Country Name	Human Resource Development Project on Geo-spatial Information for Implementation of Spatial Plan of Kosovo					
Republic of Kosovo Implementation of Spatial Plan of Kosovo I. Project Outline Implementation of Spatial Plan of Kosovo						
	The Government of Kosovo (GOK), which declared independence in 2008, established the Spat	tial				
Background	Plan of Kosovo (SPK) (2010-2020+) for conservation of natural environment as well as urban and rural development, and master plans were to be formulated based on the SPK, which necessitated a highly reliable national base map. However, GOK had only printed 1/25,000 topographic maps created in the 1970s. The GOK was also planning to introduce "E-Government" as part of reform of public administration, for which creation of a digital topographic map and GIS data was required. However, Kosovo Cadastral Agency (KCA) had neither experience in creating topographic maps nor equipment and budget for collecting accurate topographic information.					
Objectives of the Project ¹	 The project aimed to create a 1/25,000 digital national base map (about 9,863km²) and GIS data, develop specifications for a digital topographic map, human resource for creation and revision of the digital topographic map and GIS data in Kosovo, thereby contributing to attaining national land development based on the SPK², by way of formulating plans/projects for national land development based on the SPK by utilizing the digital topographic map and GIS data. 1. Expected Goals through the proposed plan³: National land development is attained based on the SPK by utilizing the digital topographic map and GIS data. 					
Activities of the Project	 Project Site: Most of the territory of Kosovo (about 9,863km²)⁴ Main Activities: Development of a digital topographic map and its specifications, development of GIS model and data files, technical transfer relating to creation and revision of the digital topographic map and GIS data, and promotion of utilization of the digital topographic map and GIS data. Inputs (to carry out above activities) Japanese Side Kosovo Side <p< td=""></p<>					
Project Period	ctober 2013 – June 2015 Project Cost (ex-ante) 450 million yen, (actual) 464 million y	/en				
Implementing Agency	Kosovo Cadastral Agency (KCA), Ministry of Environment and Spatial Planning (MESP)					
Cooperation Agency in Japan	PASCO Corporation; Kokusai Kogyo Co., Ltd.					

II. Result of the Evaluation

<Constraints on Evaluation>

 Information to verify the Indicator for Utilization Status of the Proposed Plan was limited because the implementing agency did not have information on the utilization by other relevant institutions. (The post-project situation of a development planning project is basically examined through a questionnaire survey with the implementing agency. Therefore, the evaluator did not collect information from other relevant institutions).

< Special Perspectives Considered in the Ex-Post Evaluation >

- As per the Ex-Ante Evaluation Report, ex-post evaluation was planned after three years from the completion of the project. Therefore, the target year for t Utilization Status of the Proposed Plan shall be set to be 2018.
- "Utilization of the digital topographic map" appeared in the Indicator for Utilization Status of the Proposed Plan shall be modified to "utilization of the digital topographic map <u>and/or GIS data</u>" as GIS data is the other "proposed plan" of the project. Target figure for the Indicator is not available in the existing documents. Therefore, appropriateness of the degree of utilization in the target year shall be confirmed by asking the implementing agency's judgement with grounds.

1 Relevance

<Consistency with the Development Policy of Kosovo at the Time of Ex-Ante Evaluation and Project Completion>

¹ The Objectives are based on Japanese ex-ante evaluation sheet (no English version is available) except for the Expected Goals that are based on the Record of Discussions (R/D) signed in November 2, 2012.

² The SPK is updated every 8 years according to the Law on Spatial Planning (2013).

³ The degree of achievement of the 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).

⁴ About 90% of total area of 10,887 km². The project site was about 9,869km² initially. In the beginning of the project, it was reviewed because the map sheet size was changed in association with a strong request of KCA and changed to 9,863km² through the Minutes of the Meeting dated February 4, 2014.

At the time of ex-ante evaluation and project completion, the project was consistent with the SPK (2010-2020+), in which formulation of master plans was planned, which required highly reliable national base maps.

<Consistency with the Development Needs of Kosovo at the Time of Ex-Ante Evaluation and Project Completion>

The project was consistent with the development needs of Kosovo to develop human resources for geo-spatial information for implementation of the SPK as mentioned in the "Background" above at the time of ex-ante evaluation. The continuity of the needs at the time of project completion was confirmed by KCA through the questionnaire for the ex-post evaluation. <<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with the Japan's Country Assistance Policy for Republic of Kosovo (2013), which included "administrative capacity development" as a development issue under one of the priority areas "Enhancing administrative capacity and human resources."

<Evaluation Result>

In light of the above, the relevance of the project is high.

2 Effectiveness/Impact

<Status of Achievement for the Objectives at the time of Project Completion>

The Objectives were achieved at the time of project completion. As planned, a 1/25,000 digital topographic map of about 90% of the total territory of Kosovo, GIS data, and specifications for the digital topographic map were created. Techniques of creation and revision of the digital topographic map and GIS data (hereinafter referred to as "geo-spatial data") were transferred to the relevant staff members of KCA. The Final Report of the project was officially received/accepted as the project output by KCA.

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

The Proposed Plan was utilized for formulating plans/projects for national land development based on the SPK in the target year (i.e. 2018) and the utilization status continued at the time of ex-post evaluation. According to KCA, the geo-spatial data created by the project was utilized by MESP and Institute for Spatial Planning (ISP) in MESP for formulation (and implementation) of their projects/plans. For example, ISP used the data for drafting the Zoning Map of Kosovo (1/25,000)⁵. For issues of planning of projects for water basin in Kosovo, topographic maps were used by the Water Department within Ministry of Environment and Spatial Planning. In addition, the Agency for Emergency Management used the digital topographic maps during the planning of a database for emergency issues, where topographic maps was main base map for this planning. The geo-spatial data created by the project was also made available to other relevant institutions and public through the National Geoportal⁶, a part of E-Government developed and administered by KCA as a coordinator for National Spatial Data Infrastructure (NSDI). Apart from the above-stated cases, utilization status for planning could not be verified as KCA did not keep track of utilization by other institution for formulating projects/plans based on the SPK⁷. According to KCA the degree of utilization of the Proposed Plan in the target year was appropriate because it was utilized by MESP (ISP), the institution in charge of drafting and coordinating the SPK and one of the expected main users of the data created by the project, as well as by the Agency for Emergency Management.

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

Various positive impacts were observed at the time of ex-post evaluation. The geo-spatial data of the remaining 10% territory was created by KCA, utilizing the transferred techniques and manuals developed by the project. Through the National Geoportal, the geo-spatial data created by the project was widely utilized by the relevant institutions for purposes other than the expected utilization of the Proposed Plan set at the time of ex-ante evaluation i.e. formulation of plans/projects for national land development based on the SPK. For example, the geo-spatial data was utilized for creation of "Kosovo 3-dimentional GIS" by Emergency Management Agency, field orientation by Kosovo Security Force and Police of Mitrovica Region, school lessons by different faculties, etc. Since the National Geoportal was open to public, the users of the geo-spatial data were expanded beyond the government institutions of Kosovo. KCA confirmed that the data was utilized by some non-government institutions although it was not aware for which purposes. According to KCA, the data was also utilized by Defense Geographic Centre in the United Kingdom for different purposes.

<Evaluation Result>

Therefore, the effectiveness/impact of the project is high.

⁵ The Zoning Map of Kosovo is a spatial planning document of national level formulated based on the SPK. At the time of ex-post evaluation, it was being formulated along with the next SPK (2020- 2028+), and its first draft was expected to be completed in June 2019.
⁶ The National Geoportal can be accessed directly through the link: http://geoportal.rks-gov.net/en/filimi or through the website of KCA: http://www.kca-ks.org/en/ballina.

⁷ Regarding municipal cadastral agencies, KCA mentioned that they did not use the geo-spatial data created by the project.

Aim	Indicators	Results	
(Utilization Status of the Proposed Plan) Plans/projects for national land development are formulated based on the SPK by utilizing the digital topographic map	Results of utilization of the digital topographic map and GIS data (*) by the relevant institutions (name of projects, plans) (*) See <special perspectives<br="">Considered in the Ex-Post Evaluation></special>	 (Ex-post Evaluation) achieved. The geo-spatial data created by the project was used to formulate plans/projects based on the SPK at least by MESP and ISP in MESP. For example, the data was used by ISP to draft the Zoning Map of Kosovo and water basin in Kosovo. Also, the Agency for Emergency Management used the digital topographic maps for planning a database for emergency issues. The data created by the project could be accessed by other relevant institutions through the National Geo-Portal. Information on their utilization status for planning was not available. -KCA considered the degree of utilization as appropriate because it was utilized by MESP (ISP), the institution in charge of drafting and coordinating the SPK and one of the expected main users of the data created by the project, as well as by the Agency for Emergency Management. 	

Source : Questionnaire and interview survey with KCA

3 Efficiency

While the project cost slightly exceeded the plan (ratio against the plan: 103%), the project period was within the plan (ratio against the plan: 100%). The outputs of the project were produced as planned. Therefore, the efficiency of the project is fair. 4 Sustainability

<Policy Aspect>

The SPK (2010-2020+) stated in the "Relevance" was still valid and the succeeding SPK (2020-2028+), which has the same objectives as the current one, was in preparation at the time of ex-post evaluation. The Law on Cadastre (2011), based on which KCA was designated as a coordinator for NSDI, was also effective. Meanwhile, adoption and promulgation of the Law on NSDI by the Parliament of Kosovo, which was expected in 2019, has been rather slow. It is not certain whether the law would be adopted during 2019, as it was planned. Based on the information from KCA, it is more likely the Law on NSDI to be adopted in 2020.

<Institutional Aspect>

KCA was responsible for creating, revising, and providing the geo-spatial data in Kosovo and a coordinator for NSDI at the time of ex-post evaluation. According to KCA, there was enough staff to implement the regular work in the relevant Directorate (i.e. Geoinformation Directorate)⁸. In addition, major projects (e.g. projects on cadastre, geodesy, and mapping) could be outsourced as needed. However, more staff would be necessary to implement the forthcoming Law on NSDI. KCA requested MESP to solve the issue as soon as possible, but it was not sure whether the staff would be increased as requested. Meanwhile, KCA considered cooperation with the relevant institutions was appropriate to promote utilization of the geo-spatial data, as the Inter-ministerial Committee for Land Administration and NSDI was active with two meetings yearly from 2019. KCA expected that the forthcoming Law on NSDI would raise this cooperation to the higher level. <Technical Aspect>

KCA maintained the skills and knowledge necessary for creation and revision of the geo-spatial data by itself or through outsourcing. For example, KCA created the geo-spatial data of the remaining 10% of total territory as stated above. The equipment provided under the project was considered as very important asset of KCA and was continuously utilized and maintained in good condition. Three staff members were assigned to manage the equipment (two of them were GIS experts and one was an IT expert).

<Financial Aspect>

The exact budget amount for creation, revision, and provision of the geo-spatial data could not be identified because it was difficult to segregate it from the overall KCA budget. For reference, total budget allocated to KCA increased from 2016 to 2018 and total expenditure between the same period was within the allocated budget. According to KCA, necessary budget was secured to create, revise, and provide the

Total Budget and Expenditure of KCA (Unit: I	EUR)

8 1)
	2016	2017	2018
Total Budget Allocated	825,094	797,393	1,757,140
Total Expenditure	794,115	778,015	1,526,246
e Ket			

geo-spatial data for the last three years, including salaries of the relevant staff, cost for creation of geo-spatial data for the remaining 10%, maintenance cost of the provided equipment, etc.

<Evaluation Result>

In light of the above, slight problems have been observed in terms of the policy, and institutional aspects of the implementing agency. Therefore, the sustainability of the effectiveness through the project is fair.

⁸ Geoinformation Directorate_consisted of four Cadastral Experts, three Surveying Experts, six GIS Experts, and one Mapping Expert.

5 Summary of the Evaluation

The project achieved its Objectives at the time of project completion since 1/25,000 digital topographic map (9,863 km²), GIS data, and specifications for the digital topographic map were created. The Proposed Plan was achieved because the geo-spatial data was utilized at least by MESP (and ISP) for formulation of projects/plans for national land development based on the SPK. Regarding the sustainability, slight problems were observed in policy aspect (i.e. late adoption of the Law on NSDI) and institutional aspect (i.e. insufficient staff to implement the forthcoming Law on NSDI). Nevertheless, no problem was observed in technical and financial aspects. As for the efficiency, the project cost slightly exceeded the plan. Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

- Recommendations for Implementing Agency:
- It is recommended that MESP allocate additional staff for implementation of the forthcoming Law on NSDI to Geoinformation Directorate, KCA, as soon as possible. MESP should ensure implementation of this recommendation.
- It is recommended that, in the next two years, KCA inform people employed in the municipal cadastral agencies through dissemination seminars on the result of the project and encourage the municipal cadastral agencies to also use the digital map and GIS data for their work in the future.
- It is recommended that KCA appoint one person from the current staff to be in charge of communication with the relevant ministries by the end of 2019 to support them to utilize the geo-spatial data properly for their project/plans as well as to gather information on which governmental institutions are using the data, for which project/plan and in which period, so that the overall project impact could be realized and enhanced.

Lessons Learned for JICA:

Apart from ISP, KCA has not followed if any other governmental institutions have been using the digital topographic map and GIS data created by the project (the proposed plan). For Non-Governmental part, KCA is aware which organizations are using them, but it does not know for which purpose. In future development study projects, more attention should be paid to implementation phase of the proposed plan by both JICA and the implementing agency. JICA should follow periodically the activities of the implementing agency even after completion of the Final Report to make sure that the implementing agency puts effort into actual usage of the proposed plan, their dissemination and cooperation with the Governmental and Non-governmental institutions/organizations in this regard.



Staff in the KCA utilizing the equipment procured by JICA