

Ex-post Evaluation Report
2017-06

Ex-post Evaluation of Rijeka Port Modernization Project

The Export-Import Bank of Korea

(Government Agency for EDCF)

EDCF Evaluation Team

(Evaluated by KR Engineering)

This Evaluation was entrusted to KR Engineering by EDCF for the purpose of independent evaluation research. The opinion, findings and conclusion or recommendations expressed in this report are those of the external evaluator and do not necessarily reflect the view of KEXIM BANK and EDCF

I. Project Overview

1. Project Details

- Name of Project: Rijeka Port Modernization Project
- Name of Borrower: Port of Rijeka Authority
- Name of Guarantor: Ministry of Finance, Croatia
- Project Executing Agency (PEA): Port of Rijeka Authority
- Amount of Loan
 - USD 34,534 thousand, i.e. 94% of the total project price, was borne by EDCF and USD 2,176 thousand, i.e. 6% of the total project price, by the government of Croatia.
- Terms of Loan
 - Interest rate: 2.5% per annum
 - Repayment period: 30 years including a grace period of 7 years

<Details of Loan>

Loan Number	Type of Loan	Amount of Loan	Date of Approval	Repayment Period (Grace Period)	Interest Rate
HRV-001-1998	Equipment Loan	USD 34,534 thousand	December 28, 1998	30 years (7 years)	2.5%

2. Project Purpose

- The purpose of the project is to facilitate smooth post-war rehabilitation in Croatia and strengthen the role to serve as the maritime gateway to neighboring countries, Austria, Hungary and Czech Republic, by installing large cranes and other cargo handling equipment to greatly expand seaborne trade in the Rijeka port.

3. Project Scope

- The project was initially planned to provide cargo handling equipment, including LLC, RMQC and DLTUC, for general and bulk cargos. However, the specifications and quantity of certain equipment items were modified due to changes in the Croatian government's national port development plan and in the demand forecast for maritime cargo handling.
 - Accordingly, the equipment for handling bulk cargos and containers, in place of general cargos, were added and the relevant specifications were changed.

< Project Scope >

Item	Project Appraisal	Loan Agreement Execution	Actual Output	Remarks
Cargo Handling Equipment	3 units of level luffing crane (LLC)	-	-	
	1 unit of rail mounted quayside crane (RMQC)	2 units of rail mounted quayside crane (40t)	Same as left	
	3 units of double-link type unloader crane (DLTUC)	1 unit of ship loader (600t/h)	Same as left	
		1 unit of ship unloader (3,000t/h)	Same as left	
		1 unit of gantry type stacker/reclaimer (GSR)	Same as left	Omitted equipment in the PCR
		1 set of conveyor belt	Same as left	

Source: Project Completion Report (PCR) of Rijeka Port Modernization Project (January 2015, Korea Export-Import Bank)

II. Introduction

- The government of Croatia implemented this project in order to facilitate smooth post-war rehabilitation in Croatia and strengthen its role to serve as the maritime gateway to neighboring countries by installing large cranes and other cargo handling equipment to greatly expand seaborne trade in the Rijeka port.
 - Demand for cargo handling in Croatia and neighboring countries (i.e. Austria, Hungary and Czech Republic) continued to increase by around 5% on average per year due to post-war infrastructure rehabilitation projects and economic recovery.
- (Project Target Area) The project area for the Rijeka Port Modernization Project is Rijeka, the biggest international port city located in Kvarner Bay in the west of Croatia.

< Project Area >



III. Summary of Ex-post Evaluation

1. Purpose of Evaluation

- The purpose of this evaluation was to measure the relevance, efficiency, effectiveness, impact and sustainability of the Rijeka Port Modernization Project in order to analyze the success factors and limitations and to draw lessons and recommendations for similar prospective projects.

2. Criteria and Methods of Evaluation

- The ex-post evaluation was performed based on the five OECD DAC criteria (i.e. relevance, efficiency, effectiveness, impact and sustainability) and cross-cutting issues.
 - However, since the “Croatian Rijeka Port Modernization Project” is an equipment loan, it was difficult to achieve meaningful results in “impact” and “cross-cutting issues.” Therefore, this project was evaluated only on four OECD DAC criteria (i.e. relevance, efficiency, effectiveness and sustainability).
- Evaluation items reflected the characteristics of the project based on the evaluation criteria, and in order to verify this, various research methods, such as literature review, interview and survey, were utilized to achieve reasonable results.

3. Results of Evaluation

- (Overall) The overall evaluation result was 3.65 out of 4 points and this project was evaluated as “very successful.”

<Evaluation Result Overview>

Criteria	Evaluation Factor	Detailed Factor	Score
Relevance	Policy and Strategy Relevance	Compatibility with National Development Policy of Government of Croatia	3
		Compatibility with EDCF Assistance Strategy	3
	Appropriateness of Project Plan	Feasibility of Project Goals	4
		Feasibility of Project Design	4
	Recipient Country Initiative	Participation and Cooperation of Government of Croatia	4
Overall Relevance Score			3.6
Efficiency	Degree of Implementation Compared to Plan	Actual Project Duration Compared to Plan	2
		Actual Project Expenditure Compared to Plan	4
	Overall Efficiency Score		
Effectiveness	Output	Achievement of Outputs	4
	Short-term Outcome	Improvement of Cargo Handling Capacity	4
	Overall Effectiveness Score		
Sustainability	Sustainability	Technical Sustainability	4
		Financial Sustainability	4
	Overall Sustainability Score		
Overall Average Score			3.65

(Relevance) As a result of relevance evaluation, the total score was 3.6, which falls under “relevant.”

- This project is an equipment loan for supporting the timely handling of increasing trade in the process of Croatia’s post-war rehabilitation. Therefore, the project may be evaluated as highly consistent to the policy of the recipient country.
- Some equipment types were changed in the course of promoting the project, but such change was made under local logistics circumstances and thus

fulfilled the purpose of the project.

- This project is supported at the strong request of the recipient country and it is evaluated that the recipient country actively participated in this project on its own initiative.
- (Efficiency)** Efficiency was assessed based on the differences between actual time and cost and the project plan. The overall efficiency score was 3.0, which falls under “very efficient.”
- The actual implementation period of the project was 30 months, six months longer than the planned project period for 24 months. However, the actual project cost was efficiently executed within the planned project cost.
- (Effectiveness)** Effectiveness was examined based on whether the output and short-term outcome were achieved in accordance with the project plan. The overall effectiveness score was 4.0, which falls under “highly effective.”
- The project was supposed to be composed of crane equipment for general and bulk cargos only, but the specifications and quantity of some equipment items were modified due to changes in Croatia’s national development plan and in the demand forecast for maritime cargo handling.
 - Considering that Croatia was supplied with the state-of-the-art equipment with high performance and was able to cope with fluctuating demand for seaborne cargo trade, it is deemed that the changed project scope has improved the effectiveness of the outputs compared to the original plan.
 - Moreover, the recipient country is very satisfied with the equipment which was successfully provided and installed in accordance with the plan and the operation of each equipment is found to be very efficient. As such, the outputs of the project are very effective.

- **(Sustainability)** Sustainability scored 4 points which indicate “highly sustainable.” The Port of Rijeka Authority and each terminal operator are investing enough professional manpower and budget for terminals. Thus, the Rijeka Port is continuously expanding.
 - Given that the Port of Rijeka Authority and terminal operators spend their own budget and cooperate with other countries or organizations, it is evaluated that they have a strong willingness to improve sustainability on this project on their own initiatives.

IV. Lessons and Recommendations

1. Lessons

Success Factor

- The government of Croatia had a strong willingness of the Rijeka Port Modernization Project and was well-prepared for organization, manpower and budget.
- Since the government of Croatia continued to provide the maintenance of the facility during and after the project period, the relevant equipment has been properly managed and utilized for over 10 years.
- After this equipment loan, the government of Croatia has been continuously developing infrastructure projects including road expansion work. The terminal operators have also increased their sustainability by securing their own budgets on their own initiatives.
- When the project scope change generated additional work, it was smoothly solved by the active support of the constructor. This is a good example of demonstrating the importance of partnership between the recipient country and the constructor in the process of proceeding with the project.

Limitation

- It is difficult to unload and transport cargos simultaneously, due to underdeveloped railway and highway infrastructure in Croatia. Therefore, the effectiveness of this project seems to be limited.
 - In particular, Bakar Terminal does not have a storage yard and thus bulk cargos are transported little by little on the railway simultaneously when they

are unloaded.

- The capacity of the supplied conveyor belts is not enough to handle all the capacity of the ship unloader, so that the operation of the ship unloader is limited. In addition, the ship loader no longer operates as transshipment to Italy discontinued since 2013.

2. Recommendations

- EDCF needs to secure sufficient contingency reserves in advance, taking into account external factors such as political instability and inflation.
- Given that the project may be delayed for a long term due to some unpredictable external factors, such as political instability in the recipient country, this delay may stimulate inflation and consequently reduce the project scope.
- For similar projects in the future, the price contingency fund should be sufficient in order to improve the flexible response to a longer project period and increased project costs due to the unstable political situation.
- In order to enhance sustainability in this project, the performance and capacity of equipment should be more clearly analyzed through the feasibility study.
- Therefore, if an equipment loan is supported with explicit elucidation of the efficiency of that equipment and the estimated value, sustainability will be further enhanced.