INDONESIA

Equipment Supply for Enhancement of Radio and Television Network (I) (II)

Report Date: February 1999 Field Survey: Not implemented

1 Project Summary and JBIC's Cooperation

This project is to respond to the Fourth Five-year National Development Plan for Broadcasting Sector (fiscal 1984 to 1988) that consists of the first period of the New Fifteen-year Long-term National Development Plan for Broadcasting Sector in Indonesia initially drawn up in fiscal 1984. It also aims to increase the coverage and the number of receivers of radio and television broadcasting networks and improve the quality of the broadcasts (shift to medium-wave and VHF FM radio broadcasting, colorization of television broadcasting, etc.) by construction and installment of a program production facilities and transmitting facilities for both radio and television.

The project is split into two phases. Phase I is mostly involved in expanding and equipping the program production facilities, and Phase II is mostly involved in constructing and improving the transmitting facilities.

The ODA loan covers the entire foreign currency portion for the Phase I project costs, and the entire foreign currency portion and a certain amount of the local currency portion for Phase II.

Borrower / Executing Agency	Republic of Indonesia / Ministry of Information		
Exchange of Notes / Loan Agreement	Phase I	Phase II	
	December 1985 / December 1985	December 1987 / December 1987	
Final Disbursement Date	December 1990	December 1992	
Loan Amount / Loan Disbursed Amount	· 6,507 million / · 6,396 million	· 8,603 million / · 8,393 million	
Loan Conditions	Interest: 3.5%, Repayment period: 30 years (10 years for grace period), Partial untied		





(1) Project Implementation

(i) Project Scope

(Phase I) Some amendments of project scope were carried out based on the result of a review conducted by the consultant group. The appointment of consultant team took time and other aid projects had been progressed in the broadcasting sector in the mean time. These changes in the environment surrounding the Project were the major reason for the modification of scope.

(Phase II) Changes to decrease the number of short-wave transmitting facilities and increase the number of medium wave and FM transmitting facilities were observed. As the result of a revision in 1989 of the new fifteen-year long-term development plan, the national policy was distinctly shifted to establishment of medium-wave broadcasting. And in connection of this shift in the national policy, the project scope was amended.

(ii) Implementation Schedule

(Phase I) A seventeen-month delay occurred. The major reason for this was owing to a delay (twelve months) in the Indonesian government's appointment of consultants. Another reason for the delay was insufficient local currency finances brought about by a drop in oil prices.

(Phase II) An eighteen-month delay occurred. This was influenced by the delays in Phase I in appointing consultants and in budget arrangement to secure the local currency for the Project.

(iii) Project Cost

(Phase I) The foreign currency portion was almost the same as estimated. Installation and other expenses not covered by the original project scope were included, but as a result of the bidding, procurement costs for equipment were lowered than were estimated, and the total cost was within the budget. On the other hand, a 58.3% cost overrun arose in the local currency portion. This was owing to the substantial increase in the costs involved in installation, training and domestic transportation from original estimation, but the main cause is thought to be an inflation in Indonesia at that time.

(Phase II) Both foreign currency portion and local currency portion were almost the same as estimated. Regarding the procurement costs of transmitting facilities using foreign currency, it was balanced as a whole: the increase of expenditures in the medium-wave transmitting facilities canceled out the decrease of expenditures in the shortwave transmitting facilities, and the increase of expenditures in the TV transmitting facilities canceled out the decrease of expenditures in the FM transmitting facilities.

(1) Project Scope	Plan Actual			
(Phase I)				
¥Radio studio to transmitter link	23 sites 24 sets	21 sites 21 sets		
¥Radio production equipment	21 sites 50 units	21 sites 21 units		
¥TV studio to transmitter link	8 studios, 8 transmitting stations, 2 links	6 studios, 6 transmitting stations, 3 links		
¥TV production equipment	Colorization at 3 sites etc.	Same as planned		
(Phase II)				
¥Short-wave radio transmitting facilities	14 sites	5 sites		
¥Medium-wave radio transmitting facilities	24 sites	27 sites		
¥Construction of FM radio station	7 sites	10 sites		
¥FM production facilities	—	3 sites		
¥TV transmitting facilities	16 sites	16 sites		
¥Establishment of regional TV production studies	3 sites	5 sites		
(2) Implementation Schedule				
(Phase I)	December 1987 ~ June 1989 (19 months)	September 1989 ~ November 1990 (15 months)		
(Phase II)	September 1989 ~ February 1991 (18 months)	November 1991 ~ November 1992 (13 months)		
(3) Project Cost				
(Phase I) (Foreign currency)	· 6,507 million	· 6,396 million		
(Local currency)	Rp.4,761 million	Rp.7,538 million		
(Total)	· 7,612 million	· 6,992 million		
(Phase II) (Foreign currency)	· 6,464 million	· 6,894 million		
(Local currency)	Rp.23,155 million	Rp.24,691 million		
(Total)	· 8,641 million	· 8,425 million		
Exchange Rate				
(Phase I)	(Apr. 1985) Rp.1 = · 0.232	(Average between Jan. 1990 and Dec. 1990) Rp.1 = \cdot 0.079		
(Phase II)	(Feb. 1987) Rp.1 = · 0.094	(Average between Feb. 1991 and Nov. 1992) Rp.1 = \cdot 0.062		

(2) Organization of the Executing Agency (implementation and operation/maintenance after completion)

(i) Implementation scheme

The Ministry of Information (MOI) was the executing agency involved in this project. The agency in charge of actual project implementation was the Directorate General of Radio, Television and Film (RTF) under the MOI, and no problems were observed during implementation. Three directorates are established below this: the Directorate of Radio, the Directorate of Television and the Directorate of Film Promotion.

Foreign consultants were employed for this project, and they reviewed the project scope and carried out detailed designs, preparation of tender documents, supervision at installation stage, training and other duties. Local consultants were also hired in addition to the foreign consultants for Phase II, and they were in charge of studio designs and coordination of construction.

The equipment was procured at the international competitive bid, and RTF had contracted with a Japanese company for both Phase I and Phase II. This company managed to reduce the period between production and delivery of the equipment by four months for Phase I and by six months for Phase II, and these efforts were highly evaluated by the Ministry of Information.

(ii) Operations and Maintenance

The Directorate of Radio (RRI) under RTF is in charge of operations and maintenance of the radio facilities, and the Directorate of Television (TVRI) under RTF is for television facilities. Indonesia's broadcasting sector has received assistance in the form of the Multimedia Training Center, which was built with Japanese grant aid and project-type technical cooperation, and the Radio and Television Maintenance Center, which was built with an ODA loan. Both RRI and TVRI use these facilities to train their staff.

At present all equipment is reported to be operating without problems.

(3) Project Effects and Impacts

(i) The independent production of good-quality programming has increased, including production at local stations, and the hours of broadcasting have been extended, demonstrating improved ability to produce programming. Transmitter improvements have broadened the reception area, increasing the population able to receive broadcasts. This increase is particularly notable for television broadcasts.

Color broadcasts now reach village areas, and the shift to color televisions is proceeding.

TV Transmitters and Transmitting Output in Indonesia

	1989	1990	1991	1992	1993	
No. of TV transmitters	254	273	299	314	331	
Transmitting output (KW)	339	342	343	345	246	
Area able to receive broadcasts (%)	33.9	34.1	40.6	41.1	41.3	
Population able to receive broadcasts (%)	64.7	66.1	76.9	78.9	79.2	

(Source) Annual Report of the Executing Agency

Radio Transmitters and Transmitting Output in Indonesia

		1989	1990	1991	1992	1993
No. of radio transmitters	Short-wave	141	142	131	135 (0)	126
	Medium-wave	62	64	83	114 (27)	129
	FM	120	120	137	150 (10)	159
	Sub-total	323	326	351	399 (37)	414
Transmitting output (KW)	Short-wave	2,106	2.107	2,115	2,235	1,809
	Medium-wave	1,106	1,108	1,130	1,212	1,219
	FM	16	16	48	71	79
	Sub-total	3,228	3,231	3,293	3,518	3,107
Area able to receive broadcasts (%)		67.0	80.0	80.0	81.0	81.0
Population able to receive broadcasts (%)		79.9	82.9	83.9	92.0	92.0

(Source) Annual Report of the Executing Agency

(Note) Figures in parentheses for FY 1992 are subject to Phase II of the project.

(ii) Technical transfer was achieved in both the hardware and program production, and the propagation of information was made more rapid and far-reaching.

3 Lessons Learned

Continual assistance combining ODA loans, grant aid and technical assistance when it is required, is important and effective in establishing an operations and maintenance system when extending an equipment and materials supply type project over several phases to the same executing agency. (This project was a good example of such assistance)

This project (and the projects for the broadcasting sector which were implemented before and after it) mainly comprised the supply (procurement and installation) of equipment, but it was followed up with continuing efforts, made with appropriate timing when necessary, to realize the full effects of the project through its operation and maintenance. These efforts comprised the construction of the Multimedia Training Center using Japanese grant aid and project-type technical cooperation, the Radio and Television Maintenance Center, which was built with an ODA loan, and the JICA's formulation of the Broadcasting Sector Fifth Five Year Plan. As a result, this project has enjoyed relatively good operation and maintenance.

In equipment supply projects where no operation and maintenance scheme has been established, measures should be considered to establish such a scheme where the necessity is high. In such cases, as seen in this project, it is important and effective to combine ODA loans, grant aid and technical assistance (dispatch of individual specialists, project-type technical cooperation etc.) to provide sustained support.



(i) Folk arts program, from an annual report of the executing agency



(ii) Women[©] talk show program, from an annual report of the executing agency



(iii) Music program, from an annual report of the executing agency