Grameen Telecom's Village Phone Programme A Multimedia Case Study

GrameenPhone is a commercial operation providing cellular services in both urban and rural areas of Bangladesh, with approximately 40,000 customers. A pilot programme of GrameenPhone, through the Grameen Bank and a wholly owned subsidiary called Grameen Telecom, is enabling women members of the Grameen Bank's revolving credit system to retail cellular phone services in rural areas.

This pilot project currently involves 950 village phones accessible to more than 65,000 people. The women access microcredit to acquire digital Global System for Mobile Communications (GSM) cellular phones and subsequently resell phone calls and phone services within their villages. Grameen Telecom staff have announced that when its programme is complete, 40,000 such operators will be employed for a combined net income of US\$24 million per annum.

In rural areas where isolation and poor infrastructure services are often the norm, telecommunications can play an extremely important role in enhancing rural social and economic development. Grameen Telecom's Village Phone programme provides an excellent opportunity to learn more about how private sector development (PSD) in the telecom sector can make a significant con-



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tribution to poverty reduction. The Village Phone programme also provides an opportunity to review innovative strategies for incorporating targeted, microlevel PSD in the telecom sector within project designs. Documentation of the impacts of Grameen Telecom's Village Phone programme and its innovative approach to poverty reduction provide valuable materials for learning and case study that can contribute to better strategies for poverty reduction.

Impacts on Poverty Reduction

The Village Phone programme yields significant positive social and economic impacts, including relatively large consumer surplus and immeasurable quality-of-life benefits. The consumer surplus for a single phone call from a village to Dhaka, a call that replaces a physical trip to the city, ranges from 2.64 percent to 9.8 percent of mean monthly household income. The cost of a trip to the city ranges

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from two to eight times the cost of a single phone call, meaning real savings for poor rural people of between 132 to 490 Taka (US\$2.70 to \$10) for individual calls.

The main reasons reported by Grameen Bank for using the telephone are related to family matters, with discussions of remittances (42 percent) and social calls to relatives and friends (44 percent) accounting for 86 percent of all calls. Bangladesh is a labourexporting country with many rural villagers (predominantly men) working in the Gulf States. The village phone acts as a powerful instrument to reduce the risk involved in remittance transfers, and to assist villagers in obtaining accurate information about foreign currency exchange rates. Transferring cash from a Gulf State to a rural village in Bangladesh is fraught with risks; remittances are thus a key factor in demand for telephone use.

Reducing the risks involved in remittance transfers from overseas workers has important microimplications for rural households and villages. At the micro level, remittances tend to be used for daily household tances tend to be used for daily household expenses such as food, clothing and health care and they can make up a significant portion of household income. Remittance funds are also spent on capital items including building or improving housing, buying cattle or land, and buying consumer goods such as portable tape/CD players and televisions. Once subsistence needs are met, remittances tend to be used for "productive investments," or for savings.

Social calls to family and friends frequently involve transfer of information about market prices, market trends and currency exchange rates, making the village phone an important tool for enabling household enterprises to take advaritage of market information to increase profits and reduce production expenses.

The income that Village Phone operators derive from their undertaking is about 24 percent of the household income on average—and in some cases it was as high as 40 percent—and Village Phone operators become socially and economically empowered.

Business, Technical and Regulation Aspects

Rural telephone service in Bangladesh is very profitable and, due to the existing regulatory environment, telecom operators are unable to meet the demand. Telephones in the Grameen programme bring in three times as much revenue as urban cellular phones (an average of US\$100/month versus US\$30/ month). One competing telecom operator reports that revenue from 12,000 urban cellular lines was equal to revenue from only 1,500 rural public call office (PCO) lines.

Partly because of a regulatory environment that is not conducive to advancing rural telecommunication infrastructure, the Village Phone programme appears to be the best available technical and organisational solution to rural telecommunication access. GSM cell phone technology is a high-cost solution for universal access in rural areas. Limited cellular coverage of rural areas may only be viable under the current set of cumbersome regulatory practices—once the regulatory environment improves, cellular phone technology may not be the most viable and efficient means of providing universal service.

GSM cell phone technology also places much higher tariffs on rural phone users than would be the case for wireless local loop (WLL) technologies. Without regulatory improvements, cellular technology is a practical solution. As well, cellular phone technology is a currently viable option for inexpensive E-mail/Internet/data connectivity. WLL and other options can provide much better bandwidth and cost of service.

Gender analysis

The Village Phone programme raises, perhaps for the first time, the important issue of gender when considering goals of universal telecommunication access.

The concept of "universal access" is not gender-neutral. In the case of Bangladesh, the gender of the Village Phone operator and the physical placement of the phone within a gendered village context can either inhibit or improve women's access to phones. A woman's home provides a space that is acceptable for other village women to access. From the standpoint of revenue generation and profitability, it is important to ensure that the phone is fully accessible to the entire village population: if 50 percent of the user base faces obstacles to phone use, then a significant revenue stream is lost.

Key Replicable Elements

The Grameen Telecom experience in business planning leads us to suggest one potential solution for attracting telecom operators to serve rural areas: target unserved and underserved regions and provide support for acquisition of quality market-appraisal knowledge and market data through market research in the field. Market research will help to prove the business case, attract investment capital, and reduce the effort required by investors and operators.

The experience points to a potential solution for telecom operators facing the significant challenge of managing the last mile of rural telecom operations: link existing and successful microcredit organisations with telecom operators (fixed line and/or wireless) to expand public call office coverage in rural areas. Small loans to rural entrepreneurs (perhaps targeted to women and youth) can enable entrepreneurs to establish PCOs and provide a range of services including telephone, fax, E-mail and even web, photocopying and computer word-processing services. A franchise programme of this sort would also establish consistency of service across a region that would, in turn, support local social and economic development.

This article is a reprint of the executive summary of the case study, which can be located at the Website: <http://www.telecommons. com/villagephone/execsum.html>. For more information and other requests, visit the Website or send communications to: Don Richardson, TeleCommons Development Group, 512 Woolwich St., Suite 200, Guelph, Ontario, Canada N1H 3X7; Tel: (1-519) 821-5787 x 241; Fax: (1-519) 821-4868; E-mail: <don@tdg.ca>.