

Philippines

Ex-post Monitoring for ODA Loan Project Regional Telecommunications Development Project in Region III

Evaluator: Atsushi Hashimoto (Maenam Advisory)

Field Survey: May 2008

1. Outline of the Project



Project location map (Regions I and II)



Claveria Exchange Station (Region II)

1.1 Objectives

The objective of this project was to improve telecommunication situations by constructing electric facilities in northern Luzon area (Regions I and II) and thereby contributing to the development of local society and economy.

1.2 Outline of Loan Agreement

Loan Amount / Loan Disbursed Amount	3,803 million yen / 3,557 million yen
Exchange of Notes/Loan Agreement	August 1993 / December 2000
Ex-post evaluation	Fiscal 2002
Executing Agency	Department of Transportation and Communications (DOTC)
Main Contract	Sumitomo Corporation (Japan)
Consultant Services	Japan Telecommunication Consultant (Japan)

1.3 Background and Reasons for Conducting Ex-post Monitoring Study

This Project was subjected to a monitoring study because of the following reasons.

[Effectiveness] Because this Project was pointed out to have low effectiveness, in particular the capacity utilization factor (telephone circuit utilization factor) at the time of the ex-post evaluation, it was necessary to monitor the improvement of the utilization factor. At the time of the ex-post evaluation, 4 reasons responsible for the low capacity utilization factor were

identified, including (i) the coexistence of 2 service providers in a telephone network, which resulted in relatively high charge for the calls using TELOF (Telecommunication Office, a branch of DOTC) and an insufficient increase in new subscriptions; (ii) the lack of competition in comparison with the other service provider, such as PLDT; (iii) the inability to procure materials and equipment needed for the installation of subscriber lines, resulting in the inability to reduce the backlog; (iv) the insufficient growth of population and economic activities in some parts of the project area and the low income of the people in the project area, resulting in the slow increase in the number of subscribers due to the heavy burden on users.

[Sustainability] The operation and maintenance of facilities in this Project is conducted by TEOLF, a branch of DOTC, instead of DIGITEL (Digital telecommunications Phils., Inc., a private electric telecommunication service provider) in the original plan. At the time of the ex-post evaluation, TELOF was having organizational and technical problems, as operation gradually transferred from TELOF to DIGITEL and other private operators was taking place and cutbacks in personnel and facilities were causing a disparity between TELOF and private operators. There also were financial problems, such as the inability to improve facilities because of the drop in the capacity utilization factor and the lack of assistance from the Government, and the problems related to the execution of the contract with DIGITEL.

[Follow up of the recommendations] JBIC was recommended on the need to conduct the monitoring of the implementation system and to follow the improvement of the capacity utilization factor. The implementing organization was recommended to consider operation using private contractors to improve business performance. It was necessary to conduct monitoring regarding these recommendations.

2. Monitoring Results

2.1 Effectiveness

This Project was effective in that it realized the provision of telecommunication services in the areas (Regions I and II) where only limited telecommunication means had been available. However, partly as a result of further spread of cellular phone services, the capacity utilization factor remains low, and the manifestation of effectiveness and impacts is limited.

(1) Number of Telephone Lines

The telephone density at the time of monitoring is 3.79/100 persons in Region I and 1.42/100 persons in Region II (Table 1). The national average is 8.54/100 persons (based on the number of lines, source: National Telecommunication Commission). In a comparison between the time of ex-post evaluation and the time of monitoring, the telephone density showed no substantial change, with a slight decrease in Region I and a slight increase in Region II. In the Philippines, the total population with cellular phones was 15,383 thousand persons and in 2007, 51,795

thousand persons, which means that the number tripled in five years. As a national trend, with the spread of cellular phone services, fixed telephone services are not increasing in the number of lines. The situation in this project area is not an exception. The cellular phone service is convenient in general. However, according to DOTC, particularly in the context of Philippines, the introduction of prepaid services and the SMS (Short Message Service) feature which enables both domestic and international communication at a fraction of the cost of a call has made the cellular phone even more convenient.

Table 1. Number of Telephone Lines / Number of Subscribers

	Number of Telephone Lines (Total)			
	(Lines/100 persons)		Installed Capacity (Lines)	
	Ex-post	Monitoring	Ex-post	Monitoring
Region I	4.59	3.79	2,840	2,040
Region II	1.30	1.42	3,497	3,216
Total	-	-	6,337	5,256

Source: Material from TELOF.

Ex-post refers to the data in 2001, monitoring in 2006.

(2) Capacity Utilization Factor

At the time of monitoring as of the end of December 2007, while the telephone installed capacity in Regions I and II combined was 5,256 lines (Table 1), the number of subscribers was 2,155 lines, and the utilization factor had decreased to 42.1% (from 46.9% at the time of ex-post evaluation). Comparison in each region also showed decreases to 46.8% (from 53.1% at the time of ex-post evaluation) in Region I and 37.3% (from 41.9%) in Region II (Table 2). The utilization factor exceeded 70% in 8 of the 36 towns in the project area, and it was below 50% in 19 towns. Out of the 19 towns, facilities in 5 towns were closed because of the drop in the utilization factor.

While local calls (within the coverage of the same exchange station) are offered with inexpensive fixed charge (280 pesos/month for home use, 420 pesos/month for business use), toll calls are handled at DIGITEL exchange stations and are charged, and the facility utilization factor does not improve because of the lack of convenience in comparison with cellular phones.

At the time of evaluation, 4 reasons responsible for the low capacity utilization factor were identified, including (i) the coexistence of 2 service providers in a telephone network, which resulted in relatively high charge for the calls using TELOF (Telecommunication Office, a branch of DOTC) and an insufficient increase in new subscriptions; (ii) low competitiveness in comparison with the other service provider (PLDT); (iii) the inability to procure materials and equipment needed for the installation of subscriber lines, resulting in the inability to reduce the backlog; (iv) the insufficient growth of population and economic activities in some parts of the project area and the low income of the people in the project area, resulting in the slow increase in the number of subscribers due to the heavy burden on users. The situation mentioned in (i) has remained the same. While local calls are within the service area of TELOF and are inexpensive, toll calls are offered as the service of DIGITEL. With respect to (ii), other service

providers (PLDT, DIGITEL, etc.) are not operating in local telephone networks at the present, and therefore competition is not the cause of the insufficient increase in subscribers. Although TELOF needs to make efforts to increase subscribers, TELOF does not have a plan to improve services, such as the expansion of networks. The most significant competitor for the TELOF services is not another telephone service provider but cellular phones, which is much convenient to use and without extra charge for calls outside the network. According to DOTC, as a national trend, the widespread of cellular phones improved the access to communication particularly in areas where only limited telecommunication means had been available. However, in areas where the cellular phones and fixed telephones are competing, the utilization rate of fixed telephones remains low. The private operators decided to market their landlines as internet access facilities by providing DSL (Digital Subscriber Line) services. In case of TELEOF, some portions of the facilities were not designed to support broadband service. While provision of DSL service allowed more utilization of land lines, the availability of e-mail and VOIP (Voice over Internet Protocol) services further lowered the competitiveness of the land lines thereby lowering its revenue. With regard to (iii), the backlog has been eliminated, because there are not many people applying for subscription at the time of monitoring.

Table 2. Number of Lines in Use, Backlog, and Line Utilization Factor for This Project

	Number of Lines		Backlog (Lines)		Utilization Factor (%)	
	Ex-post	Monitoring	Ex-post	Monitoring	Ex-post	Monitoring
Region I	1,507	955	499	0	53.1	46.81
Region II	1,464	1,200	570	0	41.9	37.31
Total	2,971	2,155	1,069	0	46.9	42.06

Source: Material from TELOF.

Ex-post refers to the data at the time of study in 2002, monitoring at the end of December 2007.

(3) Quality of Telephone Services

In the survey, we selected a town with a high line utilization factor (Claveria) and a town with a low line utilization factor (Alcala) in Region II, and asked questions regarding the quality of telephone services (failure and poor call quality), main call destinations, the merits of using the telephone, etc. (152 samples in total, including 60 samples of TELOF users). After receiving the list of TELOF line users, we visited users individually and asked them to answer questions. When asked about the fixed telephone services of TELOF, 71% of users answered that they are having no problems or almost no problems (2-3 times a year) with respect to poor call quality (bad connection, dropped calls, noise), and 98% answered that they are having no problems or almost no problems (2-3 times a year) with respect to the inability to make calls. There seems to be no significant problems.

2.2 Impact

(1) Contribution to the Improvement of the People's Living Environment

The above hearing survey also investigated the impacts of telephone use. As the impacts of the use of fixed telephones, 60% of users named the increase in business opportunities, 28%

affirmed the facilitation of communication with family members and friends, and 33% mentioned emergency calls (the police, fire department, etc.). Among all telephone users including cellular phone users, 43% mentioned the facilitation of communication with family members and friends and 40% recognized the benefit in business. While the users in this Project appreciate the utility value of telephones in business, this may reflect the fact that many users are located in the central parts of towns, as described below.

The connection of telephone lines is possible only to the households along the streets passing through the central parts of towns, and the number of connected lines is small. Although the contribution to the improved access to administrative and social services is recognized, the contribution to the development of communities should be regarded as being limited. The economy of the Philippines is relatively doing well, recording the economic growth rate of about 5% annually (5.4% in 2005/06 and 4.9% in 2004/05). The investment from the U.S., Korea, and other foreign countries, as well as the money sent from overseas workers, is supporting a raise in consumption. However, we cannot draw a conclusion from this monitoring regarding whether or not this Project had an impact on this economic growth.

2.3 Sustainability

Although maintenance is performed to the extent needed for ensuring the usability of telephones, there is a possibility that a shortage of budget may lead to the decline in the quality of maintenance in the future. Some facilities and machines have already become outdated and superannuated. With the spread of cellular phones, the demand for fixed telephone services has become low and facilities have lost their roles.

(1) Technical Capacity for Operation and Maintenance

The facilities introduced in this Project are managed by TELOF. In view of the current situation of operation and maintenance of facilities and the opinions of users, the organization has the technical skill level needed for operation and maintenance. According to the TELOF local office, although there is a shortage of workforce resulting from cost and personnel cutbacks reflecting the Government's policy to reduce expenditure, the available workforce is sufficient for maintaining the present state of facilities. Because the facilities, machines, and equipment maintained by TELOF are based on widely used technologies, there is no problem in performing maintenance with the present technical skill level of TELOF. Besides, trunk exchange systems are under the management of DIGITEL.

(2) Organization for Operation and Maintenance

The number of TELOF personnel in Region II is 218 as of the end of 2007. This is a decrease of about 100 persons from the time of evaluation. Each exchange station is maintained by 3 to 4 persons, including 1 engineer, 1 or 2 operators, and 1 maintenance worker. In relation to this Project, the exchange and charging of local calls are conducted by TELOF, and the exchange and charging of toll calls are conducted by DIGITEL. Bill collection is also conducted by the 2

organizations separately.

Although there has been much discussion within DOTC regarding the selling-off of facilities to DIGITEL, DIGITEL and other telecommunication companies seem unwilling to purchase the TELOF business, considering it unprofitable. The selling-off of facilities would continue to be a problem for the future.

(3) Financial Status

In the balance of the income and expenditure in Region II as of the end of 2007, the income from telephone services was 3.4 million pesos (approx. 8.84 million yen; 2.6 yen/peso (May 2008)), while the maintenance cost (excluding personnel cost) was 4.2 million pesos (approx. 10.92 million yen)(0.8 million pesos (approx. 2.08million yen) deficit). As the wages of personnel add to the cost, the business is in a state of permanent excess of expenditure. TELOF is a government organization both at the time of evaluation and at the time of monitoring, and all expenditure is covered by the government budget.

(4) Maintenance Condition

The function of facilities is maintained to an extent that is sufficient for the provision of telecommunication services. Monthly patrolling and repair works responding to failures are conducted. However, used for nearly 10 years after completion, facilities have become outdated and superannuated. At the time of monitoring, there is no plan for the renewal of facilities.

The TELOF services are limited to the provision of fixed telephone services for local calls at fixed charge, and lines can reach only to limited parts of each local area. Because of profitability considerations, there is no plan to expand networks (to elongate telephone lines so that fixed telephones may be available to households that are located far from an exchange station), and the present exchange facilities are not able to provide broad-band Internet communications. The range of services that can be provided with the present system is not satisfactory.

In the Philippines, while cellular phone service has proved to be more cost effective in comparison to the landlines, as many of cellular phone operators are using the landline infrastructures to provide their services, it would be fair to say that without the facilities of the existing landline, the cellular phone services would not have been so successful in its distribution.

3. Conclusions, Lessons Learned, and Recommendation

3.1 Conclusions

The Project was meaningful in that it constructed fixed telephone networks and enhanced communication and business opportunities in rural areas where private operators were reluctant to provide services. On the other hand, in the present, the rapid spread of cellular phones to homes and individuals has greatly reduced the meaning of investing time and budgetary costs in the maintenance of fixed telephone networks.

3.2 Recommendations and Issues Requiring Follow-up

The Government of the Philippines should consider upgrading the facilities to serve for other

network services such as broadband or selling-off of facilities to the private sector. (For example, microwave transmission towers have been constructed in strategic geographical locations, and private telecommunication providers may benefit from the use of these towers.). In case it is difficult to do neither, it is important for the government to reconsider the needs and significance of the facilities in terms of policies to determine whether the project should be continued.

3.3 Lessons Learned (for each implementing organization)

[To the Government of the Philippines and JICA] It has been suggested from the planning stage that the Project would be difficult to be conducted in the private sector due to the unprofitable nature of the Project, and it has become reality at the present. A project like this should be subjected to extensive discussion regarding the ways to ensure sustainability (use of private fund, continuation of governmental expenditure, JBIC recurrent budget assistance, etc.). It is also important to discuss measures for the project to accommodate the changes in the environment such as the widespread of the cellular phones.

(End)