

Mid-Term Review Report of Japanese ODA Loan Project for FY2012

External Evaluator: Tadayuki Kanazawa (OPMAC Corporation)
Field Study: October-November 2012

Project Name: Mozambique “Montepuez-Lichinga Road Project” (L/A No. MZ-P1)

[Project Description]

Loan Amount / Disbursed Amount : 3,282 Million Japanese Yen / 1,037 Million Japanese Yen (as of the end of July 2012)
Loan Agreement Signing Date : March 2007
Original Date of Project Completion : August 2011
Executing Agency : National Roads Administration/ANE
Operation and Maintenance Organization : National Roads Administration/ANE

[Project Objectives]

The objective of this Project is to increase transport capacity and improve access to distribution bases by widening and improving the national road between Montepuez in Cabo Delgado province and Lichinga in Niassa province, in northern Mozambique, thereby improving the livelihood of local residents and contributing to the revitalization of the local economy and poverty reduction.

Consultant : Aurecon AMEI/Studi JV (previously called Ninham Shand & Studi), South Africa (Lot A)
SNC LAVALIN in association with COB and Consultec, Canada (Lot C)
Contractor¹ : CMC/CMCAA Co. Ltd. JV, Italy (Lots A and C)

¹ The names and nationalities of consultants and contractors are entered only when they have been made public in JICA’s annual statistical report, “List of Names of Major Companies and their Contract Amount of Japanese ODA Loan” (these are names for which the contract amount is not less than 1 billion Japanese Yen for contractors and not less than 100 million Japanese Yen for consultants were entered). Where the names have not been entered in JICA’s annual statistical report, they are described only as “local contractors/consultants” or “Japanese contractors/consultants”. These names can be provided by JICA.

Item	Ex-ante Evaluation (2007)	Mid-term Review results and Ex-post Evaluation results estimated at the time of Mid-term Review (2012)
Relevance	<p>(1) Relevance to Development Policy In 1991, the Government of Mozambique (GOM) launched the 10year Roads and Costal Shipping Projects (ROCS) to strengthen the transport infrastructure. Under the 3rd ROCS (ROADS-3), the Road Sector Strategy (RSS) 2007-2011 has been implemented. In order to implement the RSS effectively in cooperation with donors, GOM initiated a sector-wide approach (SWAP) and drafted a code of conduct in January 2007. The draft code of conduct (DCC) provides a three-year implementation program to be materialized through the donor cooperation. The DCC requires that all the donors intending to provide assistance in the road sector should prioritize assistance to those projects listed in the RSS.</p> <p>(2) Relevance to Development Needs Mozambique road development is far behind other developing countries due to the prolonged civil war. The per capita road density is 0.02km/m² in Mozambique, compared with 0.2km/m² in average in the other developing countries. The road pavement ratio is as low as 20%, and the east-west road corridor is in particular low. The improvement of the east-west corridor is, therefore, essential in view of the integrated regional development. GOM considers that the investment in construction and maintenance in the road sector is vitally important to achieve regional integration,</p>	<p>(1) Relevance to Development Policy Road Sector Strategy (RSS) 2007-2011 has been updated as RSS 2012-2014(ROADS-4). In order to implement the ROADS-4, an Integrated Programme for Roads Sector (PRISE) was prepared and presented to the annual donors meeting held on October 11, 2012. According to ANE, PRISE is a three-year road project implementation program for 2012-2014, which designates the northern provinces as one of the prioritized areas. Since GOM is planning to continue road improvement projects in cooperation with the donors, the Project is considered relevant to the current GOM development policy. In addition to Montepuez-Lichinga and Nampla-Cuamba corridor projects, which are under implementation, GOM is planning to prioritize the implementation of Lichinga-Cuamba road project. GOM is also attempting to secure funds from AfDB to prepare a program for the improvement of secondary and feeder roads linking the national and provincial roads in 2013. GOM has successfully applied for a grant from AfDB toward the feasibility and detailed engineering design of a road linking Mueda –Nagomane. The Project is therefore considered relevant in terms of current GOM development policy.</p> <p>(2) Relevance to Development Needs Niassa and Cabo Delago provinces are behind in terms of infrastructure development and poverty ratio, compared to the other provinces. GOM considers it important to improve the transport system to accelerate agricultural produce in these provinces, and prioritizes the improvement of the northern corridor. As part of the northern corridor, the Project is considered important in the context of connectivity with the other part of the northern corridor. The Project is therefore considered relevant to the current development needs.</p>

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	<p>economic development and provision of access to basic social services in view of the poverty mitigation, in particular, for Niassa and Cabo Delgado provinces in the northern region, which suffer from enormous lack of road infrastructure. GOM has prepared a poverty alleviation strategy called PARPA II 2006~2009, in which the basic infrastructure and the regional development are considered crucial for the poverty alleviation.</p>																																							
Effectiveness	<p>(1) Quantitative Effects <u>Operation and Effect Indicators</u></p> <table border="1" data-bbox="436 735 1191 943"> <thead> <tr> <th colspan="2">Indicator</th> <th>Baseline (2005)</th> <th>Target (2010, at completion)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Annual average daily traffic volume (vehicles/day)</td> <td>Mt - Bl Section (54km)</td> <td>264</td> <td>611</td> </tr> <tr> <td>Bl - Lt Section (81km)</td> <td>204</td> <td>518</td> </tr> <tr> <td>Lt - Lc Section (66km)</td> <td>130</td> <td>401</td> </tr> <tr> <td colspan="2">Vehicle operation cost saving (USD/unit/km)</td> <td>0.443</td> <td>0.222</td> </tr> <tr> <td colspan="2">Time saving (opportunity cost: USD/day)</td> <td>192</td> <td>110</td> </tr> </tbody> </table> <p>Note: Mt: Montepuez; Bl: Balama; Lt: Litunde; Lc: Lichinga</p>	Indicator		Baseline (2005)	Target (2010, at completion)	Annual average daily traffic volume (vehicles/day)	Mt - Bl Section (54km)	264	611	Bl - Lt Section (81km)	204	518	Lt - Lc Section (66km)	130	401	Vehicle operation cost saving (USD/unit/km)		0.443	0.222	Time saving (opportunity cost: USD/day)		192	110	<p>(1) Quantitative Effects <u>Operation and Effect Indicators</u></p> <p>The projections for the target year have not been revised until the time of the mid-term review (MTR).</p> <table border="1" data-bbox="1209 735 1986 943"> <thead> <tr> <th colspan="2">Indicator</th> <th>Mid-Term Review (Oct. 2012)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Annual average traffic volume (vehicles/day)</td> <td>Mt - Bl Section (54km)</td> <td>375</td> </tr> <tr> <td>Bl - Lt Section (81km)</td> <td>113</td> </tr> <tr> <td>Lt - Lc Section (66km)</td> <td>210</td> </tr> <tr> <td colspan="2">Vehicle operation cost saving (USD/unit/km)</td> <td>0.340</td> </tr> <tr> <td colspan="2">Time-saving (opportunity cost: USD/day)</td> <td>165</td> </tr> </tbody> </table> <p>Sources: ANE Note: Mt: Montepuez; Bl: Balama; Lt: Litunde; Lc: Lichinga</p> <p>No major change is noted in the traffic volumes from baseline, although the quantity shown for MTR is the result of one time survey, not an annual average. The decrease of traffic volume in Balama and Lichinga section is because of their inland location far from town areas. ANE and the Project consultant anticipate that the traffic will significantly increase when the local economy becomes active after the Project is completed.</p>	Indicator		Mid-Term Review (Oct. 2012)	Annual average traffic volume (vehicles/day)	Mt - Bl Section (54km)	375	Bl - Lt Section (81km)	113	Lt - Lc Section (66km)	210	Vehicle operation cost saving (USD/unit/km)		0.340	Time-saving (opportunity cost: USD/day)		165
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	<p>(2) Qualitative Effects (a) Improved road transport network, trade activation, improved access to social services(education and/or health facility), improved livelihood of the local population, economic development of the inland region and mitigation of regional gap, etc.</p> <p>(3) Impacts There is nothing to mention.</p> <p>(4) Other items influencing effectiveness (a) Project implementation structure, technical and financial aspect of the Executing Agency National Roads Administration (Administracao Nacional de Estradas/ANE) is the Project Executing Agency. ANE's Directorate for National Roads has 29 staffs, of whom 24 staffs are civil engineers. According to AfDB project completion report for Pemba-Montepuez Road Project, July 2002, ANE's capacity for project implementation was assessed adequate, and therefore there will be no major problem for implementing the Project. Necessary funds for project implementation will be financed from the Road Fund, government budget and the participating donors. It is part of the loan conditions that project local cost should be financed from the Road Fund.</p>	<p>(2) Qualitative Effects The qualitative effects anticipated at ex-ante evaluation will be viable, given that needs for regional economic development and livelihood improvement remain unchanged in the region from those assessed at ex-ante evaluation. In view of increased economic activities in the northern part of Mozambique, the Project will contribute as basic infrastructure to enhance economic activities and local transport for the population and goods in the region.</p> <p>(3) Impacts Same as (2) Qualitative Effects</p> <p>(4) Other items influencing effectiveness (a) Project implementation structure, technical and financial aspect of the Executing Agency The capacity of ANE, Executing Agency (EA) in terms of organization and the numbers of staff and engineers remains basically unchanged from the time of ex-ante evaluation. While ANE's key staff are well qualified and experienced, the number of qualified staff is still insufficient to absorb the current workloads. There are three full-time persons assigned in the Project Management Unit (PMU). While they are all well qualified, the PMU Head is held responsible for handling the other projects being implemented over the country. Even the project coordinator for the Project is responsible to supervise several projects within the northern corridor. Under these circumstances, it appears that sufficient person-time is not allocated to handle various implementation issues that the Project has been encountering and to coordinate with AfDB in a timely manner. As for financing arrangements, sufficient funds have been so far allocated for the Project from the Road Fund, given that the Project is</p>

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	<p>(b) Cooperation with NGO, universities, etc. There is nothing to mention.</p> <p>(c) Cooperation with Japanese grant aid and/or technical cooperation No mention</p> <p>(d) Cooperation with other donors According to the financing plan, the AfDB and JICA are to jointly co-finance with GOM the road works and consulting services for Lots A and C. SIDA will co-finance as grant to GOM the road works and consulting services under Lot B. SIDA will also entirely finance road safety and GOM will finance the</p>	<p>designated as one of the important national projects. The cost overrun was resolved by a supplementary loan from AfDB, which was signed between GOM and AfDB in September 2010. The supplementary loan agreement stipulates that GOM will absorb further cost overrun, if happens. The GOM's position for this arrangement will remain the same as in November 2012.</p> <p>(b) Cooperation with NGO, universities, etc. There is nothing to mention.</p> <p>(c) Cooperation with Japanese grant aid and/or technical cooperation "The Project for the Capacity Development of Road Maintenance in the Republic of Mozambique" (hereafter "TC") is now under implementation under JICA technical cooperation. The TC aims to develop the capacity of ANE staff concerned with road maintenance work. It will help ANE develop field inspection and O&M planning techniques in a model area and establish an adequate O&M mechanism for paved road maintenance. The TC will contribute to ANE for O&M of the roads completed under the Project. The implementation of the TC is from August 2011 to July 2014. The team is assigned in the ANE Road Maintenance Division. Under the Program, several ANE engineering staffs including General Director were dispatched to Japan for road maintenance training once in a year.</p> <p>(d) Cooperation with other donors The Project is jointly co-financed by AfDB and JICA. JICA's project implementation supervision has been delegated to AfDB, and therefore Japanese ODA loan disbursements to ANE is made subject to AfDB's prior review and payment to the clients. At the time of MTR, Japanese ODA loan disbursement ratio stands at as low as 35%,</p>

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	<p>resettlement and compensation costs. Audits services for Lots A and C will be financed by AfDB.</p> <p>(e) Effect on the natural environment In accordance with JBIC Guidelines for Confirmation of Environmental and Social Consideration, April 2002, the Project belongs to Category “A.” The Environmental Impact Assessment (EIA) was prepared and approved in September 2006.</p>	<p>while 5 years has passed since the loan signing. The major reason behind this was said to be delays in payment to the contractor by AfDB. However, AfDB, ANE and the consultant attribute the delayed payment by AfDB mainly to: (a) the poor quality of contractor’s invoices, and (b) different interpretation of condition of contract for contract price adjustment (CPA) and price indices used by the contractor. Namely, the contractor includes, in addition to the base cost, the CPA amount calculated by applying certain price indices, with which AfDB was unsatisfied and rejected the payment.</p> <p>SIDA is financing as grant for the implementation of Lot B: Ruaca-Marrupa section. According to ANE report, the implementation progress of Lot B was 31% as in November 2012.</p> <p>(e) Effect on the natural environment ANE has the Cross Cutting Unit, which is responsible for handling all cross cutting issues including environmental and social issues. Environment Impact Assessment (EIA) was conducted by ANE Cross Cutting Unit with assistance by the consultant before the construction work, and the EIA report was submitted to all the agencies concerned including AfDB. Given a limited number of inhabitants living along the project sites and the works being implemented along the existing road alignment, negative impact to the social and natural environment is considered minimal. According to AfDB Project appraisal report, the Project will be implemented in accordance with Environmental and Social Management Plan (ESMP). Under the ESMP, the contractor is required to dispatch an environmental expert, but is yet to be materialized. To date, no report on environmental monitoring has been submitted by the contractor. ANE has been requesting the contractor to field the environmental expert and submit the report as required.</p>

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	<p>(f) Land acquisition The Project will involve the resettlements of 72 resident households. The resettlements and compensations will be undertaken in accordance with the GOM law.</p> <p>(g) Operation and maintenance structure and the technical and financial aspects of the executing agency Maintenance of national roads is under the responsibility of ANE, which engages local contractors and supervises the performance of the contractors for maintenance works through its 10 regional offices. The road section to be financed by JICA will be under the responsibility of Cabo Delgado and Niassa offices. In order to undertake O&M works in an efficient manner, ANE is improving its road database. The O&M capacity of ANE is considered adequate given its capacity strengthened under a World Bank (WB) technical assistance.</p>	<p>(f) Land acquisition Due to changes in road alignments in preparation of detailed design, a resettlement action plan (RAP) 2003 was revised and approved by ANE and AfDB. The land acquisition and resettlement under the Project have therefore been implemented in accordance with the revised RAP. To date, the land acquisition for AfDB financed section (Lots A and C) of Montepuez-Lichinga section totaled at 1,843 ha and the affected resident households at 1,284, of which 799 resident households have been resettled. The resettled resident households in Lot A: Montepuez-Ruaca section was 158 resident households. The RAP was prepared in accordance with GOM land law and its involuntary resettlement policy.</p> <p>During the site visit, the MTR mission had interviews with several affected resident households and found that they were all satisfied with the arrangements for compensation and the relocated places. A monitoring structure for land acquisition and resettlements has been established. The land acquisition and resettlements were undertaken in accordance with the RAP and the reports were prepared.</p> <p>(g) Operation and maintenance structure and the technical and financial aspects of the executing agency ANE has a total of 472 staff, of which 15 staffs are assigned for maintenance. Since 1992, ANE has been developing its capacity for road improvement and maintenance through assistance by various donors including World Bank (WB) and AfDB. However, it is actually the case that road maintenance data are mostly kept by consultants who have been engaged for maintenance services.</p>

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		<p>(h) ANE is furthering to outsource road maintenance works in the private sector. ANE is in the process of selecting a contractor who will be engaged for the maintenance works in the pilot project for maintenance of N1 road between Pambara and Rio Save. The project is financed through WB technical assistance program. The WB technical assistance also provides assistance to ANE in strengthening its Highway Information Management System (HIMS) through data gathering and staff training. With these assistance programs, the ANE capacity for O&M will be strengthened. However, strengthening the capacity of local contractors including mobilization of equipment, materials and funds is essential to proceed with outsourcing O&M works. ANE intends to strengthen the capacity of local contractors with external donors including WB.</p> <p>(i) HIV/AIDS and Traffic Accident Prevention Programs In order to avoid increased cases of HIV/AIDS and traffic accidents as a result of the implementation of the Project, awareness campaign and medical check-up programs are envisaged. As scheduled, a HIV/AIDS services provider was dispatched by the consultant. With cooperation of the service provider and local government officers, ANE has carried out public awareness programs for local communities. Traffic accident prevention program is conducted under a road safety component financed by SIDA. Under the program, the communities in the zone of influence are re-oriented through awareness campaigns on road utilization, the importance of following road signs and other road furniture.</p> <p>(j) Gender Consideration As requested by ANE, the contractor has engaged female workers</p>

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		<p>in carrying out construction works. The number of local workers mobilized in the works is given by gender in the consultant progress reports. As at August 2012 when the construction works were basically suspended, the number of female works was 16 out of about 190 workers in total.</p>
Efficiency	<p>(1) Outputs (a) Civil Works 1) Montepuez-Ruaca (135km) road expansion and pavement (Lot A)</p>	<p>(1) Outputs (a) Civil Work 1) As a result of bidding where the lowest bid for civil work was much higher than that estimated at ex-ante evaluation, the scope of Japanese ODA loan was limited only to Lot A: Montepuez-Ruaca section (135km) for road widening and pavement works after JICA's concurrence dated March 2011. Lot A consists of the following 3 sections: Section I : Montepuez-Balama (55km) Section II : Balama-Kwekwe (30km) Section III : Kwekwe-Ruaca (50km)</p> <p>As at the time of MTR, the physical progress of civil works was 20.5%. Namely, the progress of construction works for Section I is estimated at 60-70% with completion of soil foundation and base course while bridge and culvert construction is still under way, whereas almost no progress except landmine removal was noted for Sections II and III. The overall progress is therefore significantly delayed. The completion of the Project is expected to be much later than November 2012 originally estimated.</p> <p>A limited capacity of the contractor is considered one of the reasons for delays. ANE and AfDB viewed that the volume of works that the contractor has in his hand far exceeds his capacity and therefore he is</p>

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	<p>2) Litunde-Lichinga (66km) road expansion and pavement (Lot C-I)</p> <p>3) Marrupa-Litunde 5 bridges and 2 box culverts construction (Lot C-II)</p> <p>4) Ruaca-Marrupa (68km) road expansion and pavement (Lot B: SIDA portion)</p> <p>(b) Consulting Services</p> <ul style="list-style-type: none"> · Assistance for bid processing, construction supervision, etc · Project audit services (AfDB) · Traffic safety provision (SIDA) 	<p>unable to allocate such resources (equipment, materials and laborers) as necessary for the Project. However, ANE indicated its satisfaction with the quality of the works the contractor has produced.</p> <p>2) and 3)</p> <p>As stated above, Lots C-I and C-II: Litunde-Lichinga section were excluded from Japanese ODA loan, and therefore are implemented through AfDB supplementary loan with GOM. The contract for Lot C has been already awarded to the same contractor as for Lot A. The work for Lot C is at preliminary stage (survey and marking), while advance payment has been already made.</p> <p>4) Lot B: Ruaca-Marrupa section (68km) is financed by SIDA. ANE reported that the progress for Lot B is 31%.</p> <p>(b) Consulting Services</p> <p>As a result of exclusion of civil works under Lots C-I and C-II from Japanese ODA loan, the loan has been provided for consulting services for detailed design and bid processing for Lots A, C-I and C-II, but not for construction supervision for Lot C-I and C-II. The construction supervision services for Lot A are co-financed by JICA and AfDB with GOM. The consulting services for construction supervision of Lot C-I and C-II are financed by AfDB with GOM.</p> <p>According to ANE, they requested to exchange the team leader of the consultants because of their poor performance. The performance of the consultants is in general satisfactory since the team leader was replaced in June 2012. However, AfDB has viewed that the consultant is lack of professionalism, only reporting the progress of works and accepting contractor's proposed design changes and invoices as they were. AfDB also viewed that insufficient review and checking of</p>

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	<p>(2) Inputs</p> <p>(a) Project Cost: 3,282 million Japanese Yen</p> <ul style="list-style-type: none"> · Civil Works: 2,762 million Japanese Yen · Consulting Services: 208 million Japanese Yen · Contingencies: 312 million Japanese Yen <p>(b) Implementation Period: November 2006-August 2011 (57 calendar months)</p>	<p>contractor's invoices by the consultant was part of the reasons that resulted in delayed payment to the contractor, and subsequently the contractor withdrew their resources from the site, leading to further delays in the implementation.</p> <p>(2) Inputs</p> <p>(a) Project Cost</p> <p>Due to global inflation that happened during 2007-2008, the bid prices for the civil work in 2009 exceeded the estimated cost at ex-ante evaluation by about 80%. Accordingly, JICA agreed to reallocate unallocated contingencies amounting to 290 million Japanese Yen to the civil work out of 3,282 million JPY as requested from ANE. At the time of MTR, the Japanese ODA loan proceeds are allocated as follows:</p> <ul style="list-style-type: none"> · Civil Work: 3,052 million Japanese Yen · Consulting Services: 230 million Japanese Yen · Contingencies: 0 <p>Due to delays in the civil work, another cost overrun coupled with CPA adjustments and interest for delayed payment to the contractor is likely.</p> <p>(b) Implementation Period</p> <p>The loan agreement was signed on 19 March 2007 and became effective on 14 November 2007. The loan expiry date is 14 November 2013. The selection of contractor for civil work started in 2009 and concluded in May 2010. The contractor commenced the work in June 2010 with the date of completion in November 2012 under the contract between ANE and the contractor. However, as at MTR, the progress of physical work is only 20.5%, far behind the schedule</p>

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		<p>under the contract.</p> <p>According to the contractor, the major reason for this delay is due to delayed payments to the contractor from AfDB. For this reason, the contractor suspended almost all the construction works and withdrawn workers and equipment from the construction sites from February to August 2012. Upon the receipt of almost all pending payments in August 2012, the contractor has gradually resumed the construction works since September 2012. However, with the rainy season to come, the progress rate at the moment is only about 30% of the normal work rate.</p> <p>According to information from the parties concerned, the delay in project implementation was also attributed to the following:</p> <ol style="list-style-type: none"> a. Front-end delays such as land acquisition and resettlements, employment of a contractor, removal of landmines, etc. b. Cost overrun due to the bid price exceeding the estimated cost at ex-ante evaluation by 80% c. Poor performance of the consultant d. Limited capacity of the contractor e. Limited number of ANE staff members concerned f. Delays in AfDB processing invoices from the consultant and the contractor, resulting in delayed payments by the donors g. Major changes in design h. Adverse weather conditions <p>Major changes in design works were made as during the feasibility study no removal of land mines was made and the conceptual design was prepared based on aerial photos, and therefore, there were a number of sites where the conceptual design did not match actual site conditions. Accordingly, the alignment and elevation of the roads were changed from those prepared at F/S. In addition, base course has</p>

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	<p>(3) Internal Rate of Return</p> <p><u>Economic Internal rate of Return (EIRR)</u> Overall: 19.6% Lot A Montepuez - Balama Section: 20.02% Lot A Balama - Ruaca: 18.53% Cost: Project cost excluding local taxes, administration and operation costs Project Benefits: vehicle operation cost saving, reduced travel time</p>	<p>been changed to 2-layer crush stone construction from single layer cement mixed crush stone construction to lower the cost of construction.</p> <p>On 26 November 2012, ANE hold a tripartite meeting to discuss various issues facing the Project. As a result, ANE found it essential to accept the extension of the completion date to September 2014 (delays by 22 months) and sent a letter to AfDB for approval on 27 November 2012 to extend the Project Completion Date until 30 September 2014.</p> <p>(3) Internal Rate of Return</p> <p>Economic internal rate of return (EIRR) has been recalculated by AfDB, due to changes in scope works (cf. Lot. A) made on 1 March 2009. The recalculated EIRRs are as follows:</p> <p><u>Economic Internal rate of Return (EIRR)</u> Overall: 19.6% Lot A Montepuez - Balama Section: 12.8% Lot A Balama - Ruaca: 16.4%</p> <p>These EIRRs are considered valid while both ANE and AfDB have not updated the calculations since the change in scope was made.</p>

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Lessons learned and Recommendations	<p data-bbox="436 319 638 343">[Lessons learned]</p> <ul style="list-style-type: none"> <li data-bbox="436 351 2004 518">· The project implementation period was estimated at 30 calendar months at appraisal. Given, however, the amount of works, needs of major changes or modification of conceptual designs prepared at F/S, and adverse geographical conditions to transport equipment and materials to the site, the estimated number of months at appraisal appears insufficient. During project appraisal, the implementation period for inland civil work should be determined taking fully into account the local conditions such as location, means of transport, likeliness of design changes, etc. <li data-bbox="436 526 2004 726">· A limited number of qualified civil work contractors available in Mozambique are a problem in the construction industry. This has affected the implementation of the Project. In order to develop the capacity of local contractors as a whole, participation of Japanese contractors in the construction industry in the country will be one solution. For the countries where the capacity of local civil work contractors needs to be strengthened, consideration should be placed on Japanese ODA loan to facilitate Japanese contractors in participating construction works or technical assistance programs, such that technology transfer, etc. are made to the local construction industry. <li data-bbox="436 734 2004 869">· The Project is jointly financed by JICA and AfDB. JICA has two co-financing schemes, joint financing and parallel financing. While there are pros and cons for each scheme, the use of parallel financing scheme may be considered appropriate in case that the capacity of the co-financing partner appears weak. In case of the parallel financing, JICA needs to administer the project implementation supervision by itself, for which JICA may wish to strengthen its organization and staffing. <p data-bbox="436 909 907 933">[Recommendations to JICA/AfDB/ANE]</p> <ul style="list-style-type: none"> <li data-bbox="436 941 2004 1141">· The limited capacity of the consultant and the contractor to carry out the works under their contracts is considered a major reason for the delayed progress of the project after the procurement. However, lack of communication among ANE, the consultant, the contractor and the donors, mainly AfDB, mutual distrust, and minimal effort to resolve issues by the parties concerned have exacerbated the situation. It is therefore recommended that a tripartite meeting including AfDB representative is held as soon as possible to discuss and resolve all issues. The discussions and agreements reached during the meeting should be recorded in the minutes of meeting and signed by the representatives of all the parties concerned. <li data-bbox="436 1149 2004 1252">· The contractor stated that delayed payment by the donors attributed to the delays in their construction work. The interpretation of conditions of contract for CPA differs among ANE, the contractor and the donors, and it also should be discussed and agreed at the tripartite meeting. <li data-bbox="436 1260 2004 1348">· The contractor has neither mobilized a person responsible for environment nor prepared an environmental monitoring report as required under the contract. ANE should strongly request the contractor to do it. In case that the contractor fails to respond, ANE should consider the recruitment of another party to handle the environmental aspect. 	

Item	Ex-ante Evaluation (2007)	Mid-term Review results and Ex-post Evaluation results estimated at the time of Mid-term Review (2012)
	<p>[Recommendations to JICA]</p> <ul style="list-style-type: none"> · JICA has delegated its responsibility for project implementation supervision to AfDB. Given that AfDB's insufficient project supervision is part of the reasons for the delays in project implementation, it is recommended that JICA always participates in AfDB review activities, express its view and present its ideas to resolve various issues cooperatively with AfDB members. · It is likely that the completion of the Project will result in another substantial cost overrun. The use of the unallocated fund, if any, should be considered, only in case that GOM is unable to absorb the overrun and requests JICA for reallocation. 	
Indicators for the Ex-post Evaluation	<p>Indicators established at the ex-ante evaluation</p> <ol style="list-style-type: none"> (1) Average annual daily traffic (unit/day) (2) Reduced vehicle operation cost (USD/unit · km) (3) Reduced travel time (opportunity cost: USD/day) (4) Economic Internal Rate of Return (EIRR) (%) 	<p>No change is needed for the indicators established at the ex-ante evaluation.</p>