Country Name	The Project for the Improvement of Short Wave and Medium Wave Radio Broadcasting Stations
Nepal	The Project for the improvement of Short wave and medium wave Radio Broadcasting Stations

I. Project Outline						
Project Cost	E/N Grant Limit: 937 million yen Contract Amount: 915 million yen					
E/N Date	September, 2006					
Completion Date	February, 2008					
Implementing Agency	Radio Nepal (RNE)					
Related Studies	Basic Design Study: December, 2004 – June, 2005					
Contracted Agencies	Consultant NHK Integrated Technology Inc.					
	Contractor Hitachi Plant Technology, Ltd.					
	Supplier Mitsubishi Corporation					
Related Projects (if any)	 Japan's Cooperation The project for the improvement and development of medium wave radio broadcasting network (Grant Aid, 1981) The Project for Expansion and Development of the Medium Wave Radio Broadcasting Network I / II (Grant Aid, 1988) Project for Promoting Peace Building and Democratization through the Capacity Development of the Media Sector in Nepal (Technical Cooperation, 2010) 					
Background	The Tenth Five-year plan (2002–2007) had raised poverty reduction to the major objective. One of the strategies to achieve this was the effective provision of basic social services and improvement of fundamental infrastructures. The target set to extend the radio broadcast services to all citizens reflects the provision of equal access to information as a means to alleviate poverty. Radio Nepal (RNE), a public radio station established in 1951, was the only nationwide broadcasting service. The past Grant Aid assistance resulted in the expansion of RNE to cover 75% of the national population, and broadcasting time had increased subsequently. However, due to aging of equipment and inability to procure spare parts, it became difficult for RNE to sustain the population coverage. Furthermore, the Maoist attack on one of the stations (in Bardibas) in 2002 resulted in shrinking of RNE broadcasting the coverage of RNE. In such a circumstance, the Government of Nepal requested the Government of Japan to refurbish the transmitting stations.					
Project Objectives	Outcome To provide broadcasting services to all people in Nepal by renovating transmitting facilities of Short Wave (SW) and Medium Wave (MW) transmitting stations and by procuring and renewing transmitting equipment Outputs Japanese Side Khumaltar 100kW SW Transmitting Station: Procurement of spare vacuum tubes Bhainsepati 100kW MW Transmitting Station: Renewal of transmitter and partial renovation of facilities Pokhara 100kW MW Transmitting Station: Renewal of transmitter, partial renovation of facilities and renewal of studio equipment Kathmandu Studio Center: Renewal of studio equipment and others Bardibas 10kW MW Transmitting Station: Overall renovation of facilities and renewal of studio golid state type 10kW MW transmitter Procurement of spare vacuum tubes for Dharan 100kW MW Transmitting Station, Surkhet 100kW MW Transmitting Station, and Dipayal 10kW MW Transmitting Station Nepali Side Re-connect of the Radial Earths System and Backfilling of Security Trenches at Bardibas Transmitting Station Clearance, Transfer and Disposal of the Equipment to be renewed at Bardibas Transmitting Station Clearance, Transfer and Disposal of the Equipment and Facilities to be renewed at Bhainsepati Transmitting Station, Pokhara Transmitting Station and Kathmandu Studio Center					

II. Result of the Evaluation

Summary of the Evaluation

Due to aging of equipment and inability to procure spare parts, it became difficult for Radio Nepal (RNE) to sustain the population coverage of 75% they once had. Furthermore, the Maoist attack on one of the stations (in Bardibas) in 2002 resulted in shrinking of RNE broadcasting coverage to 48%. The shortage of vacuum tubes of SW transmitter also contributed in decreasing the coverage of RNE.

This project has largely achieved its objective. The population coverage area of RNE has increased to 85% covering a large area of Nepal, and daily broadcasting time has increased. After the project, the broadcasting hours of social

awareness raising programs have increased, and thereby the project has contributed to the economic activities and social well-being. As for sustainability, problems have been observed in terms of technical and financial aspects as well as the current status of operation and maintenance due to lack of training and manuals, decreasing financial resources, and unavailability of spare parts.

For relevance, the project has been highly relevant with Nepal's development policy, development needs as well as Japan's ODA policy at the time of both ex-ante and ex-post evaluation. For efficiency, both the project cost and the project period were within the plan.

In the light of above, this project is evaluated to be satisfactory.

1 Relevance

The project has been highly relevant with Nepal's development policy (Making information and communication service easily accessible to every citizen) as set in the Tenth Five-Year Plan (2002-2007) and the First and Second Three-Year Interim Plan (2007–2009, 2010-2013) and development needs (Improvement of SW and MW radio broadcasting stations) at the time of both ex-ante and ex-post evaluation. However, the emphasis on the development policy as well as the needs for medium are gradually shifting to FM stations nowadays, since MW network cannot cover the whole country and FM is becoming more popular due to its quality and cheep radio receiver. In response to this situation, RNE is going to launch two high power FM relay stations provided by "Project for Promoting Peace Building and Democratization through the Capacity Development of the Media Sector in Nepal" to strength its coverage area very soon. The project has been highly relevant with Japan's ODA policy at the time of ex-ante evaluation.

Therefore, relevance of this project is high.

2 Effectiveness/Impact

The project has largely achieved its objectives. Population coverage area of MW broadcasting network has increased to 85%, and the citizens that are not covered by MW broadcasting has been covered by SW broadcasting, realizing the provision of broadcasting services to all people in Nepal. Daily broadcasting time has also increased, while broadcast interruption has decreased. Based on the interview with listeners and RNE officials, it seems to be found that the number of listeners have increased in remote areas. Many people in urban areas tend to listen to FM broadcasting more; however, they also listen to certain programs in MW.

As to impact, according to RNE, the project also has somewhat contributed to economic activities and social well-being, since the broadcasting hours and the number of social awareness raising programs (including distant learning programs) in the area of agricultural production, health and hygiene, education, and public welfare have increased.



Technical Studio, Radio Nepal Pokhara Station

Therefore the effectiveness and impact of this project is high.

Quantitative Effects

Quantitative Encets							
Indicator(unit)	Baseline Value	Target Value	Actual Value	Actual Value (2012)			
	(2004)	(2007)	(2008)*1	(at ex-post evaluation)			
Indicator 1:							
The population coverage area of the national	48%	75%	80%*2	85% *3			
MW broadcasting network of RNE							
Indicator 2:	16hours/day	18hours/day	18 hours/day	18 hours/day			
The daily broadcasting time				To Hours/uay			

(Source: Radio Nepal unless specified otherwise)

*1 Actual completion is February, 2008

*2 Source: BBC Survey in 2008

*3 Source: A report submitted to National Planning Commission

3 Efficiency

The outputs of the project were produced as planned, and both the project cost and project period were within the plan (ratio against the plan: 99% and 98%, respectively). Therefore, efficiency of this project is high.

4 Sustainability

The facilities and equipment provided by the project are maintained by RNE, the implementing agency. Institutionally, RNE has enough number of staff for the continuity of the project effect. However, problems were observed in technical and financial aspects as well as the current status of operation and maintenance.

As to technical aspect, whenever problems which cannot be fixed by each station occur, RNE head office responds well. On the other hand, each station has problems of lack of proper training and manuals. Although training and manuals were provided to RNE through the project, it may not have been disseminated properly within RNE.

Although detailed financial information was not accessible, RNE also has a problem in the financial aspect due to reduction of budget from the government and reduction of revenue generation, according to RNE.



CD player lens (not working)

Regarding the current status of operation and maintenance, although the most of the facilities and equipment at each site are maintained and operated well, problems are observed. A 100 kW MW transmitter at Bhainsepati is temporarily not functioning due to the breakdown of analogue digital converter. As a local company does not produce it anymore, RNE has opened a letter of credit and it will be replaced with new equipment before January, 2013¹. Thus, RNE has tried hard to maintain the facilities and equipment; however, unavailability of spare parts due to the lack of budget and inappropriate logistical arrangement is always a concern.



Damaged discharge switch

Therefore, sustainability of this project effect is low.

III. Recommendations & Lessons Learned

Recommendations for Implementing agency

- 1. Training and proper manuals were provided to RNE, but it may not have been disseminated properly within RNE. Proper manuals for maintenance should be provided to each station. RNE should carry out proper training so that technical know-how can be transferred within RNE.
- 2. RNE should try to procure and distribute enough spare parts of major units to each station on time even though they face serious financial problem.
- 3. RNE should take immediate action to purchase any damaged equipment so that transmission will resume quickly.

Lessons learned for JICA

- 1. It took a while to replace an analogue digital converter of 100kW MW transmitter at Bhainsepati, since it is not produced locally anymore. It should be analyzed that whether the spare parts will be available in future or not.
- 2. One should check whether the existing technology will remain as main medium of transmission or not as much as possible. Also, whether the system is compatible in transforming in the new coming system or not (relating MW and FM stations) should be examined. Otherwise the implementing agency may not meet the demand of people.

¹ As to other facilities and equipment, Khumaltar SW transmitting station where the project procured the spare vacuum tubes only, is in almost closed state due to the end of life time of the station equipment (At the time of ex-ante evaluation, the procurement of the spare vacuum tubes were expected to prolong the life time of the station function for 3-5 years).