



Thailand

3 Telephone Network Expansion Projects and Local Cable Network Projects (total: six projects)

A
B
C
D

This project was designed to respond to the rapid increase in telephone service demand by expanding and modernizing the transmission network and the local cables mainly in the Bangkok metropolitan area, and thereby contribute to the development of information technology and the smoother transmission of information.

Loan Amount/Disbursed Amount: 75,383 million yen/69,672 million yen

Loan Agreement: September 1987-September 1991

Terms and Conditions: Interest rate, 2.7%-3.0%; Repayment period, 25-30 years (grace period, 7-10 years); General untied

Final Disbursement Date: August 1989-January 1997

External Evaluator: Mitsue Mishima, (OPMAC, Ltd.)

Field Survey: June 2003



Evaluation Result

In this project, the transmission network and the local cables were laid inside and outside the Bangkok metropolitan area almost as planned. The project period and project costs were also by and large as planned. Through this project, subscriber lines were increased by approximately 2.4 million (cf. the population of Nagoya, Japan is approx. 2.2 million). Whereas the telephone saturation rate in 1988 was 12.6% in the metropolitan area and 0.9% outside the metropolitan area, in 1998 it had improved to 54.2% in the metropolitan area and 5.8% outside the metropolitan area. Also, due to increased demand, the subscriber waiting list* in the metropolitan area rose temporarily from 321,000 in 1988 to 1,145,000 in 1992 but began to decline in 1994, reaching 44,000 in 1998. Meanwhile, outside the metropolitan area as well, the subscriber waiting list rose from 56,000 in 1988 to 648,000 in 1994 but declined to 512,000 in 1998. As a result of the transmission networks and subscriber cables that were installed even in regional areas through this project and the telephone network expansion project implemented in regional areas by the Thai Government, in 2000 no longer were there any villages in Thailand without telephone service. Moreover, in the beneficiary survey, approximately 80% of respondents stated that "the telephones installed by this project have had a positive impact." In

particular, there were many responses from companies stating that "customer service improved" and "company income rose," and from individuals stating that they "communicate more with family members living in distant locations." The Telephone Organization of Thailand (TOT), which is the project's executing agency, is scheduled for privatization in 2006. Currently there are no problems in technical capacity or the operation and maintenance system, and the financial status is satisfactory.

*The number of customers that applied the telephone service yet being waited.

Third-Party Evaluator's Opinion

The optical fiber network and the transmission system in the provincial area were needed to meet the rapid increase in call traffic and are also instrumental in providing a modern "access network" necessary to allow telephone users to connect to the Internet. The projects completed at lower costs than projected due to economy of scale of the projects and a more transparent process of competitive bidding.

Third-Party Evaluator: Mr. Sumeth Vongpanitlerd

Obtained a doctorate in Electrical Engineering from University of Newcastle. Presently holds the post of Research Director (telecommunications), Science and Technology Development Program, Thailand Development Research Institute. Specializes in telecommunications.

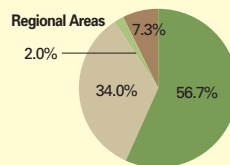
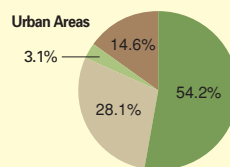
The beneficiary survey

As part of the evaluation, beneficiary study was implemented in the Bangkok metropolitan area and in two provinces (Chonburi Province, which enjoyed extraordinary economic growth around the time of the project, and Trat Province, an agricultural region). After the completion of the project, many beneficiaries responded that audio quality "improved," and that malfunctions (being cut off during a conversation) "decreased." When all beneficiaries were asked about their level of satisfaction with TOT service, over 80% replied that they were satisfied.



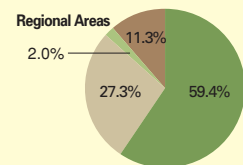
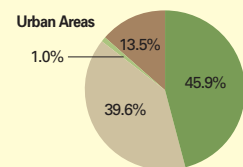
Cables in Trat Province (the thick central cable was installed by this project)

Opinions on Audio Quality



Improved No Change Worsened Don't Know

Opinions on Malfunctions



Fewer/No Cut-offs No Change More Cut-offs Don't Know