I. Abstract

Swayam Krishi Sangam (SKS) is a Grameen Bank replication project in one of the poorest parts of India—the drought-prone Medak district of Andhra Pradesh. SKS works for the empowerment of the poor by providing loans to further their economic goals. In the absence of collateral security, banks do not give financial assistance. Left with no choice, the poor turn to the high-interest resource of moneylenders, and end up being trapped in the vicious cycle of poverty and the repayment of an unmanageable debt burden.

SKS functions to break this cycle by providing various low-interest loans to the poor, especially women, thereby empowering them to make investment decisions and earn profits. Lack of confidence and suppression from family members make these women vulnerable and submissive. SKS believes that such women are empowered when they step into the outside world, interact with people, and make independent decisions.

In order to provide flexible financial services to such sections of the community, while adhering to sound financial principles, SKS introduced computerized “Smart Cards” into its lending system in August 2000. The Smart Card, electronically updated after every transaction, not only reduces processing time, but also curtails the chance of error or fraud that might arise during manual recording of transactions. As a result, the operational and financial sustainability of the program is enhanced.

II. Background

Founded in late 1997, the mission of Swayam Krishi Sangam is to develop the self-reliance of poor women through their empowerment. Vikram Akula, son of Indian immigrants, was driven by the desire to help the underprivileged. Working with nongovernmental organizations (NGOs), he realized that it was impossible for such grant-dependent bodies to reach out to a large number of people. At about the same time, he met Professor Mohammed Yunus of Grameen Bank and journeyed to Bangladesh to study the microfinance program of the bank in action. Subsequently, SKS was set up along the lines of Grameen Bank, as a microfinance institution working to support the poor.

Before offering services, SKS organizes participatory rural appraisals with villagers to identify women with household incomes of less than Rs 20,000 (US$400) per year. Only such women are eligible for membership. The field staff, composed of local women, low caste tribals, and other disadvantaged classes, are trained in such aspects of lending as financial status assessment, client sensitivity, and monitoring through participatory research and computerized records.

* 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).
Villagers are introduced to the mission, products, and procedures of the SKS loan institution through a meeting. *Sangams* (women’s societies) are formed, which consist of five members each. Loans are given to these groups, in which each member is collectively responsible for repayment of the amount. General loans and seasonal loans for season-dependent activity, such as agriculture, are provided at an interest rate of 20 percent. Emergency loans in times of unforeseen events, such as funerals, are given at no interest. Consumption loans also are provided at no interest from group funds. SKS operates a non-interest-bearing individual savings account, from which villagers can withdraw funds as needed. This account provides security for the villagers’ money, enabling them to pay their loans on time.

A key feature of SKS is the computerized “Smart Card” launched in the year 2000. Each member in the village is given this card, which is inserted in the handheld computer (HHC) carried by the staffer. The HHC and the Smart Card are updated automatically. At the end of the day, the information from the HHC is transferred to the branch office computer, thereby updating all accounts. This considerably reduces the time consumed in processing loan transactions, enabling the staff to carry out additional meetings in limited time.

SKS is one of the four recipients of the first Consultative Group to Assist the Poorest (CGAP) award in the Pro-Poor Innovation Challenge, an award program for microfinance institutions, focused on innovative poverty alleviation programs. The award of US$50,000 has effectively contributed to the financial sustainability of the program, and has led to the development and enhancement of the Smart Card management information software.

### III. Impacts/Results

**Impact of Microfinance**

SKS operates four branches in 102 villages, and has successfully increased its customer base from 1,922 members in March 2001 to 8,100 members as of July 2002. Since its inception, total SKS disbursements have reached US$116,000, and its repayment rates have been 100 percent on income-generating loans, seasonal loans, and emergency loans. The SKS initiative aims to reach 25,000 poor families by the end of fiscal 2004–05.

The provision of small savings and loans to the poor has emerged as an effective strategy for poverty alleviation. The stranglehold of traditional moneylenders has been loosened, because villagers are not forced to take high-interest loans (with rates of more than 70 percent) from them.

Low-interest SKS credit has ensured 100 percent repayment rates, resulting in financial sustainability and increased credibility for SKS.

Meetings, conducted in the early hours of the day, have resulted in a lower opportunity cost for the members since loans can be taken out at the doorstep, without long and formal procedures, and at a time not clashing with the working hours of the members.
Stringent control measures and regular evaluations ensure proper use of the loans taken out. In addition, loans are given to groups of borrowers under the principle of the joint accountability of the members. Thanks to peer monitoring, the chances of a loan being misused by any one individual are diminished, and the funds are channeled toward the intended economic activity.

**Impact of Smart Cards: Increased Productivity and Lower Costs**

The major constraints facing SKS were the time taken and the high cost of delivery for each transaction. With only limited time available before these women left for work, the productivity and the reach of the entire operation was constrained, since most of the work was done manually. But with the introduction of Smart Cards, transactions now take half the time, raising loan officers’ capacity to a level of 200 percent compared with the original manual system’s capacity. This increase in productivity significantly reduced operating costs. As shown in the table below, the overall reduction in the time consumed in transactions is because of time savings in two specific activities: (1) recording the collection sheet, and (2) recording the member’s account.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Manual system</th>
<th>Smart Card system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pledge &amp; Attendance</td>
<td>2 minutes</td>
<td>2 minutes</td>
</tr>
<tr>
<td>Cash Collection &amp; Counting</td>
<td>8 minutes</td>
<td>8 minutes</td>
</tr>
<tr>
<td>Recording Collection Sheet</td>
<td>10 minutes</td>
<td>—</td>
</tr>
<tr>
<td>Recording Member’s Account</td>
<td>30 minutes</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Loan Proposals/Discussions</td>
<td>10 minutes</td>
<td>10 minutes</td>
</tr>
<tr>
<td>Total</td>
<td>60 minutes</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

— Not available.


**Reduction of Error and Fraud**

The high volume of transactions and consolidated reports containing entries left room for fraud and errors. As a result, a substantial amount of time and effort was spent subsequently to find and correct errors and to detect fraudulent entries.

The single-point data entry system that characterizes the SKS Smart Card system has significantly eliminated the chances of mistakes or manipulation. The card, inserted in the handheld computer carried by the staff, is electronically updated together with the computer.

In addition, this system also enhances the ability of management to monitor operations and quickly respond to problems. The reduction in processing time and SKS’s adherence
to sound financial practices have contributed to increased credibility and investor confidence in the system.

**Provision of Flexible Financial Services**

The financial needs of the poor extend beyond savings and loans at weekly meetings. In particular, the poor face a wide range of emergencies—from illness to funerals to natural calamities—for which they need money immediately. At SKS, clients can come to the branch office 24 hours a day for emergency hospitalization loans. However, with a large client base and a very large number of transactions, this was not seen as a practical solution to the problem.

With Smart Cards, SKS could establish credit relationships with hospitals and health care providers. A proposal to set up ATM machines was also put forward, whereby clients could use their Smart Cards to access cash during an emergency situation.

**IV. Key Elements of Empowerment**

The majority of SKS staff members are from the poorest segments of the village, including low caste and other disadvantaged classes. For people who have undergone such economic subordination and social exclusion for generations, the very sight of one of their own—equipped only with elementary schooling, but using technology with ease—is a significant symbol of empowerment.

**Inclusion/Participation**

Financial assistance to women has helped them to acquire self-confidence and autonomy, to make crucial decisions, and to participate enthusiastically in income-generating activities.

**Box 1: Women Participate in Income-Generating Activities**

Putlibai belongs to the fisher community in Gudpally village, with her whole family engaged in the business of catching and selling fish. Unable to sustain a livelihood with the meager earnings from the sale of six kilograms of fish each day, Putlibai took out a loan of Rs 1,500 (US$35) to buy more nets. This tripled the family’s daily catch and increased their weekly income. A second loan of Rs 6,000 (US$142) enabled Putlibai to sell 50 kilograms a day and resulted in making tangible improvements in her living conditions.

Purchasing water buffaloes and cows is a very popular income-generating activity for SKS members, because of the high earnings potential in this business, as well as the easy maintenance of the milk-producing animals. Narsamma of Chandkhanpally village took out a loan of Rs 4,000 (US$95), bought a buffalo, and by selling its milk earned a weekly income of about Rs 100 (US$2.50). A second loan of Rs 6,000 (US$142) enabled her to purchase another buffalo, and her
weekly income rose by an additional Rs 170 (US$4). Having become a major income provider, Narsamma now enjoys a position of status and respect in her family.

**Accountability**

Smart Cards have enabled SKS to adhere to sound financial practices. All members have access to the electronically updated information stored in the smart card, giving them a correct and accurate picture of transactional details. The fraud and manipulation in manual recording of details has been replaced by accurate and speedy updates by Smart Cards. In the future, villagers could make use of these cards during emergency situations to withdraw money from ATMs.

**V. Issues and Lessons**

**Challenges**

The area of operation of SKS—the Medak district—has a bitter legacy of feudal oppression and peasant uprisings against that system. Social and economic seclusion of the Dalits, tribals, and other disadvantaged castes is still practiced. The arrival of SKS in Medak district and its sustained efforts at helping the extremely poor were seen as a threat to the traditional socioeconomic hierarchy in the village. The major landlords, who are also the local moneylenders, categorically felt this way. Their resistance took the form of false rumors, physical threats, and opposition to the formation of member groups, an activity basic to the loan program. The threat to SKS will remain until it has a far larger number of clients who can withstand such opposition.

**Key Factors for Success**

1. **Designing a System around the Convenience of the Client Group**

One of the key lessons from the study is the kind of loans desired by the poor. Their requirements are for flexible funds, with small repayments that are commensurate with their low incomes of less than Rs 50 (US$1) a day. In addition, since they spend the entire day working in the fields, they can spend only a minimal amount of time to obtain these funds. Therefore, the challenge for any microfinance institution is to deliver small loans and accept small repayments, at a time and place convenient to the intended beneficiaries.

2. **Provision of Loans to Groups, Rather than to Individuals**

The allotment of a loan to a group not only ensures collective responsibility among the members, but also reduces the chances of improper utilization of the funds. With others in the group also accountable for repayment, there is little opportunity for the amount to be squandered in unproductive activities.
3. **Technology as a Tool for Empowerment**

Smart Cards have largely facilitated the operational and financial sustainability of the SKS microfinance operation. Manipulation and mistakes have diminished, and the time taken for operations also has reduced substantially. Perhaps more important, Smart Cards have created a platform for the poor to confidently use technology for their own economic stability and enhancement.

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

**Publications**


**Internet Resources**

“Smart Cards to Sustainably Serve the Poorest.” Swayam Krishi Sangam. URL: <http://www.cgap.org/assets/images/SKS.pdf>.

