

研究報告

Mosquito Nets as Social Business in Bangladesh

— A Case Study of BASF Grameen Ltd.—

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Abstract

The practice of using business methods to solve social problems has been accelerating in recent years. The social business practices of Grameen Bank, its associated companies, and Grameen-related joint companies have been gaining a lot of attention. Their business model they practice is regarded as being a “social business.” In Bangladesh, there are many Grameen-related joint companies operating as social businesses. BASF Grameen is one of them.

This paper addresses the aforementioned company, BASF Grameen, and focuses on their mosquito net project, which is one of two social business projects that BASF Grameen is involved in. This study’s fieldwork was conducted by the author in December 2012. The result of this fieldwork indicates that three points are important for the future prosperity of BASF Grameen: (1) raising awareness among people regarding the value of BASF Grameen’s mosquito nets; (2) reducing the price; and (3) introducing an installment payment option.

1. Introduction

The practice of using business methods to solve social problems has become common in recent years. The social business practices of Grameen Bank, its associated companies, and Grameen-related joint companies have been gaining a lot of attention. Their business activities are commonly regarded as social businesses.

The joint companies’ ventures are conducted based on the business philosophy of Muhammad Yunus, founder of Grameen Bank. His philosophy is represented by the seven principles of social business⁽¹⁾:

1. The business objective is to overcome poverty, or one more problems (such as education, health, technology access, and environment) that threaten people and society—not to maximize profit.
2. The company will attain financial and economic sustainability.
3. Investors get back only their investment amount. No dividend is given beyond the return of original investment.
4. When the investment amount is paid back, profit stays with the company for expansion and improvement.

5. The company will be environmentally conscious.
6. The workforce gets market wage with better-standard working condition.
7. Do it with joy!!!

There are many Grameen-related joint companies operating as social businesses in Bangladesh, such as Grameen Danone Foods Ltd., Grameen Veolia Water Ltd., Grameen Uniqlo Ltd., and Grameen Yukiguni Maitake Ltd. BASF Grameen Ltd. (hereinafter BASF Grameen) is also one of these social businesses. This paper examines BASF Grameen, and focuses on the company’s mosquito net project, which is one of two social projects BASF Grameen is currently involved in.

2. The state of malaria in Bangladesh

Malaria is a mosquito-borne disease that causes fever, headache, shivering, and vomiting. In severe cases, these symptoms can progress to coma or, in the worst case, death. The United Nations Millennium Development Goals⁽²⁾ set a target of reducing the spread of malaria.

In 13 of Bangladesh’s 64 administrative districts, malaria is endemic. Those districts are labelled (1) to (4) in Figure 1. They are (1) Kurigram District in Rangpur Division, (2) Sherpur District, Mymensingh District, and

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Netrokona District in Dhaka Division, (3) Sunamganj District, Sylhet District, Maulvibazar District, and Habiganj District in Sylhet Division, (4) Khagrachari District, Rangamati District, Chittagong District, Bandarban District, and Cox's Bazar District in Chittagong Division. Malaria is a nationwide risk, but deaths directly related to malaria have only been reported in these areas.

According to the World Malaria Report 2008⁽⁴⁾, 72 percent of the Bangladeshi population is at risk of malaria. The risk of contracting the disease is the greatest in remote forested areas bordering India and Myanmar. The health infrastructure in these areas is inadequate and access to health care services is poor. In 2004, Artemisinin-based combination therapy (ACT) was adopted by Bangladeshi government officials as the treatment policy. However, the number of reported cases in 2005 and 2006 far exceeded the capacity for treatment.

The Bangladesh government has received grants from the Global Fund⁽⁵⁾ to promote the use of long-lasting insecticidal nets (LLINs) and insecticide-treated nets (ITNs) in these areas. A Bangladesh-based international development organization called BRAC, which is an NGO, has also been sponsored by the Global Fund and distributes LLINs and ITNs.

Table 1 shows a 10-fold decrease of the number of deaths from 501 in 2005, to 47 in 2009. However, it should be noted that these figures may not be accurate because many hospitals and private facilities do not diligently report malaria-deaths and the deaths of people who do not reach health care services also go unreported. Taking this into account, the actual figure is likely to be much larger⁽³⁾.

3. Overview of BASF Grameen

3.1 Establishment

BASF Grameen was established in Bangladesh as a social business joint venture resulting from the merger of BASF SE and Grameen Healthcare Trust on March 3, 2009^{(7),(8),(9)}. BASF is a leading chemical company. Grameen Healthcare Trust, on the other hand, is a non-profit organization founded by Muhammad Yunus and recognized by Bangladesh's Trust Act.

It was promised that BASF would invest €200,000 (\$260,000) and contribute the funding for one million

multi-micronutrient sachets (MMS) and 100,000 mosquito nets, and that Grameen would contribute its knowledge of Bangladesh's market, distribution structures, and networks^{(7),(8),(9)}.

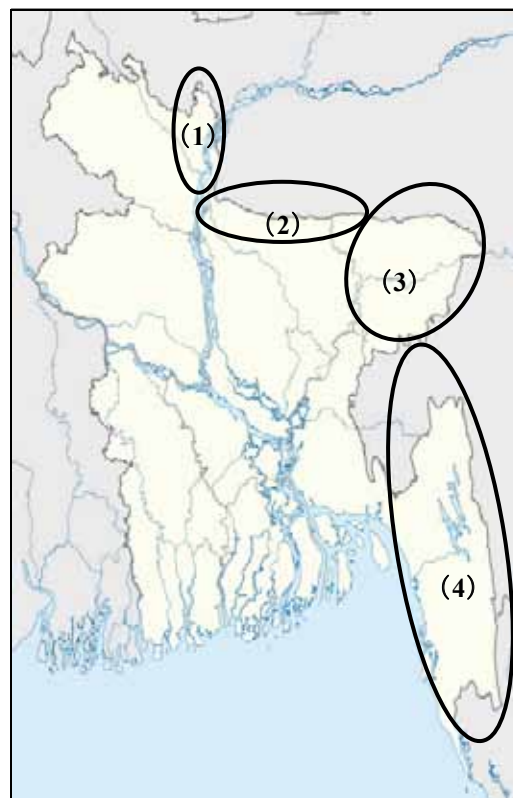


Fig. 1 Malaria areas⁽³⁾.

Table 1 Reported malaria deaths, 2000-2009⁽⁶⁾.

2000	478	2005	501
2001	490	2006	307
2002	588	2007	228
2003	577	2008	154
2004	535	2009	47

3.2 Social purpose

The social purpose of BASF Grameen is to improve Bangladeshi people's health and to provide business opportunities for the poor who otherwise would not be able to build up a business without support^{(7),(8)}.

3.3 Products

BASF Grameen utilized two existing products from BASF's portfolio: impregnated mosquito nets that protect people from insect-borne diseases, and dietary supplement sachets, referred to as multi-micronutrient

sachets (MMS), which contain vitamins and essential micronutrients^{(7),(8),(9)}.

In the initial stages, the MMS business focused on reaching large consumer outlets, such as schools, and cooperating with established distribution channels, such as pharmacies^{(7),(8),(9)}. In next stage of the program, the MMSs would be sold directly to the end user through established Grameen networks^{(7),(8),(9)}. Similarly, the mosquito nets were sold in grocery stores and pharmacies in urban areas, while in rural areas they too were sold via established Grameen networks^{(7),(8),(9)}.

3.4 Mosquito net plant

The plant producing long-lasting insecticidal nets (LLINs)⁽¹⁰⁾ was opened on March 23, 2012. This plant is located in Social Business Industrial Park in Sarabo, Kashimpur, Gazipur (Figure 2). It is owned by Grameen Fabrics & Fashions Ltd. The nets are coated with the insecticide Fendona®, a BASF product. The nets remain effective against mosquitoes for several years, which can allow them to meet the World Health Organization (WHO) requirements for LLINs. The nets retain their repellent properties for up to 20 washes. However, this may vary due to how the owners maintain them. The nets are sold under the brand-name “Auschorjo Moshori.”

3.5 Marketing

BASF Grameen now sources the nets from the above plant, and markets them. Grameen Distribution Ltd. also sells the nets through Grameen Marketing Network⁽¹¹⁾ (Figure 3). The main sales area is Chittagong Division (see Figure 1).

4. Field research results and analysis

This fieldwork was conducted by the author in December 2012. The purpose of this research was to confirm the present state of the mosquito net plant in Social Business Industrial Park and to gather feedback on the nets from the end users.

4.1 Operation of the mosquito net plant

Figure 4 shows the process for manufacturing the nets: (1) the net is coated with the insecticide Fendona®; (2) the net is sewed; (3) the net is inspected; (4) the net is packed; and (5) the net is placed in a warehouse. A barcode tag is sewed on every net to control the distribution of the net. The nets on sale are dyed in five colors: blue, green, white, orange, and pink.

As Table 2 shows, three sizes: L, M, and S are



Fig. 2 Location of the plant.

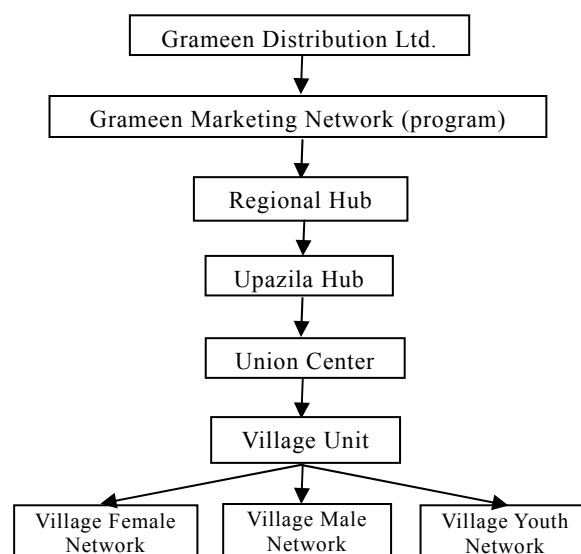


Fig. 3 Grameen Marketing Network⁽¹²⁾.

available, and the retail prices are from Tk.550 (\$6) to Tk.650 (\$7). Since non-insecticide treated nets are sold for Tk.200, which is the minimum price at the market, the poorest of the poor are less likely to be able to afford to buy a net sold by BASF Grameen and Grameen Distribution Ltd.

Table 2 Size and price of the net.

size	retail price	wholesale price
large	Tk.650	Tk.550
medium	Tk.600	Tk.500
small	Tk.550	Tk.450

(1) Coating



(2) Sewing



(3) Inspection



(4) Packaging



(5) Storage



Fig. 4 Process of manufacturing nets.

4.2 The first end user's feedback

The interview with the first end user of a mosquito net provided by BASF Grameen was carried out at Gori Raunar Chala in Tangail in December 2012. The interviewee is Rotipa, a Grameen Bank member with 18 years' experience. She is in the position of center chief at present. She runs a salt business and room-letting business. Her statement is as follows:

My village, Gori Raunar Chala in Tangail is an upland village, where the malaria incidence rate is higher. BASF Grameen chose my village as a pilot area and conducted a market research three years ago.

I was the first end user of a mosquito net BASF Grameen supplied. The banker of Grameen Bank recommended the net to me. He said, "It is a long lasting insecticidal mosquito net, whose technology comes from Germany." I did not care about the technology, but the price was Tk.450, which was reasonable for not only me but also other villagers.

When I bought a net, there was a user's manual printed on a piece of paper in the package. This way was very inconvenient for me, because I could not know how to use a net before opening the package. So I told my first impression to the banker. (The user's manual is printed on the package at present.)

One day I saw a few mosquitoes die inside the net. Then, I understood the effect of the insecticidal net. But I will give the price priority over the quality if I buy a new one.

Judging from the prior statement, it could be assumed that it takes some time for villagers to understand the value of insecticidal nets, and that the price takes priority over quality. Therefore, these two points suggest the importance of making the effect of insecticidal nets known widely among village people, and making the price lower.

5. Conclusion

As of now, no universal approach to tackling the issue of malaria has been developed, because malaria treatments and prevention methods differ from country to country. In Bangladesh, appropriate treatments are lacking and medicine is costly for the poor. In addition, irrigation ditches, drains, and other places that collect water are not adequately maintained, and the use of DDT,

an insecticide, is banned. Under these conditions, a mosquito net can be said to be the best solution.

BASF Grameen is not a charity but a business. Therefore, BASF Grameen does not promote nets via social marketing like a national voucher scheme which brings subsidized nets to the poor⁽¹³⁾, nor does this company participate in a National Malaria Control Programme in Bangladesh supported by the Global Fund so far.

BASF Grameen has created new jobs for the local people and cooperated in reducing the number of mosquitoes. However, the upfront cost of an LLIN is too high for the poor, even though the net lasts longer than a non-LLIN. Moreover, the beneficial effects of LLINs are not well understood among the people.

Necessarily, it is indicated that three points are important for the future prosperity of BASF Grameen: (1) raise awareness among people regarding the value of Auschorjo Moshori; (2) reduce the retail price; and (3) introduce an installment payment option.

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