

Evaluation Report 2018-3

EDCF Road Sector Assistance Evaluation

The Export-Import Bank of Korea

(Government Agency for EDCF)

Evaluated by

Institute of International Affairs, Seoul National University

The evaluation was entrusted to the team of external evaluation consultants from Institute of International Affairs, Seoul National University for the purpose of an independent evaluation. The opinion, findings and conclusion or recommendations expressed in this report are those of the external evaluator and do not necessarily reflect the views of Korea Eximbank and EDCF.

1. Introduction

- Road sector assistance increasingly becomes more important in the official development assistance (ODA), as it takes up 25% of the total EDCF support amid the rapid growth of South Korea's ODA commitments.
- The necessity for strategic resources allocation and effective performance management is largely increasing. This report reviews the overall EDCF road assistance and evaluates mid- to long-term results in order to draw lessons and recommendations for future strategies and projects in the road sector.
- The scope of evaluation consists of the following three parts: (1) Classify past and on-going road projects by purpose, size and subject, and analyze their support characteristics for the purpose of conducting a systematic evaluation on the results of EDCF's road sector assistance; (2) Establish a sectoral evaluation framework based on the General Assessment Guidelines of the Evaluation Sub-committee, DAC's evaluation criteria and ADB SAPE, and evaluate strategy and implementation separately; and (3) Review the shortcomings of EDCF's current standard performance indicators for the road sector and devise a new set of performance indicators and evaluation methods, and verify feasibility thereof through case studies.
- Target evaluation projects are 12 projects in 6 countries which have been approved since 2007. For a comprehensive analysis, this report also reviewed the current status of 70 road projects approved since the establishment of EDCF in 1987 as well as ex-post evaluation of 7 projects.

2. ODA in Road Sector

- ODA in the transportation infrastructure sector plays the most critical role in the social and economic development of developing countries as it brings the most important financial resources to increase socio-economic utility, along with the significance of expanding national physical resources.
 - Roads are not only a driving force of economic growth through increased productivity and economic revitalization, but also a major contributor to improving the quality of life and eliminating inequality with enhanced access to the marginalized areas. As such, they have a far-reaching impact on economy, society and culture.
 - However, in many developing countries, there are many areas with a shortage of primary roads and this serves as a stumbling block to their economic growth and social development.
 - As most developing countries lack their own resources, development cooperation funds through international aid programs become the main source of their road projects.
- The road sector has a higher proportion of support from multilateral donors than other sectors, and its ratio of concessional loans is high. In terms of the average support size of major donors over the past decade, Japan is the largest donor, followed by the World Bank (WB), the European Union (EU), the African Development Bank (AfDB) and the Asian Development Bank (ADB).
 - Korea is one of the largest donors in the road sector, ranked 6th among total donors and 2nd among bilateral donors.

- Most donor organizations in the road sector have strategies for supporting transportation and roads and a system that enables the cherished value of each institution to be pursued efficiently and effectively.
 - Overall, such donor organizations have the uppermost goals—economic growth and poverty eradication—and focus on their strategic values, such as regional integration, mutual growth, eco-friendly policies and response to climate change.
 - WB tends to participate in formulating road project strategies through large projects, such as a master plan for cross-cutting issues and a national development plan. It also supports project management and technical guidance when the institutional and technical levels of the recipient country are unable to meet international standards.
 - ADB recognizes transportation as a tool to integrate all areas that support and improve people's lives and promotes developing transportation and roads for safety, sustainability and regional integration across Asia.
 - AfDB focuses on projects that emphasize the value of regional development under the strategy of (1) addressing infrastructure shortages and promoting economic development at the individual country level and (2) contributing to an expansion of cross-border trade and exchanges at the regional level.
 - The Japan International Cooperation Agency (JICA) aims at progressive economic development for mutual growth based on economic integration through a transportation system connecting major industrial and tourist cities in the recipient country. Exceptionally, JICA as a bilateral donor strategically supports the establishment and implementation of a long-term, comprehensive national transportation master plan for major recipient countries and at a continental level.

- In addition, Germany considers eco-friendliness and sustainability a top priority and the US tends to prioritize road reconstruction projects in countries affected by disasters and warfare.
- o The leading donor organizations intervene in the road policies and projects of the recipient country in various ways and implement support strategies.
 - Typically, a project process consists of identification & appraisal, proposal, approval and implementation & evaluation. At each stage, a donor organization may intervene in and affect key matters, such as priorities, road quality, safety and environmental and social impacts.
- EDCF has no explicit support strategy for the road sector other than the overall strategy direction.
- o EDCF is one of the major donor agencies in the road sector in terms of support size and is preferred by recipient countries due to its lower interest rate and other favorable conditions compared to other development banks.
- o Therefore, it is necessary to set clear goals and establish implementation strategies in order to identify and promote strategic projects that are appropriate for EDCF's aid size.

3. EDCF Road Sector Assistance

- Classification and characteristics of EDCF road projects
 - o To systematically evaluate the road sector performance, road projects financed by EDCF are analyzed based on details of EDCF support, including approved amount, location and income level.
 - All of 70 approved road projects were analyzed based on approved amount, type of construction, distribution by region and income level, and co-financing trends.

- As for 12 target projects to be evaluated herein, in-depth analysis was conducted on the purpose of the project, detailed road type and financing terms.

□ General characteristics of EDCF road projects

- The road sector has accumulated its approved amount of KRW 4.2 trillion, taking up 25% in total EDCF approved amount. This amount is the largest size for a single sector. EDCF road projects have been concentrated in Asia and middle-income countries, but recently the fund has expanded its support for Africa facing an increasing demand for road infrastructure.
- New road construction projects are more dominant than improvement and renovation projects.
 - 70% of EDCF's overall co-financed projects are transportation projects, and 12 road projects were co-financed by EDCF and multilateral development banks.

□ Characteristics of 12 target evaluation projects

- 12 target evaluation projects are relatively recently approved. Among these projects, 3 are completed and the others are under construction or in the pre-construction phase.

<Evaluation Projects>

Country	Project	Year of approval	Approved amount (Unit: KRW 1 million)	Duration of project (Initially planned)	Date of commencement of construction	Current status
Vietnam	Construction of Rach Gia Bypass Project	2007	99,395	60 months	May 2011	Completed (Apr. 2015)

Country	Project	Year of approval	Approved amount (Unit: KRW 1 million)	Duration of project (Initially planned)	Date of commencement of construction	Current status
	Construction of Hanoi-Haiphong Expressway Project	2008	136,394	36 months	Feb. 2009	Completed (Sep. 2015)
	Construction of Hanoi-Haiphong Expressway Project, Ex-10)	2009	126,489	39 months	Nov. 2009	Completed (Dec. 2015)
	Lo Te-Rach Soi Highway Construction Project	2012	234,827	54 months	Jun. 2016	Under construction
	Tan Van-Nhon Trach Road Construction Project	2015	215,374	52 months	-	Loan Agreement execution
Ethiopia	Modjo-Hawassa Highway Project – Phase I Modjo-Zeway: Lot 2 Meki-Zeway	2013	119,744	58 months	Jun. 2016	Under construction
	Gore-Tepi Road Improvement Project	2016	143,628	60 months	-	To be completed (Jan. 2019)
Sri Lanka	Construction of Kandy Tunnel Project	2017	224,753	58 months	-	Loan Agreement signed
Mozambique	The Construction of National Road N104 between Nampula and Nametil Project	2013	86,353	46 months	Dec. 2017	Under construction
Pakistan	Malakand Tunnel Construction Project	2011	87,973	57 months	-	Consultant employment contract executed
	National Highway N-45 (Kalkatak-Chitral) Improvement and Widening project	2018	55,316	50 months	-	Consultant selection underway

Country	Project	Year of approval	Approved amount (Unit: KRW 1 million)	Duration of project (Initially planned)	Date of commencement of construction	Current status
Nicaragua	National Highway N-45 (Kalkatak-Chitral) Improvement and Widening Project	2016	79,616	51 months	-	Consultant selection underway
			134,155.17	51.75 months		

- (Project size and duration) The approved amount of 12 projects is KRW 134.1 billion on average, and the project period is 52 months on average, ranging between 36 and 60 months.
- (Construction type) Average road length is 35km and half of the target projects are related to two-lane highways. 8 projects are for new road construction and the remaining 4 are for road improvement, and 4 projects are for highway construction.
- (Project area) 7 projects are located in the urban area and 5 in the rural area, in order to improve connectivity in rural underprivileged areas as well as metropolitan districts.
- (Priority partner country and focus sector) Out of 6 recipient countries, 5 fall under priority partner countries. The recipient countries other than Nicaragua list transportation as a focus sector in the CPS.
- (Income level of recipient countries) Based on the EDCF country classification criteria, 3 projects are in group I (poorest countries), 3 projects in group II, 5 projects in group III, and 1 project in group IV (richest countries). The projects were relatively well balanced in terms of income except for group IV of high-income countries.
- (Financing conditions) Interest rates vary from 0.01% (low-income countries) to 1% (Vietnam). The proportion of untied aid is 26.7% on average, which is significantly lower than the average of all EDCF

projects.

- (Project purpose and expected effects) The purposes of the projects set out in the appraisal report are mainly to reduce traffic congestion, reduce logistics costs, and boost balanced development across regions. The expected effects are to strengthen diplomatic and economic cooperation between Korea and the recipient countries and create business opportunities for Korean companies.

o Depending on the income level of recipient countries, the characteristics of project size and road type vary as follows:

- Recipient countries with higher income levels tend to have larger projects in size (i.e. approved amount) but the average road length (km) decrease. This is because countries with lower income levels need projects with less costs and greater coverage that are required for their infrastructure development phase.

<Project Characteristics According to Recipients' Income Level>

Country classification based on EDCF criteria	Average duration of projects (Month)	Average amount approved (Unit: KRW 1 million)	Average road length (km)	Type	
				New construction	Improvement & renovation
Group I	54.67	116,575	81.57	1	2
Group II	49.00	120,759	11.48	2	1
Group III	52.80	134,621	27.31	4	1
Group IV	58.00	224,753	4.36	1	0
Average	52.75	134,155	35.00	New construction: 8 / Improvement & renovation: 4	

4. Evaluation of EDCF Support

<Evaluation Matrix>

Category	Criteria	Evaluation Questions and Scope
Evaluation of Strategies and Policies	Strategic Direction	<ul style="list-style-type: none"> ▪ What is EDCF's support strategy and direction in the road sector? ▪ Is EDCF's road sector strategy properly aligned with its upper and lower-level strategies, including the Framework Act on International Development Cooperation, government policy and EDCF strategies? ▪ Are EDCF's road sector tactics appropriate for the effective fulfillment of its strategic goals?
	Appropriateness of Selected Projects	<ul style="list-style-type: none"> ▪ Given the road project strategies of other donors as well as the conditions of the recipient country, is EDCF's road sector strategy well aligned with the demand, priority and strategies of the recipient country? ▪ Is EDCF's road sector strategy consistent with the road sector strategy of the recipient country? ▪ Do EDCF's projects reflect major needs and priorities of the recipient's road sector?
	Strategy Implementation Methods	<ul style="list-style-type: none"> ▪ What are the effective implementation methods depending on the environment of the recipient country? ▪ Is EDCF's implementation method effective for strategic implementation?
Evaluation of Performance	Effectiveness	<p>[Development goal achievement of EDCF-financed projects in the road sector]</p> <ul style="list-style-type: none"> ▪ Does EDCF's support for the road sector meet its development goals? ▪ Does EDCF's support for the road sector contribute to economic development and welfare improvement in the recipient country? ▪ What are the structural factors and potential risks to undermine effectiveness? <p>[Effectiveness of EDCF's support system and</p>

Category	Criteria	Evaluation Questions and Scope
		management for the road sector] <ul style="list-style-type: none"> ▪ Are EDCF’s project composition and support type effective in the road sector? ▪ Are project design, performance management system, and partnership effective? ▪ Does the standard performance indicator appropriately measure effectiveness?
	Efficiency	[Efficiency based on the ratio between resource input and output] <ul style="list-style-type: none"> ▪ Did the project meet the planned schedule? ▪ Is the project implementation method more efficient than the alternative? ▪ Do tied conditions decrease efficiency excessively?
	Sustainability	[Sustainability of EDCF’s road projects] <ul style="list-style-type: none"> ▪ Are there any statutes and systems to ensure technical and financial independence of projects? ▪ What are the structural factors and potential risks that could undermine sustainability? ▪ [Sustainability of EDCF’s road sector achievements] ▪ Are the overall achievements from the road sector support sustainable in the long run? ▪ What should be considered to sustain the road sector achievements in terms of support systems and management?

A. Evaluation of Strategy

- Donors’ strategy is one of the key determining factors in road ODA projects: Most road ODA projects begin when the recipient government suggests a certain project to the donor institution based on such strategy. For such donor institution, strategy is significant for the selection and concentration in small aid as well as for the efficient resources distribution

in large aid.

- Since EDCF's assistance strategy for the road sector has not been formally documented, such strategy is reconstructed based on the country partnership strategy (CPS), in-depth interviews with stakeholders, and an analysis of EDCF's strategies and road projects in order to evaluate strategic direction, appropriateness of selected projects, and implications of strategy implementation methods.
- EDCF's road sector strategy and aid goals are divided into (1) external strategy focusing on the welfare improvement of the recipient country and (2) internal strategy based on the environment of the donor country. The external strategy includes traffic redistribution, transportation infrastructure improvement, regional balanced development, and economic growth across the recipient country. The internal strategy is seeking to proceed with projects with high visibility and profitability to offer business opportunities to Korean enterprises and to strengthen economic cooperation and foreign exchange earnings. As for EDCF's implementation strategy, the fund elects to build partnerships with other donors as well as KOICA's grant projects and to boost ICT and other high value-added projects.
- EDCF's road sector strategy and direction are (1) organically aligned with Korea's ODA structure in terms of the internal strategy based on the donor country's environment, but (2) relatively less connected to the external strategy as no clear strategy was established for welfare improvement in the recipient country.

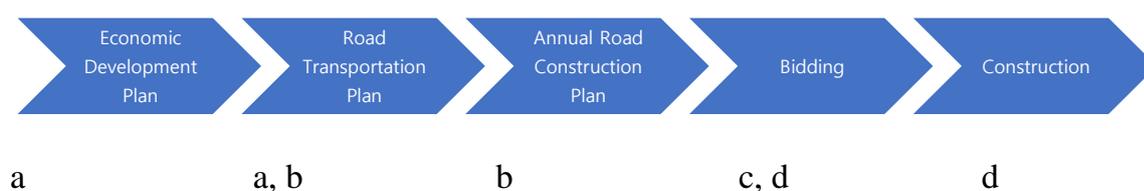
- o The welfare improvement strategy for the recipient country under the Framework Act on International Development Cooperation is well reflected on the EDCF Policy and Direction as well as the EDCF Vision 2030. However, this is partially demonstrated in EDCF's road sector priorities.
 - The road sector is a significant part of the infrastructure support that EDCF Policy and Direction prioritizes because of its great contribution to economic development, and is also consistent with the SDG values under the EDCF Vision 2030. Also, the road sector is linked in part to regional balanced development and improved accessibility that are repetitively mentioned as the purposes of individual projects.
- o The 100 National Tasks that emphasize internal strategy in the ODA sector are aligned with EDCF's Policy and Direction, Vision 2030 and mid-term management strategies. Also, the selections and concentrations highlighted in the EDCF Policy and Direction are fully reflected on the composition of past and current road projects as well as the priorities pointed out by EDCF internal experts.
 - Preference for countries in extensive economic exchanges, or with the high potential of economic development, with South Korea; intense support for sectors that will likely promote exports or have ripple effects on markets; and greater support for sectors over which Korea has a relative advantage, such as ICT and high value-added transportation.
 - Expected results stated in the appraisal report— assisting Korean companies with businesses in the market, strengthening economic cooperation, and acquiring foreign currency earnings—are also in line with the support for projects with high visibility and profitability that could help Korean companies do businesses in the relevant market as mentioned by EDCF internal experts.
- o Tactics for EDCF road strategies are reconstructed in the overall strategies for the transportation sector in CPSs and individual project documents,

although they are not separately documented, and some of them should take a long-term approach.

- Two-thirds of EDCF loans are offered to mid-income countries and the rest are to low-income countries, according to the WB classification. This is in line with the EDCF Policy and Direction that prefers countries with economic exchange potential and seeks for relatively favorable conditions for loans to mid-income countries with the high demand of road projects.
- Whereas the average project size is approximately USD 100 million, there is a demand for larger projects from recipient countries and Korean companies. Given the increasing amount of EDCF loans, the fund should consider increasing large projects in the portfolio.
- Major roads and highways with great economic effects and high visibility and ITS (i.e. Intelligent Transportation System) projects with enhanced safety and efficiency and minimal environmental impacts are prioritized based on the relative advantage of Korean companies, visibility, and profitability; provided, however, that as for ITS projects, EDCF needs to take a long-term approach since the recipient country does not fully understand these projects and its demand for them still low compared to traditional road projects.
- EDCF's tied aid is not likely to increase the cost to the inefficient level as Chinese companies won low-price contracts. However, high technical and safety standards of Korean companies contribute to building good quality roads and therefore improve effectiveness and sustainability.
- EDCF generally co-finances projects led by international development banks. But the fund needs to identify projects in a more proactive manner in order to implement its strategies more effectively.
- Cooperation with KOICA emphasized in CPSs has not materialized. This should be strategically approached in TA, capacity-building, road subsidiary facilities and ITS.

- EDCF’s road projects are structurally in line with the demand, priority, and strategies of the recipient country despite certain limitations in its external strategic direction.
 - In general, road-related ODA projects are requested by the recipient government based on its national development plan and road development master plan. As such, EDCF road projects are deemed to be relatively compatible in structure with the priorities and strategies of the recipient country.
 - Commencing projects at the request of the recipient country could help improve completeness and coherence; provided, however, that this may limit pursuing strategies as well as strategic identification and execution of new projects.
- Road sector strategies should be differentiated by the construction stage and the economic level of the recipient country for effectiveness. As EDCF’s project implementation method is evaluated as being relatively passive, the fund needs to pursue its strategy more actively in line with the construction stage as well as the recipient country’s environmental characteristics.
 - Road construction is generally divided into the five stages below, and donors can employ their strategy at each stage as described below.

[Strategy Implementation By Road Construction Stage]



a: Strengthen TA or capacity-building in line with the strategy.

- b: Contact decision makers in the recipient country to inform the donor's focus sectors so that they may be applicable to the mid-term road/transportation plan.
 - c: Identify a project that fits the strategy.
 - d: Implement the above identified project to be consistent with the strategy
- Typically, the strategies at a and b stages are adopted by multilateral organizations and a couple of bilateral donors with an abundance of experience, capacity, capital, network, and human resources, while those at c and d stages are available for most donors.
- o Aid environment can be divided into supply-driven and demand-driven based on the level of the recipient country's economic development.
 - A supply-driven environment facilitates strategy-based implementation at all stages, whereas a demand-driven environment only allows a passive approach to b, c and d so that donors' strategies may be reflected on the method of implementation or in any other indirect manners.
- o EDCF rarely participates from the planning stage and generally engages in the bidding and construction stages after projects are decided. EDCF should start to consider engaging from the planning stage in order to organically implement its strategy from the conception of projects.

B. Evaluation of Performance

- (Overall assessment) EDCF's performance in the road sector is assessed as effective. Limitations are observed in efficiency and sustainability, but these are largely caused by structural problems in implementing projects in developing countries.
- (Effectiveness) EDCF road sector projects have been successful in improving connectivity and road infrastructure and reducing logistics costs. The projects delivered the outputs and outcomes effectively and are

expected to contribute to economic growth and welfare enhancement in partner countries.

- EDCF road sector support is well balanced between large cities and rural areas and between expressways and local roads. The portfolio is assessed as effective to achieve the overall goals.
- There are potential risk factors which could possibly delay effectiveness. The poor or inefficient road system in the project area, such as insufficient access roads and connecting roads, could keep the newly-constructed roads financed by EDCF from functioning effectively at its maximum capacity.
- (Efficiency) EDCF's road projects were mostly delayed as the project period was extended due to the postponement of construction works, which is attributable to sluggish land acquisition and compensation, i.e. commonly reported structural problems in developing countries. It is noted that EDCF has made efforts to minimize the relevant risk with the regular on-site monitoring of local offices as well as the risk management plan assured by the recipient country. Weather conditions and design modifications are deemed to be another cause of delay in several completion reports and ex-post evaluation reports. This should be taken into consideration when setting the design and schedule of construction activities.
- Negligible loss of efficiency due to tied loans is observed. EDCF loans tied to procurement from Korean suppliers prevent a drastic price increase. It is worth noting that Korean contractors contribute to high-quality work, safety management, and social activities for residents.
- (Sustainability) It is identified that the lack of road management system

and maintenance capacity in partner countries is a major risk that often hinders the sustainability of EDCF-financed roads. The road authorities usually reports to EDCF a maintenance plan, but human, institutional and financial resources are often far from being satisfactory. It is recommended that EDCF consider technical assistance programs for its road projects such as road quality management system, capacity-building and maintenance training with appropriate equipment supports.

- o EDCF's road sector support needs a strategic, long-term approach in order to ensure the sustainability of its overall development effectiveness. Construction projects often remain separate with limited synergies with other projects. As such, it is important to strengthen a long-term partnership with partner governments and donor agencies and to actively engage in the process of needs assessment, planning and strategy implementation in developing countries.

5. EDCF Standard Road Sector Performance Indicators

- The performance indicators employed by EDCF until 2018 had several problems. They had neither causal relation with the project nor theoretical grounds, or their statistical data were very difficult or impossible to obtain in the recipient country. Therefore, the performance indicators need to be improved or changed.
- This report suggests performance indicators based on the cost-benefit analysis of a road construction project.
 - Generally, the benefits of a road construction project consist of direct benefits, e.g. valuation of vehicle operating costs savings (VOCS), valuation of travel time savings (TTS) and valuation of accident costs savings (ACS), and indirect benefits, e.g. valuation of environmental costs savings (ECS).
 - VOCS is a reduction of vehicle operating cost with a project compared to without that project. This reduction is determined by (1) the changed number of vehicles and mileage by link and vehicle type and (2) the vehicle operation cost per kilometer by travel speed.
 - TTS is a reduction of time cost with the project. This reduction depends on changed travel time by link, value of time per vehicle and number of passing vehicles by link and vehicle type.
 - ACS is excluded from performance indicators since accidents do not necessarily decrease on account of the road projects and ACSs are very small compared to VOCSs and TTS.
 - ECSs are mostly benefits from reduced air pollution. Traffic-originated air pollution per kilometer is mainly determined by vehicle speed.

- VOCS, TTS, ACS and ECS are mostly determined by the change in travel distance, speed and travel time, which result from the construction of new roads.
- Therefore, performance indicators can be proposed in the table below.

< Proposed Road Project Performance Indicators >

Design Summary	Performance Target/Indicator	Data Source
Impact Economic growth and poverty reduction	Stimulation of the regional economy	Qualitative analysis using regional statistics
	Welfare enhancement from lower logistics cost	
Outcome Stable, efficient and eco-friendly transportation system	Reduction in the number of vehicles in alternate road	Monitoring data by the local government and reports by the local transportation authority Direct collection of data
	Number of vehicles in the new road	
	Speed increase and travel time reduction in the alternate road	
	Speed and travel time in the new road compared to those in the alternate road	
	Less traffic accidents in the alternate road	
Output Improved road infrastructure and auxiliary facilities	Extension, width and materials of road construction (pavement), bridge, overpass, crossroad, tunnel and drainage	Project completion report
	Difference in the travel distance between alternate and new roads	

6. Lessons and Recommendations

- (Comprehensive Assessment) EDCF, i.e. one of the largest donor agencies in the road sector ODA, has contributed to economic development and welfare improvement in recipient countries by supporting road infrastructure expansion and renovation.
 - EDCF's road assistance is highly evaluated thanks to its excellent road construction quality and favorable conditions for recipient countries. However, as there are structural risk factors in the road projects of the developing countries, it is necessary to further strengthen management to minimize the risk.
 - The lack of explicit strategy documents and inadequate maintenance staffs limit the ability to identify and promote projects. In order to respond to the expansion of Korea's ODA and secure the influence appropriate for EDCF's support size, EDCF needs to establish clear support goals and implementation strategies in the road sector.
- (Establishment of road sector support strategies) EDCF needs to establish clear road sector strategies, though declarative and abstract, and to set up implementation methods to achieve strategic goals.
 - EDCF needs to coordinate its external strategy—strengthening ODA's fundamental objective of promoting the welfare of the recipient country—and internal strategy—pursuing the national interests for Korea.
 - External strategic goals include high-quality, safe roads and efficient road system support for the future and internal strategic goals are helping Korean companies do businesses in the new market and identifying projects that will take advantage of the relative advantage and visibility.

- EDCF's support direction includes strengthening quality control standards, establishing a master plan for transportation, promoting capacity-building programs in the recipient countries, and enlarging the proportion of ITS and other future-oriented high value-added projects. Examples of implementation strategies are expanding co-financing projects and promoting inter-agency projects.
- (Strategic project identification and planning) It is possible to gain detailed information as to the local road sector and to strategically promote road projects with a package of a master plan and others.
- It is necessary to make a project plan to enhance sustainability including technical support factors, e.g. road master plan, road quality control system, road management system and strengthened operation/management capacity.
 - With reference to MDBs' related projects as well as KOICA's ITS projects and other projects with master plans, EDCF may possibly consider implementing co-financing and inter-agency projects in the future.
- (Selection and concentration) By concentrating on large-scale projects in a country with a better business environment and high performance, EDCF can contribute to economic development in the country and realize its support strategy in a more effective manner.
 - In order to improve the effectiveness and efficiency of EDCF's road sector support, it is advisable to expand the project size rather than the number of projects.
 - It is estimated that the co-financing projects contribute to less cost of project planning and more efficiency in project management. Therefore, they should be implemented broadly and continuously.

- (Strengthening of project planning and management system) Due to the situation of the recipient country, there are various structural problems that limit the performance and sustainability of the project. Therefore, each individual project requires a system to review, plan and manage it thoroughly.
 - The items requiring review, including the efficiency of surrounding roads, the characteristics of motorcycles and other vehicles, and local climate characteristics, should be determined at the project design level.
 - To avoid delays caused by land expropriation, the land expropriation plan and budget of the recipient country should be reviewed during project appraisal and the monitoring system thereof also should be formed at the project management level.
 - Since the lack of manpower and experts for project management makes it hard to manage a project systematically, the plan to expand management personnel and establish a data management system should be prepared in the long term.