resulted in deterioration of cumulative effect of continued training program. In addition, the translation/interpretation of the interpreter employed in the project was not clear enough because he did not have enough knowledge of the domain of GIS. It made participants difficult to have the total comprehension of the content of training.

<Utilization Status of the Proposed Plan at the time of Ex-post Evaluation>

After the project was completed, the outputs of the project have been partially utilized. Namely, the result of the project has been used for diverse and important purposes. In addition to the usage shown in the table below, various ministries and the development projects have used the maps including the Urban Development Project (PDU) with the Vision 2040 developed by the European Union (EU), according to IGN. Also, the maps were supplied to a library of the United Kingdom, which gets the country known abroad. However, the authorities of Guinea have not been making good use of the maps in a way of promoting them to its potential users like ministries and donors in the country. In the final report, it was clearly mentioned that users should approach IGN in order to make an agreement for the usage of the soft copies of the maps. As for the hard copies, IGN is the only authorized institution to sell them. At the time of ex-post evaluation, though it was confirmed that the data of this project has been utilized for diverse purposes, it did not give much benefice to IGN because most of the users are Guinean government agencies to whom IGN cannot ask for payment.

<Status of Achievement for Expected Goals through the Proposed Plan at the time of Ex-post Evaluation>

As mentioned above, several projects have requested having the data (soft and or paper) of the maps. The development has been underway at the time of ex-post evaluation and yet to be verified.

<Other Impacts at the time of Ex-post Evaluation>

Recently, IGN has suggested to Mayors of the five (5) municipalities of Conakry a project of making maps of each municipality which makes it clear the physical boundaries of each of them. This is a spontaneous action of IGN staff and could be considered as a positive impact.

According to IGN, no negative impacts on the natural environment have been observed, and no land acquisition and resettlement occurred.

<Evaluation Result>

In light of the above, the effectiveness/impact of the project is fair.

Status of Achievement of Utilization Status of the Proposed Plan and Expected Goals through the Proposed Plan

Aim	Indicators	Results	
(Utilization Status of the Proposed Plan) Topographic maps that reflect the latest information on the national land are used for policy formulation in development plans and well-planned infrastructure development.	Related organizations (Conakry City, Ministry of Public Works et.) utilize the maps	(Ex-post Evaluation) partially achieved	
		Name of the organization who utilized the maps	Name of the policies/projects/plans that the maps were utilized
		MEABOOK Library	Exposition in the library
		Guinea Water Company	Conakry (Coyah and Dubréka towns in the suburbs of Conakry.) (For the new project request to the Japanese government) Master Plan of Guinea Water Company
	Amtec Resources Management	Integration to Amtec Cartography of Guinea 1:100 000	
(Expected Goals through the Proposed Plan) Development of the urban infrastructure in Conakry City and its surrounding area is promoted through utilization of the topographic maps.	Development projects realized using topographic maps (road, water and sewage infrastructure development, etc.)	(Ex-post Evaluation) not verified As mentioned above, several projects have requested having the data (soft and or paper) of the maps, however, at the time of ex-post evaluation, it is still underway and has not been sufficiently confirmed.	

Source: A questionnaire and interviews with IGN

3 Efficiency

Although the project cost was within the plan (the ratio against the plan: 87%), the project period significantly exceeded the plan (the ratio against the plan: 200%). The project period exceeded the plan because of the outbreak of the Ebola hemorrhagic fever. The project could have been completed within the planned period, as WHO announced the restriction of entry into the country from August 2014 to March 2016. Considering the nature of the situation, the efficiency of the project is high.

4 Sustainability

<Policy Aspect>

The Government of Guinea has had PNDES 2016-2020 put in place so that all development projects and programs are put together in a harmonious way that can enhance the efforts to pull the country up to development. The second pillar of PNDES, "Sustainable and inclusive Economic Transformation" refers to infrastructures construction (road network, transport, communication etc.) for the coming years where the result of this project will be used for development of road network.

<Institutional Aspect>

IGN, under the Ministry of Public Works (Ministère des Travaux Publics: MTP), has been responsible for managing and updating measurement outputs for the entire national land of Guinea. Before the project (between 1980's and 2012), there was certain period during which IGN was obliged to minimize its activities of geospatial information development due to the political instability and economic and

financial situation of Guinea. During the implementation of this project, institutional aspect was reinforced, with an increase of the staff from 23 at the beginning of this project in 2012 to 36 at the end of this project in 2016. At the time of ex-post evaluation, the number of staff remains 36, with which IGN can conduct its activities according to the management of IGN, thus the institutional aspect is sustained.

At the time of ex-post evaluation, the effort of IGN to improve the institutional aspect was observed; IGN assigned two of its staff members for the promotion of the sales of maps in hotels in Conakry City. Even though this action did not yet result in a big increase of the sales, the intention of IGN to sustain the result of this project could be appreciated.

<Technical Aspect>

As mentioned above, the interruption of the training due to the Ebola outbreak made it difficult to ensure that, transferred skills for producing and revising the digital map is fully put into practice according to IGN. It is true that acquired skill can be maintained through daily practice like revising the digital topographic maps, especially for those who have obtained it relatively recently; however, IGN could not have that kind of opportunity sufficiently. To take it into consideration and reassure its practical skill, a request for a complementary technical assistance entitled as “Strengthening human resources capacity in the field of Geographic Information Systems (GIS)” was submitted to the Government of Japan. With this technical assistance, which is already approved, reinforcement of technical aspect is expected.

<Financial Aspect>

According to IGN, IGN has received ordinary budget that can even cover the increase of its staffs mentioned above. In terms of activities, after this project, IGN has basically used the external fund such as the financial support of the government of Morocco with which IGN has implemented the project to settle the geodesic points. Currently, IGN is preparing the “Strategy paper horizon 2030” with Morocco’s support. After the completion of this strategy paper, IGN will ask its government to allocate the activity budget to IGN. In the short term, IGN is requesting the budget for 2021 in the national provisions, taking advantage of JICA’s technical assistance. IGN is thus actively working on the acquisition of activity budget.

<Evaluation Result>

In light of the above, there have been some difficulties in the technical and financial aspects however, IGN is trying to cope with it. Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

At the project completion, the objectives of the project were partially achieved. The digital topographic maps of Conakry city and its surrounding area were produced, and (ii) capacity development of counterpart personnel was conducted, however, the interruption of the training due to the Ebola outbreak, which was a ‘force majeure’ for them, made it difficult to ensure the transferred skills to be fully put into practice. After the project was completed, the result of the project has been used for diverse and important purposes. As for the sustainability, difficulties have been observed in the technical and financial aspects; however, at the same time, the efforts of IGN to overcome these difficulties has been also observed. The fact that IGN has succeeded to obtain the financial/technical support from government of Morocco and Japan is one of the results of their efforts.

Considering all of the above elements, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

The authorities of Guinea are not making use of the map in the way of promoting it to the potential user of the maps like ministries and donors in the country. It is as if the usage is not following what was recommended by the final report. Also, IGN does not make its staff members update the knowledge of the project by implementing them or making updates and researches to enrich it. MTP must allocate appropriate financial means that can allow the institute to keep its activities as that is reckoned to it. MTP must also empower IGN by explaining its importance in the Ministers Council and recommend that every need in relation to the maps goes through the IGN.

Lessons Learned for JICA:

The follow-up of the training of the project could have been more emphasized. The detail of roadmap of activities should have been established to facilitate the counterpart personnel to make use of the transferred skills. We suggest also that in future the establishment of a new system of monitoring to check if the transferred skills are well developed by counterpart. This kind of system should be applied within short span of time after the end of the projects.