

## TECHNICAL ASSISTANCE COMPLETION REPORT

Division: SPOP/SPD

TA No., Country and Name			Amount Approved: \$225,000	
TA 8603-REG: Geocoding of ADB's Projects			Revised Amount: Not applicable	
Executing Agency Asian Development Bank	Source of Funding TASF-Others	Amount Undisbursed: \$29,130	Amount Utilized: \$195,870	
TA Approval Date: 20 December 2013	TA Signing Date: Not applicable	Fielding of First Consultants: 28 February 2014	TA Completion Date Original: 31 July 2014	Actual: 30 November 2014
			Account Closing Date Original: 31 July 2014	Actual: 25 March 2015
<b>Description</b>				
<p>The objective of the small-scale technical assistance (TA) was to enhance Asian Development Bank's (ADB) transparency by recording the geographic location of its projects. The TA also aimed to incorporate an information technology (IT) application for geocoding into ADB's project management system, or eOperations. Since 2008, ADB has been participating in the International Aid Transparency Initiative (IATI), which aims to promote an international standard for aid data publication. One of the IATI requirements ADB needed to fulfill was the publication of geographical project locations. In the Aid Transparency Index (ATI) 2013, an annual survey on donors' compliance with IATI standard, ADB was ranked lower than other multilateral development banks (MDB) on that indicator.</p>				
<b>Expected Impact, Outcome and Outputs</b>				
<p>The expected impact of the TA was an improved ADB's ability to work effectively with its stakeholders, as the geographic location information would facilitate a better understanding of ADB's resource allocation, especially at the subnational level. The expected outcome was enhanced ADB's compliance with international standards by the IATI, which would result in an improved recognition of ADB's transparency by its stakeholders and external transparency initiatives such as the ATI. The outputs included (i) geographic location information of ongoing loan, grant and TA operations financed by ADB, (ii) a geocoding module developed in eOperations to enable ADB project officers to geocode newly approved projects, and (iii) training of ADB staff on the use and maintenance of the system. The expected impact, outcome and outputs of the TA were largely achieved as envisaged in the initial design of the TA.</p>				
<b>Delivery of Inputs and Conduct of Activities</b>				
<p>The TA engaged a consulting firm which had extensive experience and expertise in geocoding MDBs' operations. The consultants comprised (i) a project manager who served as team leader, (ii) application developers handling the development of a geocoding tool for integration with eOperations, and (iii) geocoders for recording of ADB project locations, providing a total of 11 person-months international consultant services.</p>				
<p>The TA started with a technical assessment of ADB's IT architecture in March 2014, for which a mission of the consultants visited ADB headquarter and discussed with ADB's IT experts and project officers who use eOperations for project processing. The points of discussion included (i) the process of producing and validating the geospatial information of ADB portfolio, and (ii) the features required for the geocoding module in eOperations to serve ADB's needs in a user-friendly and technically reliable manner. Following the technical assessment, geocoding of ADB project locations was conducted by the consultants based on the information sourced from project documents available in ADB website. Draft geocodes were submitted to ADB project officers for validation, and, when discrepancies were identified, the consultants accordingly made corrections into the data. The TA produced information of around 11,000 locations of 700 projects either closed in 2013 or active as of March 2014. The finalized geocodes were incorporated in ADB's IATI publication in June 2014.</p>				
<p>Development of the geocoding module comprised two elements: (i) modification of eOperations for accommodation of the geocoding process, which were undertaken by ADB's IT experts, and (ii) development of an IT application for geocoding, called the geocoding widget, by the consultants. Functional designs of the components were determined via a series of consultation with the eOperations users. Also, there was close coordination between ADB and the consultants to ensure seamless integration of the two IT systems. After user acceptance tests by ADB, the geocoding module was completed in November 2014, and subsequently rolled out for use in December. To power the geocoding module, geographic information system (GIS) software was procured and installed in ADB's IT infrastructure.</p>				
<p>Training of ADB IT experts on the technical details and maintenance of the geocoding module was conducted by the consultants through video conferences during the system integration. The consultants provided technical documents to facilitate the process. In addition, training of ADB staff on the use of the geocoding module was provided by ADB</p>				

geocoding team in October 2014, where around 150 project officers participated. The consultants assisted with the task by preparing training materials and a geocoding user guide.

The TA completion date was extended twice from originally 31 July to 30 November 2014. The extensions were mainly attributable to (i) a delay in signing of the contract due to the consultant's inexperience with ADB procurement process, (ii) insufficient IT resources in ADB to execute internal system changes and integration, and (iii) unforeseen technical hurdles that complicated system integration. Also, a minor change in implementation arrangements was made to adjust the procurement cost of the GIS software and cancel a consultants' mission to Manila, which resulted in a decrease of \$996 in total TA costs.

#### **Evaluation of Outputs and Achievement of Outcome**

Geocoding was undertaken by well-trained consultants, producing geospatial information for all the projects requested by ADB, in compliance with the IATI standard. Inclusion of the geocoded data in ADB's IATI reporting made a major contribution to improving ADB's performance in ATI 2014 as expected in the TA design. ADB's score on the subnational geographic location jumped from 0 in the previous year to 81 in 2014 survey, which marked the highest among MDBs. Partly thanks to this, ADB's overall ranking also rose to 5<sup>th</sup> out of 68 donors from 10<sup>th</sup> place in 2013, outperforming its comparators. Nevertheless, a quality issue remained with the geocoded information due to the lower-than-expected validation of the consultants' draft by ADB staff, which was at around 40%.

The geocoding module was well accepted by both ADB IT experts and project officers. Although slow performance was an issue during the system integration, the consultants managed to resolve it, eventually fulfilling ADB's IT performance requirements. The workflow and functionalities of the module were also received as user-friendly during the staff training. The user guide helped enhance the acceptability of the module by providing clarification and guidance on the geocoding process.

#### **Overall Assessment and Rating**

The TA is rated highly successful. The outputs were relevant and enabled ADB to achieve the objectives of the exercise, i.e., (i) improvement in data transparency as rewarded by the ATI, and (ii) incorporation of a well-functioning geocoding module in eOperations. The delay in TA completion did not compromise overall project achievement.

#### **Major Lessons**

Institutionalizing a new data reporting process requires not only a well-functioning tool but also a broad compliance with the new requirements by data reporters. For tasks where change in the perception of the people affected is a critical element of success, as was in the validation of the draft geocodes under the TA, it is important to ensure a sufficient allocation of resources and efforts in promoting awareness of the project objectives and benefits.

For consultants newly engaged in ADB projects, adequate time should be allowed for knowledge transfer to familiarize them with ADB's strategic priorities, documentation and performance requirements, etc. Lack of knowledge about ADB-specific requirements can result in unexpected delay in implementation and waste of resources.

#### **Recommendations and Follow-Up Actions**

Although the geocoding module was successfully rolled out, it remains to be seen whether the process takes root in ADB workflow. A close monitoring of the system performance and compliance with the process by ADB project officers, along with continued communication with them on data validation and the benefits of geocoding, will be required to ensure sustainability of the exercise. Also, maintaining and improving the functional health of eOperations which houses the geocoding process, would be essential for longer-term viability of the initiative.

The geospatial data made available through the TA provide basis for ADB to proceed to visualization of the information, or geomapping. A follow-on project, TA8713-REG: Geomapping of ADB's Projects, has been approved in September 2014 to implement the next phase. It is important that the new project builds on the assurances across ADB stakeholders, including ADB project officers, about the actual usage and merits of geocoded information.

An institutional arrangement for maintenance and management of the geocoding system is not fully in place in ADB. The follow-on project will provide maintenance assistance services by the end of 2015. ADB needs to consider internalizing the whole maintenance task and prepare a new arrangement for 2016 and onward.

Prepared by:                     Dong-Ick Kim                     Designation:                     Planning and Policy Specialist                    

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.