



Costs of Health Education and Health Product Distribution

Bandhan's Experience in India

FREEDOM FROM HUNGER RESEARCH PAPER NO. 10A

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This paper presents an analysis of the financial costs and revenues associated with Bandhan's provision of health services – including health education, health product distribution and informal linkages to healthcare providers – in West Bengal, India. We describe the components of the MFI's health protection package developed and tested in partnership with Freedom from Hunger as part of the Microfinance and Health Protection (MAHP) initiative and then present an estimated income statement for the services, including both direct and allocated costs. The purpose of this analysis is to provide microfinance practitioners with practical information about the approximate cost of offering nonfinancial health services in conjunction with a microfinance program and to inspire further research and discussion about quantifying the potential financial and nonfinancial costs and benefits of such services.

Based on Bandhan's three years of experience in offering health protection services, we conclude that:

- Bandhan spends about US\$3,200 in net, direct marginal costs and \$5,500 in net total (including allocated) costs per branch per year to provide an average of 3,200 clients per branch with access to practical health education and affordable health products (mostly over-the-counter medicines).
- The use of a volunteer network of entrepreneurs who sell needed health products and medicines in local communities can generate a small amount of wholesale revenues that contribute to the MFI's cost of supporting the service. Bandhan realized approximately \$1,200 per branch in revenues in 2009 from the wholesale of health products to its health product volunteers.
- In 2009 Bandhan's costs amounted to about \$16,000 (\$1 per client) in net direct costs and \$28,000 (\$1.73 per client) in total net costs, including allocated expenses, to serve more than 16,000 clients across five branches.
- For MFIs with positive net earnings, this relatively small investment can be considered a high-impact investment in social mission as well as MFI reputation and marketing.

¹ We would like to gratefully acknowledge Eileen Miamidian for her review of and input on this paper.

This study focuses primarily on the financial costs and benefits of Bandhan’s health protection service offerings. Future research comparing measures such as client growth, retention, loan sizes and PAR rates among branches with and without health services would be a valuable complement to this work and would provide further insight into the impact of health protection services on the MFI’s financial bottom line.

Introduction

Purpose

This paper examines the costs and benefits of integrated microfinance and health protection services developed and piloted between 2006 and 2009 by Bandhan in India as part of the MAHP initiative in partnership with Freedom from Hunger. The conception and operation of the services—designed to be a cohesive and complementary package—were honed over the course of the four-year initiative, and research was conducted to determine the impacts of Bandhan’s health protection package on both the clients (in terms of health and financial well-being) and the microfinance institution (MFI) itself (in terms of the expenses, revenues and additional, indirect nonfinancial benefits to Bandhan). While we observed and documented numerous client-level social impacts in conjunction with Bandhan’s health protection package, this paper is primarily concerned with the impacts of Bandhan’s health education and health product distribution on the MFI itself.

MFI Background

Bandhan began operations in July 2002 in the Howrah district of West Bengal. By 2007, Bandhan had received numerous industry awards and was ranked second in Forbes magazine’s list of the “World’s Top 50 Microfinance Institutions.” Bandhan provides microenterprise loans, microenterprise development, education, health and disaster management services for “socioeconomically disadvantaged” people, focusing especially on urban and rural women who are poor, landless and lacking in assets. Bandhan started with the aim of impacting women’s empowerment, believing that enhancing the status of the woman in the family and society, through her ability to generate income, would reduce poverty. Recognizing that financial services alone cannot alleviate poverty, Bandhan developed health protection services beginning in 2006 to better accomplish its mission of improving the living conditions of clients and their communities, while also protecting the MFI’s own financial sustainability.

FIGURE 1: BANDHAN INSTITUTIONAL DATA AS OF DECEMBER 2009*

MFI-wide	
Year MFI established	2002
Number of active borrowers	1,924,016
Outstanding gross portfolio	234,768,206
Portfolio-at-risk (30 days)	0.16%
Operational self-sufficiency	NA
Health Protection Products	
Year started <i>Credit with Education</i>	2007
Number of members in credit group program receiving <i>Credit with Education</i>	51,900
Clients with access to health product distribution	51,900

*Data as of December 31, 2009 as provided by Bandhan

Bandhan's Health Protection Services

In a Nutshell

- Bandhan provides practical health education to its clients through optional monthly hour-long sessions held in communities. The nonformal education sessions focus on prenatal and neonatal care, preventing common illnesses and planning ahead to face health expenses. This education is reinforced by a network of “Shastho Shohayikas” (SS)—volunteers from Bandhan’s credit groups—who make door-to-door visits in their communities to reinforce the health education messages, sell over-the-counter health products sourced by Bandhan, and encourage people to use local health services when appropriate, thereby facilitating people’s access to health products and increasing the likelihood that they will act on what they have learned. Bandhan also offers health loans to enable eligible members to pay for serious medical treatment if and when the need arises. With this package, more Bandhan clients are equipped to reduce the instance of common health problems and to afford care when they need it.

Bandhan's Role

- Bandhan selects, employs, trains and supervises the health educators (“Health Community Organizers” or HCOs); Bandhan also selects, trains and provides technical support to the product distribution volunteers (SS). A full-time Bandhan health manager convenes groups of HCOs and SS on a monthly basis for ongoing training, trouble-shooting and health product distribution.
- Bandhan purchases health products from a non-governmental organization and wholesaler, Community Development Medicinal Unit (CDMU). One of the products offered by SS, sanitary napkins, are manufactured by a small company formed, owned and managed by Bandhan and staffed in part by Bandhan clients. Products are typically delivered by CDMU to or near branch offices, and Bandhan’s Health Manager and HCOs onsell them to the SS from the branch offices. Bandhan sets the health product prices, based on the recommended retail price and average local prices.
- Bandhan staff accept and evaluate health loan applications, and the health manager and other branch staff pay visits to clients to verify need. Health loan disbursements, repayments and monitoring are integrated in the MFI’s regular loan processes.

Value Proposition

- Bandhan earns a margin on the health products sold to SS (ranging from 7 to 160 percent), which contributes to the cost of training and managing the volunteers. The potential reduction in common health problems in the communities served by Bandhan is expected to lead to healthier clients who experience fewer work days lost, lower household expenses (because of reduced illness and faster treatment), and thus better capacity to repay their loans, grow their microenterprises and take out larger loans with Bandhan.
- The health loans carry an interest rate of 10 percent annually (compared to Bandhan’s microenterprise loans, which carry a rate of 12 percent), which is approximately equivalent to Bandhan’s own cost of funds, thereby just paying for themselves while providing a valued social service.

Roll-out Timing and Locations

- Bandhan launched its health protection package in the Howrah district in 2007. Health loans were tested in the branches of Bagnan, Birshipur and Shyampur beginning in February 2007, and health education began in the same communities in July 2007. SS first began selling health products in August 2007. Health loans were extended to numerous other Bandhan branches across West Bengal beginning in 2008, while health education and product distribution grew more gradually to new districts and communities in the succeeding years.

Methodology

This analysis focuses on the costs and benefits of the health education and health product distribution portion of Bandhan's package.² Figures presented here are based on summary data provided by Bandhan, as well as calculations and projections based on Freedom from Hunger's experience in providing technical support to the pilot project. It is important to point out that the data presented here represent our best estimates, but due to MFI information system gaps and privacy concerns, we were unable to obtain precise and complete figures. We share this data with the goal of providing a rough picture of the costs and revenues in the Indian context of offering health education and product distribution.

In assessing "profitability," we included two levels of analysis for the package of nonfinancial services:

1. Direct Revenues - Direct Expenses = Net Income (Loss) with Direct Expenses Only
2. Direct Revenues (Direct Expenses + Allocated Expenses) = Net Income (Loss) including Allocated Expenses

The first level (a) allows Bandhan and other MFIs to approximate how much more they would need to budget in order to launch and run similar innovations. The next level (b) provides a more thorough accounting of the costs by allocating a portion of existing branch-level costs to operate the package. All figures and estimates have been converted to dollar values at 46 INR per USD (exchange rate as of December 2009).

ANALYSIS: Health Education and Product Distribution

Further Product Description

Health Education

Bandhan provides community-based health education on 14 topics focused on prenatal and neonatal care, preventing common illnesses and planning ahead to face health expenses. The hour-long, interactive education sessions are delivered once a month in each community by specialized HCO Bandhan staff. As of June 2009, each HCO covered approximately 1,125 Bandhan clients, and there were two HCOs assigned to each branch. HCOs serve the same credit groups and communities as Bandhan credit officers, but at different times. HCOs also provide technical support, monitoring and supervision to the volunteer SS described below. A health manager oversees the entire project, including training of the HCOs and SS, technical support and supervision, and strategic guidance to Bandhan branches as the package evolves and is extended to new branches.

Product Promotion and Distribution

The health education is accompanied by access to affordable, high-quality health products that correspond with the health education, such as oral rehydration salts (ORS), paracetamol, deworming pills, antiseptic lotion, oral contraceptive pills and sanitary napkins. The health products are promoted and sold door-to-door in the communities by the village-level volunteers, known as SS. The SS are also trained to reinforce the health education messages during their visits to community households and to encourage people to seek preventive and curative treatment when appropriate. Each SS covers two or three Bandhan credit groups and their villages—approximately 75 Bandhan clients and their families and neighbors per SS.

As described above, Bandhan purchases the products from a supplier and onells them to the SS at a

² Adequate data were not available from Bandhan to incorporate health loans in this analysis.

markup ranging from 7 to 160 percent (depending on the product). Bandhan sets the prices at which the SS may onsell the product—intended to be on par with the recommended retail price—with the goal of ensuring a 15 to 25 percent profit for the SS. Although this report does not cover SS-level profits (due both to our focus here on MFI profitability, as well as a lack of specific and reliable data), average earnings per SS have been reported to be less than \$1 a month—not yet a significant source of income. SS have stated that their primary reasons for remaining in the program are to help people and to enjoy an enhanced sense of self-esteem and respect in their communities.

The Bottom Line

As per Figure 2, we estimate that Bandhan spends \$4,400 per branch per year in direct, out-of-pocket expenses to offer health education and product distribution, and about \$6,700 per branch per year when including allocated expenses such as office space, electricity and office supplies. With each branch serving an average of 3,200 clients, this amounts to an average of about \$.17 per client per month and \$2.10 per client annually in total costs. The sale of health products to SS earns Bandhan about \$1,172 annually per branch (around \$39 per SS per year). Thus, Bandhan’s annual net cost per branch to offer these services is approximately \$5,500 per branch and about \$1.73 per client. As of June 2009, Bandhan offered this combination of services in a total of five branches.

Although Bandhan’s revenues on the sale of health products is projected to rise (SS sales revenue grew by over 500 percent between June 2008 and June 2009, which means that Bandhan’s retained earnings also increased significantly during that time), it is clear that revenues from health product sales contribute only a small proportion against the costs associated with these services. Bandhan views these relatively small per-client costs as a high-impact social and reputational investment that enhances the well-being of clients while also enhancing the image of Bandhan as “more than a bank.” The MFI seeks donor funds to support this ongoing package of health protection services.

The following Revenues and Expenses sections describe the elements from which our bottom-line financial estimates are derived.

FIGURE 2: INCOME STATEMENT FOR BANDHAN’S HEALTH EDUCATION AND PRODUCT DISTRIBUTION, BASED ON DATA AS OF 2009

Revenues	Monthly per Branch	Annually per Branch
Revenues from sale of health products to SS	98	1,172
Expenses		
Direct expenses		
Salaries (HCOs, health manager)	196	2,348
SS review meetings	43	522
SS follow-up trainings	18	222
Educational materials (“flex”)	11	130
Wholesale health products	45	539
Product transport, storage, handling	2	22
Loss of interest on SS revolving fund	49	587

Expenses (continued)		
Subtotal direct expenses	364	4,369
Allocated expenses		
Office rent	65	783
Electricity	22	261
Transport	43	522
Stationery	43	522
Miscellaneous	22	261
Subtotal Allocated Expenses	196	2,348
Total expenses	560	6,717
Net profit (loss) with direct expenses only	(266)	(3,196)
Net Profit (Loss) including allocated expenses	(462)	(5,544)
Number of clients	3,200	3,200
Direct cost per client	0.11	1.37
Direct and allocated cost per client	0.17	2.10
Net loss (direct expenses only) per client	(0.08)	(1.00)
Net loss (including allocated expenses) per client	(0.14)	(1.73)

**Data as of December 31, 2009 as provided by Bandhan*

Revenues

Bandhan earns modest revenues on the sale of health products to the SS. Lacking specific data on the numbers of various products sold to SS and Bandhan's earnings from these sales, we estimated revenues in the following manner.

Figure 3 summarizes the specific health products that comprised Bandhan's original "start-up package" for the SS, along with available data on their cost, as provided by Bandhan. Although the product mix has been expanded and diversified, we assume that Bandhan's overall average markup of 118 percent applies to all product sales per branch.

FIGURE 3: SS "START-UP PACKAGE"

Product	Package. Units	Wholesale Unit Cost	Wholesale Total Price	Cost to SS (from Bandhan)	Unit Cost to Client	Profit to SS	Profit to Bandhan
Antacid	60	0.003	0.20	0.21	0.26	0.05	0.01
Paracetamol	10	0.005	0.05	0.14	0.18	0.04	0.09
ORS	10	0.087	0.87	2.09	2.61	0.52	1.22
Total	80	0.10	1.12	2.44	3.05	0.61	1.32

** All monetary figures are in USD*

Next, we take available information, provided by Bandhan, on total sales made by SS in the 6 month period from January–June 2009, and—assuming a 20 percent margin retained by SS on retail sales as well as a 118 percent markup from Bandhan to SS—we calculate the approximate revenues earned by the MFI (see Figure 4).

FIGURE 4: CALCULATION OF BANDHAN REVENUES FROM SALES TO SS

	Actual Data		Estimates	
	Jan-June 2008	Jan-June 2009	Per Month Per Branch	Per Month Per SS
Total sales of health products by SS	597	3,631	121	4.03
SS Profits	125	700	23	0.78
Total sales minus SS profits (revenues)	472	2,931	98	3.26
Cost of product to Bandhan	217	1,347	45	1.50
Estimated storage, transport, handling	9	54	2	0.06
Bandhan-retained earnings	247	1,531	51	1.70
			Per Branch	Per SS
Annual revenues			1,172	39
Annual retained earnings			612	20

** All monetary figures are in USD*

Expenses

Salaries

Salary expenses of Bandhan staff directly involved in the health education and product distribution services include an allocation of the Health Manager’s time (\$43 per month) and the full cost of two HCOs per branch (\$76 per HCO per month). As volunteers, the SS are not paid any salary. Their only income is from profits earned on product sales. The time that senior management spent in launching the program has not been accounted for in the analysis.

SS Review Meetings and Trainings

The Health Manager convenes the HCOs and SS of each branch once a month for refresher trainings and technical support. Biannually, trainings are also conducted for new and current SS.

Educational Materials (“Flex”)

Each of the monthly health education sessions incorporates simple imagery for storytelling and discussion around the key lessons. Bandhan opted to create a set of durable “flex” materials (see photo inset) for each HCO at a cost of approximately \$5 each. Although some sessions utilize the same flex, we have conservatively assumed a new flex per HCO per month.

Wholesale Health Products

As described and referenced in Figures 3 and 4, we have estimated the cost to Bandhan of the health products, based on 2008 and 2009 data received. Both the costs and the revenues associated with the

health products are dependent on the proportions of various products sold—with some products carrying a significantly higher markup rate than others. Our estimated cost does not take into account Bandhan’s internal sanitary napkin manufacturing operation and assumes a limited product mix sold in the same proportions as the initial “start-up kit” shown in Figure 3.

Recent information on the cost to Bandhan for the kit of SS health products and markup of products for sale to SS is not available; for this analysis we use the initial start-up kit of antacids, Paracetamol and ORS packets. As demonstrated in Figure 4, the goal of providing a 20–25 percent profit to SS workers also establishes the potential revenue gains to Bandhan for each specific product—the percentage of the markup going to Bandhan ranges from 7 to 160 percent.

Product Transportation, Storage and Other Distribution Costs

The costs of managing product distribution (storage, transportation, etc.) are relatively small. The supplies are stored in metal cabinets in branch offices; the cost of these cabinets was a one-time investment of \$65 per branch, which has not been incorporated into this analysis focused on ongoing annual expenses. CDMU transports goods either to the branch office or nearby for a nominal fee of \$3 to \$4.50 per consignment. Based on knowledge of typical shipment sizes, we assume that Bandhan pays about \$4.35 on each shipment of about \$108.

Loss of Interest

An opportunity cost to Bandhan is a 0 percent interest “revolving loan” fund of about \$13 per SS to cover the cost of her Bandhan-branded bag and initial purchase of health product inventory (beyond this start-up loan, the SS must purchase additional products on a “cash-and-carry” basis). Lacking detailed information about SS repayment of these funds, we conservatively assume that the initial “loan” remains permanently outstanding. With 30 SS per branch, we assume that about \$390 is not available for microenterprise lending, and that given Bandhan’s 12.5 percent flat annual rate, this amounts to a loss of income of about \$49 per branch per year.

We relied on Bandhan’s own estimates of reasonable allocations of general office and administrative expenses. These are shown in the allocated expense section of Figure 2.

Conclusion

In 2008, Bandhan achieved the following financial results: Nominal Gross Portfolio Yield of 30 percent; Real Yield on Gross Portfolio of 22 percent; and overall Profit Margin of 40 percent.³ The MFI has received numerous industry awards and has been ranked among the top MFIs in the world. With these results and the MFI’s serious commitment to achieving social impact while ensuring its own long-term financial viability, the MFI has seen fit to use retained earnings and outside donor funds to develop and maintain this health protection package.

While certain health innovations such as health loans can be designed to pay for themselves, MFIs can also leverage their networks of clients (Bandhan’s was nearly two million strong by the end of 2009) to provide high-impact nonfinancial services. Although Bandhan’s health education and product distribution are not self-financing, the net costs for this package are low, especially in per-client terms.

Additionally, there are promotional benefits to Bandhan through the increased contact provided by the HCOs and SS. In an increasingly competitive microfinance environment, the provision of health services can promote retention, loyalty, and attract new clients through increased visibility. According to the CEO of Bandhan, Chandra Shekhar Ghosh, the MAHP innovations are “value adding” to Bandhan through increased prominence of being more than just a provider of credit and business services.

Although we were unable to examine comparative rates of client attraction, retention and performance as part of this study, research with other MFIs that have implemented similar services is revealing positive trends and suggesting that in the long run, such services really may pay for themselves—or even better. This would be a valuable area for further research at Bandhan.

For more information on the costs and benefits of health protection services on MFIs’ financial performance, please see Freedom from Hunger’s series of white papers on the Microfinance and Health Protection initiative, forthcoming 2010, at www.freedomfromhunger.org.

³ www.mixmarket.org/mfi/bandhan/data