| Country | The Republic of Indonesia |
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| Project | Construction Equipment Reconditioning and Rehabilitation Project |
| Borrower | The Republic of Indonesia |
| Executing Agency | PT.AMARTA KARYA : AMKA |
| Exchange of Notes | April 1988 |
| Loan Agreement | July 1988 |
| Loan Amount | ¥1,846 million |
| Loan Disbursed Amount | ¥1,844 million |

Project Summary and OECF Portion

This project is to transfer the construction equipment owned by the Ministry of Public Works to AMKA (state-owned enterprise AMARTA KARYA: repair and leasing of machinery for construction works, iron works) and efficiently perform its repair, while providing lease services of the equipment through AMKA to the Ministry of Public Works, other state-owned enterprises, and private-sector builders, in order to promote the development of the construction industry and the efficient utilization of construction machinery.

The ODA loan covers the eligible portion of the total project expenditures for rehabilitation of workshop, rehabilitation of workshop equipment, repair of construction machinery, supply of spare parts, supply and installation of equipment for manufacturing spare parts, and consulting services.

| Comparison of Original Plan and Actual | Plan | Actual | | |
|--|--------------------------------------|---|--|--|
| (1) Project Scope 1. Rehabilitation of Bekasi Workshop | 1 set | Generator 350kVA x 3 sets (Addition) | | |
| | 1 set | No change. | | |
| 2. Rehabilitation of repair equipment | 400 units | Changed the target number to 350 units Actual accomplished 231 units | | |
| 3. Repair of construction machinery, | | | | |
| supply of spare parts | 1 set | Necessary facility for manufacturing pin-bushing etc. of heavy machine/ automobiles use | | |
| 4. Supply and installation of equipment for manufacturing | | | | |
| spare parts | 152 M/M | 182 M/M | | |
| 5. Consulting service | | | | |
| (2) Implementation Schedule | | | | |
| (Start of consulting service ~ Completion of repairs, installation) | Apr. 1988 ~ Sep. 1992 (54 months) | Mar. 1989 ~ Dec. 1995 (82 months) | | |
| (3) Project Cost | | | | |
| Foreign currency portion | ¥1,633 million (¥1,633 million) | ¥1,654 million (¥1,654 million) | | |
| Local currency portion | Rp. 2,630 million (¥213 million) | Rp. 7,686 million (¥190 million) | | |
| Total | ¥1,880 million (¥1,846 million) | ¥2,123 million (¥1,844 million) | | |
| Figures in the parentheses are for ODA loans. | | | | |
| Exchange rate | ¥1 = Rp. 10.64 (1988) | ¥1=Rp. 16.39 (Average at the time of contract) | | |

Analysis and Evaluation

(1) Project Scope

Three generators were added as part of improvements at the Bekasi Workshop. Originally, the workshop simply planned to receive power from PLN (state-owned power company), but as the electric power shortages developed due to a sudden rise in electric power demand in the area, the in-house generation of electric power became unavoidable. With regard to the repair of construction machinery and the supply of spare parts, the actual number of repaired machinery units reached only 231, largely below the target number of 400 units. This is due to the fact that the transfer from the Ministry of Public Works was delayed, resulting in a worsening in the condition of the machinery, so that in many cases units fell beyond repair. As a result, a portion of purchased spare parts became unusable.

(2) Implementation Schedule

The start of the project was delayed by approximately 12 months due to the late signing of the L/A, and the completion of the project was delayed by approximately 39 months, the main reason for this being the delay in the transfer procedures for construction machinery. The transfer of construction machinery during the implementation of the project was sped up by SAPI(Special Assistance for Project Implementation), but the procurement of some spare parts could not be accomplished within the original implementation limit, which resulted in a one-year extension. With regard of other implementation schedules, the Project Implementation Committee actually contributed to making the procurement procedures more complicated, and the procurement of parts no longer in production also took time, resulting in delays.

(3) Project Cost

With regard to foreign-currency project costs, the repair cost per construction machinery unit rose as the result of their delayed transfer, while the targeted number of repair units was adjusted downward; yet even so, costs that could not be covered occurred, which were handled by making changes in budget allocations, so that the final result was almost as originally planned. Local-currency costs almost tripled under a combination of rising prices and mounting repair costs. This increase in local-currency costs could not be covered by the ODA loan, and the executing agency implemented the required capital allowance and led the project to completion.

(4) Implementation Scheme

With regard to the project implementation scheme, AMKA, the executing agency, cannot be said to have taken sufficient measures against the important delay in the implementation schedule caused by the late transfer of construction machinery. Moreover, considering the fact that the Project Implementation Committee actually made procurement procedures more complicated, the project implementation scheme leaves room for improvement. There were actually no particular problems regarding consultants, contractors and suppliers.

(5) Operations and Maintenance

Regarding the operations scheme, no particular problems occurred. Operational performance in terms of the number of leases actually rose, from 20 machinery units before the project started to 279 machinery units following its implementation. However, demand for spare parts was lower than originally planned, so that the utilization rate of part of the production equipment remained relatively low.

There were no particular problems in the maintenance scheme.

Project Effects and Impacts

Through this project, construction machinery that used to be idle is now being used efficiently. The average service life of construction machinery for which repairs have been performed has increased from 6,000 hours to 8,000 hours. Moreover, a repair system has been established as the result of rehabilitation of workshop, and repair equipment, and technology transfers via consultants. Further efficiencies are expected to surface as current achievements contribute to the development of the leasing market and technology transfers toward small- and medium-sized companies and vocational training take place.

| Notes | | | |
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| Report Date : March | 1998 | | |
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