Internal Ex-Post Evaluation for Technical Cooperation Project

conducted by Viet Nam Office: March, 2020

Country Name	**Project on Improvement of Urban Transportation of Danang City**
Socialist Republic of Viet Nam	

I. Project Outline

Background	JICA implemented the Study of Integrated Development Strategy for Danang City and Its Neighboring Area in the Socialist Republic of Viet Nam (DaCRISS) from 2008 to 2010, in order to formulate regional development strategies for the Central Economic Zone and the Master Plan for Danang City up to 2025, including plans for urban transportation and environment. It was pointed out in DaCRISS that one of the development scenarios assumed that the population of Danang City would reach 2.1 million by 2025. Therefore, it was required for Danang City to take measures such as shifting transportation demand from private mode to public mode by introducing mass rapid transit systems and traffic management measures. At the same time, it was also required to strengthen project planning and implementing capacity of the Danang City People's Committee (DPC) in order to carry out the urban transportation plan up to 2020.		
Objectives of the Project	Through conducting pilot projects and trainings for improvement of urban transport system, the project aimed at strengthening planning, implementation, evaluation and management capacities of Danang Department of Transport (DOT) in urban transport system, thereby promoting sustainable development of Danang City through improvement of urban transport system. 1. Overall Goal: Promotion of sustainable development of Danang City by improving urban transport system. 2. Project Purpose: Danang Department of Transport's planning, implementation, evaluation and management capacities in urban transport system are strengthened in line with urban development orientation.		
Activities of the Project	1. Project Site: Danang City 2. Main Activities: (1) Implement pilot projects, provide recommendations for future projects and cooperate with DPC and relevant organizations to formulate the draft budget plan for future projects; and (2) Conduct training courses in theory and practice and formulate training manuals/guidelines etc. 3. Inputs (to carry out above activities) Japanese Side 1) Experts: 6 persons 2) Trainees Received: 28 persons 3) Equipment: CAD Software, VISSIM Software, GIS Software, multifunction printer and projector etc. 4) Local operation cost Vietnamese Side 1. Staff Allocated: 24 persons 2. Project office and facilities 3. Local operation cost		
Project Period	April 2013 – December 2015	Project Cost	(ex-ante) 194 million yen, (actual) 216 million yen
Implementing Agency	Danang Department of Transport (DOT)		
Cooperation Agency in Japan	ALMEC Corporation		

II. Result of the Evaluation

<Constraints on Evaluation>

- Indicators of Project Purpose and Overall Goal are not concretely defined to verify the degree of achievement, and numerical targets are not set at all for Project Purpose and Overall Goal. Thus, in the ex-post evaluation, the continuation status of project effects (Project Purpose indicator) and the achievement level of Overall Goal needed to be evaluated qualitatively.

<Special Perspectives Considered in the Ex-Post Evaluation>

- [Evaluation of the Continuation Status of Project Effects] The Project Purpose indicator (DOT's task is properly implemented in line with urban transport master plan.) is vague and not specific enough, as the coverage of "urban transport" is very wide. In the Terminal Evaluation, the indicator was interpreted as to what extent DOT staff was able to plan, implement, evaluate and manage their tasks based on the data and real situation of the traffic sites properly, as seen in improvement of intersections and motorbike parking system on sidewalk. In line with this interpretation, in the ex-post evaluation, the continuation of project effects (Project Purpose indicator) was evaluated based on (1) whether DOT has continued/expanded improvements in urban transport system such as improvement of intersections and motorbike parking system on sidewalk etc. in Danang City since project completion; and (2) whether DOT has operated, maintained and/or expanded the coverage of the management software for traffic signalized system, Transport Facility Management System and DaCRISS GIS Database since project completion.
- [Evaluation of the Achievement Level of Overall Goal] The logical steps for achieving the Overall Goal would be: (Project Purpose) DOT's capacity for planning, implementing, evaluating and managing improvement of urban transport system is strengthened. > (Overall Goal) Urban transport system in Danang City is improved. > (Overall Goal Indicator) Public satisfaction in urban transport system is increased. On the other hand, the coverage of "urban transport" is very wide. Thus, in the ex-post evaluation, the achievement level of Overall Goal was evaluated based on (1) whether and to what extent urban transport system in Danang City has been improved since project completion, centering on to what extent the proposed future projects (six future projects proposed by the project) have been implemented (to a possible extent to be implemented by three years after project completion); and (2) whether and to what extent public satisfaction on urban transport system in Danang City has been increased after project completion (through interviews with 33 road users on Le Duan Corridor and Nguyen Van Linh Corridor).

1 Relevance
<Consistency with the Development Policy of Viet Nam at the Time of Ex-Ante Evaluation and Project Completion>

The project was consistent with Viet Nam's development policy such as "development of the public transport system in Danang City" and "alleviation of traffic congestions and accidents in the city" as set forth in the "Masterplan of Danang City to Year 2030, Vision to Year 2050" (prepared in 2012 and approved by the Prime Minister in 2013) and the "Danang Transport Masterplan Up to 2020 and Vision to 2030" (approved by DPC in 2014[1]) at the times of both ex-ante evaluation and project completion.

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

The project was consistent with Viet Nam's development needs for improving the urban transport system in Danang City as the strategically important point in Viet Nam as well as in the Greater Mekong Sub-region, at the times of both ex-ante evaluation and project completion.

<Consistency with Japan's ODA Policy at the Time of Ex-Ante Evaluation>

The project was consistent with Japan's ODA policy as stated in the "Country Assistance Program for Viet Nam" (2009), which included "development of public transportation" under "promotion of economic growth and strengthening of international competitiveness".

<Evaluation Result>

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

2 Effectiveness/Impact

<Status of Achievement of the Project Purpose at the time of Project Completion>

The Project Purpose was achieved by the time of project completion. The project conducted two pilot projects, in which it improved five congested intersections on Le Duan Corridor and motorbike parking management on Nguyen Van Linh Sidewalk in Danang City[2]. During the process, project counterparts (C/Ps) and other staff belonging to Danang DOT and relevant organizations cooperated to formulate the implementation plan and managed the implementation by monitoring and improving the operation method. Moreover, Danang DOT improved two other intersections in the city such as the change of geometric design by its own initiative. The motorbike parking system on a sidewalk introduced under the project was also expanded from the target area to other commercial areas in Hai Chau District. In addition, C/Ps acquired practical skills of operating the management software as well as conducting field surveys for the traffic signalized system and transportation facility management in order to collect necessary data and information to implement their tasks properly.

<Continuation Status of Project Effects at the time of Ex-post Evaluation>

The project effects have continued to the time of ex-post evaluation. At intersections on Le Duan Corridor where a pilot project was conducted under the project, Danang DOT has continued improvements and maintenance such as further geometric design improvements, traffic lane assignment and infrastructure improvements (on road surface/pavement) since project completion. Vehicle detectors installed under the project have also been operated. Motorbike parking management on a sidewalk, which was another pilot project conducted under the project, has also been maintained. In addition, a tunnel (40 meters long and 7.5 meters wide) has been constructed under Le Duan Corridor in response to the increasing traffic demand. The Transport Facility Management System developed under the project has been integrated into Danang city's GIS database, as Danang DOT has started developing its own GIS database on technical infrastructure including transport and information system with support from the private sector such as IBM.

<Status of Achievement for Overall Goal at the time of Ex-post Evaluation>

The Overall Goal has been achieved by the time of ex-post evaluation. Among six future projects proposed by the project, the following four projects have been implemented since project completion: (1) Improvement of Traffic Situations on Le Duan Corridor, (2) Installation of the Traffic Information System in Danang City, (3) Improvement of Traffic Situation in Danang City, and (4) Application of GIS for Transport Facility Management. Regarding (1), as stated above, further geometric design improvements, traffic lane assignment and so on have been implemented. Regarding (2), traffic information boards together with fiber transmission cables were installed at 12 locations in the city. Regarding (3), while geometric design improvements in 60 intersections in the city in total as well as traffic lane assignment and traffic signal operation using traffic detectors were proposed by the project, improvements such as geometric design improvements, traffic lane assignment and road surface/pavement improvements have been conducted in approximately 30 intersections so far. Regarding (4), as stated above, Danang DOT has started developing its own GIS database on technical infrastructure including transport and information system. As for public satisfaction on the urban transport system, interviews with 13 persons on Le Duan Corridor and 20 persons on Nguyen Van Linh Corridor (including car drivers, motorbike drivers, pedestrians and traffic policemen) were conducted. Among them, 79% answered that traffic safety including pedestrians' safety and convenience in intersections in the city has been improved significantly or moderately since project completion. 88% answered that traffic smoothness (reduced traffic congestions and traffic conflicts) in intersections in the city has been improved significantly or moderately since project completion.

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

No negative impact on natural environment has been observed and no land acquisition or resettlement has been occurred under the project.

<Evaluation Result>

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

Achievement of Project Purpose and Overall Goal

Aim	Indicators	Results
(Project Purpose) Danang Department of Transport's planning, implementation, evaluation and management capacities in urban	DOT's task is properly implemented in line with urban transport master plan.	Status of the Achievement: achieved (continued) (Project Completion) Danang DOT implemented two pilot projects properly and acquired necessary skills to operate the management software and conduct field surveys for the traffic signalized system and transportation facility management. (Ex-post Evaluation) Danang DOT has continued maintenance and further

[1] There was no notable change in the masterplan at the time of project completion (2015).

[2] Two pilot projects implemented under the project were: (1) Le Duan Traffic Corridor Management (congested intersections improvement: (a) improvement of geometric design and traffic markings at five intersections and (b) improvement of the traffic signal control system including introduction of vehicle detectors) and (2) Nguyen Van Linh Sidewalk Parking Management (parking management system to prepare for introduction of mass rapid transit system in future).

transport system are strengthened in line with urban development orientation.		improvements in pilot project sites. The Transport Facility Management System developed under the project has been integrated into Danang city's GIS database.
(Overall Goal) Promotion of sustainable development of Danang City by improving urban transport system.	Public satisfaction in urban transport system is increased.	(Ex-post Evaluation) achieved Among six future projects proposed by the project, four projects have been implemented, and approximately 80% of interviewed beneficiaries answered that traffic safety and traffic smoothness in intersections in the city have been improved significantly or moderately since project completion.

Source: JICA document, questionnaire survey and interview with Danang DOT, interviews with 33 road users

3 Efficiency

The project cost exceeded the plan, while the project period was within the plan (ratio against plan: 111%, 92%, respectively). The outputs of the project were produced as planned. Therefore, the efficiency of the project is fair.

4 Sustainability

<Policy Aspect>

The needs for improvement of urban transport system in Danang City are stated in the "Danang Transport Masterplan Up to 2020 and Vision to 2030", the "General Planning Master Plan for Danang City till 2025" and the "Danang Socio-Economic Development Strategy, Vision 2030".

<Institutional Aspect>

Danang DOT has expanded its structure by supplementing a number of divisions in accordance with the increasing traffic demands in the city since project completion. Within Danang DOT, Danang Traffic Signal Control and Public Transport Management Center (DATRAMAC) is the main section in charge of urban transport management including six future projects proposed by the project stated above, and the Center has approximately 100 full-time staff and approximately 30 contract staff at the time of ex-post evaluation. According to DOT, the number of staff is sufficient to improve urban transport system in the city, as DOT has managed to maintain and expand project activities as stated above.

<Technical Aspect>

Most staff for whom necessary technical skills were transferred under the project still work at Danang DOT. According to DOT, the skill level of staff in DOT including DATRAMAC is sufficient to improve urban transport system in the city, as all the full-time staff has the educational background of the university or higher levels and they have also been provided opportunities to participate in trainings within and outside of the country. Danang DOT has provided trainings on GIS database in cooperation with DPC in 2017 and 2018, in which approximately 30 staff per year from governmental organizations in the city such as the Department of Science and Technology (DOST) and the Department of Construction (DOC) as well as DOT participated. The guidelines produced under the project have continuously been utilized in DOT. All the equipment procured under the project has also been properly used.

<Financial Aspect>

Data on the amount of budget allocation in Danang DOT was not available. However, DOT has continuously allocated the certain amount of budget for improving urban transport system in the city since project completion, in terms of both hardware (infrastructure) improvement and software strengthening (staff trainings), as stated above. Thus, it is considered that DOT has the sufficient amount of budget to sustain project effects.

<Evaluation Result>

In light of the above, a slight problem has been observed in terms of the financial aspect of the implementing agency (non-availability of financial data). Therefore, the sustainability of the effectiveness through the project is fair.

5 Summary of the Evaluation

The project had achieved the Project Purpose at project completion, and it achieved the Overall Goal at ex-post evaluation: Danang DOT implemented two pilot projects properly and acquired necessary skills for transportation facility management at project completion, and it has implemented six future projects proposed by the project to a possible extent to be implemented by the time of ex-post evaluation. Regarding the sustainability, a slight problem was observed such as non-availability of financial data, while no particular problem was observed on the policy, institutional and technical aspects. Regarding the efficiency, the project cost exceeded the plan.

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

III. Recommendations & Lessons Learned

Lessons Learned for JICA:

- As stated above, the project achieved both the Project Purpose and the Overall Goal. One of the most important attributing factors is the selection of a right counterpart, i.e. Danang DOT, particularly DATRAMAC, which is involved in formulation of urban transport policies and directly handles daily transport management in the city. Selection of appropriate consultants as JICA experts is also important for project success. Thus, in future projects, these aspects should be carefully taken into consideration.

Le Duan- Tran Phu intersection:
one of improved intersections on Le Duan Corridor

Le Duan- Nguyen Chi Thanh intersection:
one of improved intersections on Le Duan Corridor