



1. Project Data

Project ID P083588	Project Name VN-MKG DELTA TRANSPORT INFRA DEV		
Country Vietnam	Practice Area(Lead) Transport & ICT	Additional Financing P126605	
L/C/TF Number(s) IDA-43060,IDA-52000,TF- 13700,TF-91332	Closing Date (Original) 30-Dec-2013	Total Project Cost (USD) 312,100,000.00	
Bank Approval Date 22-May-2007	Closing Date (Actual) 30-Jun-2016		
		IBRD/IDA (USD)	Grants (USD)
Original Commitment		207,700,000.00	27,781,595.77
Revised Commitment		207,700,000.00	27,781,595.77
Actual		333,094,190.92	31,913,021.69
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2. Project Objectives and Components

a. Objectives

The project development objective in the Project Appraisal Document (PAD) is to improve access to markets by businesses, farmers and the poor with lower logistics costs resulting from the alleviation of key physical and institutional bottlenecks of the main transport corridors in the Mekong Delta region.

Financial Agreement Development Objective (as stated in Schedule 1 of the FA): assist the Recipient in relieving key bottlenecks of the main transport corridors in the Mekong Delta region and improving access of the poor to those corridors.

The objectives in the FA will be used as a basis to assess the project's achievement.



b. Were the project objectives/key associated outcome targets revised during implementation?

No

c. Will a split evaluation be undertaken?

No

d. Components

1. **National Road Corridors** (estimated cost: US\$100.3 million, additional financing US\$6 million, actual cost: US\$98.75 million): This component would support the improvement of approximately 98 km of national highways connecting the main economic hub of the Mekong Delta including the construction of 22 bridges, and raising the road levels where required in flood prone areas. The scope of the originally planned 43km of NH91 was reduced to 7km during the implementation. The government completed the improvement of the remaining 36 km under a separate arrangement. 61km highway and 10 bridges were delivered by the project.

2. **National Waterway Corridors** (estimated cost: US\$99.3 million, additional financing US\$ 120 million, actual cost: US\$ 258.89 million): This component was to support the improvement of the trunk waterways connecting the Northern and Coastal Delta areas to Can Tho and HCMC, concentrating on links in both the Northern Trans Mekong corridor and the Southern Coastal corridor. At project closure, the widening, deepening and bank protection were completed for 351km of waterway corridors as compared to the original plan of 401km waterway corridors.

3. **Connecting the Poor to the Supply Corridors** (estimated cost: US\$96.3 million, additional financing US\$45 million, actual cost: US\$149.38 million): The component was to improve the feeder waterways (58km), roads (315km) and 118 bridges to link the poor and more distant producer communities to the main supply corridors. At the end of the project, originally planned widening and deepening of 58km feeder canals were dropped from the project.

4. **Institutional Support to Ministry of Transport** (Estimated cost: S\$6.9 million, actual cost: US\$6.9 million). This component was to provide institutional support to the Ministry of Transport. There was no substantial change of the scope of work of this component.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost: The total cost at project design stage was estimated at US\$312.02 million including the contingency. To cover the cost increase resulting from changed design (as the cost estimate was based on the preliminary design which was substantially revised during the project implementation) and high inflation, an additional financing was provided to increase the total financing to US\$ 534.64 million. In the end, US\$517.69 million was utilized.

Financing: The total financing provided by the World Bank including an additional financing of US\$156 million was US\$363.66 million and the actual amount spent was US\$342.33 million. The total amount of the grant from Australian Agency for International Development (AusAID) was US\$40 million and the



actual amount utilized was US\$44.38 million (the actual amount was higher as a result of exchange rate fluctuation).

Borrower contribution: The total contribution from the Government of Vietnam was US\$130.98 million that included an additional counterpart funding of US\$ 51.62 million provided in 2013.

Dates: The original project closing date was December 31, 2013. When the additional financing was provided in January 2013, the closing date was extended by two years to allow the completion of the project activities. On December 30, 2015, the government requested a second extension of project closing date by six months to June 30, 2016 to allow the completion of some provincial works that were delayed in part due to protracted resettlement issues.

3. Relevance of Objectives & Design

a. Relevance of Objectives

The project development objectives were to assist the client to relieve key bottlenecks of the main transport corridors in the Mekong Delta region and improving access of the poor to those corridors. This PDO was relevant to the government's priorities and the Bank Group's Country Partnership Strategy (CPS) at the design stage and remained relevant at closing stage. At design stage, one of the areas for support in the Vietnam CPS (FY07-11) was efficient and reliable infrastructure services; the Government's Socio-Economic Development Plan (SEDP) for 2006-2010 called for better coordination and planning between modes in transport sector. At closing stage, the Government Socio-Economic Development Plan (SEDP 2011–2020) called for the transition from an agrarian economy toward one that is more open and industrialized, as such, the focus would shift from quantity to quality of production and services, meaning providing good quality of infrastructure to facilitate the production and service growth. At the same time, the CPS(2012-2016) listed one of the pillars as increased basic infrastructure and public service delivery and connecting rural communities to markets and essential services, including addressing gender dimensions of transport.

Rating

Substantial

b. Relevance of Design

The project design was relevant to the PDO. The designed activities focused on improving the capacity and quality of key transport corridors (waterway and highway corridors) in the Mekong Delta region that were expected to relieve key bottlenecks of the main transport corridors in the region. In addition, the project activities of improving feeder waterways and provincial roads were to lead to a better access of the poor to the main supply corridors. On top of the infrastructure improvement, the project also supported the capacity building of government agencies responsible for transport sector development to facilitate the government's continuous support to relieving key bottlenecks of key transport corridors.



Rating
Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

Relieving key bottlenecks of the main transport corridors in the Mekong Delta region.

Rationale

A split rating was not applied though there were adjustment of some PDO indicators and their targets, the reason being i) the project objectives did not change; 2) the change of the targets was not material; and, 3) the assessment of the efficacy was based on the overall achievement of the stated objectives rather than simply against the targets.

The relieving of the key bottlenecks of main transport corridors in the Mekong Delta region will be evidenced by the 1) improved quality and capacity of the main transport corridors supported by the project; 2) consequently, the reduced travel time of freight when using the corridors under the intervention.

At output level, the project completed the widening of 61kms of national trunk roads which connect the main economic hub of the Mekong Delta, as well as widening, deepening, protecting and installing navigational aids on 351kms of two key freight waterway corridors. In addition, the project also improved 20 bridges along the main corridors (2 more than originally planned). As such, the quality and capacity of the sections on the main transport corridors were improved. The outputs actually delivered by the project fell short of the original targets of 98kms of national trunk roads and 406kms waterways, respectively.

At outcome level, the travel time on the improved corridors was reduced. The average rice barge travel time from Rach Gia to HCMC via Corridor 2 (improved under the project) reduced by 35 percent from the baseline of 52 hours to 34 hours. This achievement also exceeded the target of 10 percent travel time reduction to 47 hours. The average travel time by truck on the improved section on National Highway 91 was reduced by 33 percent, exceeding the target of a reduction by 10 percent. According to the cost of logistics baseline study carried out under the project, transport travel time accounts for an average 50 percent across all supply chains in the Delta (ICR page 14). Hence, the transport cost of the barge using the improved waterway corridors was reduced. In addition, the fatality rate (fatalities per 100 million vehicle-km) on the improved Highway 91 section shows a 77 percent decrease in fatalities as a result of the improvements in blackspot areas. Since the actual scope of work was reduced, consequently, the benefits accrued were limited to the shortened sections with the interventions. In terms of institutional strengthening and capacity building, the project helped build up internal audit capacity. Supported by the project, a formal decision was made in early 2015 to form the internal audit function under the Ministry of Transport's Inspectorate. The project also helped strengthen the capacity of Inland waterway authority in planning, budgeting, financing, and O&M management and the capacity of multi-modal transport planning. The project also financed the first-ever quantified assessment for the country's transport logistics cost. The project was less successful in



identifying the key multi-modal transport corridors and in forging partnerships with the private sector. The long-term arrangement of involving private sector for the operations and maintenance of the waterways and road network with the intention of facilitating the movement of goods and people between these two modes was not in place by the project closing date.

This review noticed that evidence of reduced time and improved safety was limited to the selected interventions such as the improvement of waterway corridor 2 and national highway 91. The review also took note that these interventions had more strategic impact and also used the largest proportion of the project financing. The waterway corridor 2 would help open a new waterway corridor linking the Mekong Delta region to Ho Chi Minh city for export, thus help release the currently congested Cho Gao canal. The improvement of the 7KM section on NH91 would help relieve the most heavily congested section within Can Tho City. While the information was not available of the achievement on other improved sections, e.g., national highway 53 and 54 and waterway corridor #3, the overall project achievement against its objective is assessed as substantial because the key bottlenecks of the main waterway corridors and road transport corridors were relieved under the projects.

Rating
Substantial

Objective 2

Objective

Improving access of the poor to those corridors.

Rationale

The achievement of this objective was mainly through the improvement of provincial roads which would provide better linkage between the local communities including the poor to the main corridors. At the end of the project, infrastructure improvement was done on 237kms provincial roads, 103 bridges and two provincial ports. The improved infrastructure located in all 13 provinces in the Delta Region and the poorest provinces received more of such support. It was noted that the original scope of improving 315kms provincial roads and 118 bridges was reduced because of the unexpected price escalation of building materials.

While the project did not have a specific indicator of the improved access of the poor, a household survey of 261 households (farmers, small businesses owners and workers or hired laborers) in five provinces was conducted at the end of the project. According to the respondents, they did not experience problem of moving products to the markets, while at the beginning of the project, only a small share of residents in project area, e.g., only 28 percent of residents in Ca Mau province, were within two kilometers of an all-weather road. The improved access was evident in reduced travel time as a result of improved transport infrastructure (roads and waterways) condition. For example, the share of households which could reach a high school in rainy days within 30 minutes increased from 50% to 91% after the project intervention. In addition, the improvement of land transport infrastructure also led to increased supply of new modes of



transport service and improved road safety. In the project area, 90% of children used boats to go to school in rainy days; with improvement of the road network, more children took land transportation than boats to school during rainy days.

In addition to the quantitative information on the improved access to transport infrastructure, transport, social and economic services, the responses also suggested benefits associated with improved access which included reduced losses in agricultural products, new job opportunities and increased mobility for women.

Rating

Substantial

5. Efficiency

The project suffered from efficiency loss as a result of prolonged implementation period, substantial cost overrun and reduced scope of work. The implementation period was extended by 2.5 years, additional financing of US\$222 million (US\$156 million from the World Bank, US\$15 million from the Government of Australian and US\$51.6 million from the client) were provided to cover the cost overrun, and the scope of finally delivered infrastructure work was reduced; consequently, the cost benefits analysis done at the appraisal stage and at the completion stage showed that the economic rate of return (EIRR) and Net present value (NPV) of key infrastructure investment at the completion stage were lower than originally estimated. For the national highway corridors (NH91, 54 and 53), the post-project NPV was US\$36.1 million while the originally estimated NPV was US\$63 million. For the national waterway corridors supported by this project, the EIRR dropped from 24% at appraisal stage to 13.8% at completion and the NPV was reduced from US\$86.5 million to US\$28.4 million.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	24.00	24.40 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	13.80	36.00 <input type="checkbox"/> Not Applicable



* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The objectives of this project were relevant to the country priorities and the Bank Group's country strategies at the project design stage and remained relevant at the completion stage. The design was substantially relevant to the project objectives. After the project was completed, the selected key sections on the main water corridors and national highway corridors were improved with good quality, consequently, the travel time and associated transport cost on these improved sections were reduced. Road safety was also improved as a result. The interventions on provincial roads and feeder roads connecting the local communities had a specific focus on the poor. Through investments into all weather access roads to the communities in the project area, the project improved the access of local households to markets, schools and health centers. The project's efficiency was assessed as modest as a result of delivering less than the originally planned scope of work with a longer implementation period and at higher cost.

a. Outcome Rating

Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating

The benefits accrued to this project are the reduced travel time and improved road safety as a result of improved national road and water way corridors and provincial roads. A key factor to sustain the development outcome is to maintain the infrastructure in good condition. The central government remained committed to empower provincial government with more responsibilities and provided provincial government with more budget for infrastructure maintenance, however, the central government has yet to adopt formula-driven, predictable annual budget transfers to the local government to meet expenditures, including infrastructure maintenance needs. For the infrastructure with the potential to generate revenue managed by the national transport agencies, the central government has not granted its full support to introduce economically viable cost recovery tariffs. As a result, there is a substantial risk to the provision of adequate maintenance to the infrastructure improved.

a. Risk to Development Outcome Rating

Substantial

8. Assessment of Bank Performance



a. Quality-at-Entry

The objectives of this project were relevant and the activities designed by the Bank team together with the client were relevant. However, the quality at entry was compromised by the following issues:

1. Underestimation of the costs: the project cost estimation was based on the preliminary designs, which were insufficiently prepared because the funds for the preliminary design were limited. The project works were found to be under-designed and the cost was underestimated during the implementation stage. As a result, the project implementation was affected.
2. Weak M&E framework: the project original indicators were not clearly defined, and the baselines and targets of many indicators were missing. The original project M&E framework was not robust for the assessment of the project's achievement (more detailed assessment of the project M&E framework is in section 10).
3. Insufficient arrangement to mitigate the possible impact of government regulation on project implementation. At design stage, the government regulation did not allow advance procurement prior to the financing agreement (FA) being signed, under such circumstance, an agreement should have been arranged to allow advance procurement in order not to delay the project implementation. Consequently, the first works contract could only be signed about 24 months after the FA was signed in the absence of advance procurement arrangement.

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

In addition to regular site visits, providing technical support to the project, the Bank team also took actions to support the implementation including requesting additional financing to cover project cost overrun, simplifying disbursement categories, and revising the M&E framework. All these contributed to the completion of the majority of originally planned activities and the achievement of the project objectives. However, there were a few shortcomings in supervision, for example, the revised M&E framework still missed a key indicator on the achievement of the second objective of "improving the access of the poor to these corridors". The updated PDO indicators, while more clearly defined, did not capture the achievement of the entire project, but were limited to the achievement of selected interventions, e.g., improvement of water way corridor #2, improvement of NH91. In addition, the team should have used project restructuring to enhance the project support to institutional capacity building.

Quality of Supervision Rating

Moderately Satisfactory

Overall Bank Performance Rating

Moderately Satisfactory

9. Assessment of Borrower Performance



a. Government Performance

The government performance is mixed. On one hand, the Government showed its strong commitment to the project as demonstrated by regular high level participation of key agencies in the Steering Committee. The Government also fulfilled its commitment of providing 25% of counterpart funding to cover both the originally estimated total project cost and the project cost overrun. The government financed the improvement of 36km NH91 when it was clear that the project financing was not enough for this section of work. On the other hand, the government was slow at approving project-related requests, leading to delays and cost increase. The government is also yet to allocate sufficient maintenance budget to the provincial government for transport corridors improved by the project to address risks to sustainability of the project development outcomes.

Government Performance Rating

Moderately Satisfactory

b. Implementing Agency Performance

Multiple implementing agencies were involved in this project. PMU-1 was responsible for implementation of Component A, the national roads improvement; PMU-W (water) was responsible for implementation of Component B, the national waterways improvement and the consultancy services under the institutional support to MOT (Component D); the 13 Provincial PMUs (PPMUs) were responsible for the activities assigned to the provinces (Component C). All the implementing agencies encountered procurement issues in the initial years, consequently, the project implementation was also delayed. Their performance improved thereafter, and completed the activities under their responsibilities.

Implementing Agency Performance Rating

Moderately Satisfactory

Overall Borrower Performance Rating

Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

The original M&E design was weak; there were too many indicators (21), the PDO- level indicators were not clearly defined and the achievement of which could not be attributed to the project itself, e.g., reduced road freight times on NH91 when the project did not support the improvement of the entire NH91. Some indicators did not have baselines or targets. The M&E was revised during restructuring, the number of indicators was reduced and the scope was more clearly defined, and missing baseline and targets were added. However, the indicator for the second sub-objective of "improving access of the poor to these corridors" was missing. A beneficiary impact assessment financed by the grant from the Australian



government was built into the project design.

b. M&E Implementation

While the project monitoring report was regularly prepared, the M&E implementation focused on project outputs as most project outcome indicators could be measured only when the infrastructure was improved and put into use. In addition, the achievements outside of the M&E framework were not sufficiently monitored and evaluated; these included road safety improvement and reduced travel time on improved national highway sections other than NH91, reduced travel time of barge using waterway corridor #3. The partially implemented beneficiary survey helped present information on the achievement of the second sub-objective of "improving the access of the poor to these corridors" in the absence of a specific indicator for this objective.

c. M&E Utilization

The M&E information was used to understand the project implementation progress, since the information was focusing on outputs, it was not clear whether the M&E was utilized to adjust the project activities.

M&E Quality Rating

Modest

11. Other Issues

a. Safeguards

At appraisal stage, four safeguard policies were triggered:

Environmental Assessment (OP/BP 4.01): This project was identified as an environmental category A project based on the assessment that project interventions would most likely be irreversible and could have adverse impacts on hydrology and agriculture in the project area. An Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) were prepared. Environmental safeguard management was moderately satisfactory throughout implementation.

Involuntary Resettlement (OP/BP 4.12): A Resettlement Policy Framework (RPF) was prepared according to the OP/BP 4.12. Two Resettlement Plans (RPs), one for roads and one for waterways, have been prepared for the first phase subprojects in accordance with the RPF (ICR page 10, paragraph 41). It was estimated that 7,245 households would be affected by the waterway work and 2,840 households would be affected by the national highways and provincial roads work. At the end of project, the total number of affected households exceeded original estimates by more than 30 percent from 15,000 to 22,663. There were occasions that affected persons were not compensated in accordance with the approved safeguards measures in the initial years of project implementation. These were addressed. By March 2017, about 30 households were to be compensated. The government committed to complete all the



compensations. Overall, there was general compliance with the RPF (ICR, p.10).

Indigenous Peoples (OP/BP 4.10): The social surveys at project preparation stage identified that the project would impact a number of ethnic minority communities and households in the project areas, and the Bank safeguard policy OP/BP 4.10 was triggered. An Ethnic Minority Policy Framework (EMPF) that complies with Bank's policy on Indigenous Peoples was developed and publicly disclosed. An Ethnic Minority Development Plan (EMDP) was prepared for the first year implementation for both waterways and national highways and provincial roads. During the implementation, the project team found that the lives of affected ethnic minority households were acculturated into the mainstream Kinh (Vietnamese) culture. As a result of further consultation with the ethnic minority groups, it was agreed that the RFP prepared under OP/BP 4.12 was to be applied to all the project affected households and affected minority households were compensated in accordance with RFP.

b. Fiduciary Compliance

Financial management: The overall financial management of the project was rated as moderately satisfactory throughout the project implementation, though the FM performance varied among three implementing agencies. PMU1 responsible for component A performed better at FM than the PPMUs responsible for the provincial infrastructure component. For example, the PPMUs, which had limited capacity and less knowledge about WBG procedure, did not fulfill financial reporting consistently in the beginning years of project implementation. The ICR did not report if any ineligible expenditures occurred during the implementation process.

Procurement: Procurement activities were substantially delayed because advance procurement was not arranged. In addition, the project procurement was also affected by the limited capacity at PPMU level. Trainings were provided to improve the capacity and a Governance and Transparency Action Plan was prepared to mitigate the risk of non-compliance in procurement process. Overall, the procurement performance was rated moderately satisfactory by the Bank team. No mis-procurement was reported by the ICR.

c. Unintended impacts (Positive or Negative)

Contractors trained under the HIV/AIDS Awareness and Prevention Program (HAPP) continued HAPP under contracts financed by other resources.

d. Other



12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Substantial	Substantial	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

13. Lessons

Two lessons were selected by IEG from a longer list provided in the ICR, with some adaptation of the language:

- **Design and implementation of a robust results and monitoring framework is an important element for operational activities.** While the project completed most of the designed activities and there was evidence on the achievement of the project development objectives, the original M&E framework was weak. Consequently, the evidence on project achievement were limited to selected interventions. In addition, not all the project effects, for example, poverty reduction and economic development would be fully materialized at the point of project closing, hence, it was important that the project could help the client set up a M&E system which could continue the assessment of the project effects even after the project was completed.
- **Policy dialogue and continuous support for institutional development is paramount for sector development and long-term sustainability of investments.** The project design included a set of technical assistance activities to complement the physical investments, which included studies of multi-modal transport issues, accurately disaggregating and measuring the cost of logistics of major supply chains operating in the Mekong Delta, separation of operator/regulator functions in the transport sector, tariff structures, and training needs assessments and plans for staff. However, many of these earlier diagnostics and reform options did not translate into actions for the sector policy development. Policy change takes longer time than a project cycle, hence, continuous support for institutional development would be required to prompt reforms. Experiences from other countries, e.g., Nigeria and Argentina, all showed that continuous engagement is the



key for successful institutional development.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR was candid about the Bank's performance, i.e., issues at design and supervision stage. Even constrained by the weak M&E framework, the ICR tried best to present evidence on the achievement of the project beyond its outputs. The ICR also utilized the information from beneficiary survey as evidence for the achievement of the second sub-objective in the absence of key indicators for the sub-objective. However, regarding the first sub-objective, the evidence presented by the ICR was limited to the key indicators, which only tracked the achievement of selected interventions. While it was acknowledged by this review that the selected interventions were the key interventions, the ICR should have tried to get additional information on the effects of all the interventions to present a complete picture on the overall project achievement.

a. Quality of ICR Rating

Substantial