Internal Ex-Post Evaluation for Technical Assistance under Finance and Investment Account

conducted by Viet Nam Office: December, 2023

Country Name	
Socialist Republic of	Project for Capacity Enhancement in Construction Quality Assurance
Viet Nam	

I. Project Outline

Background	To keep maintain sustainable economic growth imperative to support the National Development Plan, the Vietnamese Government worked out a large number of infrastructure development projects and put them into realization successfully. However, a rapid increase in infrastructure construction projects brought about negative aspects of development, i.e., inadequate quality of construction works and an increase in labor accidents during the construction process which turned out to be a social concern. Though many efforts were made by the Vietnamese Government through the development of regulations of construction quality assurance, quality management technologies, human capacity development programs, etc., they still faced issues, such as the lack of understanding of rules and regulations, particularly for field engineers; an increase in violations of regulations and contract conditions; lack of capacity of work quality inspection and of technical guidelines and manuals imperative to help support field activities of construction works; insufficient engineer qualification system that have not caught up with the rapid increase in infrastructure construction projects.
Objectives of the Project	Through the enhancement of construction quality assurance, development of project management technologies for construction quality assurance, and training of those engaged in the construction projects, the project aims to prepare efficient administration functions which provide general rules over the implementation of various construction investment projects in Viet Nam, thereby contributing to improving the function of construction quality assurance for construction works. 1. Overall Goal: Construction quality assurance for Construction Works in Viet Nam is functioning well. 2. Project Purpose: Efficient administration functions which provide general rules over the implementation of various construction investment projects are prepared.
Activities of the Project	1. Project Site: Viet Nam (whole nation) 2. Main Activities: (1) Enhancement of construction quality assurance system (2) Development of project management technologies for construction quality assurance (3) Training of those engaged in the construction projects 3. Inputs (to carry out the above activities) Japanese Side Vietnamese Side 1) Experts: 3 persons (long-term) 1) Staff allocated: 41 persons 16 persons (short-term) 2) Provision of Land, Buildings, and Facilities: 2) Trainees received: 50 persons *Excluding 6 senior officials who attended a seminar on construction quality assurance in Japan. 3) Equipment: vehicles, ultrasonic flaw detector, coating thickness measurement equipment, concrete test hammer, corrosion analyzing instrument, topographic survey instrument, etc. 4) Local cost
Project Period	(ex-ante) March 2010 – March 2013 (36 months)Project Cost(ex-ante) 341 million yen(actual) April 2010 – December 2013 (44 months)(actual) 579 million yen
Implementing Agency	State Authority of Construction Quality Inspection (SACQI), Ministry of Construction (MOC)
Cooperation Agency in Japan	Ministry of Land, Infrastructure, Transport, and Tourism Katahira and Engineers International, Central Nippon Expressway Company Limited

II. Result of the Evaluation

<Special Perspectives Considered in the Ex-Post Evaluation>

[Evaluating the continuation status of project effects]

- Indicator 1 "Draft enhancement plans are agreed by MOC" represents a preliminary state of Indicator 2 "Revision of the regulations containing project outcomes goes into legalization procedures". Therefore, the continuation status of indicator 1 can be verified as a continuation of Indicator 2. [Evaluating the achievement of Overall Goal]
- In order to examine the achievement of the Overall Goal, "Construction quality assurance for Construction Works in Viet Nam is functioning well", the only indicator, "The number of construction works conforming to specification increase and the number of disqualifications and accidents involving workers during construction works decrease" is set. Since no numerical targets were set for the indicator, the judgment was made by the upward or downward trend of numerical data under this ex-post evaluation.
- In addition, in order to verify the effectiveness of the construction quality assurance introduced by the project, the evaluation, and comments from the authority, such as "Have the authority (MOC, Ministry of Transport, etc.) considered the construction quality assurance for construction work effectively functioned under the current system?" was used as supplementary information 1.

[Relevance]

<Consistency with the Development Policy of Viet Nam at the time of Ex-Ante Evaluation >

The project was consistent with the development policy of Viet Nam at the time of ex-ante evaluation. In Viet Nam, both the "Ten-Year Socio-Economic Development Strategy (SEDS) (2001-2010)" and the "Five Year Socio-Economic Development Plan (SEDP) (2006-2010)" set out the goals to break away from the underdeveloped situation through the promotion of industrialization and modernization; to improve people's lives and realize a just society, and to continue development in a sustainable manner. The project aims to develop a social infrastructure of high quality which is an essential element in achieving the goals of both the SEDS and the SEDP

<Consistency with the Development Needs of Viet Nam at the time of Ex-Ante Evaluation >

The project was consistent with the development needs of Viet Nam to prepare the efficient administration functions which provide general rules over the implementation of various construction investment projects at the time of ex-ante evaluation as stated in "Background" above.

<Appropriateness of Project Design/Approach>

The project design/approach was appropriate. No problem attributed to the project design/approach was confirmed.

<Evaluation Result>

In light of the above, the relevance of the project is \Im^1 .

[Coherence]

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

The project was consistent with Japan's ODA policy to Viet Nam at the time of ex-ante evaluation. Japan's Country Assistance Program for Viet Nam (July 2009) stated that Japan expressed its commitment to support Viet Nam's socio-economic development in line with the National Development Plan (NDP). This project was positioned to cope with a development issue in one of four priority areas of NDP, "Urban Development, Network Development for Transportation and Communications".

<Collaboration/Coordination with other JICA's interventions>

Any collaboration/coordination between the project and other JICA's interventions was not clearly planned at the time of ex-ante evaluation.

<Cooperation with other institutions/ Coordination with international framework>

Any cooperation/coordination with other donors, NGOs, universities, or international frameworks was not clearly planned at the time of ex-ante evaluation.

<Evaluation Result>

In light of the above, the coherence of the project is ②

[Evaluation Result of Relevance/Coherence]

In the light above, the relevance/coherence of the project is ③.

2 Effectiveness/Impact

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

At the time of project completion, the Project Purpose was mostly achieved as planned. The project reviewed existing regulations and worked on the enhancement of construction quality assurance and developed project management technologies for construction quality assurance. As a result, the draft enhancement plans were agreed upon by MOC (Indicator 1). With the reflection of seven items of recommendations made by the project, the revision of the regulations containing project outcomes went into legalization procedures (Indicator 2). Through training programs for the purpose of disseminating project outcomes commenced in major cities in 2012 and 2013, the capacity development of those staff engaged in the construction progressed (Indicator 3).

< Continuation Status of Project Effects at the Time of Ex-Post Evaluation>

By the time of the ex-post evaluation, the project effects have been continued. It was a custom in Viet Nam that legal documents must be frequently reviewed and revised, supplemented if needed. This is to best suit the changes in the real market. Accordingly, regulations that were enforced during the project period have been revised or replaced by other regulations. For example, such important content as project outputs as testing, capabilities in implementing construction works, issuing work permits for contractors and consultants, and capabilities of management agencies have been included and integrated substantially in legal documents, which are Decree No. 59, Decree No.15 and circulars on the guidance of those decrees implementation. It was identified by the study that Decree No. 15 was applied to other JICA Loan Projects which were started right after the project completion (2013), such as "North Nghe An Irrigation System Upgrading Project (signed March 2013)", "Hanoi City Yen Xa Sewerage System Project (1) (signed March 2013)", "Hanoi Ring Road No.3 Project (Mai Dich - South Thang Long) (signed December 2013)". It was confirmed by the study that training programs on Construction Quality Management (CQM) referring to the revision of the regulations have been conducted in 2014 and 2015. Since 2016, with annual State budget allocation, MOC has been organizing workshops, seminars, on-the-job training of CQM on the implementation of legal documents with contents related to the project's outputs, and recommendations.

<Status of Achievement of the Overall Goal at the Time of Ex-Post Evaluation>

At the time of ex-post evaluation, the Overall Goal was not achieved. Indicator 1, set to examine the achievement of the Overall Goal, is consisted of three types of data. Two types of data, that are (i) the number of construction works confirming specifications and (ii) the number of disqualifications, have not been collected as annual statistical data by the MOC. However, SACQI's officer explained that there is a trend that the number of disqualifications has decreased after the introduction of new regulations to control safety and quality assurance by the project.

Regarding the third type of data, (iii) the number of accidents involving workers during construction works, from the year of project completion (2013) to the target year (2016) has shown an upward trend in that all of those figures, "the total labor accident", "the number of victims", "the number of seriously injured" and "the number of loss of life" increased by 13.3%, 13.3%, 23.2%, and 13.4% respectively. There may be various factors causing this trend including the influence of active economic activities at that time.

 $^{1 \}oplus : \text{very high}, \oplus : \text{high}, \oplus : \text{moderately low}, \oplus : \text{low * To be the same afterwards}.$

Construction works were increasing during this period as a result of the robust economic development of the country with an average growth rate of 6.4%² (2013-2016) when newly established regulations to ensure safety in construction works were still new to engineers and construction companies. After the target year until 2020, the country was continuing its robust economic growth with an average growth rate of 6.2%³ (2017-2020), but all of the subject figures have shown a slight downward trend. The shift in the trend seems to be due to the time required for new rules/regulations on assuring construction safety to permeate into society. Some positive information identified by the study is that authorities (MOC and related agencies) have now considered that the construction quality assurance for construction work has been effectively functioning under the current system, indicating that Viet Nam's legal document on construction quality assurance gradually approaches international standards, bringing benefits to Viet Nam and the people. (Supplementary Information 1)

<Other Impacts at the Time of Ex-Post Evaluation>

According to the interviews with SACQI, recommendations brought about through project activities have been used by academic institutions such as Hanoi University of Civil Engineering and Hanoi Architecture University in their training curriculum and reference materials for their training. It was also confirmed by the study that legalized regulation based on the output of the project has a positive impact on enhancing the quality assurance system in the overall construction sector, including projects which have construction portions supported by international donors and NGOs, etc.

<Evaluation Result>

In light of the above, there was some statistical data unavailable by MOC, however by taking into account of the qualitative effects, the effectiveness/impact of the project is ②.

Achievement of Pro	ect Purpose and Ov	erall Goal			,		
Aim	Indicators	Results	Source				
(Project Purpose) Efficient administration functions which provide general rules over the	Indicator 1: Draft enhancement plans are agreed by MOC.	applicable) (Project Compl		Questionnaire and interview with			
implementation of various construction investment projects are prepared.	Indicator 2: Revision of the regulations containing project outcomes goes into legalization procedures.	Status of the A (continued) (Project Compl •New laws and the Project as s •In Decree 15 s by the project v large scale con consulting firm of design chan acceptance prod	Questionnaire and				
		Type of regulation	Date of legalization				
		Decree 15	Quality management of infrastructure construction	February 6, 2013			
		Circular 10	Gircular 10 Guiding some articles of the decree on the quality July 25, 2013 management of construction works				
		Circular 12	Promulgating the regulation on rewarding on construction quality	July 31, 2013			
		Circular 13	Stipulating the verification, appraisal, and approval of designs of construction projects	August 15, 2013			
		Others	New circular on publicized management of information on capacities of entities, individuals operating in the construction sector	September 2013			
		(Ex-post Evalu • It was confir period have be regulations hav such as recom permits, etc, we • There is no le Type of regulation Decree 15 Circular 10 Circular 12 Circular 13					

² Source: GDP growth (Annual %) - Vietnam Data, World Bank.org

³ Source: same as above.

	Indicator 3:	Status of the Achievement (Status of the Continuation): mostly achieved as planned														
	Training programs	(Continued)								Questionnaire and						
	for the purpose of	 (Project Completion) Six (6) training courses on CQM were implemented in 2012 with MOC funds in order to disseminate project outputs. In 2013, three (3) CQM training courses were conducted. 									interview with					
	disseminating										MOC					
	project outcomes															
	commence	· In	1 2013, t	ree (3	B) CQ	M tra	ining co	ourses	were co	onduct	ed.					
	regularly.			ate				Venue		Number of participants						
	-		ov. 2, 2				Ha Noi			120						
		-		ov. 23,				Can Th			90					
		-		ov. 28,			-	Ho Chi			130					
		-		ec. 15,				Da Nar			110					
		-		ec. 19,				Hai Ph			100					
		-		ec. 24,			-	Nha Tr			90					
		-		ct. 25, 2				Hue Ci	•		240					
		-		ov. 15,				Dong T	•		100					
	1			ov. 22,				Da Lat	City		90					
			Post Ev			MOO	1 - 141 - 1	41	f	.m.a.t	tion .	1:4	· · · · · ·	. mof		
														referring and Can		
			Tho, and in 2015 at Hue. Since 2016, the training on CQM has been incorporated into workshops, seminars, and training which include comprehensive agenda, conducted by													
		MO	MOC, annually.													
		Trai	Training programs on Construction Quality Assurance													
		II Iraining Lifle and Venue					Number trainees			Use of project outputs		Fun	ded by			
		Training workshop on outputs sharing in Hai P					200		Novemb 2014	er	Guidance manual		МО	C's fund		
	Training workshop on project outputs sharing in Can Tho					150	November 2014		Guidance manual		ditto)				
			ning woi			oject	170	April 2015		Guidance manual di		ditto)			
(Overall Goal)	Indicator 1:	(Ex-	Post Ev	aluatio	n)-no	t achi	eved.								source :	
Construction quality	(i) The number of							e nun	ber of	cons	truction	works	confi	irming to	Questionnaire and	
assurance for	construction works	spec	cification	and (i	ii) the	num	ber of d	lisqual	fication	ns.					interview with	
Construction Works in Viet Nam is	specification													vas on ar		
functioning well.	increase			rd trend from project completion (2013) to the target year (2016) for all four es. Various factors can be considered for this, however, by just referring to the												
	and (ii)the number													arget yeai		
	of disqualifications		1 2020.						. , ,					2 3		
	and (iii)accidents involving workers	,.	··/ നവ	1									1			
	during construction	(1	ii) The n	umber		cciden Project		Change		during	g constru	action w	orks	Change		
	works decrease.			201	12 C	Comple ion 2013	Target year 2016	2013- 2016 (%)	2017	2018	2019	2020	2021	2016- 2020* (%)		
		1	The labor	otal 6,7		5,695	7,588	13.3%	7,749	7,090	7,130	7,473	5,797	-1.5%		
		2	Number	of 6,9	67 6	5,887	7,806	13.3%	7,907	7,259	7,267	7,649	5,910	-2.0%		
		ĮĒ	Victims		-	,	,,,,,,,,		.,,.	1.,20,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,	-,- 10			
		3	Number seriously injured		70 1	,506	1,855	23.2%	1,681	1,684	1,592	1,617	1,226	-12.8%		
		4	Number loss of li		6	527	711	13.4%	666	622	610	661	602	-7.0%		
		No			e infl	uence	of CO	VID-1	9, the p	ercent	age cha	nge afte	r the t	arget year	.[
			verified													
3 Efficiency																

3 Efficiency

The project cost considerably exceeded the plan by 170%. The project period slightly exceeded the plan (the ratio against the plan: 122%). The reasons are that the project period was extended another seven months⁴ to add the study on the enhancement of building works procedures based on the request from the Vietnamese side. Also, the project cost slightly exceeded with the added operation cost during the extended period. Outputs were produced as planned.

In the light above, the efficiency of the project is ②.

4 Sustainability

<Policy Aspect>

The following policies have ensured the sustainability of the policy aspect. The "Ten-Year Socio-Economic Development Strategy

⁴ In the extension period, activities related to the revision of the Law on Construction, in-depth study on how to implement the qualification examination system, preparation of the Construction Facility Maintenance Manual, etc., were carried out. It was considered by the Terminal Evaluation Team that the extension was relevant as the extension period of approximately seven months (actual 44 months against the planned 36 months) was productively represented by the promulgation and enforcement of several regulations.

(2021-2030)" and the "Five Year Socio-Economic Development Plan (2021-2025)" set out the goals to establish, to enhance the feasibility of legal documents to develop a market-oriented economy. Legal documents on construction quality assurance for construction works can be considered a part of these legal documents.

<Institutional/Organizational Aspect>

At the central level, MOC is a governmental agency that performs the function of state management of construction, focusing on construction administration. SACQI has the assistance function to support the Minister in state management on construction quality assurance. The number of staff for SACQI at the time of ex-post evaluation is 45. At local levels, actual construction is often implemented by the Provincial People's Committee (PPC). The Department of Construction (DOC) under PPC at the provincial level, with staff numbers ranging from 40 to 100, depending on the locality population scale and budget amount, has been in charge of construction operations and of providing consultation to PPC. Construction Inspection Center (CIC) under PPC with staff numbers from 15 to 150, conducts regular checking and evaluates construction quality, and conducts legal inspections on construction. <Technical Aspect>

The staff members of SACQI have sufficient knowledge and skills to promote and disseminate construction quality assurance. MOC has conducted the training programs with the theme of construction quality assurance referring to the revision of the regulations in 2014 at Hai Phong and Can Tho, and in 2015 at Hue. Since 2016, capacity development has been conducted in the form of seminars, workshops, and on-the-job training. "Safety and Health Manual in Construction" and "Case Studies on Accident and Near Misses Handbook" developed by the project have been continuously utilized by MOC, PPC, and academic institutions in the construction sector such as Hanoi Architecture University, Hanoi University of Civil Engineering.

<Financial Aspect>

SACQI has generally maintained a sufficient budget. Since the completion of the project, the budget has been allocated to conduct training for those engaged in construction works. This budget is included in those allocated from the State budget to MOC annually for the purpose of information dissemination, on the job training, especially on revision and updating legal documents, including construction quality assurance and construction management.

<Environmental and Social Aspect>

No issues with the environmental and social aspects caused by this project have been observed, and it has not been necessary to take any countermeasures.

<Evaluation Result>

In light of the above, no problem has been observed in terms of the policy/institutional/organizational/technical/financial/environmental, and social aspects of the implementing agency. Therefore, the sustainability of the project effects is ④.

5 Summary of the Evaluation

The project mostly achieved the Project Purpose as planned to prepare the efficient administration functions which provide general rules over the implementation of various construction investment projects. After the project completion, project effects continued. The Overall Goal in which construction quality assurance for construction works functioned well in Viet Nam was not achieved.

As for sustainability, no problem has been observed. As for efficiency, both the project cost and project period exceeded the plan. Considering all of the above points, this project is evaluated to be satisfactory.

III. Recommendations & Lessons Learned

Recommendations for Implementing Agency:

For effectiveness and convenience in state management in the field of construction quality assurance, it is recommended that the Vietnamese side, i.e. Ministry of Construction (MOC) in cooperation with local governments and stakeholders should establish a system to collect data on the number of construction works conforming to specification as well as the number of disqualifications on a regular basis. The reporting schedule can be either semi-annual or annual and the consolidated data must be submitted officially from local governments (province/ city department of construction) to MOC.

Lessons Learned for JICA:

- 1. During the project implementation period, JICA shall closely monitor whether the intended data collection is implemented by the counterpart as it is planned. In case the data is difficult for counterpart to obtain, JICA shall discuss with counterpart to find the alternative way.
- 2. In case of the project which introduces a new regulation and of which outcome is to be verified by its effects on the market, the target year (at what point in time the effects are examined) needs to be carefully determined. It often takes more than three years set in this project for the new regulation, such as quality control for construction work, to permeate society and for its effects to be realized.

Photos

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DECREE

ELABORATING ON IMPLEMENTATION OF SEVERAL REGULATIONS ON QUALITY MANAGEMENT, CONSTRUCTION AND MAINTENANCE OF CONSTRUCTION WORKS

Pursuant to the Law on Government Organization dated June 19, 2015; the Law on Amending and Supplementing certain Articles of the Law on Government Organization and the Law on Local Government Organization dated November 22, 2019;

Pursuant to the Law on Construction dated June 18, 2014; the Law on Amendments and Supplements to the Law on Construction dated June 28, 2020;

Pursuant to the Law on Occupational Safety and Hygiene dated June 25, 2015;

Decree 06/2021 on implementation of several regulations on quality management, construction, and maintenance of construction works, established on January 26, 2021



Opening of the training course on legal regulations on construction safety and construction quality assurance in Phu Tho province, Nov. 24, 2022