

## GRAMEEN TELECOM: THE VILLAGE PHONE PROGRAM\*

### I. Abstract

The Village Phone (VP) program is an initiative of the Grameen Bank, a well-known nongovernmental organization (NGO) providing economic assistance to poor villagers in rural Bangladesh. Grameen Bank provides small loans, without collateral, to the villagers—primarily women—for their various income-generating activities.

Grameen Telecom was created as a telecommunications network that would significantly advance social and economic development in rural Bangladesh by enabling villagers to access the latest business and market information. Villagers, mostly women who are members of the Grameen Bank's microcredit program, are provided with loans to purchase cell phones. These "operators" then provide telephone service (making and receiving phone calls) to the villagers, thereby earning enough revenue to repay the loan taken from the Grameen Bank. Grameen Telecom buys airtime in bulk from a sister company—Grameen Phone—so that it can charge the operator a discounted rate on the airtime used. It is remarkable that, in 1997, when the cell phone was still a technological novelty the world over, Grameen Telecom successfully initiated the use of this tool for empowering the rural poor.

The VP program is designed to maximize gains for villagers in several ways. First, access to a cell phone at low cost has empowered villagers significantly in their work domain. They now can make phone calls to obtain information vital for their businesses, and can seek new work opportunities directly, thereby reducing their dependence on middlemen. Second, the program has led to the empowerment of the phone operators, primarily poor rural women, who now command respect in the village community by virtue of their new-found economic independence and the fact that villagers depend on them to obtain a valuable service.

### II. Background

The Grameen Bank (GB) is an NGO that has been helping poor villagers in Bangladesh by providing loans to them under a *microcredit program* for rural income-generating activities, such as raising livestock or cultivating vegetables. The loans are also aimed at fostering enterprises and small-scale businesses. The Village Phone program is an initiative of GB whereby members of its microcredit program are provided with cellular phones. The VP program provides the villagers with access to telephones for a price, and the phone borrowers/owners (GB microcredit program members) with a new source of income.

The Grameen Bank created a totally independent, not-for-profit company called Grameen Telecom, which, in turn, created a for-profit company—Grameen Phone—which launched services in urban Dhaka on March 26, 1997. In keeping with the antipoverty

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\* This case study was prepared by a team comprising Prof. Subhash Bhatnagar and Ankita Dewan at the Indian Institute of Management (Ahmedabad) and Magüi Moreno Torres and Parameeta Kanungo at the World Bank (Washington DC).

mission of the Grameen family, Grameen Phone was created to fund rural phone programs in Bangladesh with the profits that it earns.

Villagers, mostly women, who are members of the Grameen Bank's microcredit program, are provided with loans to purchase the cell phones. To become operators, they are required to have been GB members for at least two years, possess a record of timely repayment, have a house that is located centrally, have other sources of income (a grocery store, for example), and have access to electricity (to charge the phone). Selected women are provided with a loan at a 22 percent interest rate, repayable in three years, to purchase a Grameen cell phone at an estimated cost of US\$420.

The operators then provide telephone services (making and receiving phone calls) to the villagers at a market price. The operators are responsible for maintaining the telephone set and remitting payments to Grameen Bank. Grameen Telecom purchases airtime from Grameen Phone in bulk, saving on airtime costs, which are passed on to the VP operator.

The program started in 1997 and set a target of installing 40,000 Village Phones by December 2004. It has made rapid progress, and, by October 2002, the number of Village Phones had grown to 20,000 in operation in 18,581 villages<sup>1</sup>. Each of these phones allows access to 1,500 people on average. Nearly 7 million people are covered in 40 districts.

The average monthly revenue of a VP subscriber is about US\$140. On average, each of the VP operators earns a profit of US\$2 per day after meeting all costs, resulting in earnings of more than US\$700 per year—more than double the annual per capita income.

The Village Phone Program received the GSM [Global System Mobile] in the Community Award by the GSM Association in February 2000 and the Commonwealth Association for Public Administration and Management Bronze Award for Community Service in 1998.

### **III. Impact/Results**

#### ***Saving Time and Money***

The Village Phone Program has brought telephones within the reach of rural Bangladeshis. The telephone is being used to transact business (50 percent of all calls in some surveys), which would otherwise have required trips to distant villages, costing 2–8 times the expense of a telephone call.

#### ***Ensuring Safe Transmission of Funds***

Since a high proportion of the village folk work away from home, the telephone is being used as an instrument to ensure that all of the money remitted by them reaches the

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<sup>1</sup> "Current Status of Information and Communication Technology," October 2002. URL: <<http://www.sdnbd.org/sdi/issues/IT-computer/article/ICTBANGLADESH-banglait.pdf>>.

intended recipients in villages. Instances of theft, reduction in the original amount, and long delays in delivering the cash are common when money is sent by friends or relatives traveling back to the village or a nearby place. In addition, when using the VP, the villagers who receive remittances can now obtain accurate details of foreign currency rates, thus minimizing the risks of underpayment or nonpayment when money is earned abroad.

### ***Enabling Social Contact***

Social calls account for 44 percent of the total number of calls. Many households in rural Bangladesh have at least one member living abroad. Telephone conversations between family members provide a chance to stay in touch and reduce the feeling of isolation on both sides.

More broadly, Village Phones have delivered multidimensional benefits for the rural poor users, who make nearly 25 percent of all calls through VPs. Individual users have benefited in terms of better prices, lower cost of travel, more employment opportunities, and better access to health facilities (10 percent of calls are made for a health-related purpose). Communities have benefited through improved law and order and quicker response in coping with calamities. The VP operators have benefited through increased income, and in many ways have improved their status in their families and in the larger society.

## **IV. Key Elements of Empowerment**

### ***Information***

The telephone enables villagers to access information related to their occupations within a short time at a low cost, thus empowering them in relation to middlemen.

#### **Box 1: Information Gets Better Prices for Farmers**

Aminul Hoque lives 40 kilometers from Dhaka and has a small poultry farm. Hoque says the phone helps him in three ways:

- Instead of going to Dhaka himself, at a cost in time and money, to buy chicken feed and other supplies (which often are not available), he phones orders in advance.
- Hoque uses the phone to lower his business risk by calling experts for business advice and by consulting a veterinarian when his chickens become sick. As a result, he has lowered the incidence of mortality among his poultry stock.
- He now calls buyers to obtain market prices, which means that he gets a better price from the middlemen, increasing his return on sales.

Similarly, Halima Khatun, a poor, illiterate woman who owns 15 hens and sells their eggs for a living, uses the Village Phone to get a better price. She recounted, “Last week, the middleman came ... and desired to pay me 12 taka per hali [hali means four units].... Keeping him waiting, I rushed to check the prices through Village Phone. The price was 14 taka per hali of eggs in

nearby markets. I came back and refused to sell to him at the lower price.... After [some] brief haggling, we agreed to buy and sell at 13 taka per hali.”

An operator of a cell phone is required to relay messages to the concerned persons in the village; handle information of different types, assimilating it in the process, before relaying it to the concerned person; and also handle finances. These activities increase an operator’s familiarity with new areas and people. The fact that operators are privy to the conversations that take place over the phone has led to women gaining functional knowledge in areas such as currency markets, health problems, and so forth, as these are typical topics of phone conversation. All these enhance a woman operator’s self-confidence and efficacy when dealing with unexpected situations. Villagers refer to her as “telephone wali” or “owner of a telephone,” an indication that her status has been enhanced.

### ***Inclusion/Participation***

The VP program has enabled rural women—in this case, VP phone operators—to directly participate in generating income for the household in a way that is less physically demanding and carries less risk than farming or animal husbandry. This has encouraged more women to take up VP phone operation as a profession. Being revenue earners for the home elevates their status within their households and enables them to participate in decisionmaking at home. Furthermore, they can use the help of other family members in procuring the services, thus increasing the overall welfare of households.

### **Box 2: A Member of Grameen Bank Consolidates Her Earning Power at Home**

A rural woman was able to consolidate her position in the family with the help of the cell phone. Her phone store is located in a small concrete stall in a busy market in a village one hour away from Dhaka. There are seven operators in this market, including three with Grameen phones. She reports, “I usually earn 300 to 600 taka (US\$6–10) per day. My husband sells clothes and spends his extra time helping me. We have one daughter and one son in school. I work from 7:00 a.m. to 9:00 p.m. and leave at 1:00 p.m. to go home and make lunch for my children, and my husband takes over the phone. My mother-in-law is at my house and helps with the housework.” She was able to pay back the loan in two years. She had been a member of Grameen Bank for seven years, and her first loans from the Bank were for rice husking. She learned about the phone from her husband, who saw a Bangla-language advertisement in the local paper about it. She went to Grameen Bank and asked about it.

### ***Local Organizational Capacity***

One of the reasons for the success of Grameen telecom is the local organizational capacity that the Grameen Bank had built through its microfinance program. Grameen Telecom had access to the history of repayments and other details of Grameen bank borrowers, which was used to select women operators from among the Grameen Bank borrowers and thus to ensure the viability of each mobile phone operator. No evidence has been reported of the development of local organizational capacity and empowerment of the community as a result of the launch of mobile telephones.

## V. Issues and Lessons

### *Challenges*

#### *1. Affordability of rural telecommunication services*

Telecommunication services are out of reach for most of the rural poor in Bangladesh. These services continue to remain expensive because of an inadequate number of consumers, while potential consumers cannot afford the current prices. The annual revenue required per land line for the provider to be profitable in low-income countries—about US\$300 to US\$400, assuming that the capital cost is \$1,000 per line—is more than the average annual per capita GDP in these countries. The problem of poverty is exacerbated by a lack of public policies to support the introduction and extension of telecommunication networks and services in rural areas.

Grameen Telecom has attempted to solve this problem by combining, under one umbrella, nonprofit and commercial organizations. This gives the group flexibility to cross-subsidize its rural telecom operations and to draw upon finances to offer loans to its rural clients.

#### *2. Political obstacles and social challenges faced by the VP operators*

In order to expand, Grameen Telecom needs interconnectivity with and greater access to the fixed-line system controlled by the Bangladesh Telegraph and Telecom Board (BTTB). Although technical reasons are cited for not providing interconnectivity, the real reasons lie elsewhere. A Grameen Phone report says that the government finds its sources of income, both legal and illegal, threatened. To get a fixed-line telephone in Bangladesh, one has to wait long and make an official payment of \$500, plus pay an equal unofficial amount to controlling officials. In contrast, Grameen Phone offices provide a functional phone within a half hour.

### *Key Factors/Issues*

#### *1. Rural service can be promoted through existing successful channels.*

Grameen Telecom has succeeded in promoting an affordable service because it could draw upon the financial and organizational strengths of Grameen Bank. It used its existing membership base to identify operators who are likely to make a good business by selling cell phone access for villagers. Grameen also was able to cross-subsidize its rural operations with profits from its urban operations.

#### *2. Rural consumers will pay a market price if the service is of value.*

Grameen Phone has succeeded in generating demand and the willingness to pay for a service that was not needed by the villagers before. Although Grameen Telecom gives the VP operators a rate list, varying fees may be charged for the phone services, depending on the operators' relationships with service users and the content of phone calls (for

example, there is a higher service charge for happy news and no charge in the case of bad news). The only way to regulate pricing is to let market forces determine rates by introducing more operators where high fees are being charged.

3. *Gender plays a significant role in rural telecom services.*

Studies have reported a distinct preference among women for using phones owned by women operators. A TeleCommons Group study reported that only 6 percent of Grameen Bank members (women) used phones operated by a male, while 82 percent accessed the phone when the operator was a woman. Women operators are seen to be more dependable in informing another woman of an incoming call.

4. *NGOs can play an expanded role in rural telecom services.*

The strong institutional and organizational capacity of organizations that are pro-poor, such as Grameen Telecom, contributes to turn the poor into the managers of this technology. This is a critical factor in harnessing the full benefits from such technologies. Organizations such as microfinance institutions, which have grown in number over the last few years, can begin to function as providers of telecom services in rural areas, where traditional profit-seeking operators have been reluctant to step in.

### ***Outlook***

The outlook for the project is promising. The economic viability of a similar project will need to be reevaluated in the current context in which telephone handset prices have come down substantially because of high volumes, and operating costs have been lowered due to newer network technologies. Prices have been lowered because of competition. On the other hand, the value of access keeps going up, because of network externalities; that is, more people can be accessed as the number of network subscribers grows larger. Therefore, the future outlook for rural telephony seems to be bright, if relevant policy measures can be put in place.

## **VI. Further Information: References and World Wide Web Resources**

All the personal experiences cited above are from:

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Details about GSM [Global System Mobile]. Website of Ericsson, a telecommunications company and supplier of mobile systems. URL: <<http://www.ericsson.com/technology/GSM.shtml>>.